Weed Identification and Control \$300.00 48 HOUR RUSH ORDER PROCESSING FEE ADDITIONAL \$50.00

Rush service does not include overnight delivery or FedEx fees.

Start and finish dates You will have 90 days from this dat	te in order to complete this course
Print Name	
I have read and understood You can electronically sign v	the disclaimer notice found on page 4. Signature is required. with XXX
Signature	
Address:	
City	StateZip
Phone: Home ()	Work ()
Fax ()	Email
License or Operator ID #	Exp. Date
Please circle/check which	certification you are applying the course CEU's.
Commercial Applicator	Residential Applicator Industrial Applicator
Pesticide Handler Ag	gricultural Applicator Adviser Other
Your certificate will be ma	ailed to you in about two weeks.
	earning College PO Box 3060, Chino Valley, AZ 86323) 557-1746 Fax (928) 272-0747 E-Mail <u>info@tlch2o.com</u>
If you paid on the Intern	net, please write your 4 or 5-digit code
	e certificate of completion we need your e-mail address. We will e- ou, if no e-mail address; we will mail it to you.

DISCLAIMER NOTICE

I understand that it is my responsibility to ensure that this CEU course is either approved or accepted in my State for CEU credit. I understand State laws and rules change on a frequent basis and I believe this course is currently accepted in my State for CEU or contact hour credit, if it is not, I will not hold Technical Learning College responsible. I fully understand that this type of study program deals with dangerous, changing conditions and various laws and that I will not hold Technical Learning College, Technical Learning Consultants, Inc. (TLC) liable in any fashion for any errors, omissions, advice, suggestions or neglect contained in this CEU education training course or for any violation or injury, death, neglect, damage or loss of your license or certification caused in any fashion by this CEU education training or course material suggestion or error or my lack of submitting paperwork. It is my responsibility to call or contact TLC if I need help or assistance and double-check to ensure my registration page and assignment has been received and graded. It is my responsibility to ensure all information is correct and to abide with all rules and regulations.

State Approval Listing Link, check to see if your State accepts or has pre-approved this course. Not all States are listed. Not all courses are listed. If the course is not accepted for CEU credit, we will give you the course free if you ask your State to accept it for credit.

State Approval Listing URL...

http://www.tlch2o.com/PDF/CEU%20State%20Approvals.pdf

You can obtain a printed version of the course manual from TLC for an additional \$139.95 plus shipping charges.

AFFIDAVIT OF EXAM COMPLETION

I affirm that I personally completed the entire text of the course. I also affirm that I completed the exam without assistance from any outside source.

I understand that it is my responsibility to file or maintain my certificate of completion as required by the state or by the designation organization.

Grading Information

In order to maintain the integrity of our courses we do not distribute test scores, percentages or questions missed. Our exams are based upon pass/fail criteria with the benchmark for successful completion set at 70%. Once you pass the exam, your record will reflect a successful completion and a certificate will be issued to you.

For security purposes, please fax or e-mail a copy of your driver's license and always call us to <u>confirm</u> we've received your assignment and to confirm your identity.

Thank you...

All downloads are electronically tracked and monitored for security purposes.

CUSTOMER SERVICE RESPONSE CARD

Weed Control Training Course

NAME:	_
E-MAILPHONE	_
PLEASE COMPLETE THIS FORM BY CIRCLING THE NUMBER OF THE APPROPRIATE ANSWER IN THE AREA BELOW.	
 Please rate the difficulty of your course. Very Easy 0 1 2 3 4 5 Very Difficult 	
2. Please rate the difficulty of the testing process. Very Easy 0 1 2 3 4 5 Very Difficult	
3. Please rate the subject matter on the exam to your actual field or work. Very Similar 0 1 2 3 4 5 Very Different	
1. How did you hear about this Course?	
5. What would you do to improve the Course?	
	_
6. How about the price of the course?	
Poor Fair Average Good Great	
7. How was your customer service?	
Poor Fair Average Good Great	
3. Any other concerns or comments.	
	_

Important Information about this Course (Disclaimer Notice)

This CEU course has been prepared to educate pesticide applicators and operators in general safety awareness of dealing with the often-complex and various pesticide treatment sprays, devices, methods, and applications. This course (manual) will cover general laws, regulations, required procedures and accepted policies relating to the use of pesticides and herbicides. It should be noted, however, that the regulation of pesticides and hazardous materials is an ongoing process and subject to change over time. For this reason, a list of resources is provided to assist in obtaining the most up-to-date information on various subjects. This manual is a not a guidance document for applicators or operators who are involved with pesticides. It is not designed to meet the requirements of the United States Environmental Protection Agency or your local State environmental protection agency or health department. This course manual will provide general pesticide safety awareness and should not be used as a basis for pesticide treatment method/device guidance. This document is not a detailed pesticide informational manual or a source or remedy for poison control.

Technical Learning College or Technical Learning Consultants, Inc. makes no warranty, guarantee or representation as to the absolute correctness or appropriateness of the information in this manual and assumes no responsibility in connection with the implementation of this information. It cannot be assumed that this manual contains all measures and concepts required for specific conditions or circumstances. This document should be used for educational purposes only and is not considered a legal document. Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Confine chemicals to the property or plants being treated. Avoid drift onto neighboring properties, especially gardens containing fruits and/or vegetables ready to be picked. Dispose of empty containers carefully. Follow label instructions for disposal. Never reuse containers. Make sure empty containers are not accessible to children or animals. Never dispose of containers where they may contaminate water supplies or natural waterways. Do not pour down sink or toilet. Consult your county agricultural commissioner for correct ways of disposing of excess pesticides. You should never burn pesticide containers.

Individuals who are responsible for pesticide storage, mixing and application should obtain and comply with the most recent federal, state, and local regulations relevant to these sites and are urged to consult with the EPA and other appropriate federal, state and local agencies.

USE PESTICIDES WISELY: ALWAYS READ THE ENTIRE PESTICIDE LABEL CAREFULLY, FOLLOW ALL MIXING AND APPLICATION INSTRUCTIONS AND WEAR ALL RECOMMENDED PERSONAL PROTECTIVE GEAR AND CLOTHING. CONTACT YOUR STATE DEPARTMENT OF AGRICULTURE FOR ANY ADDITIONAL PESTICIDE USE REQUIREMENTS, RESTRICTIONS OR RECOMMENDATIONS.

NOTICE: MENTION OF PESTICIDE PRODUCTS IN THIS COURSE DOES NOT CONSTITUTE ENDORSEMENT OF ANY MATERIAL OR HERB OR HERBAL SUPPLEMENT. ALWAYS FOLLOW THE PRODUCT'S LABEL INSTRUCTIONS.

NOTICE

I understand that it is my responsibility to ensure that this CEU course is either approved or accepted in my State for CEU credit. I understand State laws and rules change on a frequent basis and I believe this course is currently accepted in my State for CEU or contact hour credit, if it is not, I will not hold Technical Learning College responsible. I also understand that this type of study program deals with dangerous conditions and that I will not hold Technical Learning College, Technical Learning Consultants, Inc. (TLC) liable for any errors or omissions or advice contained in this CEU education training course or for any violation or injury caused by this CEU education training course material. I will call or contact TLC if I need help or assistance and double-check to ensure my registration page and assignment has been received and graded.

Grading Information

In order to maintain the integrity of our courses we do not distribute test scores, percentages or questions missed. Our exams are based upon pass/fail criteria with the benchmark for successful completion set at 70%. Once you pass the exam, your record will reflect a successful completion and a certificate will be issued to you.

weed C	ontroi Answer K	ey			
Name					_
Phone#					<u> </u>
your Sta	solely responsible i te. Did you check v d for credit?		_	•	
N	lethod of Course ac	ceptance	e confirmation. Plea	se fill th	is section
Website	e Telephone Call	Emai	il Spoke to		
Did you	receive the approva	l numbe	r, if applicable?		
What is t	the course approval	number	, if applicable?		
	esponsible to ensure all us to ensure that w			nent and	Registration Key.
Multiple Circle or	Choice. Pick only of Mark off, Underline of the assignment v	one answ or Bold	er per question. Ex the answer. Please	_	
1.	ABCDEF	15.	ABCDEF	29.	ABCDEF
2.	ABCDEF	16.	ABCDEF	30.	ABCDEF
3.	ABCDEF	17.	ABCDEF	31.	ABCDEF
4.	ABCDEF	18.	ABCDEF	32.	ABCDEF
5.	ABCDEF	19.	ABCDEF	33.	ABCDEF
6.	ABCDEF	20.	ABCDEF	34.	ABCDEF
7.	ABCDEF	21.	ABCDEF	35.	ABCDEF
8.	ABCDEF	22.	ABCDEF	36.	ABCDEF
9.	ABCDEF	23.	ABCDEF	37.	ABCDEF
10.	ABCDEF	24.	ABCDEF	38.	ABCDEF
11.	ABCDEF	25.	ABCDEF	39.	ABCDEF
12.	ABCDEF	26.	ABCDEF	40.	ABCDEF
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43.	ABCDEF	75. A B C D E F	107. A B C D E F
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45.	ABCDEF	77. A B C D E F	109. A B C D E F
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49.	ABCDEF	81. A B C D E F	113. A B C D E F
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54.	ABCDEF	86. A B C D E F	118. A B C D E F
55.	ABCDEF	87. A B C D E F	119. A B C D E F
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60.	ABCDEF	92. A B C D E F	124. A B C D E F
61.	ABCDEF	93. A B C D E F	125. A B C D E F
62.	ABCDEF	94. A B C D E F	126. A B C D E F
63.	ABCDEF	95. A B C D E F	127. A B C D E F
64.	ABCDEF	96. A B C D E F	128. A B C D E F
65.	ABCDEF	97. A B C D E F	129. A B C D E F
66.	ABCDEF	98. A B C D E F	130. A B C D E F
67.	ABCDEF	99. A B C D E F	131. A B C D E F
68.	ABCDEF	100. A B C D E F	132. A B C D E F
69.	ABCDEF	101. A B C D E F	133. A B C D E F
70.	ABCDEF	102. A B C D E F	134. A B C D E F
71.	ABCDEF	103. A B C D E F	135. A B C D E F
72.	ABCDEF	104. A B C D E F	136. A B C D E F
73.	ABCDEF	105. A B C D E F	137. A B C D E F
74.	ABCDEF	106. A B C D E F	138. A B C D E F

139.	ABCDEF	171.	ABCDEF	203.	ABCDEF
140.	ABCDEF	172.	ABCDEF	204.	ABCDEF
141.	ABCDEF	173.	ABCDEF	205.	ABCDEF
142.	ABCDEF	174.	ABCDEF	206.	ABCDEF
143.	ABCDEF	175.	ABCDEF	207.	ABCDEF
144.	ABCDEF	176.	ABCDEF	208.	ABCDEF
145.	ABCDEF	177.	ABCDEF	209.	ABCDEF
146.	ABCDEF	178.	ABCDEF	210.	ABCDEF
147.	ABCDEF	179.	ABCDEF	211.	ABCDEF
148.	ABCDEF	180.	ABCDEF	212.	ABCDEF
149.	ABCDEF	181.	ABCDEF	213.	ABCDEF
150.	ABCDEF	182.	ABCDEF	214.	ABCDEF
151.	ABCDEF	183.	ABCDEF	215.	ABCDEF
152.	ABCDEF	184.	ABCDEF	216.	ABCDEF
153.	ABCDEF	185.	ABCDEF	217.	ABCDEF
154.	ABCDEF	186.	ABCDEF	218.	ABCDEF
155.	ABCDEF	187.	ABCDEF	219.	ABCDEF
156.	ABCDEF	188.	ABCDEF	220.	ABCDEF
157.	ABCDEF	189.	ABCDEF	221.	ABCDEF
158.	ABCDEF	190.	ABCDEF	222.	ABCDEF
159.	ABCDEF	191.	ABCDEF	223.	ABCDEF
160.	ABCDEF	192.	ABCDEF	224.	ABCDEF
161.	ABCDEF	193.	ABCDEF	225.	ABCDEF
162.	ABCDEF	194.	ABCDEF	226.	ABCDEF
163.	ABCDEF	195.	ABCDEF	227.	ABCDEF
164.	ABCDEF	196.	ABCDEF	228.	ABCDEF
165.	ABCDEF	197.	ABCDEF	229.	ABCDEF
166.	ABCDEF	198.	ABCDEF	230.	ABCDEF
167.	ABCDEF	199.	ABCDEF	231.	ABCDEF
168.	ABCDEF	200.	ABCDEF	232.	ABCDEF
169.	ABCDEF	201.	ABCDEF	233.	ABCDEF
170.	ABCDEF	202.	ABCDEF	234.	ABCDEF

235.	ABCDEF	257. A B C D E	F 279.	ABCDEF
236.	ABCDEF	258. A B C D E	F 280.	ABCDEF
237.	ABCDEF	259. A B C D E	F 281.	ABCDEF
238.	ABCDEF	260. A B C D E	F 282.	ABCDEF
239.	ABCDEF	261. A B C D E	F 283.	ABCDEF
240.	ABCDEF	262. A B C D E	F 284.	ABCDEF
241.	ABCDEF	263. A B C D E	F 285.	ABCDEF
242.	ABCDEF	264. A B C D E	F 286.	ABCDEF
243.	ABCDEF	265. A B C D E	F 287.	ABCDEF
244.	ABCDEF	266. A B C D E	F 288.	ABCDEF
245.	ABCDEF	267. A B C D E	F 289.	ABCDEF
246.	ABCDEF	268. A B C D E	F 290.	ABCDEF
247.	ABCDEF	269. A B C D E	F 291.	ABCDEF
248.	ABCDEF	270. A B C D E	F 292.	ABCDEF
249.	ABCDEF	271. A B C D E	F 293.	ABCDEF
250.	ABCDEF	272. A B C D E	F 294.	ABCDEF
251.	ABCDEF	273. A B C D E	F 295.	ABCDEF
252.	ABCDEF	274. A B C D E	F 296.	ABCDEF
253.	ABCDEF	275. A B C D E	F 297.	ABCDEF
254.	ABCDEF	276. A B C D E	F 298.	ABCDEF
255.	ABCDEF	277. A B C D E	F 299.	ABCDEF
256.	ABCDEF	278. A B C D E	F 300.	ABCDEF

You are finished with your assignment. Please fax this answer key and your registration page along with the customer survey to TLC.

We will require a photocopy of your driver's license.

Fax Number (928) 272-0747 Back-Up Fax (928) 468-0675

Amount of Time for Course Completion – How many hours you spent on course?

Must match State Hour Requirement _____ (Hours)

Please fax or email this answer key and the registration Page to TLC. Call 15 minutes later to ensure we have received the paperwork

Assignment Instructions

- 1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
- 2. You will need to pick one of the following five assignments to complete. This selection process is based upon your last name.

If your last name begins with an A to E, you will pick assignment number 1, if your last name begins with the letter F to L, you are to complete assignment number 2 and if your last name begins with the letter M-Q, you will pick assignment number 3 and if your last name begins with the letter R-Z, you will pick assignment number 4.

Multiple Choice, Please select one answer and mark it on the answer key. The answer must come from the course text. (s) means answer can be plural or singular.

Assignment #1 for all pest applicators whose last name begins with A-E you will find your assignment on pages 11-49.

Assignment #2 for all pest applicators whose last name begins starting with the letter F-L, your assignment is found on pages 51-89.

Assignment #3 for all pest applicators whose last name begins starting with the letter M-Q, your assignment is found on pages 91-129.

Assignment #4 for all pest applicators whose last name begins starting with the letter R-Z, your assignment is found on pages 131-168.

Assignment #5 for all pest applicators who have failed the first assignment. Pages 169-204

2017 Changes to EPA's Farm Worker Protection Standard

In late 2015 the Environmental Protection Agency issued the long awaited revision to the Worker Protection Standard (WPS). This law it is now technically active and it will be enforced. Please keep in mind that the WPS covers both restricted use AND general use pesticides. This course is not for worker and/or handler training. Always follow the label and your State Pesticide Agency rules.

This course contains EPA's federal rule requirements. Please be aware that each state implements pesticide regulations that may be more stringent than EPA's regulations and these frequently are changed. Check with your state environmental/pesticide agency for more information.

Weed Identification and Control Assignment #1 For Students Names A-E

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Write your answers on the Answer Key found in the front of this assignment. ASSIGNMENT INSTRUCTIONS

- 1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
- 2. You will need to pick one of the following five assignments to complete. This selection process is based upon your last name. If your last name begins with an A to E, you will pick assignment number 1, if your last name begins with the letter F to L, you are to complete assignment number 2 and if your last name begins with the letter M-Q, you will pick assignment number 3 and if your last name begins with the letter R-Z, you will pick assignment number 4.

Multiple Choice assignment, please select one answer and mark it on the answer key. The answer must come from the course text. (s) means answer can be plural or singular. There are no intentional trick questions

What is a Weed? Generally, the term weed is used to describe any plant that is unwanted and grows or spreads aggressively. 1. Terms such as are used somewhat interchangeably to refer to weeds that infest large areas. A. Noxious or invasive weeds D. Plants non-native to North America B. Invasive or non-invasive E. Invasive, exotic or non-native C. Noxious or not noxious F. None of the Above 2. Free from the natural controls present in their native lands, these weeds grow quickly and overtake A. Non-native (or alien) B. No natural enemies D. Native vegetation E. Native plants C. Noxious weeds F. None of the Above **Noxious Weed** 3. Millions of acres of once healthy, productive rangelands, forestlands and riparian areas have been A. Noxious or invasive weeds D. Plants non-native to North America B. Invasive or non-invasive E. Plant species C. Noxious or not noxious F. None of the Above What is a noxious weed? 4. The term " " means different things to different people. In the broadest sense, it is any plant growing where it is not wanted. A. Non-native (or alien) D. Native vegetation

E. Weed

F. None of the Above

B. No natural enemies

C. Noxious weeds

5. Weeds can be native or non-	-nat	ive, invasive or non-invasive, and	Legally,
a noxious weed is any plant des	sign	ated by a Federal, State or county government as ir	njurious to public
health, agriculture, recreation, w	vildl	ife or property.	
A. Noxious or invasive weeds	D.	Plants non-native to North America	
B. Invasive or non-invasive	E.	Plant species	
C. Noxious or not noxious			
6. A is also	0 CC	mmonly defined as a plant that grows out of place	(i.e. a rose can be
a weed in a wheat field) and is "	'cor	npetitive, persistent, and pernicious.	•
A. Non-native (or alien)	D.	Native vegetation	
B. No natural enemies	E.	Natural controls	
A. Non-native (or alien)B. No natural enemiesC. Noxious weed	F.	None of the Above	
7. The	n	nandated for control are plants non-native to North A	America.
Consequently, these plants do r	not	nave the natural checks as found in their native land	d, such as insects,
		d keep the plant population in check.	,
A. Noxious or invasive weeds			
B. Invasive or non-invasive			
C. Noxious or not noxious			
8. Due to the competitive aggre	essi	ve ability of these plants, coupled with no natural co	ntrols, these plants
		lot only are manyout competed	
but native vegetation and the wi	ildli1	e associated with it will be replaced.	by incoo woods,
A. Noxious or invasive weeds			
B. Invasive or non-invasive	F	Plant species	
C. Noxious or not noxious	F.	None of the Above	
9 Consequently identifying the	e we	eeds when they first become established and develo	oping an integrated
		hem is critical in maintaining healthy, productive lan	
		to describe a legal designation for plant species that	
determined to be especially und			
		Plants non-native to North America	
B. Invasive or non-invasive	E.	Plant species	
C. Noxious or not noxious	F.	None of the Above	
10. These weeds are subject, b	ov la	w, to certain restrictions. Regulated by the U.S. De	partment of
Agriculture, there are	,	in, to contain recursioner regulated by the c.e. be	paramont of
A. Non-native (or alien)	D.	Native vegetation	
B. No natural enemies		Natural controls	
C. 90 federal noxious weeds		None of the Above	
11. include no	ot o	nly noxious weeds, but also other plants that are no	t native to this
country.		ny nomena matany amanana amanana ma	
	D.	Plants non-native to North America	
B. Invasive plants		Plant species	
C. Noxious or not noxious		None of the Above	
12. Plants are		if they have been introduced into an environment	t where thev did
	uall	y have no natural enemies to limit their reproduction	
A. Non-native (or alien)		Considered invasive	
B. No natural enemies		Natural controls	
C. Noxious weeds		None of the Above	

	in produce significant changes to vegetation, composition,	
structure, or ecosystem function.	anta man mativa ta Nanth Amania	
A. Noxious or invasive weeds D. Pla B. Invasive plants E. Pla	ants non-native to North America ant species	
C. Noxious or not noxious F. No	one of the Above	
C. Nexicus of florifloxicus	710 OT 110 7 150 TO	
What is an Invasive Species?		
	s defined as a species that is 1) non-native (or alien) to the	
ecosystem under consideration and 2)	s defined as a species that is 1) non-native (or alien) to the whose introduction causes or is likely to cause economic or	
environmental harm or harm to human	health.	
A. Non-native (or alien) D. Na	ative vegetation	
A. Non-native (or alien) B. No natural enemies C. Noxious weeds D. Na E. Inv	vasive species	
C. Noxious weeds F. No	one of the Above	
Weed Identification Section		
	ant growing in an area where it is not wanted. We try to control	
weeds because they compete with cro	ps for light, moisture, space and nutrients.	
A. Seed	D. Other species	
B. Weed	E. Crops for light, moisture, space and nutrients	
B. WeedC. Medical and economic problems	F. None of the Above	
16. Certain weed species can harbor	and insect pests and can be a serious threa	at to
	may be poisonous, allergenic or an irritant to humans and/or	
livestock. A. Seeds	D. Other appeign	
B. Plant diseases	Other species E. Crops for light, moisture, space and nutrients	
C. Medical and economic problems		
e. Medical and economic problems	1. None of the Above	
17. Medical and economic problems s	such as illness, death, rash, hayfever, or a	0
fur, meat and milk products may result		
A. Seeds	D. Reduction in quality	
B. Weeds	E. Crops for light, moisture, space and nutrients	
C. Medical and economic problems	F. None of the Above	
40 Marda have many writing about the	Assisting ordered was less than an automorphism of the control of	
	teristics which make them extremely difficult to control. Most	
produce a tremendous number ofA. Seeds	D. Other species	
B. Weeds	E. Crops for light, moisture, space and nutrients	
C. Medical and economic problems		
e. Medical dila economic probleme	1. None of the Above	
19. The of some v	weed species may be dormant for many years, with only a small	II
percentage germinating each year.		
A. Seeds	D. Other species	
B. Weeds	E. Crops for light, moisture, space and nutrients	
C. Medical and economic problems	F. None of the Above	
20. Canada	:	
	inate without intense heat, like from a wild fire. Weeds generally seeds will be dropped before crop harvest and remain in the fie	
	steeds will be dropped belore crop flarvest and remain in the liest than crops and can often survive under unfavorable growing	JIU.
conditions.	than stops and can often survive under unlavorable growing	
A. Seeds	D. Other species	
B. Weeds	E. Crops for light, moisture, space and nutrients	
C. Medical and economic problems	F. None of the Above	

21	_ may conveniently be divided into two classes based on the way in which they
emerge from the seed	<u>d.</u>
A. Seeds	D. Other species
B. Weeds	E. Crops for light, moisture, space and nutrients
C. Medical and econo	E. Crops for light, moisture, space and nutrients omic problems F. None of the Above
	'
22.	emerge with a single seed leaf whereas dicots emerge with two seed
leaves.	
	D. Summer annuals
	E. Correct identification
	F. None of the Above
23. Most	found in turfgrass are from the family Gramineae and are termed weedy
	clude crabgrass, annual bluegrass, tall fescue, and quackgrass.
A. Monocot weeds	
B. Perennial weeds	
C. Biennial weeds	
O. Dicimial weeds	1. None of the Above
24.	, on the other hand, are termed broadleaf weeds and include such plants
as dandelion, clover	ground ivy, knotweed, and plantain.
	D. Summer annuals
B. Perennial weeds	
	F. None of the Above
C. Dieffilial Weeds	1. Notice of the Above
25 Weedy grasses a	andare further divided into groups according to the plants
length of life.	andare further divided into groups according to the plants
	D. Summor appuals
P. Doronniol woodo	D. Summer annuals
	E. Broadleaf weeds
C. Diemilai weeds	F. None of the Above
26	have a life of more than two years, though new seeds may be produced every
zo year.	have a file of filore than two years, though hew seeds may be produced every
	D. Summer annuals
	E. Correct identification
C. Dienniai weeds	F. None of the Above
07	have a life of two years, generally staring up food recorves in the leaves and
	have a life of two years, generally storing up food reserves in the leaves and
	d producing seed in the second year.
	D. Summer annuals
	E. Correct identification
C. Biennial weeds	F. None of the Above
00 T	
28. The	are often grouped with perennial weeds since control is similar.
A. Monocot weeds	D. Summer annuals
B. Perennial weeds	E. Correct identification
C. Biennial weeds	F. None of the Above
29.	warmainata francasa di arau. Flaurar and praduca acadin laca than ana wasr
	_germinate from seed, grow, flower, and produce seed in less than one year.
A. Monocot weeds	D. Summer annuals
	_ =

			A warm season annuals) germinate in the spring and mature in the fall .KAn distributed in fall or late winter and matu	
sp	ring.			
À.	Monocot weeds	D.	. Summer annuals	
В.	Perennial weeds	E.	Cool season annuals	
C.	Biennial weeds	F.	None of the Above	
31			complete their lifecycle from seed to maturity in less than one year.	They
ge	rminate in the spring,	ma	ature, set seed and die in the fall.	
	Monocot weeds		. Summer annuals	
В.	Perennial weeds	Ε.	Correct identification	
C.	Biennial weeds	F.	None of the Above	
32			germinate in the fall, overwinter as seedlings or small rosettes and	
	t seed and die the foll nter annual lifecycles.		ving spring or early summer. Some weeds are capable of both summe	r and
	Monocot weeds		. Summer annuals	
B.	Perennial weeds	E.	Winter annuals	
	Biennial weeds		None of the Above	
	ennials			
33			complete their lifecycles in less than two years. Germination and t	.he
			ring rosette of leaves occur the first year.	
	Monocot weeds		. Summer annuals	
	Perennial weeds		Correct identification	
C.	Biennials	F.	None of the Above	
		owe	ering,, and plant death occur. Control is best o	obtained
	ring the first year.	_		
	Monocot weeds			
	Perennial weeds			
C.	Biennial weeds	۲.	None of the Above	
	rennials		live for more than two years. They reproduce yearstatively from re	oto
			live for more than two years. They reproduce vegetatively from ro	
	rsistent root systems.		or from seed, or both. They can be especially difficult to control because	se or triell
	Monocot weeds		. Summer annuals	
	Perennial weeds		. Summer annuals . Perennials	
_			None of the Above	
C.	Biennial weeds	г.	Notice of the Above	
	 Early identification of the state of the sta	ou t	emerged weed species is critical for choosing the best weed control m to identify	ethods.
A.	Monocot weeds	D.	. Weeds at three growth stages	
В.	Perennial weeds	E.	. Correct identification	
C.	Biennial weeds	F.	None of the Above	
37	. Effective control of	$\overline{}$	is based on correct identification.	
	Monocot weeds	D.	. Weeds in turf	
	Perennial weeds		Correct identification	
C	Biennial weeds	F.	None of the Above	

Understanding Weed Terms	is simply but all life on earth even that which has yet to be
discovered. More specifically, it inclu	is, simply put, all life on earth, even that which has yet to be des the millions of diverse species, from bacteria to whales that
share the earth's lands and waters w	ith us.
A. Cultivar(s) D. I	Exotic (introduced) plant
B. Biological Management E. C	Ornamental plant
C. Biodiversity F. N	None of the Above
	pecies are being extinguished as a result of, such
as habitat destruction and exotic spe	cies introductions.
A. Cultivar(s) D. B. Biological Management E. H	Exotic (introduced) plant
B. Biological Management E. F.	Human activities
C. Biodiversity F. N	Notice of the Above
40 Biolog	ical control is the deliberate use of the pest's natural enemies - - to reduce the pest population below damage levels.
predators, parasites, and pathogens	- to reduce the pest population below damage levels.
A. Cultivar(s) D. I B. Biological Management E. C	=xotic (introduced) plant Ornamental plant
C. Biodiversity F. N	Jone of the Above
•	
41: Wh	en exploring chemical control options, you should select the lowest
risk and most effective products. The	key is to use pesticides in a way that complements rather than
hinders other elements in the strateg	y and which also limits negative environmental effects.
A. Cultivar(s) D. I	=xotic (introduced) plant Ornamental plant
A. Cultivar(s) D. B. Biological Management E. C. Chemical Control F. N	Jone of the Ahove
and/or genetic manipulation to exhibit	Exotic (introduced) plant Ornamental plant
43. are maintain	ed via controlled pollination or vegetative means, so that cultivar
characteristics are passed to ensuing	g generations.
A. Cultivar(s) D. B. Biological Management E. C	Exotic (introduced) plant
B. Biological Management E. C	Ornamental plant
C. Biodiversity F. N	None of the Above
increase pest mortality or reduce rate	
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plantC. Ecovar	E. Integrated Pest Management (IPM) F. None of the Above
C. LCOVAI	1. Notice of the Above
pest resistant varieties of crops, mulcimpact, burning, flooding, crop rotation of beneficial insect habitat, or other h	
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plantC. Non-susceptible crops	E. Integrated Pest Management (IPM)F. None of the Above

collection of plants of a native sp	or "ecological variety." A plant "variety" developed by man from a pecies that were selected from several to many natural populations in a
specific region. A. Growth Habit – Invasiveness	
C. Ecovar	E. Integrated Pest Management (IPM)F. None of the Above
diversity within that species in the little to no selection is done during A. Growth Habit – Invasiveness	n genetic diversity in the parent collection, which reflects the natural ne defined region. To maintain genetic diversity in ensuing generations, ng the development process. D. Cultural management E. Integrated Pest Management (IPM) F. None of the Above
	intermediate step between a wild-growing plant and a cultivar.
B. Exotic invasive plant	D. Cultural management E. Integrated Pest Management (IPM)
C. Ecovar	E. Integrated Pest Management (IPM)F. None of the Above
intention or by accident. A. Cultivar(s) B. Biological Management	A plant species that exists in a region because it was brought to that e settlement of the region. We are still introducing exotic plants, by D. Exotic (introduced) plant E. Ornamental plant F. None of the Above
ecosystems. Some native plants species are introduced (exotic).	
A. Growth Habit – Invasiveness B. Exotic invasive plant	D. Cultural management E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above
over large areas. Free from the	: The most important aspect of an alien plant is how it responds to a new es is one that displays rapid growth and spread, allowing it to establish vast and complex array of natural controls present in their native lands, and diseases, exotic plants may experience rapid and unrestricted growth D. Cultural management E. Integrated Pest Management (IPM) F. None of the Above
seed production, high seed gerr reproductive (seed-producing) s	is enhanced by features such as strong vegetative growth, abundant mination rate, long-lived seeds, and rapid maturation to a sexually stage. Invasive plants reproduce rapidly, either vegetatively or by seed. Is them to overwhelm and displace existing vegetation and form dense
A. Invasiveness	D. Cultural management
B. Exotic invasive plantC. Ecovar	E. Integrated Pest Management (IPM)F. None of the Above

	d harmful. For example, a small number of
	of our agricultural industry and pose little to no threat to our
	n plant is one less native host plant for our native insects,
vertebrates and other organisms that are	
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plantC. Non-invasive alien plants	E. Integrated Pest Management (IPM)
C. Non-invasive alien plants	F. None of the Above
54 · A plan	nt species or cultivar that is grown for its beauty (in its end use),
rather than commercial or production re-	asons
A. Cultivar(s) D. Exo	tic (introduced) plant
A. Cultivar(s) D. Exo B. Biological Management E. Orn	amental plant
C. Biodiversity F. Non	e of the Above
	comprehensive, environmentally sensitive approach to managing
environment.	ategies that pose the least hazard to people, property, and the
	D. Cultural management
A. Growth Habit – InvasivenessB. Exotic invasive plantC. Ecovar	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above
56. The simple philosophy is that control	ol will be more effective, andwill be less
	ures is deployed against a pest. These measures can include,
	cal, and chemical methods for managing the pest.
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plant C. Ecovar	E. Resistance
C. Ecovar	F. None of the Above
57 Some of the key components to a s	uccessful program include the following:
Identify current and potential nest specie	es, their biology, and conditions conducive to the pest(s) (air,
water, food, shelter, temperature and lig	
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plant	E. IPM
A. Growth Habit – InvasivenessB. Exotic invasive plantC. Ecovar	F. None of the Above
50 11 1 1 1 1 1 1 1 1 1	
58. Understand the physical and	that affect the number and distribution of pests
and their natural enemies.	D. Cultural management
A. Growth Habit – Invasiveness	E. Biological factors
B. Exotic invasive plantC. Ecovar	F. None of the Above
C. Ecoval	F. Notic of the Above
59. : Mech	nanical or physical control methods involve using barriers, traps, or
physical removal to prevent or reduce pe	
A. Source-identified seed D. Med	chanical or Physical Management
B. Noxious Weeds E. Sou	rce-identified seed
C. Native plant F. Non	e of the Above
60. Tactice may include using row save	rs or trenches to prevent insects from reaching the crop, baited or
pheromone traps to capture insects, or	
	chanical or Physical Management
	rce-identified seed
	e of the Above

61: A plant specie	es that is found in a region because it developed and evolved in
	s that existed in a region prior to settlement.
A. Source-identified seed D. Mecha	anical or Physical Management
B. Noxious Weed E. Source	e-identified seed
C. Native plant F. None	of the Above
62. : An exotic	plant that was introduced into an area, escaped from
	udes exotic invasive plants). Many plants commonly thought to
be natives were actually introduced by ear	ly settlers.
A. Mechanical or Physical Management	D. Variety
B. Native plant	E. Pest
C. Naturalized plant	F. None of the Above
63. : The term no	xious is a legal designation used specifically for plant species
	sts of agricultural ecosystems and are subject, by law, to
certain restrictions. The U.S. Department	
A. Source-identified seed D. Mecha	
B. Noxious Weeds E. Source	
C. Native plants F. None	of the Above
64. Plants can also be designated as "	" by states and counties, usually through
	eds designated for their impacts to agriculture also threaten
	quen-ervia), a tree from Australia, aggressively invades
	onal Park in Florida and has been designated a federal noxious
	nts affecting natural ecosystems are expected, as their
ecological and economic impacts continue	
A. Source-identified seed D. Mecha	anical or Physical Management
B. Noxious Weeds E. Source	e-identified seed
C. Native plants F. None	of the Above
65 · Any living organi	ism (plant or animal) that occurs where it is not wanted or that
causes damage to crops or humans or oth	er animals.
A. Mechanical or Physical Management	
B. Native plant	
C. Naturalized plant	F. None of the Above
66: Off-sprin	g of plants collected from a single defined natural population of
a native species for production of seed. No	o selection is done during the collection and subsequent seed
	diversity. The genetic diversity is less than for an ecovar.
	anical or Physical Management
	e-identified seed
	of the Above
67. : Within a	species, a naturally occurring sub-group of plants that have one
	art from the rest of the species. Ex.: Solidago odora var.
chapmanii.	, , , , , , , , , , , , , , , , , , , ,
A. Mechanical or Physical Management	D. Variety
B. Native plant	E. Pest
C Naturalized plant	F None of the Above

	_: The term weed is a subjective word used to describe any plant
growing wherever someone wishe	other words, weeds can include native and non-native plants alike, es they weren't. Invasive exotic plants of natural ecosystems are often
referred to as natural areas weeds	s.). Weeds, Wildlands and Natural Areas
B. Noxious Weeds	Source-identified seed
C. Native plant	. None of the Above
direct human interference. The term A. Source-identified seed B. Noxious Weeds E	is generally an area of land or water with predominantly native eatures that is allowed to respond to the forces of nature with little to norm wildlands is also used to describe these areas. D. Natural area E. Weeds, Wildlands and Natural Areas E. None of the Above
The Invasive Problem	
Exotics are those that do not natu	describe plants that were growing here before the arrival of Europeans. rally occur in an area but have been introduced by people. Many exotic are invasive and grow out of control — displacingwhich sortment of native wildlife. D. Our native fauna E. Native plants F. None of the Above
example, Japanese honeysuckle	
	of the greatest threats to the natural ecosystems of the U.S. and are
destroying America's natural histo	ny and identity. D. Our native fauna
A. Aggressive invadersB. Invasive non-native organismsC. Native butterfly species	E. Invasive species
C. Native butterfly species	F. None of the Above
A. Some native plants E Exotic plants E	are disrupting the ecology of natural ecosystems, displacing and degrading our nation's unique and diverse biological resources. D. Exotic plants and animals E. Unwelcome plants, insects and other organisms E. None of the Above
	he amount of light, water; nutrients and space available to native s, soil chemistry, moisture-holding capacity, and erodibility, and change
A. Aggressive invaders	D. Our native fauna
B. Invasive non-native organisms	
C. Native butterfly species	F. None of the Above

75are capable of hybridizing with native plant relatives, resulting in unnatural changes to a plant's genetic makeup; others have been found to harbor plant pathogens, such as bacterial leaf scorch (Xylella fastidiosa) that can affect both native and non-native plants, including
ornamentals.
A. Some native plants D. Exotic plants and animals
B. Some exotics E. Native plant relatives
C. Natural disturbances F. None of the Above
76. Still others contain toxins that may be lethal to certain animals. For example, garlic mustard has been found to contain compounds that are lethal to a
A. Aggressive invaders D. Our native fauna
B. Invasive non-native organisms E. Invasive species
C. Native butterfly species F. None of the Above
77. Exotic organisms have been referred to as biological pollution. In some cases, exotic plant invaders are driving our rarest species closer to extinction. According to the U.S. Fish and Wildlife Service, an
estimated 42% of the nation's endangered and threatened species have declined as a result of
encroaching A. Some native plants D. Exotic plants and animals B. Exotic plants E. Native plant relatives
B. Exotic plants E. Native plant relatives
C. Natural disturbances F. None of the Above
Impacts to Native Fauna
78. Our native fauna, including insects, birds, mammals, reptiles, fish and other animals, is dependent or
native plants for food and shelter. While some animals have a varied diet and can feed on a wide number of, others are highly specialized and may be restricted to feeding on several or a
A. Aggressive invaders D. Plant species
B. Invasive non-native organisms E. Invasive species
A. Aggressive invaders B. Invasive non-native organisms C. Native butterfly species D. Plant species E. Invasive species F. None of the Above
79. Caterpillars of the monarch butterfly have evolved to feed primarily on plants in the genus Asclepias (milkweeds) that contain special chemicals. The term host plant is generally used to describe a plant
species that is required food for at least one stage of an insect or other animal. As exotic plants replace
our native flora, fewer host plants are available to provide the necessary nutrition for
A. Some native plants D. Exotic plants and animals
B. Exotic plants E. Native plant relatives
C. Our native wildlife F. None of the Above
Disturbance Effects
80 are especially problematic in areas that have been disturbed by human activities
such as road building, residential development, forest clearing, logging operations, grazing, mining,
ditching of marshes for mosquito control, mowing, erosion control and fire prevention and control
activities.
A. Aggressive invaders D. Our native fauna
B. Invasive non-native organisms E. Invasive species
C. Native butterfly species F. None of the Above
81, such as fires, floods, tornadoes, landslides, and tree falls also provide avenues for
81, such as fires, floods, tornadoes, landslides, and tree falls also provide avenues for invasive species to get started. The enormity of change wrought upon the American landscape over the
past few hundred years has thrown things out of balance.
A. Some native plants D. Exotic plants and animals
B. Exotic plants E. Native plant relatives
C. Natural disturbances F. None of the Above

	. Lacking		, native s	species and ecosystems benefit from natural disturbances that
				and nutrient recycling, and reduce fuel loadings.
	Aggressive i	invaders	l.	D. Exotic species
В.	Invasive non	n-native organi	sms i	E. Invasive species
C.	native butte	rily species	ı	F. None of the Above
83		displ	ay invasive	growth tendencies in their native ranges, often as a response to
				or example, native grape vines in forests may grow vigorously in
				cut that opens the canopy and brings abundant sunlight into
pre	eviously shad	led areas.		
Α.	Some native	e plants	D. Exoti	ic plants and animals re plant relatives
В.	Exotic plants	3	E. Nativ	e plant relatives
Ċ.	Natural distu	urbances	F. None	of the Above
84	. This "invasi	ive" growth sp	urt is usuall	y temporary though, and slows down again as trees and other
pla	nts fill in and	the forest can	opy is reco	vered. The best way to reduce plant invasions is to focus on
				ons,, minimizing disturbance to
				ıral communities.
Α.	Aggressive i	invaders	[D. Our native fauna E. Invasive species F. None of the Above
В.	Invasive non	n-native organi	sms I	E. Invasive species
Ċ.	Managing ex	xisting intestat	ions i	F. None of the Above
lm	portance of N	lative Plants		
			nts are nati	ive to the ecosystems of North America. Our native flora (i.e., all
				on of theand defines the various
ec	osystems and	d regions of the	e country. T	These plants also provide natural sources of food and fiber, and
				nd other materials for native American Indians.
Α.	Some native	e plants	D. Exoti	ic plants and animals
В.	Exotic plants	S .	E. Histo	oric American landscape
C.	Natural distu	urbances	F. None	of the Above
86	The		ŀ	nave been greatly reduced as a result of human encroachment
wh	ich has destr	oved many mi	Ilions of acr	res of natural habitat. In the U.S. alone, about 200 native plant
				800's and 5,000 species are considered to be at risk. Invasions
				test threat to native species after direct habitat destruction.
A.	Aggressive i	invaders	[D. Populations of many native plants
B.	Invasive non	n-native organi	sms l	E. Invasive species
C.	Native butte	rfly species	ŀ	F. None of the Above
Re	coanize the r	maior plant cha	aracteristics	s used to identify weeds.
87				he leaf that is attached to the node.
	Sheath	D. Rhizomes		
B.	Ligule	E. Stolons		
	Blade	F. None of th	e Above	
QQ		: 1 0	cated where	o the blade and the sheath most
88 Δ	Collar	D. Auricle	cated wrier	e the blade and the sheath meet.
	Roots	E. Shoot		
	Node	F. None of th	e Above	
89	•		gion of node	es with tightly compacted internodes.
	O-11	D A	,	es with tightily compacted internodes.
	Crown	D. Auricle	,	es with tightiy compacted internodes.
В.	Collar Crown Node	D. AuricleE. ShootF. None of th		es with tightly compacted internodes.

			:The region between the nodes
	Collar		
	Internode		
C.	Node	F.	None of the Above
91	•		:Enlarged areas at intervals along the stem and also the part of the plant where
	ds are attach		
	Collar		
	Roots		
C.	Node	F.	None of the Above
92			:Underground stems that grow laterally. Rhizomes
A.	Sheath	D.	Rhizomes
В.	Ligule	E.	Stolons
C.	Blade	F.	None of the Above
93			:Attachment of the plant to the soil that absorbs minerals and water needed for
	e plants surviv		
	Collar		
R.	Roots	F.	Shoot
C.	Node	F.	None of the Above
94			:Aboveground stems that grow laterally. Rhizomes
A.	Sheath	D.	Rhizomes
B.	Ligule	E.	Stolons
C.	Blade	F.	None of the Above
95	_		:Characteristic of the grass that describes how the new blades emerge from the
	eath as grow		
Δ	Sheath	ח	Rhizomes
R.	Liquie	F.	Vernation
C.	Blade	F.	Rhizomes Vernation None of the Above
Ο.	Blade	٠.	Trong of the Above
96			:The aboveground parts of the plant.
A.	Collar	D.	Auricle
В.	Roots		
C.	Node	F.	None of the Above
97			:A structure that grows from the collar area on the inner side of the leaf.
Λ	Sheath	<u> </u>	Phizomes
	Ligule		Stolons
	Blade		None of the Above
•	2.5.4.5	•	
98			:An appendage that grows from the edge of the collar and may wrap around the
	em.	_	
	Collar		Auricle
	Roots		Shoot
C.	Node	F.	None of the Above
99	_		:The upper part of the leaf.
	Sheath	D	Rhizomes
	Ligule		Stolons
	Blade		None of the Above
U.			

	Grasses (monocots), and Sedges essified into three primary categories: broadleaves (dicots), grasses (),
and sedges.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
•	D. Every species of plant, animal, fungi, bacteria
	E. A native (indigenous) species
C. Rhizomes	F. None of the Above
-	eaf seedlings, it is common to look first at the cotyledons or seed leaves. The are the first pair of leaves that open after emergence.
A. Endemic	D. Other physical and biological factors
A. Endemic B. Leaf surfaces	E. Cotyledons
C. Leaf shape	F. None of the Above
	have various shapes and sizes; they may be linear-, egg-, round- or butterfly-
shaped or have variatio	
	ery species of plant, animal, fungi, bacteria
	ative (indigenous) species
C. Rhizomes F. Non	e of the Above
	ures of the weed, such as the(leaves emerging after
cotyledons) and stems.	
A. True leaves	D. Other physical and biological factors
B. Leaf surfaces	E. Underground vegetative stems
C. Leaf shape	F. None of the Above
104. Leaf shape can va	ary dramatically and is a consistent key to The leaves may be
alternately or oppositely	arranged along the stem.
	D. Other physical and biological factors
B. Leaf surfaces	E. Plant identification
C. Leaf shape	
105. Some leaves may	y be attached to a short stem, known as the petiole, while others may lack a
A. Cotvledons D. Eve	ery species of plant, animal, fungi, bacteria
B. Petiole E. A na	ative (indigenous) species
C. Rhizomes F. Non	
106. Check the leaf sui	rfaces for the presence of hair and the
A. Endemic	D. Other physical and biological factors
	E. Underground vegetative stems
C. Leaf shape	F. None of the Above
107. Stems can also as	ssist in identifying a weed; they have various shapes and amounts of hair, if any.
	remove the roots from the soil and look for the presence of rhizomes, creeping
roots, or other structure	
A. Cotyledons	D. Tubers
B. Petiole	E. A native (indigenous) species
C. Rhizomes	F. None of the Above
108.	are underground vegetative stems from which new plants are generated. The
	tative structures will indicate that the weed's life cycle is perennial.
A. Endemic	D. Other physical and biological factors
B. Leaf surfaces	E. Rhizomes
C. Leaf shape	F None of the Above

	es interactions ve (indigenous) species
A. Endemic	f time, these and other physical and biological factors direct the D. Distributions of organisms in nature Underground vegetative stems None of the Above
ecosystem, and habitat w	
to European settlement plants or other organisms environments. A. Endemic	orth America are generally recognized as those occurring on the continent prior is used to describe populations of native animals, that are have relatively restricted distributions and are confined to certain O. Other physical and biological factors Underground vegetative stems None of the Above
occur artificially in location	es of plant, animal, fungi, bacteria rical natural ranges
ecosystems and even oth A. Considered exotic	D. Large numbers of species E. Many introduced plants
locality in the U.S. to a ne A. Considered exotic E B. Species exotic E	to the U.S. include those transported from Europe, Asia, Africa, South her parts of the world. It also includes any species moved by people from one ew one. D. Large numbers of species E. Many introduced plants F. None of the Above
U.S. Because of its for living fences, erosion of	nia pseudoacacia) is native to the southern Appalachian region of the eastern, it was planted all around the U.S. during this century control, wind breaks and other purposes. Even though it is native to the U.S., I exotic anywhere it occurs outside its known historical natural range of southern
A. Considered exotic E. Species exotic E	D. Large numbers of species E. Rapid growth and hardiness F. None of the Above

from their home lands, for food, continue today, and are increasi intentional and accidental move	n Exotic! European settlers brought hundreds of plants to North America medicinal, ornamental, and other purposes. Introductions of exotic plants ng due to, increased international travel, and the ment of large numbers of species between continents as a result of
expanded international trade.	D. Large numbers of appaies
A. Considered exoticB. Species exotic	D. Large numbers of species
C. An exploding human popular	E. Many introduced plants tion F. None of the Above
North American native plant spe	ave become naturalized across the continent and some are replacing cies. These naturalized plants, however much a part of our current e nonetheless exotic, since they were moved here by people rather than are numbers of species
B. Species exotic E. Mar	v introduced plants
C. Non-native F. Non	e of the Above
continues to attempt to unravel tranges.	of some species are unknown or unclear, research the tangle of human and natural influences responsible for their current
A. Historical distributions	D. Large numbers of species
B. Species exotic	E. Many introduced plants
C. Non-native	F. None of the Above
Broadleaves and grasses may b	to two large general classifications: broadleaves and grasses. be further divided into D. Biennials and winter annuals E. Perennials F. None of the Above
121may be	even further subdivided by the seasons in which they germinate and
grow. A. Annual and perennial weeds B. Annual plants C. Summer annuals	D. Biennials and winter annualsE. PerennialsF. None of the Above
122. Annuals	
	e their life cycle in less than one year.
A. Annuals and perennials	D. Biennials and winter annuals
B. Annual plants	E. Perennials
C. Summer annuals	F. None of the Above
because of an abundance of do	ered easy to control. This is true for any one crop of weeds. However, rmant seed and fast growth, annuals are very persistent. They actually nial weeds. Most common field weeds are annuals. There are two types;
A. Annuals and perennials	D. Biennials and winter annuals
B. Annual plants	E. Summer and winter annuals
C. Summer annuals	F. None of the Above

Summer Annuals 124.	germinate in the spring, make most of their growth during the summer,
and the plants mature and die in	the fall. The seeds lie dormant in the soil until next spring. D. Biennials and winter annuals E. Perennials F. None of the Above
months. In this group, high soil These are most troublesome in	geminate in the fall and winter and usually mature seed in the ne plants die. The seeds often lie dormant in the soil during the summer emperatures (125°F or above) have a tendency to cause seed dormancy fall and early spring in ornamental plant areas. D. Biennials and winter annuals E. Winter annuals F. None of the Above
troublesome weeds fall in this g the winter annual group normall	ves for more than 1 year but not more than 2 years. Only a few oup. There is confusion between biennials and winter annuals, because volves during 2 calendar years and during 2 seasons. D. Biennials and winter annuals E. A biennial plant F. None of the Above
reproduction as simple and cree A. Annuals and perennials	D. Biennials and winter annuals E. Perennials
cut in half longitudinally may pro	_spread by seed. They have no natural means of spreading vegetatively t pieces may produce new plants. For example a dandelion or dock root duce two plants. The roots are usually fleshy and may grow very large. D. Biennials and winter annuals E. Perennials F. None of the Above
Creeping Perennials 129. (stolons), or creeping below-gro A. Creeping perennials B. Annual plants C. Summer annuals	reproduce by creeping roots, creeping above ground stems und stems (rhizomes). In addition they may reproduce by seed. D. Biennials and winter annuals E. Perennials F. None of the Above
130. Some weeds maintain the adapted for food storage. NutseA. TubersB. Agricultural advancesC. Roundup and Roundup Rea	dge (nutgrass) and Jerusalem artichoke are examples. D. Some creeping perennials E. Propagate by means of tubers

	are probably the most difficult group of weeds to control.
Cultivators and plows often drag pieces about th	
A. Tubers	D. Creeping perennials
	E. Roundup-resistant weeds F. None of the Above
C. Roundup and Roundup Ready crops	F. Notic of the Above
132, repeated mowing fo	r 1 or 2 years, or persistent herbicides are often
necessary for control.	D. Combination and managed adjusting tions
A. Tubers	D. Continuous and repeated cultivations
B. Agricultural advancesC. Roundup and Roundup Ready crops	E. Roundup-resistant weeds F. None of the Above
C. Roundup and Roundup Ready Crops	F. Notic of the Above
133. Cultivation, in combination with herbicides, effective eradication program also requires	is proving effective on some creeping perennials. An
A. Tubers	D. The killing of seedlings
B. Agricultural advances	E. Roundup-resistant weeds
C. Roundup and Roundup Ready crops	F. None of the Above
o. Rodridap and Rodridap Roday Grope	T. None of the Above
Roundup-Resistant Weeds	
134 like horsey	weed and giant ragweed are forcing farmers to go back to
more expensive techniques that they had long a	
A. Tubers	D. Some creeping perennials E. Roundup-resistant weeds
B. Agricultural advancesC. Roundup and Roundup Ready crops	E. None of the Above
C. Roundup and Roundup Ready Crops	F. Notic of the Above
	f glyphosate-resistant pest called Palmer amaranth, or
pigweed, whosehas I	pegun to seriously infesting farms.
A. Tubers	D. Resistant form
B. Agricultural advances	E. Roundup-resistant weeds
A. Tubers B. Agricultural advances C. Roundup and Roundup Ready crops	F. None of the Above
136 Pigweed can grow three inches a day and	reach seven feet or more, choking out crops; it is so
	In an attempt to kill the pest before it becomes that big,
	That threatens to reverse one of the agricultural advances
bolstered by the: minimu	
A. Tubers	D. Some creeping perennials
B. Roundup revolution	E. Roundup-resistant weeds
A. TubersB. Roundup revolutionC. Roundup and Roundup Ready crops	F. None of the Above
137. By combining , farme	ers did not have to plow under the weeds to control them.
That reduced erosion, the runoff of chemicals in	to waterways and the use of fuel for tractors
A. Tubers	D. Some creeping perennials
B. Agricultural advances	E. Roundup-resistant weeds
C. Roundup and Roundup Ready crops	F. None of the Above
Commonly Found Wood Scotion	
Commonly Found Weed Section A-Z Common Names	
African Rue	
138. Description: African rue is a multi-branche	ed and
A. Five individual petals D. Bushy perer	
B. Allelopathic chemicals E. An herbaced	
C. Fleshy tubers F. None of the	

		it is a succulent plant, with bright green alternating
leaves that are smooth and fine	ly d	livided with long, narrow segments. Plants grow 1.5 feet tall and 3-4
feet in diameter.		
A. Compositae Family	D.	Creeping plant with compound leaves
B. Perennial weed	Ε.	Caltrop family
C. An herbaceous perennial	F.	None of the Above
140. Flowers are white with		and are present in spring to early fall. Fruit is a
located in a leathery capsule 2-	4 ce	elled which contains 45-60 seeds.
A. Five individual petals	D.	Multi-branched and bushy perennial
B. Allelopathic chemicals	E.	An herbaceous perennial
C. Fleshy tubers	F.	None of the Above
141. Seeds are angular, dark b	row	n and have a distinctive smell. When crushed, the stems also have a
disagreeable odor. The base of	this	s plant iscan branch and reach 20 feet in depth
		Creeping plant with compound leaves
B. Woody and roots	Ε.	Annual sunflowers
C. An herbaceous perennial	F.	None of the Above
142. African rue prefers distribu	utec	l environments such as roadsides, fields and rangelands in desert and
		in soils with high salinity and most parts of the plant contain
that redu	се	growth of other vegetation.
A Five individual netals	ָ ח	Multi-branched and bushy perennial
B. Allelopathic chemicals C. Fleshy tubers	E.	An herbaceous perennial
C. Fleshy tubers	F.	None of the Above
Artichoke, Jerusalem		
143. Plant Description: It is near	arly	impossible to distinguish Jerusalem artichoke from annual sunflowers
		rusalem artichoke has a coarse, 5- to 10-foot tall stem, large leaves
with a rough upper surface, and	l	
A. Compositae Family	D.	Creeping plant with compound leaves
B. Perennial weed	E.	Bright yellow sunflower-like flowers
C. An herbaceous perennial		
144. Jerusalem artichoke can b	oe e	easily distinguished from annual sunflowers by its below-ground growth
		ing thin, knotty potatoes. Reproduction of Jerusalem artichoke is by
seeds, rhizomes (
A. Five individual petals	D.	Multi-branched and bushy perennial
B. Allelopathic chemicals		Horizontal underground stems
C. Fleshy tubers		None of the Above
Asparagus, Wild		
	para	agus is an herbaceous perennial, well-known for its edible young
shoots. Mature plants have a		, and reproduce by seed.
A. Distinctive fern-like appeara		
B. Perennial weed		E. Annual sunflowers
C. An herbaceous perennial		F. None of the Above
Aster, White-Heath		
	eat	h aster is athat can frequently be seen
		a clump of upright stems with wand-like spreading branches. In late
August, small white flowers cov		
A. Five individual petals		Multi-branched and bushy perennial
B. Allelopathic chemicals		An herbaceous perennial
C. Perennial weed		None of the Above

	of many individual flowers that may be different shapes and
	ping plant with compound leaves al sunflowers
C. An herbaceous perennial F. None	of the Above
148. In the case of white heath aster, the surrounded by 16 to 35 white ray flowers. A. Five individual petals D. Multi. B. Yellow disk flowers E. An heath aster, the surrounded by 16 to 35 white ray flowers. C. Fleshy tubers F. None	Reproduction is by seedsbranched and bushy perennial erbaceous perennial
	om May to July. A creeping plant with compound leaves; ir. Flowers 1/4 to 1 inch long and orange-red. Many seeds in
B. Perennial weed	D. Creeping plant with compound leaves E. Annual sunflowers F. None of the Above
	or light shade if provided with abundant moisture and rich soil. t interior climates, some shading would be beneficial for most ording. Ingled mats Is species Above
stepping on the young shoots. New shoo like asparagus. Keep in mind that running and when they are "	in a small area (a normal city yard) simply by mowing or ts could also be used for culinary purposes and cooked, much g bamboo only puts up new shoots for a short time each year,", the new plants are very fragile and easy to destroy. D. Nodes on the stem. E. Shooting F. None of the Above
time seems to be in the fall or early winte	nches
encountered, (8-10 inches is usually suffileft, cutting a line until all the rhizomes hat A. Leaves alternate and compound B. Spreading rhizomes	s maximum depth so as to cut through any cient). Keep moving the spade one width at a time to the right of ave been cut. D. Nodes on the stem. E. New plants are very fragile and easy to destroy F. None of the Above

Bedstraw, Smooth 154. Plant Description: There are at least 30 different bedstraws in North America, and many are perennials like smooth bedstraw that produce sprawling tangled mats from which	
which A. Rhizomes D. Sprawling tangled mats B. A few erect stems arise E. Nodes on branches C. Large mats F. None of the Above	
155. The typical bedstraw leaf is linear andconsisting of as many as 8 leaves at nodes on the stem. A. Leaves alternate and compound D. Nodes on the stem. B. Spreading rhizomes E. New plants are very fragile and easy to destroy F. None of the Above	98
with 8 leaves at each node on main stems and 6 to leaves at nodes on branches. A. Rhizomes D. Sprawling tangled mats B. Bedstraw E. Only white-flowered form C. Large mats F. None of the Above	8
157. Reproduction is by seeds and underground, spreading rhizomes (). A. Leaves alternate and compound D. Nodes on the stem. B. Spreading rhizomes E. New plants are very fragile and easy to destroy F. None of the Above	
Related Information: 158. The common name 'bedstraw' has two possible origins: the dried plant was used to stuff mattresses; it is said that bedstraw was placed in thewhen Jesus was born. John 3:16 A. Manger at Bethlehem D. Sprawling tangled mats B. Bedstraw E. Nodes on branches C. Large mats F. None of the Above	
Biddy-biddy 159. Description: Perennial that grows four to eight inches tall. Biddy-biddy spreads by stolons that ro at the nodes and plants form large mats where individual plants are indistinguishable. The plant stems are depending on conditions. A. Rhizomes D. Sprawling tangled mats B. Prostrate to erect E. Nodes on branches C. Large mats F. None of the Above	
160. Leaves alternate and compound, withhaving 5 to 11 leaflets 1/4-2/inches long. A. Leaves alternate and compound D. Mature plants. B. Spreading rhizomes E. New plants are very fragile and easy to destroy F. None of the Above	'3
161, and turn into a round bur that disperses as a unit when mature. A. Twining perennial vine D. Dense ground cover B. Bindweed foliage E. Flower heads spherical C. Vines F. None of the Above	

162. Impacts: This plant prefer	rs open, disturbed, well-drained sites, including stable dunes, open s d trampled sites in coastal habitats where some summer moisture is	scrub,
available and frosts are infreque	d trampled sites in coastal habitats where some summer moisture is ent. Plants thrive on poor soils and compete poorly with established	•
vegetation		
A. Grassy areas	D. Deep root system E. Dense field bindweed infestations	
B. Bindweed leaves	E. Dense field bindweed infestations	
C. Herbicide application	F. None of the Above	
• •		
Bindweed, Field		
163. Field bindweed can be spi	read by seed,, farm implements, infested s	soil
adhering to the roots of nursery	stock, root growth from infested areas, and by animals.	
A. Twining perennial vine		
B. Bindweed foliage C. Vines	E. Root growth	
C. Vines	F. None of the Above	
164. Field bindweed has a dee nutrients.	p root system that competes withfor water and	
A. Flowers are funnel-shaped	D. Crop plants	
B. Bindweed leaves	E. Dense field bindweed infestations	
C. Herbicide application	E. Dense field bindweed infestationsF. None of the Above	
	shade crops, cause lodging of, and make harves	sting
difficult by clogging machinery.		
A. Twining perennial vine		
B. Bindweed foliage		
C. Small grains	F. None of the Above	
166 Dense field	may reduce crop yields by 50 to 60 percent. Land infested with	n field
bindweed is reduced in value.	may reduce drop yields by 60 to 60 percent. Early intested with	i iicia
A. Flowers are funnel-shaped	D. Deep root system	
B. Bindweed leaves	E. Bindweed infestations	
C. Herbicide application		
• •		
	which produces a dense ground cover. The t	wining
stems vary from 1.5 to 6 feet or		
A. Twining perennial vine		
B. Long-lived perennial		
C. Vine	F. None of the Above	
shaped like an arrowhead. Flow	variable, but generally the leaves are 1 to 2 inches long, smooth, and vers are, about 1 inch diameter, and white or pink i	
color.		
A. Flowers are funnel-shaped	·	
B. Bindweed leaves	E. Dense	
C. Herbicide application	F. None of the Above	
169. Theha	is two small bracts located $rac{1}{2}$ to 2 inches below the flower. The bract	is.
	ler flower size, distinguish field bindweed from hedge bindweed.	,
A. Twining perennial vine	D. Dense ground cover	
B. Bindweed foliage	E. Root growth	
C. Flower stalk	F. None of the Above	

170. Control: Herbicides such will be needed.	as	glyphosate can be painted on	Repeat applications
A. Flowers B. Bindweed leaves	D.	Deep roots	
C. Herbicide application			
171. Herbicides such as 2,4-D applications may be needed.	cor	nbinations can be sprayed on	; repeat
A. Twining perennial vine	D.	Dense ground cover	
B. Bindweed foliageC. Vines	E.	Root growth None of the Above	
172. The most effective times to August/September. Always rea	for ₋ d th	e label before applying any pesti	_ are during flowering, or in cide.
A. Flowers are funnel-shaped	D.	Deep root system	
B. Bindweed leaves	E.	Dense field bindweed infestation None of the Above	ns
C. Herbicide application	Г.	None of the Above	
Bindweed, Hedge			
A. Twining perennial vine		dweed is a	
B. Bindweed foliage	E.	Root	
B. Bindweed foliageC. Vine	F.	None of the Above	
pointed tips, pinkish petals fuse	ed ir	it from other vines include arrow to funnel-shaped flowers, the pre	esence of large bracts enclosing the
A. Large bracts	D.	Smaller flowers and the bracts An annual, biennial or short-live	
B. Creeping perennial rootsC. Nodes of older stems	E. F.	An annual, biennial or short-live None of the Above	ed perennial
175 The plant reproduces by	200	ds and	
A. Short-lived perennial	D.	Creeping roots	 '
B. Stolons	Ε.	Creeping roots Small yellow flowers and a deep None of the Above	p taproot
C. A unique flower	F.	None of the Above	
Bindweed, Japanese			
176. Plant Description: Japane	ese it h	oindweed is a	Its appearance is similar to enclosing the base of each flower are
smaller.	11.11	as silialiei iloweis allu lile biacis	s enclosing the base of each nower are
A. Large bracts		Smaller flowers and the bracts	
B. Creeping perennialC. Nodes of older stems		An annual, biennial or short-live None of the Above	ed perennial
O. Nodes of older sterils	٠.	Notic of the Above	
177. The other bindweed flowers, this is to a rose or carnation.			tinctive double flower. Compared with e number of petals and looks similar
A. Short-lived perennial	D.	Seeds and creeping roots	
B. Stolons	E.	Small yellow flowers and a deep	p taproot
C. Weedy form	F.	None of the Above	

Birdsfoot Trefoil	
	oot trefoil has a perennial root crown and stems that die back each winter.
The species is characterized b	yconsisting of 3 clover-like leaflets at the tip a 2 smaller leaflets at the base. Its flowers are yellow, clover like, and in
separated by a short stem from	n 2 smaller leaflets at the base. Its flowers are yellow, clover like, and in
groups of 2 to 6. They are arra	nged such that, when pods form, they resemble a bird's foot.
A. Large bracts	D. Smaller flowers and the bracts E. An annual, biennial or short-lived perennial
B. Compound leaves	E. An annual, biennial or short-lived perennial
C. Nodes of older stems	F. None of the Above
179. Reproduction is by seeds	and plants spread by(stolons) and rhizomes
(horizontal underground stems).
A. Short-lived perennial	D. Seeds and creeping roots
B. Modified stems	E. Small yellow flowers and a deep taproot
C. A unique flower	D. Seeds and creeping roots E. Small yellow flowers and a deep taproot F. None of the Above
stem cuttings. Also, new shoot	buds at the nodes of older stems, it is possible to propagate plants by s arise from
A. Large bracts	D. Smaller flowers and the bracts
B. Root crowns	D. Smaller flowers and the bractsE. An annual, biennial or short-lived perennial
C. Nodes of older stems	F. None of the Above
Black medic	
181. Black medic is an annual	,or short-lived perennial.
A. Biennial	D. Seeds and creeping roots
B. Stolon	E. Small yellow flowers and a deep taproot
A. Biennial B. Stolon C. A unique flower	F. None of the Above
182. A,	it is closely related to alfalfa. It is most often found in lawns having low
fertility.	
A. Large bracts	D. Smaller flowers and the bractsE. An annual, biennial or short-lived perennial
B. Legume	E. An annual, biennial or short-lived perennial
C. Nodes of older stems	F. None of the Above
183. Often called Japanese cl	over, this plant has small yellow flowers and a It can be
	ifficulty. Keeping your lawn healthy and dense with proper watering,
mowing, and fertilization will di	scourage invasion by black medic.
A. Short-lived perennial	D. Seeds and creeping rootsE. Deep taprootF. None of the Above
B. Stolons	E. Deep taproot
C. A unique flower	F. None of the Above
D alone.	combination herbicides orare more effective than 2,4
	D. Triclopyr + 2,4-D combination herbicides
B. Application of 2,4-D	E. Other 2,4-D combination herbicides
C. Bladder-like calyx	F. None of the Above
	y and dense with, mowing, and fertilization will
discourage invasion by black n	
A. Short-lived perennial	D. Seeds and creeping roots
B. Proper watering	E. Small yellow flowers and a deep taproot
C. A unique flower	F None of the Above

deeply lobed leaves, sir	winter annual that germinates in the fall and produces awith nilar in appearance to a dandelion. D. Physical destruction of a weed E. Large patche F. None of the Above
are coarsely toothed an A. Wavy margins	in March through April. Leaves on the flowering stems d have wavy margins. D. Purple or blue flowers at the top of the plant E. A soap like lather F. None of the Above
188. The plant may groresemble "A. Beaks B. Germinates C. Tillage	w from 1 to 1 1/2 feet in height. Two-inch long, bean-like seedpods (siliques) that " mature in early summer. D. Physical destruction of a weed E. The tendency to form large patches F. None of the Above
actively growing, this wo A. Wavy margins B. Application of 2,4-D	es are most effective if applied before In the spring, while it is eed can be controlled with an application of 2,4-D. D. Weeds start to bolt in the spring E. A soap like lather when mixed with water F. None of the Above
190. Mechanical Weed A. Beaks B. Germinates C. Tillage	Control: Mechanical weed control involves the D. Physical destruction of a weed E. The tendency to form large patches F. None of the Above
is often used; but by far A. Beaks	re hand pulling and hand hoeing which are practical for small infestations. Mowing the most common practice of mechanical control includes D. Physical destruction of a weed E. The tendency to form large patches F. None of the Above
	Bouncingbet is a, a dense show of fragrant phlox-like the tendency to form large patches. D. Perennial characterized by smooth leafy stems E. The tendency to form large patches F. None of the Above
water. Bouncingbet rep A. Wavy margins	that forms a soap like lather when mixed with roduces by seeds and spreading underground stems (rhizomes). D. Thick juice E. A soap like lather F. None of the Above
194. Similar Species: V	White campion (Silene pratensis) can be distinguished from bouncingbet by
A. Primitive perennial la B. Roots are perennial C. Flowering spikes	acks true stems D. Dense patches like bouncingbet E. Its hairy stems and leaves F. None of the Above

195. Bladder campion (Silene v bladder-like calyx.	vulgaris) c	an be distinguished by its	and papery
A. Wavy margins	D. Herbi	cides	
B. Deeply lobed flower petals	E. Flowe	ers	
C. Bladder-like calyx	F. None	of the Above	
196. In addition, white campior bouncingbet.		_	-
A. Bladder campion B. Roots are perennial	D. Dens	e patches like bouncingbe	et
B. Roots are perennial	E. Its ha	iry stems and leaves	
C. Flowering spikes	F. None	of the Above	
	t tall (some		ern that has almost horizontal leaves ke our more
A. Primitive perennial lacks true	e stems [D. Dense patches like boo	uncingbet
B. Roots are perennialC. Flowering spikes	E	Typical broadleaf perer	nnials
C. Flowering spikes	ŀ	None of the Above	
	ern does no s often for e stems [ot produce flowers or see ms large colonies. D. Dense patches like boo	
Brambles 199. Plant Description: Bramble vines, that are noted for their pr A. Primitive perennial lacks true B. Roots are perennial C. Flowering spikes	ickly stem e stems [E	s and berry-like, usually e D. Dense patches like boo	dible fruits.
	are continue stems [(stolons). Ir ually produced. In all spec	
Broadleaf Plantain 201. Broadleaf Plantain is a The leaves are arranged in a ro A. Evergreen shrub B. Stems thicker and rougher C. Dense, fibrous roots	D. Prom E. Low g		s broad leaves with prominent veins.
202. The	turfgrass is D. Prom E. Flowe		

203. Control: Triclopyr + 2,4-D	or 2,4-D alone or 2,4-D combination herbicides should control
Always read the label before ap	olying any pesticide.
A. Larger yellow flowers	D. Clump-forming perennial grass E. Plantain
B. Evergreen shrub	E. Plantain
B. Evergreen shrubC. Sod-forming, perennial grass	F. None of the Above
Brome, Smooth	
	brome is a sod-forming, perennial grass, distinguished by long, slender,
bronze- or purple-tinted flower c	lusters that make up the flower head. This species spreads by seeds and
dark-colored rhizomes ().
A. Larger yellow flowers	D. Clump-forming perennial grass
B. Evergreen shrub	E. Horizontal underground stems
C. Sod-forming, perennial grass	D. Clump-forming perennial grass E. Horizontal underground stems F. None of the Above
	rome may be confused with quackgrass (Elytrigia repens). However,
at the top of the sheath in quack	ent claw-like appendages () that clasp the stem
A Evergroop chrub	D. Prominant claw like annondages
A. Evergreen siliub	D. Prominent claw-like appendagesE. An aggressive pioneer speciesF. None of the Above
C. Donne fibrous roots	E. An aggressive pioneer species
C. Derise, librous roots	r. Notic of the Above
Broom, French	
	oms April to June. Grows three to ten feet tall. Evergreen shrub similar to
	not grow as erect, leaves are retained the entire year, leaves trifoliate and
more numerous and	
A Larger vellow flowers	D. Clump-forming perennial grass
R Evergreen shruh	E Except pods inflated and hairy all over
C. Yellow flowers smaller	D. Clump-forming perennial grass E. Except pods inflated and hairy all over F. None of the Above
207. Impacts: This plant,	, takes advantage of land disturbances to establish and
spread. In California, large infes	tations displace native plant species and significantly increase the costs
of reforestation in commercial tir	nberlands.
A. Evergreen shrub	D. Prominent claw-like appendages
B. Stems thicker and rougher	D. Prominent claw-like appendagesE. An aggressive pioneer species
C. Dense, fibrous roots	F. None of the Above
Broom, Portuguese	A 114 L O O O 40 M L II E
	oms April to June. Grows 3 to 10 ft. tall. Evergreen shrub similar to
Scotch broom except pods inflat	ed and hairy all over, Stems more silvery, but
	s and flowers fall off.
A. Larger yellow flowers	D. Clump-forming perennial grass
B. Evergreen shrub	E. Giving appearance of pussy willow buds
C. Sod-forming, perennial grass	F. None of the Above
Drague Contab	
Broom, Scotch	Annil to June Onesse 2 to 40 foot to 11 Francisco objects with money
	oms April to June. Grows 3 to 10 feet tall. Evergreen shrub with many
	d branches with small, simple leaves. Abundant small,
yellow,	D D 1 10
A. Evergreen shrub	D. Pea-shaped flowers
B. Stems thicker and rougher	E. An aggressive pioneer species
C. Dense, fibrous roots	F. None of the Above

	Spanish broom (S. Junceum) has round stems, very few
leaves, and larger yellow flower	
A. Spanish broomB. Evergreen shrub	D. Clump-forming perennial grassE. Except pods inflated and hairy all over
C. Sod-forming, perennial gras	
o. Cod-forming, percrimal gras	1. Notice of the Above
stems thicker and rougher, it ha	noms April to June. Grows 3 to 10 ft. tall. Similar to Scotch broom except s very few leaves, and flowers larger and D. Prominent claw-like appendages E. An aggressive pioneer species F. None of the Above
when its stems and leaves turn underground stems).	edge is a clump-forming perennial grass that is most noticeable in the fall, a It reproduces by seed and short rhizomes (horizontal D. Distinctive orangish-tan to reddish-brown color E. Except pods inflated and hairy all over F. None of the Above
213 Root system - Dense fibro	ous roots are produced from (horizontal underground
stems).	(nonzonial andorground
A. Short rhizomes	D. Prominent claw-like appendages
B. Stems thicker and rougher	E. An aggressive pioneer species
C. Dense, fibrous roots	F. None of the Above
weed. It bears long, yellow spin	lled Kansas thistle and, is a tap rooted annual es on stems, leaves, and flower heads and can grow up to 2 feet high. currence is in dry, exposed soil. D. Flat pitted seeds E. Prickly nightshade F. None of the Above
215. The oblong leaves are 2-3	inches long withand are covered with very
dense, stiff, and sharp spines.	
A. Bright yellow flowers	
B. Deep rounded lobes	
C. Green to blue-gray	F. None of the Above
enclosed in the	be seen in summer. In the fall, berries up to 3/8 inch in diameter areand are filled with black, wrinkled, flat pitted seeds.
A. Five equal lobes	D. Flat pitted seeds
B. Perennial herb	E. Dried flower parts
C. Flower heads lilac-like	F. None of the Above
217 Control of this plant is imp	ortant, as it is a host for the Colorado potato beetle. When mature, the
	nd and the plant rolls like, widely scattering the 8500
seeds that each plant produces	
A. Bright yellow flowers	D. Scotch broom
B. Tumbleweed	E. Upper leaves
C. Green to blue-gray	F. None of the Above

218. Herbicides should	be applied	between	Dicamba, Triclopyr and 2,4-D can be 2% solution can be applied as a spot treatment.
effective in controlling B	uffalo bur.	Glyphosate in a	2% solution can be applied as a spot treatment.
A. Five equal lobesB. Perennial herbC. Flower heads lilac-lik	D.	Flat pitted seed	S
B. Perennial herb	E.	Late bud to ear	ly flower
C. Flower heads lilac-lik	ke F.	None of the Ab	ove
Butterfly Bush			
219. Description:		; flowers m	id to late summer. Grows up to 10 feet tall. Leaves
narrow, opposite and gre	een to blue	-gray.	
A. Bright yellow flowers	D.	Scotch broom	
B. Perennial shrub	E.	Upper leaves	
A. Bright yellow flowersB. Perennial shrubC. Green to blue-gray	F.	None of the Ab	ove
220. lila	c-like but c	ome to a more o	efinite point. Flowers small and purple.
A Five equal lobes	D	Flat pitted seed	s
A. Five equal lobesB. Perennial herb	F.	Kansas thistle	and prickly nightshade
C. Flower heads	F.	None of the Ab	ove
004 Januarita This also	4::		
			at dominates open habitats. It poses an ecological s, dominating these sites as much as has
			g in a loss of forest productivity.
Δ Bright vellow flowers	es relorest	Scotch broom	g in a loss of lorest productivity.
A. Bright yellow flowersB. Colorado potato beeC. Green to blue-gray	tle F	I Inner leaves	
C. Green to blue-gray	E.	None of the Ah	ove
o. Groom to blue gray	• •	110110 01 1110 7 15	,,,
Bugloss, Common			
222. Description: Peren	nnial herb; f	lowers May to O	ctober. Grows one to two feet tall;
overall plant is coarsely	hairy.	-	
A. Five equal lobes	D.	Flat pitted seed	s
B. Perennial herb	E.	Stems and leav	es fleshy
C. Flower heads lilac-lik	ke F.	None of the Ab	ove
223. Basal leaves are		: mid leaves	are progressively smaller up the stem, and the upper
leaves are sessile (no p	etiole) or cl	asping.	
A. Bright yellow flowers	Ď.	Scotch broom	
B. Narrowly oblong	E.	Upper leaves	
A. Bright yellow flowersB. Narrowly oblongC. Green to blue-gray	F.	None of the Ab	ove
224 Blue to purple flow	ers with wh	nite throats. Peta	ls are five equal lobes, forming
			. As the flowers open, coils unfold.
A. Five equal lobes		Flat pitted seed	
B. Perennial herb		An uncurved tu	
C. Flower heads lilac-lik		None of the Ab	
225. Fruit is a four-char	mborod nut	lat: agab putlat a	ontoine
A. One seed		Several hundre	
B. Spine-tipped lobes		Rosette leaves	u seeu neaus
C. Spiny wings		None of the Ab	ove
226 Imports: This	tipuodos -	Ifolfo fiolds := -4	ures nine ferente rengeland minemier and wart-
			ures, pine forests, rangeland, riparian and waste ld. Large, very dense stands can occur, offering
strong competition to	can cause	nay bales to IIIC	ia. Largo, very derise stands can occur, onemly
A. Rosette leaves	D. Native	plant communiti	_· _ :
B. Spiny bracts		ils on the flower	
C. Biennial		f the Above	

Bull Thistle	
	oright biennial. Young seedling leaves are oblong in shape, but mature
	othed and spiny with cottony hairs on the undersurface.
A. Four-chambered nut	let D. Several hundred seed heads
C. Spine-upped lobes	E. Rosette leaves F. None of the Above
O. Opiny wings	1. Notice of the Above
228	generally grow 2 - 12 inches long and 3/4 - 4 inches wide. Leaves are dark
	alternately along the rigid flower stalk, that grows 1 - 5 feet tall and can be highly
branched.	
	D. Strong competition to native plant communities
	E. Leaf axils on the flower stem
C. Biennial	F. None of the Above
229.	have distinctly pointed, spine-tipped lobes, with bases that clasp the stem to
form spiny wings.	
A. Four-chambered nut	let D. Several hundred seed heads E. Stem leaves F. None of the Above
B. Spine-tipped lobes	E. Stem leaves
C. Spiny wings	F. None of the Above
230.	1 to 2 inches diameter, are borne on branch tips, and are subtended by
an egg-shaped cluster of	, 1 to 2 inches diameter, are borne on branch tips, and are subtended by
	D. Purplish/pink flower heads
B. Spiny bracts	E. Leaf axils on the flower stem
C. Biennial	E. Leaf axils on the flower stem F. None of the Above
231.	
plume of feathery white	D. Flower heads
R Sniny hracts	F. Leaf axils on the flower stem
C. Biennial	D. Flower headsE. Leaf axils on the flower stemF. None of the Above
C. 2.5a.	
	stics: Bull thistle reproduces solely by seed. Each plant can produce between one
	ed heads, and seed heads produce
	let D. An average of 100 seeds each
	E. Rosette leaves
C. Spiny wings	F. None of the Above
Burdock, Common	
	Common burdock is a biennial that grows as a the first year and
	all, erect, bushy flowering stem.
A. Rosette leaves	D. Rosette of leaves
B. Spiny bracts	E. Leaf axils on the flower stem
C. Biennial	F. None of the Above
224 Posetto legues ar	a distinctive due to their large size, heart shaped has a week undersurfees, and
hollow leaf stalks (e distinctive due to their large size, heart-shaped base, wooly undersurface, and).
A. Four-chambered nut	
B. Spine-tipped lobes	E. Rosette leaves
C. Petioles	F. None of the Above

leaf axils on the flower stem are	flower heads comprised of a bur with hooked bristles beneath a closely
A. Rosette leaves D. Clus	ster of tubular, purplish flowers
B. Spiny bracts E. Lea	f axils on the flower stem
packed A. Rosette leaves D. Clus B. Spiny bracts E. Lea C. Biennial F. Non	e of the Above
236. The weed is best known for only means by which common by	or theon its burs that stick to fur and clothing. The burdock reproduces are its seeds. D. Several hundred seed heads
	ng buttercup is a low-growing, rosette-forming, spreading perennial. It is and creeping horizontal stems (stolons) that root at the nodes to form
A. Spine-tipped branches	D. 3-parted leaves
A. Spine-tipped branchesB. ButtercupC. Creeping buttercup	E. New rosettes
C. Creeping buttercup	F. None of the Above
A. Actively growing plants B. Perennial weed	
Chemical 239. Herbicides can be used if ensure safe and effective use. A. Spine-tipped branches B. Buttercup C. Creeping buttercup	allowed and appropriate for Follow all label directions to D. The site and land use E. New rosettes F. None of the Above
	o, Aquamaster) can be applied to actively growing plants before they seed or plants. Re-seed or re-plant bare areas after removing buttercup to keep
	 D. Some mature plants will generally recover
B. Perennial weed	E. Re-infesting the area
C. Toxic	F. None of the Above
to selectively kill the buttercup a most effective on buttercup. Me Follow label directions on timing A. Actively growing plants B. Buttercup	
and because some mature plan	t two or three applications tobecause of the seed bank ts will generally recover. D. Eradicate creeping buttercup E. Perennial F. None of the Above

243. Monitor the treated area of A. Spine-tipped branches B. Buttercup C. Creeping buttercup	D. Any new seedlings	before they establish runners.
Buttercup, Tall 244. Plant Description: Tall but eaves. This species reproduce A. By actively growing plants B. By perennial weeds C. By seeds	s only D. Bv rhizomes	aracterized by erect stems and deeply lobed
	It could hinder colonization by de and spread. D. Tall buttercup	adow given the opportunity, especially with native species in a prairie or grassland
rom salivation, skin irritation, bl A. Spine-tipped branches	listers, abdominal distress, infl D. Fresh buttercup plants E. New rosettes	toxic to grazing animals, who can suffer lammation, and diarrhea.
247. Fortunately, palatable	_ has a strong, bitter taste so a	animals generally try to avoid it if more
A. Spine-tipped branches B. Buttercup C. Creeping buttercup	D. Fresh plantsE. New rosettesF. None of the Above	
1/4 to 1 3/4 inches lo	ng.	/2 to 4 feet tall. Stems greenish with
A. Actively growing plants B. Perennial weed C. Toxic	E. Perennial F. None of the Above	
		/4 to 1 1/4 inches longsmall ed branches along the upper portion of the
A. Spine-tipped branches	D. Flowers	
Buttercup Creeping buttercup	E. New rosettesF. None of the Above	
250curve A. Actively growing plants B. Perennial weed C. Reddish-brown jointed seed	D. Some mature pla E. Perennial	

	campion can be a winter or summer annual, biennial, or D. Winter or summer annual, biennial E. Creeping perennial weed F. None of the Above
emerge from a green, inflated, A. Bladder-like structure (calvx	zed byand showy white flowers, whose petals bladder-like structure (calyx). D. An aggressive, creeping perennial weed E. Infestations F. None of the Above
ise to new plants.	by seeds, although fragmented segments of thecan give D. Root crown E. Creeping perennial weed F. None of the Above
ocated in A. Bladder-like structure (calvx	a goldenrod is a perennial distinguished by numerous small yellow flowers at the top of individual, unbranched, leafy stems. D. An aggressive, creeping perennial weed E. Infestations F. None of the Above
more or less horizontally. A. Central axis	D. Numerous backward-curved stalks E. Creeping perennial weed F. None of the Above
oothed on the edge.	nairless on the upper surface, hairy underneath, and sharply D. Lance-shaped, tapered at both ends E. Creeping perennial weed F. None of the Above
	being 3-nerved, meaning the midrib and 2 parallel lateral veins are way of short rhizomes (horizontal underground stems) emerging from the D. Wind dispersed seeds E. Creeping perennial weed F. None of the Above
pastures, rangeland, roadsides	overgrazed pastures, tilled fields or abandoned sites.

graze near infestations		because cattle typically will not
A. Pastures and rangeland B. Perennial	D. An aggressive, creeping per E. Infestations	rennial weed
C. Cool-season perennial	F. None of the Above	
		n vegetative buds in its root system andallows it to recover from control
A. Creeping perennial		
B. Canada thistle managementC. Repeat applications		
imperative so the weed is contin	ds is the best form of Canada this nually stressed, forcing it to exha	ust
A. Creeping perennialB. Canada thistle management	D. Root nutrient stores and even	entually die
C. Repeat applications	F. None of the Above	
	clopyr + clopyralid or 2,4-D comb ded at 6 week intervals. D. Herbicide applications E. Repeat applications	aveswill be inations can be sprayed on thistle foliage;
263. The most effective times f in August/September. Always reA. Applying any pesticideB. Canada thistle managementC. Repeat applications	ead the label before D. Herbicide applications E. Repeat applications	ng, just after the green shoots appear, or
characterized in summer by its		
	rms a rosette during the first year D. Cultivated carrot E. Fern-like foliage	mells similar to r.
266. During the second year of in umbrella-shaped clusters of s A. Mat-forming species B. Reproduces by seeds C. Heart-shaped leaves appear	D. Hairy flower stalks E. Leaf-like bracts and	

267. A distinctive feature of wild carrot is the appearance of a dark purple flower (rarely several flowers) in the center of most flower clusters. Once flowers mature and, the flower cluster closes forming a cuplike bird's nest. Wild carrot reproduces by seeds. A. Seeds begin to develop D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
Catnip 268. Plant Description: Catnip is best known for the minty odor emitted by its leaves and stems when they are crushed or wilted. The odor is very attractive to cats. A. An erect perennial D. In the Mint Family B. Reproduced by seeds E. Leaf-like C. Heart-shaped F. None of the Above
269. Other distinctive characteristics are and the serrated appearance of the leaf edges, which resembles the toothed edge of a saw. A. Downy foliage D. Unbranched plant with yellow flowers and leaves B. Reproduced by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
270. The flower shape is common among members of the mint family consisting of 2 lips, and flower color is white with unusual purple dots. Along with most members of the Mint Family, catnip has square stems. This species reproduces by seeds and(horizontal underground stems). A. Mat-forming species D. It also produces short rhizomes B. Reproduces by seeds E. Leaf-like bracts and branches C. Heart-shaped leaves appear F. None of the Above
Catsear, Common 271. Plant Description: Common catsear is a perennial with a growth form similar to that of dandelion; its leaves form a basal rosette and it produces Leaves of common catsear are typically lance-shaped with irregular rounded lobes and hairs on both the upper and lower surfaces. A. Either an annual D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Yellow head-like flowers at the tips of upright stems C. Typically lance-shaped F. None of the Above
272. Emerging from the rosette arethat usually have leaf-like bracts and branches. At the tips of the branches are 1-inch-wide flower heads composed of many tubular, yellow flowers. A. Mat-forming species D. Wiry hairless stems B. Reproduces by seeds E. Leaf-like bracts and branches C. Heart-shaped leaves appear F. None of the Above
273. Common catsear reproduces by seeds and vegetatively by way ofthat can produce new plants if separated. A. Buds formed on the crown D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
Chickweed, Mouseear 274. Plant Description: Mouseear chickweed is a creeping, mat-forming species that normally behaves as a perennial; however, it is possible for it to exist as an annual. Plants reproduce by seeds and roots growing from the It tends to form dense patches. A. Mat-forming species B. Reproduces by seeds C. Heart-shaped leaves appear Chickweed, Mouseear Leaf-like practices and branches E. Leaf-like bracts and branches F. None of the Above

Chicory 275. Plant Description: Chicory toothed basal leaves. Then, late	isthat initially grows as a rosette of irregularly- r in the season, leafless stems emerge with sky-blue daisy-like flowers
scattered along their length. A. Either an annual B. Reproduces by seeds C. A perennial	D. Unbranched plant with yellow flowers and leaves E. Perennial that initially grows as a rosette F. None of the Above
flower heads open at a time and A. Is a mat-forming species	ng and close as sunlight increases in intensity around noon. Only a few each head opens for a single day. Chicory D. Reproduces by seeds E. Has leaf-like bracts and branches F. None of the Above
biennial when growing in less di A. A short-lived perennial	cinquefoil behaves as either an annual if growing in cultivated ground, a sturbed sites, or D. Unbranched plant with yellow flowers and leaves E. Perennial that initially grows as a rosette F. None of the Above
	at the beginning of the season, but later forms an upright, hairy, Leaves consist of 3 coarsely-toothed, hairy leaflets. Rough cinquefoil D. Rosette E. Leaf-like bract F. None of the Above
with yellow flowers and leaves or radiate from a common point like	inquefoil is a perennial. It is an erect, hairy, generally unbranched plant onsisting of Leaflets are arranged such that they e fingers on a hand. Sulfur cinquefoil reproduces by seeds. Ets D. Unbranched plant with yellow flowers and leaves E. Rosette F. None of the Above
	ot is a Its flowers are the same color, size, and shape to species are easily confused while in bloom if viewed from a distance. D. A member of the Mint Family E. Wooly vegetative stem F. None of the Above
Also, coltsfoot flowers appear at	that the flowers have already come and gone by the time leaves emerge. the tips of 1/8-inch-thick stems that are wooly and covered with iving them an appearance similar to that of asparagus spears. D. Scaly bracts E. Leaf-like bracts and branches F. None of the Above
282. After flowers have matured	d, clumps of broad, heart-shaped leaves appear on short,
A. Mat-forming species B. Wooly vegetative stems C. Heart-shaped leaves appear	D. Scaly bractsE. Leaf-like bracts and branchesF. None of the Above

	rimarily by	(horizontal underground stems) and also
by seeds. A. Distinctive curled clusters	D Horizontal o	rooning rhizomos
B. Perennial herb	E. Branched ta	
C. A dense, healthy turf		
C. A delise, fleating turi	1. None of the	Above
		e system of(horizontal underground
A. Opened flowers		
B. Seeds	E. Thick white	
C. Good cultural habits	F. None of the	Above
Comfrey, Common		
		erennial herb with lower leaves that are bristly, up to 12
inches long, and attached to plant.	winged leaf stalks (that emerge from the base of the
A. Distinctive curled clusters	D Petioles	
B. Perennial herbs		proots
C. Stems	F. None of the	
		petioles are borne on
A. Opened flowers	D. 2- to 3-foot t	all flowering stems
B. StemsC. Rhizomes	E. Branched ta F. None of the	
C. Killzonies	r. None of the	Above
287. Flowers are bell shape	d and either yellow	or blue. They form in distinctive curled clusters having an
		Reproduction is by way of seeds. Also, new
plants can be propagated by		
A. Distinctive curled cluster		
B. Perennial herb		
C. Scorpion's tail	F. None of the	Above
Common Groundsel		
288. Common groundsel is_		A prolific seed producer, seeds are produced within
		eral generations within the same year. This weed likes
moist soil and is often found	in well-irrigated area	as such as lawns and flower beds.
A. Opened flower	D. Also bristly I	out lack petioles veed in the home vegetable garden Above
B. A prolific seed producer	E. A common v	veed in the home vegetable garden
C. An early season weed	F. None of the	Above
289. Control: A dense, healt	hy turf will prevent s	seeds from taking root in the lawncan
		atering, and other cultural practices. Good drainage will
also help to discourage the g	rowth of common g	roundsel.
A. Distinctive curled clusters	D. Broadleaf si	ummer-annual weed control measures
B. Perennial herbs	E. Turf density	
C. A dense, healthy turf	F. None of the	Above
290. The plants can be easi	ly pulled by hand fro	om moist soil. Be sure to pull and dispose of them before
		even after the plants have been killed. If there
is heavy infestation, spot treat	at with a post-emero	ent herbicide containing glyphosate (Roundup, Kleenup).
	Petioles	3371 (17.22-21.24)
•	o vegetables	
	lone of the Above	

disturbed. The growth habits of road or in an open field, it may r	s a that can be found anyplace the soil has been the common lambsquarters vary with its location. If growing along the each three or four feet in height.
B. Perennial herb	D. Broadleaf summer-annual weed E. Broadleaf winter-annual weed
C. Dense, healthy turf	F. None of the Above
handpulling, rototilling, hoeing a	s of weed control in the home vegetable garden are mulching, and preventing the weeds from D. Blooming
B. A prolific seed producerC. Going to seed	D. Blooming E. The home vegetable garden F. None of the Above
The best methods of weed cont hoeing and preventing the weed	ched taproot, lambsquarters can be easily hand-pulled from moist soil. rol in the home vegetable garden are mulching, hand pulling, rototilling, ds from going to seed. Because of its,
lambsquarters can be easily ha	
B. Perennial herb classification	D. Short, branched taproot
C. Rosette stage	E. Long, branched taproot F. None of the Above
broadleaf weeds such as lambs	should be the first line of defense in eliminating quarters from lawns.
B. Hoe	D. Fire E. Weed control in the home vegetable garden
C. Good cultural habits	F. None of the Above
	such as trifluralin (Preen) can be used to
A. Control grass	D. Control broadleaf summer-annual weedE. Prevent germination of weed seeds
C. Create a dense, healthy turf	F. None of the Above
296. Post-emergent herbicides (sold under many brand names)	effective against) are 2,4-D, MCPP and dicamba and combination formulas (Trimec).
A. Broadleaf weeds	D. Broadleaf summer-annual weeds E. Weed seeds
B. Perennial herbs	E. Weed seeds
C. Turf	F. None of the Above
lack density. It can be	requently found in newly seeded lawns or lawns that are stressed and
A. Opened flower	D. Found with banana trees
B. A prolific seed producerC. An annual or biennial	E. Found with a long, branched taprootF. None of the Above
the geranium. The	t but can be easily pulled from moist soil. The foliage resembles that of of common mallow are pinkish-white and the fruits look like smal
round cheeses. A. Flowers	D. Seeds
B. Flowering plants	E. Stems
C. Rosette stage	F. None of the Above

299. Control:	with proper mowing, tertilization, watering and other
cultural practices can help in the	e control of this weed.
A. A non-selective herbicide	D. Increasing turf density
B. Seed production	E. Spreading perennial
C. Herbicide spraying	F. None of the Above
300. Post-emergent herbicides are suggested.	areeffective. Triclopyr + clopyralid or triclopyr alone
	D. Only marginally
B. Very	E. An insecticide and are
C. Not	F. None of the Above

You are finished with your assignment.

Weed Identification and Control Assignment #2 For Students Names F-L

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Write your answers on the Answer Key found in the front of this assignment. ASSIGNMENT INSTRUCTIONS

- 1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
- 2. You will need to pick one of the following five assignments to complete. This selection process is based upon your last name. If your last name begins with an A to E, you will pick assignment number 1, if your last name begins with the letter F to L, you are to complete assignment number 2 and if your last name begins with the letter M-Q, you will pick assignment number 3 and if your last name begins with the letter R-Z, you will pick assignment number 4.

Multiple Choice assignment, please select one answer and mark it on the answer key. The answer must come from the course text. (s) means answer can be plural or singular. There are no intentional trick questions

Commonly Found Weed Section A-Z Common Names African Rue 1. Description: African rue is a multi-branched and A. Five individual possible B. Allelopathic chemicals E. An herbaceous periods F. None of the Above A. Five individual petals D. Bushy perennial E. An herbaceous perennial 2. A member of the it is a succulent plant, with bright green alternating leaves that are smooth and finely divided with long, narrow segments. Plants grow 1.5 feet tall and 3-4 feet in diameter. A. Compositae Family D. Creeping plant with compound leaves B. Perennial weed E. Caltrop family C. An herbaceous perennial F. None of the Above and are present in spring to early fall. Fruit is a located 3. Flowers are white with in a leathery capsule 2-4 celled which contains 45-60 seeds. A. Five individual petals D. Multi-branched and bushy perennial B. Allelopathic chemicals C. Fleshy tubers E. An herbaceous perennial F. None of the Above C. Fleshy tubers 4. Seeds are angular, dark brown and have a distinctive smell. When crushed, the stems also have a disagreeable odor. The base of this plant is _____ can branch and reach 20 feet in depth. A. Compositae Family D. Creeping plant with compound leaves B. Woody and roots F. Annual sunflowers E. Annual sunflowers B. Woody and roots C. An herbaceous perennial F. None of the Above

semi-desert areas. It is often four	environments such as roadsides, fields and rangelands in desert and in soils with high salinity and most parts of the plant contain
	e growth of other vegetation. D. Multi-branched and bushy perennial E. An herbaceous perennial F. None of the Above
based on above-ground growth. with a rough upper surface, and_A. Compositae Family	mpossible to distinguish Jerusalem artichoke from annual sunflowers Jerusalem artichoke has a coarse, 5- to 10-foot tall stem, large leaves ———————————————————————————————————
that includes fleshy tubers resemseeds, rhizomes (asily distinguished from annual sunflowers by its below-ground growth bling thin, knotty potatoes. Reproduction of Jerusalem artichoke is by), and tubers. D. Multi-branched and bushy perennial E. Horizontal underground stems F. None of the Above
Mature plants have a	agus is an herbaceous perennial, well-known for its edible young shoots, and reproduce by seed. D. Creeping plant with compound leaves E. Annual sunflowers F. None of the Above
growing by the side of the road a August, small white flowers cove A. Five individual petals B. Allelopathic chemicals	D. Multi-branched and bushy perennial
	ar to those produced by other plants in the Compositae Family, are ade up of many individual flowers that may be different shapes and
A. Head-like clustersB. Perennial weed	D. Creeping plant with compound leaves E. Annual sunflowers F. None of the Above
A. Five individual petalsB. Yellow disk flowers	ter, there arein the center of each head flowers. Reproduction is by seeds. D. Multi-branched and bushy perennial E. An herbaceous perennial F. None of the Above

	om May to July. A creeping plant with compound leaves; nair. Flowers 1/4 to 1 inch long and orange-red. Many seeds in
A. Bladder-like translucent pods B. Perennial weed C. An herbaceous perennial	D. Creeping plant with compound leavesE. Annual sunflowersF. None of the Above
	angled mats ys species
on the young shoots. New shoots could asparagus. Keep in mind that running b	I in a small area (a normal city yard) simply by mowing or stepping also be used for culinary purposes and cooked, much like amboo only puts up new shoots for a short time each year, and the new plants are very fragile and easy to destroy. D. Nodes on the stem. E. Shooting F. None of the Above
time seems to be in the fall or early wint	ranches
encountered, (8-10 inches is usually suffleft, cutting a line until all the rhizomes had been alternate and compound	
perennials like smooth bedstraw that prwhich	
B. A few erect stems arise E. Noo	rawling tangled mats des on branches ne of the Above
18. The typical bedstraw leaf is linear a nodes on the stem.A. Leaves alternate and compoundB. Spreading rhizomesC. Formed in whorls	D. Nodes on the stem. E. New plants are very fragile and easy to destroy F. None of the Above

19. Smooth bedstraw is the _ leaves at nodes on branches.	with 8 leaves at each node on main stems and 6 to 8
	orawling tangled mats
A. Rhizomes D. Sp B. Bedstraw E. Or C. Large mats F. No	nly white-flowered form
C. Large mats F. No	one of the Above
	and underground, spreading rhizomes (). bound D. Nodes on the stem.
B. Spreading rhizomes	 E. New plants are very fragile and easy to destroy
C. Horizontal underground ste	ems F. None of the Above
	odes on branches
the nodes and plants form larg	at grows four to eight inches tall. Biddy-biddy spreads by stolons that root at ge mats where individual plants are indistinguishable. The plant stems are
A. Rhizomes D. Sp	depending on conditions. prawling tangled mats
B. Prostrate to erect E. No	
C. Large mats F. No	one of the Above
	pound, withhaving 5 to 11 leaflets 1/4-2/3
inches long.	oound D Mature plants
inches long.	oound D Mature plants
inches long.	
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur	Dound D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above To into a round bur that disperses as a unit when mature.
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage	Dound D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above The into a round bur that disperses as a unit when mature. D. Dense ground cover E. Flower heads spherical
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage	Dound D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above The into a round bur that disperses as a unit when mature. D. Dense ground cover
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage C. Vines 25. Impacts: This plant prefered available and frosts are infrequence.	Dound D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above The into a round bur that disperses as a unit when mature. D. Dense ground cover E. Flower heads spherical
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage C. Vines 25. Impacts: This plant preference available and frosts are infrequegetation.	D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above In into a round bur that disperses as a unit when mature. D. Dense ground cover E. Flower heads spherical F. None of the Above It is open, disturbed, well-drained sites, including stable dunes, open scrub, and trampled sites in coastal habitats where some summer moisture is uent. Plants thrive on poor soils and compete poorly with established
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage C. Vines 25. Impacts: This plant preference available and frosts are infrequegetation. A. Grassy areas	Dound D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above In into a round bur that disperses as a unit when mature. D. Dense ground cover E. Flower heads spherical F. None of the Above It is open, disturbed, well-drained sites, including stable dunes, open scrub, and trampled sites in coastal habitats where some summer moisture is uent. Plants thrive on poor soils and compete poorly with established D. Deep root system
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage C. Vines 25. Impacts: This plant preference available and frosts are infrequegetation. A. Grassy areas	Dound D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above In into a round bur that disperses as a unit when mature. D. Dense ground cover E. Flower heads spherical F. None of the Above It is open, disturbed, well-drained sites, including stable dunes, open scrub, and trampled sites in coastal habitats where some summer moisture is usent. Plants thrive on poor soils and compete poorly with established D. Deep root system E. Dense field bindweed infestations
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage C. Vines 25. Impacts: This plant preference available and frosts are infrequegetation. A. Grassy areas B. Bindweed leaves C. Herbicide application Bindweed, Field	Dound D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above In into a round bur that disperses as a unit when mature. D. Dense ground cover E. Flower heads spherical F. None of the Above It is open, disturbed, well-drained sites, including stable dunes, open scrub, and trampled sites in coastal habitats where some summer moisture is usent. Plants thrive on poor soils and compete poorly with established D. Deep root system E. Dense field bindweed infestations
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage C. Vines 25. Impacts: This plant prefered available and frosts are infrequegetation. A. Grassy areas B. Bindweed leaves C. Herbicide application Bindweed, Field 26. Field bindweed can be spadhering to the roots of nurser	D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above In into a round bur that disperses as a unit when mature. D. Dense ground cover E. Flower heads spherical F. None of the Above In open, disturbed, well-drained sites, including stable dunes, open scrub, and trampled sites in coastal habitats where some summer moisture is usent. Plants thrive on poor soils and compete poorly with established D. Deep root system E. Dense field bindweed infestations F. None of the Above Tread by seed,
inches long. A. Leaves alternate and comp B. Spreading rhizomes C. Any rhizomes 24, and tur A. Twining perennial vine B. Bindweed foliage C. Vines 25. Impacts: This plant prefered, and available and frosts are infrequenced available and frosts are infrequenced available and leaves B. Bindweed leaves C. Herbicide application Bindweed, Field 26. Field bindweed can be sp	D. Mature plants. E. New plants are very fragile and easy to destroy F. None of the Above In into a round bur that disperses as a unit when mature. D. Dense ground cover E. Flower heads spherical F. None of the Above In open, disturbed, well-drained sites, including stable dunes, open scrub, and trampled sites in coastal habitats where some summer moisture is usent. Plants thrive on poor soils and compete poorly with established D. Deep root system E. Dense field bindweed infestations F. None of the Above Tread by seed,

•	roc	ot system that competes with	for water and
nutrients.	_	On an art and a	
A. Flowers are funnel-shaped			
C. Herbieide application	<u> </u>	Dense field bindweed infestations None of the Above	
C. Herbicide application	Г.	Notice of the Above	
	had	de crops, cause lodging of	, and make harvesting
difficult by clogging machinery.			
A. Twining perennial vineB. Bindweed foliageC. Small grains	D.	Dense ground cover	
B. Bindweed foliage	Ε.	Root growth	
C. Small grains	F.	None of the Above	
29. Dense field		may reduce crop yields by 50 to 60 p	percent. Land infested with field
bindweed is reduced in value.			
A. Flowers are funnel-shaped			
B. Bindweed leaves	E.	Bindweed infestations	
C. Herbicide application	F.	None of the Above	
30. Field bindweed is a		which produces a c	lense ground cover. The twining
stems vary from 1.5 to 6 feet or	mo	re in length.	· ·
A. Twining perennial vineB. Long-lived perennialC. Vine	D.	Dense ground cover	
B. Long-lived perennial	Ε.	Root growth	
C. Vine	F.	None of the Above	
31. Leaf size and shape are va	riab	ole, but generally the leaves are 1 to 2	inches long, smooth, and
		are, about 1 inch di	
color.			
A. Flowers are funnel-shaped			
B. Bindweed leaves	E.	Dense	
C. Herbicide application	F.	None of the Above	
32. The has	two	small bracts located ½ to 2 inches b	elow the flower. The bracts,
along with leaf shape and small	er f	lower size, distinguish field bindweed	from hedge bindweed.
A Twining perennial vine	D	Dense ground cover	3
B. Bindweed foliage	E.	Root growth	
B. Bindweed foliage C. Flower stalk	F.	None of the Above	
33. Control: Herbicides such a	s al	yphosate can be painted on	. Repeat applications
will be needed.	- 5.	, prisoure can be painted on	
A. Flowers	D.	Deep roots	
B. Bindweed leaves		Infestations	
C. Herbicide application		None of the Above	
34. Herbicides such as 2.4-D c	oml	pinations can be sprayed on	: repeat
applications may be needed.			,
A. Twining perennial vine	D.	Dense ground cover	
B. Bindweed foliage		Root growth	
C. Vines		None of the Above	
35. The most effective times for	r	are d	luring flowering, or in
		e label before applying any pesticide.	ising newering, or in
A. Flowers are funnel-shaped			
B. Bindweed leaves		Dense field bindweed infestations	
C. Herbicide application		None of the Above	

36. Bindweed, Hedge Plant Description: Hedge bindw	eed is a
A. Twining perennial vine	D. Dense ground cover
A. Twining perennial vineB. Bindweed foliageC. Vine	E. Root
C. Vine	F. None of the Above
tips, pinkish petals fused into full each flower, and	ng it from other vines include arrowhead-shaped leaves that have pointed nnel-shaped flowers, the presence of large bracts enclosing the base of .
A. Large bracts	D. Smaller flowers and the bracts E. An annual, biennial or short-lived perennial
B. Creeping perennial roots	E. An annual, biennial or short-lived perennial
C. Nodes of older stems	F. None of the Above
38. The plant reproduces by se	eds and
A. Short-lived perennial	D. Creeping roots
B. Stolons	D. Creeping roots E. Small yellow flowers and a deep taproot F. None of the Above
C. A unique llower	F. None of the Above
Bindweed, Japanese	
39. Plant Description: Japanese	e bindweed is a Its appearance is similar to that smaller flowers and the bracts enclosing the base of each flower are
smaller.	s smaller flowers and the bracts enclosing the base of each flower are
A. Large bracts	D. Smaller flowers and the bracts
B. Creeping perennial	E. An annual, biennial or short-lived perennial
C. Nodes of older stems	F. None of the Above
40. The	that escaped cultivation has a distinctive double flower. Compared with
other bindweed flowers, this is a	unique flower in that it has twice the number of petals and looks similar
to a rose or carnation.	D. Coods and annualization
A. Short-lived perennialB. Stolons	D. Seeds and creeping roots E. Small yellow flowers and a deep taproot
C. Weedy form	F. None of the Above
,	
Birdsfoot Trefoil 41. Plant Description: Birdsfoot The species is characterized by	trefoil has a perennial root crown and stems that die back each winterconsisting of 3 clover-like leaflets at the tip
	2 smaller leaflets at the base. Its flowers are yellow, clover like, and in
	ged such that, when pods form, they resemble a bird's foot.
A. Large bracts	D. Smaller flowers and the bracts
B. Compound leavesC. Nodes of older stems	E. An annual, biennial or short-lived perennial F. None of the Above
C. Nodes of older sterris	r. Notice of the Above
(horizontal underground stems)	
A. Short-lived perennial	D. Seeds and creeping roots
B. Modified stems	E. Small yellow flowers and a deep taproot
C. A unique flower	F. None of the Above

Black medic	
	or short-lived perennial.
A. Biennial B. Stolon C. A unique flower	D. Seeds and creeping roots
B. Stolon	E. Small yellow flowers and a deep taproot
C. A unique flower	F. None of the Above
44. A, it fertility.	is closely related to alfalfa. It is most often found in lawns having low
A. Large bracts	D. Smaller flowers and the bracts
B. Legume	E. An annual, biennial or short-lived perennial
C. Nodes of older stems	D. Smaller flowers and the bractsE. An annual, biennial or short-lived perennialF. None of the Above
pulled from moist soil without di mowing, and fertilization will di	ver, this plant has small yellow flowers and a It can be ifficulty. Keeping your lawn healthy and dense with proper watering, scourage invasion by black medic. D. Seeds and creeping roots
B. Stolons	E. Deep taproot
A. Short-lived perennialB. StolonsC. A unique flower	F. None of the Above
D alone	combination herbicides orare more effective than 2,4-
A. Crabgrass killer	D. Triclopyr + 2,4-D combination herbicidesE. Other 2,4-D combination herbicides
B. Application of 2,4-D	E. Other 2,4-D combination herbicides
C. Compound herbicide	F. None of the Above
discourage invasion by black m A. Short-lived perennial B. Proper watering C. A unique flower	and dense with, mowing, and fertilization will nedic. D. Seeds and creeping roots E. Small yellow flowers and a deep taproot F. None of the Above
lobed leaves, similar in appeara	ysical destruction of a weed ge patche
49. Blue mustard bears	in March through April. Leaves on the flowering stems are
coarsely toothed and have wav	y margins.
A. Wavy margins	D. Purple or blue flowers at the top of the plant
B. Application	E. A soap like lather
C. Bladder-like calyx	F. None of the Above
	to 1 1/2 feet in height. Two-inch long, bean-like seedpods (siliques) that mature in early summer.
A. Beaks D. Phy	sical destruction of a weed
B. Germinates E. The	e tendency to form large patches
C. Tillage F. Nor	ne of the Ábove
51. Control: Herbicides are mo actively growing, this weed can A. Crabgrass killer B. 2,4-D combination herbicide C. Compound herbicide	be controlled with an application of 2,4-D. D. Weeds start to bolt in the spring E. DCPA (Dacthal)

A. Crabgrass killer	E. Physical destruction of a weed	
	ulling and hand hoeing which are practical for small infestations. Mowing the common practice of mechanical control includessical destruction of a weed tendency to form large patches e of the Above	
flowers in summer, and the tend A. Clump-forming perennial	D. BiennialE. Perennial characterized by smooth leafy stems	æ
55. Stems, leaves and roots cowater. Bouncingbet reproducesA. Wavy marginsB. Application of 2,4-DC. Bladder-like calyx	ntain athat forms a soap like lather when mixed with by seeds and spreading underground stems (rhizomes). D. Thick juice E. A soap like lather F. None of the Above	
56. Similar Species: White cam	pion (Silene pratensis) can be distinguished from bouncingbet by	
	e stems D. Dense patches like bouncingbet E. Its hairy stems and leaves F. None of the Above	
57. Bladder campion (Silene vu bladder-like calyx.	lgaris) can be distinguished by itsand papery	/,
	anddo not grow in large, dense patches like	
bouncingbet. A. Bladder campion B. Roots are perennial C. Flowering spikes	D. Dense patches like bouncingbetE. Its hairy stems and leavesF. None of the Above	
and can grow 1 1/2 to 6 1/2 feet	ern is a large, coarse, perennial fern that has almost horizontal leaves tall (sometimes up to 10 feet). Unlike our more	
this primitive perennial lacks true A. Primitive perennial lacks true B. Roots are perennial C. Flowering spikes	e stems. E stems D. Dense patches like bouncingbet E. Typical broadleaf perennials F. None of the Above	

60. Each leaf arises directly from a rhizome (horizontal underground stem), and is supported on a rigid leaf stalk. In addition, brackenfern does not produce flowers or seeds. Instead,and
creeping rhizomes. This species often forms large colonies.
A. Primitive perennial lacks true stems D. Dense patches like bouncingbet
B. Roots are perennialC. Flowering spikesE. It reproduces by sporesF. None of the Above
Brambles
61. Plant Description: Brambles are a diverse group of, shrubs or trailing
vines, that are noted for their prickly stems and berry-like, usually edible fruits.
A. Primitive perennial lacks true stems D. Dense patches like bouncingbet
B. Roots are perennial E. Perennial herbs
B. Roots are perennial E. Perennial herbs C. Flowering spikes F. None of the Above
or the neutral graphics
62. They can reproduce by many different methods including seeds, root sprouts, underground stems
(rhizomes), and branches that(stolons). In some species, individual stems live
only two years, but new stems are continually produced. In all species, roots are perennial.
A. Primitive perennial lacks true stems D. Dense patches like bouncingbet
B. Roots are perennial E. Root at the tips C. Flowering spikes F. None of the Above
C. Flowering spikes F. None of the Above
Broadleaf Plantain
63. Broadleaf Plantain is a It has broad leaves with prominent veins.
The leaves are arranged in a rosette and may smother lawn grass.
A. Evergreen shrub D. Prominent claw-like appendages
B. Stems thicker and rougher E. Low growing perennial
C. Dense, fibrous roots F. None of the Above
64. The normally grow taller than the foliage but may develop below
mowing height. Vigorous, thick turfgrass is less susceptible to invasion.
A. Evergreen shrub D. Prominent claw-like appendages
B. Stems thicker and rougher E. Flowering spikes
C. Dense, fibrous roots F. None of the Above
C. Bollos, librous rocks
65. Control: Triclopyr + 2,4-D or 2,4-D alone or 2,4-D combination herbicides should control
Always read the label before applying any pesticide.
A. Larger yellow flowers D. Clump-forming perennial grass
A. Larger yellow flowers D. Clump-forming perennial grass E. Plantain
C. Sod-forming, perennial grass F. None of the Above
Brome, Smooth
66. Plant Description: Smooth brome is a sod-forming, perennial grass, distinguished by long, slender,
bronze- or purple-tinted flower clusters that make up the flower head. This species spreads by seeds an
dark-colored rhizomes ().
A. Larger yellow flowers D. Clump-forming perennial grass
B. Evergreen shrub E. Horizontal underground stems
C. Sod-forming, perennial grass F. None of the Above
67. Similar Species: Smooth brome may be confused with quackgrass (Elytrigia repens). However,
smooth brome lacks the prominent claw-like appendages () that clasp the stem
at the top of the sheath in quackgrass.
A. Evergreen shrub D. Prominent claw-like appendages
B. Auricles E. An aggressive pioneer species
C. Dense fibrous roots F. None of the Above

Broom, French 68. Description: Perennial; blooms April to June. Grows three to ten feet tall. Evergreen shrub similar to Scotch broom except plants do not grow as erect, leaves are retained the entire year, leaves trifoliate and more numerous, and	i
A. Larger yellow flowers D. Clump-forming perennial grass E. Except pods inflated and hairy all over C. Yellow flowers smaller F. None of the Above	
69. Impacts: This plant,, takes advantage of land disturbances to establish and spread. In California, large infestations displace native plant species and significantly increase the costs of reforestation in commercial timberlands. A. Evergreen shrub D. Prominent claw-like appendages B. Stems thicker and rougher E. An aggressive pioneer species C. Dense, fibrous roots F. None of the Above	
Broom, Portuguese 70. Description: Perennial; blooms April to June. Grows 3 to 10 ft. tall. Evergreen shrub similar to Scotch broom except pods inflated and hairy all over, Stems more silvery, but difficult to distinguish until leaves and flowers fall off. A. Larger yellow flowers B. Evergreen shrub C. Sod-forming, perennial grass F. None of the Above	
Broom, Scotch 71. Description: Perennial; blooms April to June. Grows 3 to 10 feet tall. Evergreen shrub with many slender, erect, dark green angled branches with small, simple leaves. Abundant small, yellow,	
A. Evergreen shrub D. Pea-shaped flowers B. Stems thicker and rougher E. An aggressive pioneer species C. Dense, fibrous roots F. None of the Above	
72. Easily confused with Spanish broom (S. Junceum) has round stems, very few leaves, and larger yellow flowers. A. Spanish broom D. Clump-forming perennial grass B. Evergreen shrub E. Except pods inflated and hairy all over C. Sod-forming, perennial grass F. None of the Above	
Broom, Spanish 73. Description: Perennial; blooms April to June. Grows 3 to 10 ft. tall. Similar to Scotch broom except stems thicker and rougher, it has very few leaves, and flowers larger and A. Fewer in number D. Prominent claw-like appendages B. Stems thicker and rougher E. An aggressive pioneer species C. Dense, fibrous roots F. None of the Above	
Broomsedge 74. Plant Description: Broomsedge is a clump-forming perennial grass that is most noticeable in the fall, when its stems and leaves turn a It reproduces by seed and short rhizomes (horizontal underground stems). A. Larger yellow flowers D. Distinctive orangish-tan to reddish-brown color	
B. Evergreen shrub E. Except pods inflated and hairy all over C. Sod-forming perennial grass F. None of the Above	

75. Root system - Dense, fibro stems).	us I	oots are produced from	(horizontal underground
A. Short rhizomes	ח	Prominent claw-like appendages	
		An aggressive pioneer species	
C. Dense, fibrous roots			
C. Delise, librous roots	г.	Notice of the Above	
Buffalo Bur			
76. Buffalo bur, sometimes call	led	Kansas thistle and	, is a tap rooted annual weed.
It bears long, yellow spines on s	ster	ns, leaves, and flower heads and c	an grow up to 2 feet high. Drought
resistant, its highest occurrence	e is	in dry, exposed soil.	
A. Five equal lobes	D.	Flat pitted seeds	
B. Perennial herb	E.	Prickly nightshade	
A. Five equal lobesB. Perennial herbC. Flower heads lilac-like	F.	None of the Above	
		nes long with	and are covered with very
dense, stiff, and sharp spines. A. Bright yellow flowers		Scotch broom	
B. Deep rounded lobesC. Green to blue-gray	 	None of the Above	
C. Green to blue-gray	Г.	Notice of the Above	
78. Bright yellow flowers can b	e s	een in summer. In the fall, berries u	p to 3/8 inch in diameter are
enclosed in the		and are filled with black, wrinkle	
enclosed in theA. Five equal lobes B. Perennial herb	D.	Flat pitted seeds	,
B. Perennial herb	E.	Dried flower parts	
C. Flower heads lilac-like	F.	None of the Above	
		nt, as it is a host for the Colorado p	
		and the plant rolls like	, widely scattering the 8500
seeds that each plant produces		0 - 4 - 1 - 1	
A. Bright yellow flowers	υ.	Scotch broom	
B. Tumbleweed	E.	Upper leaves	
C. Green to blue-gray	۲.	None of the Above	
80 Herbicides should be applied	ed ł	petween Dican	nha Triclonyr and 2.4-D can be
effective in controlling Buffalo b	ur.	Glyphosate in a 2% solution can be	e applied as a spot treatment.
A Five equal lobes	D	Flat pitted seeds	аррион не и орог и онимени
B Perennial herb	F	Late bud to early flower	
A. Five equal lobesB. Perennial herbC. Flower heads lilac-like	F.	None of the Above	
Butterfly Bush			
81. Description:			Grows up to 10 feet tall. Leaves
narrow, opposite and green to be	olue	-gray.	
A. Bright yellow flowers	D.	Scotch broom	
B. Perennial shrub	Ε.	Upper leaves	
C. Green to blue-gray	F.	None of the Above	
00 liles like h	t aa	me to a more definite point. Flavor	ra amall and numbe
		me to a more definite point. Flower	s small and purple.
A. Five equal lobesB. Perennial herb		Flat pitted seeds	ado
C. Flower heads		Kansas thistle and prickly nightshaped None of the Above	au c
O. I IOWEI HEAUS	١.	HOLIG OF THE WOOLE	

threat to dry-land meadows,	pioneering species that dominates open habitats. It poses an ecological open slopes and dunes, dominating these sites as much as storically. It also invades reforested sites, resulting in a loss of forest
A. Bright yellow flowers B. Colorado potato beetle C. Green to blue-gray	D. Scotch broom
overall plant is coarsely hair A. Five equal lobes	D. Flat pitted seeds E. Stems and leaves fleshy
85. Basal leaves are leaves are sessile (no petiol A. Bright yellow flowers B. Narrowly oblong C. Green to blue-gray	D. Scotch broom E. Upper leaves
Flowers found in coiled clust A. Five equal lobes	E. An uncurved tube
87. Fruit is a four-chambereA. One seedB. Spine-tipped lobesC. Spiny wings	nutlet; each nutlet contains D. Several hundred seed heads E. Rosette leaves F. None of the Above
The fleshy stalks can cause competition to	des alfalfa fields, pastures, pine forests, rangeland, riparian and waste areas hay bales to mold. Large, very dense stands can occur, offering strong Native plant communities Leaf axils on the flower stem None of the Above
	biennial. Young seedling leaves are oblong in shape, but mature vith cottony hairs on the undersurface. D. Several hundred seed heads E. Rosette leaves F. None of the Above
green and are arranged alte branched. A. Rosette leaves D. B. Spiny bracts E.	generally grow 2 - 12 inches long and 3/4 - 4 inches wide. Leaves are dark rnately along the rigid flower stalk, that grows 1 - 5 feet tall and can be highly Strong competition to native plant communities Leaf axils on the flower stem None of the Above

91	_have distinctly pointed, spine-tippe	ed lobes, with bases that clasp the stem to forr
spiny wings.		
A. Four-chambered nut	tlet D. Several hundred seed	heads
	E. Stem leaves	
C. Spiny wings	F. None of the Above	
00	1 to 0 inches disperter or	a hawa an bunanah tima anal ana ay bahandad by
an egg-shaped cluster o	, i to z inches diameter, ar	e borne on branch tips, and are subtended by
A. Ruselle leaves	D. Purplish/pink flower heads	
C. Biennial	E. Leaf axils on the flower stem F. None of the Above	
C. Diennai	r. Notic of the Above	
93.	give rise to seed heads that contain	many single-seeded fruits, each topped by a
plume of feathery white		, , , , , , , , , , , , , , , , , , , ,
A. Rosette leaves	D. Flower heads	
B. Spiny bracts	E. Leaf axils on the flower stem	
C. Biennial	D. Flower headsE. Leaf axils on the flower stemF. None of the Above	
		y seed. Each plant can produce between one
	ed heads, and seed heads produce	
	tlet D. An average of 100 see	ds each
B. Spine-tipped lobes	E. Rosette leaves	
C. Spiny wings	F. None of the Above	
Described to the Commencer		
Burdock, Common	2	
		grows as athe first year and
then produces a 5-foot-	tall, erect, bushy flowering stem.	
A. Rosette leaves	D. Rosette of leaves	
B. Spiny bracts	D. Rosette of leaves E. Leaf axils on the flower stem F. None of the Above	
C. Biennial	F. None of the Above	
96 Rosette leaves are	distinctive due to their large size. h	eart-shaped base, wooly undersurface, and
hollow leaf stalks ()	our onapou baco, woory andorounaco, and
A Four-chambered nut). tlet D. Several hundred seed	heads
B Spine-tipped lobes	E. Rosette leaves	neado
C. Petioles	F. None of the Above	
O. 1 Olio100	1. 110110 01 110 7 15010	
97. Stem leaves are sir	milar to but smaller than rosette leav	ves. Located at the ends of branches or at leaf
		ur with hooked bristles beneath a closely
packed	· :	•
A. Rosette leaves	D. Cluster of tubular, purplish flow	rers
B. Spiny bracts	E. Leaf axils on the flower stem	
C. Biennial	F. None of the Above	
		on its burs that stick to fur and clothing. The
	ommon burdock reproduces are its s	
A. Hooked bristles	D. Several hundred seed	neads
B. Spine-tipped lobes		
C. Spiny wings	F. None of the Above	

	buttercup is a low-growing, rosette-forming, spreading perennial. It is
new rosettes.	and creeping horizontal stems (stolons) that root at the nodes to form
A. Spine-tipped branches	D. 3-parted leaves
B. Buttercup C. Creeping buttercup	
C. Creeping buttercup	F. None of the Above
100. This species reproduces p	rimarily by, but can also reproduce by seeds.
Because of its spreading, straw	berry-like growth habit, creeping buttercup can rapidly form large patches.
A. Actively growing plants	D. Mature plants E. Poroppial
B. Perennial weed C. Stolons	F. None of the Above
Chemical	
101. Herbicides can be used if	allowed and appropriate for Follow all label directions to
ensure safe and effective use.	5
A. Spine-tipped branches	D. The site and land use
B. Buttercup C. Creeping buttercup	E. New rosettes
C. Creeping buttercup	F. Notic of the Above
	o, Aquamaster) can be applied to actively growing plants before they seed
	er plants. Re-seed or re-plant bare areas after removing buttercup to keep
A Actively growing plants	D. Some mature plants will generally recover
B. Perennial weed	E. Re-infesting the area
C. Toxic	D. Some mature plants will generally recover E. Re-infesting the area F. None of the Above
103her to selectively kill the buttercup a	bicides can be applied over grassy areas infested with creeping buttercup and not the grass. Products containing the active ingredient MCPA are tsulfuron (Escort, Ally) is also effective but can harm some grasses. g and rates. D. Broadleaf
	st two or three applications tobecause of the seed bank
and because some mature plan	
	D. Eradicate creeping buttercup
B. Perennial weed C. Toxic	E. Perennial F. None of the Above
	or re-growth and pull upbefore they establish runners.
A. Spine-tipped branches	E. New rosettes
B. Buttercup C. Creeping buttercup	F. None of the Above
, -	
Buttercup, Tall 106 Plant Description: Tall but	tercup is a perennial weed characterized by erect stems and deeply lobed
leaves. This species reproduces	
A. By actively growing plants	D. By rhizomes
B. By perennial weeds	
C. By seeds	F. None of the Above

Impacts 107.	an dominate a pasture or meadow given the opportunity, especially with
acid soils and/or over-grazing. It habitat if it were allowed to invade	could hinder colonization by native species in a prairie or grassland de and spread.
A. Spine-tipped branches	D. Tall buttercup E. New rosettes
B. Buttercup C. Creeping buttercup	F. None of the Above
108. The main impact is to lives	stockare toxic to grazing animals, who can suffer sters, abdominal distress, inflammation, and diarrhea.
109. Fortunately,palatable	has a strong, bitter taste so animals generally try to avoid it if more
A. Spine-tipped branches	D. Fresh plants
A. Spine-tipped branchesB. ButtercupC. Creeping buttercup	E. New rosettes
C. Creeping buttercup	F. None of the Above
1/4 to 1 3/4 inches lon	wers June to July. Grows 1 1/2 to 4 feet tall. Stems greenish with
A. Actively growing plants	D. Slender spines E. Poroppial
A. Actively growing plants B. Perennial weed C. Toxic	F. None of the Above
pea-like, pinkish purple to maroo plant.	rless on the upper surface, 1/4 to 1 1/4 inches longsmall, on, occur on short, spine-tipped branches along the upper portion of the
A. Spine-tipped branches	D. Flowers
B. ButtercupC. Creeping buttercup	F. None of the Above
	d upward, deeply indented with each seed clearly outlined in the pod. D. Some mature plants E. Perennial
Campion, White 113. Plant Description: White can A. Short-lived perennial B. Reproduction C. Leaves are lance-shaped	ampion can be a winter or summer annual, biennial, or D. Winter or summer annual, biennial E. Creeping perennial weed F. None of the Above
114. This species is characterizemerge from a green, inflated, b. A. Bladder-like structure (calyx) B. Downy foliage C. Cool-season perennial	ladder-like structure (calyx).

	by s	eeds, although fragmented segme	nts of the	can give
rise to new plants. A. Central axis	D	Root crown		
B. Reproduction				
C. Leaves are lance-shaped	F.	None of the Above		
Canada Goldenrod				
	go	ldenrod is a perennial distinguished	d by numerous small y	ellow flowers
		ne top of individual, unbranched, le		
A. Bladder-like structure (calyx))	D. An aggressive creening r	perennial weed	
R Parannial		F Infectations		
C. Pyramid-shaped clusters		F. None of the Above		
		that originate a	t a central axis and are	e arranged
more or less horizontally. A. Central axis	П	Numerous backward-curved stalk		
B. Reproduction		Creeping perennial weed	5	
C. Leaves are lance-shaped		None of the Above		
118. Leaves are		_, hairless on the upper surface, h	airy underneath, and s	sharnly
toothed on the edge.			any andomodin, and s	пагріу
A. Central axis	D.	Lance-shaped, tapered at both en	ds	
B. Reproduction		Creeping perennial weed		
C. Leaves are lance-shaped	F.	None of the Above		
	wa	g 3-nerved, meaning the midrib and y of short rhizomes (horizontal und		
A. Central axis		Wind dispersed seeds		
B. Reproduction				
C. Leaves are lance-shaped		None of the Above		
Canada Thistle				
		se) is an aggressive, creeping per		
		. General		i disturbed
		grazed pastures, tilled fields or aba D. Is an aggressive, creeping		
B. Non-crop areas	'	E. In infestations	g perennai weed	
C. Cool-season perennial		F. None of the Above		
	age	e consumption in	because cattle ty	pically will no
graze near infestations.	Ь	An aggregative areaning perspect	Lwood	
A. Pastures and rangelandB. Perennial		An aggressive, creeping perennia Infestations	i weed	
C. Cool-season perennial		None of the Above		
		perennial that reproduces from vege		
from seed. It is difficult to contro attempts.	l be	ecause itsall	ows it to recover from	control
A. Creeping perennial	D.	Extensive root system		
B. Canada thistle management	E.	Fern-like foliage		
C. Repeat applications	F.	None of the Above		

123. Combining control methods is the best form of Canada thistle management. Persistence is imperative so the weed is continually stressed, forcing it to exhaust A. Creeping perennial D. Root nutrient stores and eventually die B. Canada thistle management E. Fern-like foliage C. Repeat applications F. None of the Above
124. Herbicides such as glyphosate can be painted on thistle leaveswill be needed. Herbicides such as triclopyr + clopyralid or 2,4-D combinations can be sprayed on thistle foliage repeat applications may be needed at 6 week intervals. A. Creeping perennial D. Herbicide applications B. Canada thistle management E. Repeat applications C. Applying any pesticide F. None of the Above
125. The most effective times for herbicide applications are spring, just after the green shoots appear, o in August/September. Always read the label before A. Applying any pesticide D. Herbicide applications B. Canada thistle management E. Repeat applications C. Repeat applications F. None of the Above
Canarygrass 126. Plant Description: Reed canarygrass is a tall, coarse, sod-forming, cool-season perennial, characterized in summer by its two-tone appearance of golden seedheads atop green foliage. It reproduces through seeds and more typically by(horizontal underground stems). This species tends to grow in clumps 3 feet or more in diameter, and can form large, dense colonies. A. Bladder-like structure (calyx) D. Seed B. Perennial E. Vigorous rhizomes C. Cool-season perennial F. None of the Above
Carrot, Wild 127. Plant Description: Wild carrot is a biennial that looks and smells similar to Its distinctive fern-like foliage forms a rosette during the first year. A. Creeping perennial D. Cultivated carrot B. Canada thistle management E. Fern-like foliage C. Repeat applications F. None of the Above
128. During the second year of growth, it produces a succession ofthat terminate in umbrella-shaped clusters of small white flowers. A. Mat-forming species D. Hairy flower stalks B. Reproduces by seeds E. Leaf-like bracts and branches C. Heart-shaped leaves appear F. None of the Above
129. A distinctive feature of wild carrot is the appearance of a dark purple flower (rarely several flowers) in the center of most flower clusters. Once flowers mature and, the flower cluster closes forming a cuplike bird's nest. Wild carrot reproduces by seeds. A. Seeds begin to develop D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
Catnip 130. Plant Description: Catnip isbest known for the minty odor emitted by its leaves and stems when they are crushed or wilted. The odor is very attractive to cats. A. An erect perennial

	ristics areand the serrated appearance of the leaf edges,
which resembles the toothed ed	Ige of a saw. D. Linhranched plant with vellow flowers and leaves
B. Reproduced by seeds	D. Unbranched plant with yellow flowers and leaves E. Perennial that initially grows as a rosette
C. Typically lance-shaped	F. None of the Above
	non among members of the mint family consisting of 2 lips, and flower le dots. Along with most members of the Mint Family, catnip has square
stems. This species reproduces	by seeds and (horizontal underground stems).
A. Mat-forming species	D. It also produces short rhizomes E. Leaf-like bracts and branches
B. Reproduces by seeds	E. Leaf-like bracts and branches
C. Heart-shaped leaves appear	F. None of the Above
Catsear, Common	
	on catsear is a perennial with a growth form similar to that of dandelion; its
leaves form a basal rosette and	it produces Leaves of common catsear are
typically lance-shaped with irreg	gular rounded lobes and hairs on both the upper and lower surfaces.
A. Either an annual	D. Unbranched plant with yellow flowers and leaves
B. Reproduces by seeds	D. Unbranched plant with yellow flowers and leaves E. Yellow head-like flowers at the tips of upright stems F. None of the Above
C. Typically lance-snaped	F. None of the Above
134. Emerging from the rosette	e arethat usually have leaf-like bracts and branches. At
the tips of the branches are 1-in	nch-wide flower heads composed of many tubular, yellow flowers.
A. Mat-forming species	D. Wirv hairless stems
	E. Leaf-like bracts and branches
C. Heart-shaped leaves appear	r F. None of the Above
135 Common catsear reprodu	ces by seeds and vegetatively by way of that can
produce new plants if separated	
	D. Unbranched plant with yellow flowers and leaves
C. Typically lance-shaped	E. Perennial that initially grows as a rosetteF. None of the Above
Okialasa d Massa	
Chickweed, Mouseear	ear chickweed is a creeping, mat-forming species that normally behaves
	ear chickweed is a creeping, mat-forming species that normally behaves obsible for it to exist as an annual. Plants reproduce by seeds and roots
	It tends to form dense patches.
A. Mat-forming species	D. Nodes of stems
B. Reproduces by seeds	E. Leaf-like bracts and branches
C. Heart-shaped leaves appear	r F. None of the Above
Chicary	
Chicory 137 Plant Description: Chicory	that initially grows as a rosette of irregularly-
toothed basal leaves. Then, late	that initially grows as a rosette of irregularly- er in the season, leafless stems emerge with sky-blue daisy-like flowers
scattered along their length.	
A. Either an annual	D. Unbranched plant with yellow flowers and leaves
B. Reproduces by seeds	E. Perennial that initially grows as a rosette
C. A perennial	F. None of the Above
138 Flowers open asch marnis	ng and close as sunlight increases in intensity around noon. Only a few
	ng and close as sunlight increases in intensity around noon. Only a few deach head opens for a single day. Chicory
A. Is a mat-forming species	D. Reproduces by seeds
B. Reproduces by rhizomes	E. Has leaf-like bracts and branches
C. Has heart-shaped leaves	F. None of the Above

Cinquefoil, Rough 139. Plant Description: Rough of biennial when growing in less di	cinquefoil behaves as either an annual if growing in cultivated ground, a
A. A short-lived perennial B. Reproduces by seeds C. Typically lance-shaped	D. Unbranched plant with yellow flowers and leaves E. Perennial that initially grows as a rosette F. None of the Above
140. It grows as arobust stem with yellow flowers. reproduces by seeds.	at the beginning of the season, but later forms an upright, hairy, Leaves consist of 3 coarsely-toothed, hairy leaflets. Rough cinquefoil
A. Mat-forming species	E. Leaf-like bract
with yellow flowers and leaves or radiate from a common point like A. 5 to 7 coarsely-toothed leafle	inquefoil is a perennial. It is an erect, hairy, generally unbranched plant consisting of Leaflets are arranged such that the efingers on a hand. Sulfur cinquefoil reproduces by seeds. Estimate D. Unbranched plant with yellow flowers and leaves E. Rosette F. None of the Above
What is a Weed? Generally, the term weed is use aggressively.	d to describe any plant that is unwanted and grows or spreads
142. Terms such asinfest large areas.	are used somewhat interchangeably to refer to weeds tha
	•
overrun by	
143. Millions of acres of once h overrun by	D. Plants non-native to North America E. Plant species
143. Millions of acres of once hoverrun by A. Noxious or invasive weeds B. Invasive or non-invasive C. Noxious or not noxious What is a noxious weed? 144. The term "	D. Plants non-native to North America E. Plant species F. None of the Above " means different things to different people. In the broadest
143. Millions of acres of once hoverrun by	D. Plants non-native to North America E. Plant species F. None of the Above means different things to different people. In the broadest here it is not wanted. D. Native vegetation
 143. Millions of acres of once hoverrun by	D. Plants non-native to North America E. Plant species F. None of the Above means different things to different people. In the broadest here it is not wanted.

	gressive ability of these plants, coupled with no natural controls, these e stands. Not only are manyout competed by these
weeds, but native vegetation ar	e stands. Not only are manyout competed by these and the wildlife associated with it will be replaced.
A. Noxious or invasive weeds	
B. Invasive or non-invasiveC. Noxious or not noxious	E. Plant species
C. Noxious or not noxious	F. None of the Above
Colts Foot	
	ot is a Its flowers are the same color, size, and shape
	vo species are easily confused while in bloom if viewed from a distance.
B. Reproducer of seeds	D. A member of the Mint Family
C. Yellow-flowered perennial	F. None of the Above
148. Coltsfoot blooms so early	that the flowers have already come and gone by the time leaves emerge.
Also, coltsfoot flowers appear a	t the tips of 1/8-inch-thick stems that are wooly and covered with
9	giving them an appearance similar to that of asparagus spears.
A. Mat-forming species	D. Scaly bractsE. Leaf-like bracts and branches
B. Reproduces by seeds	E. Leaf-like bracts and branches
C. Heart-shaped leaves appea	F. None of the Above
149. After flowers have mature	d, clumps of broad, heart-shaped leaves appear on short,
A. Mat-forming species	D. Scaly bracts E. Leaf-like bracts and branches
B. Wooly vegetative stems	E. Leaf-like bracts and branches
C. Heart-shaped leaves appea	F. None of the Above
150. Root system - Coltsfoot fo	rms an extensive system of(horizontal underground
A. Opened flowers	D. Petioles
A. Opened flowersB. SeedsC. Good cultural habits	E. Thick white rhizomes
C. Good cultural habits	F. None of the Above
Comfrey, Common	
	on comfrey is a perennial herb with lower leaves that are bristly, up to 12
plant.	nged leaf stalks () that emerge from the base of the
A. Distinctive curled clusters	D. Petioles
B. Perennial herbs	
C. Stems	F. None of the Above
152. Smaller leaves that are als	o bristly but lack petioles are borne on
A. Opened flowers	D. 2- to 3-foot tall flowering stems
B. Stems	E. Branched taproots
C. Rhizomes	F. None of the Above
	nd either yellow or blue. They form in distinctive curled clusters having an
appearance similar to that of a_	. Reproduction is by way of seeds. Also, new
A. Distinctive curled cluster	viding the roots of established plants. D. A broadleaf summer-annual weed
B. Perennial herb	E. A branched taproot
C. Scorpion's tail	F. None of the Above

Common Groundsel 154. Common groundsel is A prolific seed producer, seeds are produced within several weeks of germination, and there are several generations within the same year. This weed likes moist soil and is often found in well-irrigated areas such as lawns and flower beds. A. Opened flower D. Also bristly but lack petioles B. A prolific seed producer E. A common weed in the home vegetable garden C. An early season weed F. None of the Above
155. Control: A dense, healthy turf will prevent seeds from taking root in the lawncan be increased with proper mowing, fertilization, watering, and other cultural practices. Good drainage will also help to discourage the growth of common groundsel. A. Distinctive curled clusters D. Broadleaf summer-annual weed control measures B. Perennial herbs E. Turf density C. A dense, healthy turf F. None of the Above
156. The plants can be easily pulled by hand from moist soil. Be sure to pull and dispose of them before they set seed, as seed can mature ineven after the plants have been killed. If there is heavy infestation, spot treat with a post-emergent herbicide containing glyphosate (Roundup, Kleenup). A. Opened flowers D. Petioles B. Seed producing E. To vegetables C. Weeds F. None of the Above
Common Lambsquarters 157. Common Lambsquarters is a that can be found anyplace the soil has been disturbed. The growth habits of the common lambsquarters vary with its location. If growing along the road or in an open field, it may reach three or four feet in height. A. Distinctive curled cluster D. Broadleaf summer-annual weed B. Perennial herb E. Broadleaf winter-annual weed C. Dense, healthy turf F. None of the Above
158. Control: The best methods of weed control in the home vegetable garden are mulching, handpulling, rototilling, hoeing and preventing the weeds from A. Opened flowers D. Blooming B. A prolific seed producer E. The home vegetable garden C. Going to seed F. None of the Above
159. Because of its short, branched taproot, lambsquarters can be easily hand-pulled from moist soil. The best methods of weed control in the home vegetable garden are mulching, hand pulling, rototilling, hoeing and preventing the weeds from going to seed. Because of its
160. Prevention by use of should be the first line of defense in eliminating broadleaf weeds such as lambsquarters from lawns. A. Violence D. Fire B. Hoe E. Weed control in the home vegetable garden C. Good cultural habits F. None of the Above
161. Pre-emergent herbicides such as trifluralin (Preen) can be used to A. Control grass D. Control broadleaf summer-annual weed B. Control perennial herbs E. Prevent germination of weed seeds C. Create a dense, healthy turf F. None of the Above

162. Post-emergent herbicides	effective against) are 2,4-D, M	CPP and dicamba
	and combination formulas (Trimec).	
A. Broadleaf weeds	D. Broadleaf summer-annual weeds	
B. Perennial herbs	E. Vveed seeds	
C. Turf	F. None of the Above	
Common Mallow		
	requently found in newly seeded lawns or lawns tha	at are stressed and
lack density. It can be		
A. Opened flower	D. Found with banana trees	
B. A prolific seed producer	E. Found with a long, branched taproot	
C. An annual or biennial	D. Found with banana trees E. Found with a long, branched taproot F. None of the Above	
164. Mallow has a deep taproof	t but can be easily pulled from moist soil. The foliag	e resembles that of
	of common mallow are pinkish-white and the	fruits look like small,
round cheeses.	D 0 1	
	D. Seeds	
B. Flowering plants		
C. Rosette stage	F. None of the Above	
165. Control:	with proper mowing, fertilization, wa	atering and other
cultural practices can help in the		
A. A non-selective herbicide	D. Increasing turf density	
B. Seed production	E. Spreading perennial	
A. A non-selective herbicideB. Seed productionC. Herbicide spraying	F. None of the Above	
are suggested. A. Post-emergent herbicides	D. Only marginally E. An insecticide and are F. None of the Above	ralid or triclopyr alone
and miner's candle is a	own as wooly mullein, velvet dock, flannel leaf, Aaro D. Biennial E. Spreading perennial F. None of the Above	on's rod, torch plant,
168. Common mullein was brouthe treatment of coughs and dia plant has also been used an an A. Post-emergent herbicide B. Is a flowering plant C. For skin disorders	ught over from Europe by early settlers. It was used urrhea and A methan insecticide for mosquito larvae. D. As a respiratory stimulant for the lungs when s E. An insecticide for mosquito larvae F. None of the Above	ol extract from this
The felt-like leaves are a bluish A. Non-selective weed D. Bier B. Seed producer E. Spre	nnial	about 5 inches in width

	are produced the second year, growing 5 to 10 feet in height including the produces five-petaled flowers that bloom a few at a time all
summer. The tiny seeds	produces five-petaled flowers that bloom a few at a time all can germinate after lying dormant for several decades.
A. Spreading perennial	D. Deep taproot
B. Flowering plant	E. Leafy spike
C. Rosette stage	D. Deep taproot E. Leafy spike F. None of the Above
	eand are easily hand-pulled. Recently, weevils (Gymnetron
	seeds have been found effective in reducing seed production.
A. Spreading stems	D. Shallow tap roots
B. Seed production	E. Spreading roots
C. Featherlike leaves	F. None of the Above
	nd-pulling is not safe or practical, such as on a steep slope, herbicide control is an
effective option. This is	especially effective during the Because of the wooly nature
of the leaves, herbicides	s should be mixed with a surfactant to facilitate uptake.
A. Post-emergent stage	D. Deep taproot E. Spreading stage F. None of the Above
C. Bootto stage	E. Spreading stage
C. Roselle slage	F. Notile of the Above
173. A 2% solution of g	llyphosate or triclopyr and water, plus a, can be applied
using a hand sprayer. Ū	lse with care around desired plants as glyphosate is a non-selective herbicide.
Always read and follow	the directions carefully when using a herbicide.
 A. A non-selective herb 	oicide D. Glyphosate or triclopyr
B. Seed reducer	E. Non-ionic surfactantF. None of the Above
C. Liquid	F. None of the Above
.	
Common Yarrow	
1/4. Description: A low	-growing, with upright flower stalks that can reach 3 feet in height.
Each plant produces on	e to several flower stalks, which are often branched and covered by fine hairs.
A. Non-selective weed	D. Blenniai
C. Leaves are factle will	D. Biennial ort family E. Spreading perennial ke F. None of the Above
175	, with tiny, fine leaflets lining each side of the leaf stem. Leaves are
arranged along the sten	n at even intervals.
A. Spreading stems	D. Shallow tap roots
B. Seed production	D. Shallow tap roots E. Spreading roots ke F. None of the Above
C. Leaves are featherli	Ke F. None of the Above
176gro	ow between 1 and 6 inches long and 1/4 - 1 inch wide.
A. Spreading stems	D. Flower heads
B. Seed production	E. Spreading roots
C. Leaves	F. None of the Above
177. Flower heads are	borne in flattened or umbrella-shaped clusters at stem tops. Each individual
	usually of five, 1/8 inch long, white to pinkish-white ray flowers surrounding 10-20
pale yellow disk flowers	· · · · · · · · · · · · · · · · · · ·
A. Spreading stem	D. Flower heads
B. Seed production	E. Spreading root
C. Leaf	F. None of the Δhove

Crabgrass 178. Crabgrass is a summer annual grass with wider blades and a lighter green color than
It is low growing, prostrate, and often has reddish-purple stems. It forms seedheads below mowing height. A. Crabgrass D. Reddish-purple B. Bluegrass E. Perennial crown C. Compound leaves F. None of the Above
179. Crabgrass is less prevalent when turf has In particular, mowing too low promotes crabgrass seed germination. Maintain mowing heights of 2.5 - 3 inches. A. Stems D. Sharply toothed lobes B. Good density E. Immature, young seedlings C. Bright yellow flower heads F. None of the Above
180. Control:(benefin + trifluralin, dithiopyr, DCPA, oxadiazon, pendimethalin, or prodiamine) applied correctly and at the proper time should provide control. A. Crabgrass killer D. A pre-emergent herbicide B. Applied correctly E. Perennial spray C. Compound herbicide F. None of the Above
181. Do not use on a newly seeded or sodded lawn or when overseeding a lawn. A. Crabgrass killer D. A pre-emergent herbicide B. Applied correctly E. Perennial spray C. Compound herbicide F. None of the Above
182. Fenoxaprop and other "crabgrass killer" (MSMA, DSMA, MAMA) sprays are not effective unless crabgrass plants are immature, young seedlings. Always read the label before applying any pesticide. A. Post-emergent
Creeping Yellow Cress 183. Description:; flowers June to August. Grows up to 20 in tall. Leaves 2 to 4 in long and pinnately divided into narrow, sharply toothed lobes. Flowers yellow with four small petals. A. Non-selective weed D. Biennial B. Winter annual E. Spreading perennial C. Perennial F. None of the Above
Crownvetch, Trailing 184. Plant Description: Crownvetch is a characterized by compound leaves made up 11 or more small leaflets arranged in pairs and pinkish flowers resembling those of peas, beans, or clovers that are grouped into head-like clusters. A. Non-selective weed D. Biennial B. Winter annual E. Spreading perennial C. Perennial F. None of the Above
185. Stems are, forming a tangled mass less than 2 feet tall. Reproduction is by seeds. A. Long and trail along the ground B. An erect biennial C. Bright yellow D. Sharply toothed lobes E. Immature, young seedlings F. None of the Above

186. Root system - Roots formA. RhizomeB. Sharply toothed lobeC. Compound stem	a D. Reddish-purple stem E. Perennial crown F. None of the Above
Curlycup Gumweed 187. Description: An erect bienr branching stems. Stems grow 1- A. Non-selective weed B. Winter annual C. Perennial	-3 feet tall. D. Biennial
	ely along the stem, and typically clasp the stem, with no stalk. Leaves h serrated margins, are 1/2 - 2 1/2 inches long, nd D. Sharply toothed lobes
B. An erect biennial C. Bright yellow	
resinous bracts that curl in hook	nd D. Sharply toothed lobes E. Immature, young seedlings
replaced by tiny, ridged, four-sid	inch across and are sticky with resin. As the plant matures, flowers are ed, off-white seeds, to which two to three bristles are nd D. Sharply toothed lobes E. Attached at the tip F. None of the Above
ovid to oblong, mature leaves op A. Non-selective weed B. Winter annual	_; flowers July to September. Grows up to seven feet tall. Rosette leaves posite, large, oblong and prickly. D. Biennial E. Short-lived perennial F. None of the Above
	arly lobed. Stems tall and prickly. Flowers small, white and packed into similar, but has purple flowers and D. No lobes on upper leaves E. Stems tall and prickly head F. None of the Above
Daisy, Oxeye 193. Plant Description: Ox-eye dark green, hairless, somewhat white rays and yellow centers.	daisy is adistinguished by lower leaves that are fleshy, and coarsely toothed and conspicuous daisy-like flowers with
A. Clump-forming perennialB. Winter annualC. Perennial	D. BiennialE. Short-lived perennialF. None of the Above

	other identifying feature. The plant reproduces by seeds and short
rhizomes (horizontal undergrou	
A. An extensive taproot	D. A simple herbaceous perennialE. Stems tall and prickly
C. A single, bright-yellow flowe	r head F None of the Above
G. A single, bright-yellow howe	Thead 1. Notic of the Above
Dandelion	
195. The Dandelion is a	with an extensive taproot. Its yellow flowers can
develop anytime between Marc	h and November and are followed by fluffy seed heads. More prevalen
under low turf density, dandelio	n growth can be inhibited by increasing the turf density.
A. Clump-forming perennial	D. Biennial
B. Winter annualC. Perennial	E. Short-lived perennial
C. Perennial	F. None of the Above
106 Dandelians can be due of	it with appaid tools, but any part of the that is left in
capable of regenerating a plant.	It with special tools, but any part of thethat is left is
A An extensive tangent	D Plant
A. An extensive taproot B. Rhizomatous roots C. Root	F Stem
C. Root	F. None of the Above
197. Control: A 2,4-D or	is most effective and should be used in spring and fall.
Always read the label before ap	plying any pesticide.
	D. A pre-emergent herbicide
B. 2,4-D combination herbicide	
C. Compound herbicide	F. None of the Above
108	, and are 2-12 inches long and 1/2 - 4 inches wide. Leaf shape varies,
A. A globe shape	D. Coarsely toothed and conspicuous flower
B. Fluffv seed heads	E. Or toothed margins to having deep lobes
C. Leaves are arranged in a lov	D. Coarsely toothed and conspicuous flower E. Or toothed margins to having deep lobes v-growing rosette F. None of the Above
199. The rosette produces one	or more hollow flower stalks that grow 2 - 24 inches tall, depending on
conditions.	develops at the apex of each stalk, and is 3/4 - 2 inches in diameter
A. An extensive taproot	develops at the apex of each stalk, and is 3/4 - 2 inches in diameter D. A single, bright-yellow flower head E. Stems tall and prickly
B. RNIZOMATOUS FOOTS	E. Stems tall and prickly
C. A single, bright-yellow flowe	r nead F. None of the Above
200 The seed head is compos	ed of many 1/8 inch-long rough, brown, oblong fruits with white hairs
attached at the tip,	ou of maily 170 mon long rough, slown, oblong hate with white half
A. Collectively forming a globe	shape D. Coarsely toothed and conspicuous daisy-like flowers
B. Fluffy seed heads	E. Or toothed margins to having deep, pointed lobes
C. Spring and fall	F. None of the Above
Daylily, Tawny	
201. Plant Description: Tawny	daylily is a, characterized by its beautiful orange in July. This species is not a true lily, as indicated by its unspotted
	in July. This species is not a true illy, as indicated by its unspotted
blossoms and leafless stems. A. Clump-forming perennial	D. Biennial
B. Winter annual	E. Short-lived perennial
C. Perennial	F. None of the Above

	primarily by rhizomes () and tuber-like	roots, and rarely
by seeds.	D. Horizontal underground stems	
B. Is especially destructive	E. Basal rosette	
C. Vertical underground stems	D. Horizontal underground stemsE. Basal rosetteF. None of the Above	
Dock, Broadleaf 203. Plant Description: Broadle	af dock is awith a deep taproot that aces primarily by seeds, but there is limited regeneration f	t can reach
A. Clump-forming perennialB. Rosette-forming perennial	D. Biennial	TOTT TOOL (ISSUES.
O. 1 Ciciniai	1. Notice of the Above	
heights up to 5 feet and will have A. Plant B. Vine	al rosette with relatively large leaves. Thee smaller versions of the basal leaves arranged alternate D. Horizontal underground stem E. Basal rosette	
C. Hairless reproductive stem	F. None of the Above	
205. The smartweed family is c	haracterized by a papery sheath (called the ocrea) that	
A. Easy to pull and destroy	D. Cover each nodeE. Is a rosette-forming perennial	
C. Is classified as a perennial	F. None of the Above	
or red. Occasionally it is almost	mmica), is a twining yellow or orange plant sometimes tin white. and thread-like or relatively D. Horizontal underground stems E. Basal rosette with relatively large leaves F. None of the Above	
a member of the Dodder Family A. Clump-forming perennial B. Rosette-forming perennial	ssified as a member of thein older re (Cuscutaceae) in the more recent publications. D. Biennial E. Morning-Glory Family (Convolvulaceae) F. None of the Above	ferences, and as
208various kii	nds of wild and cultivated plants, and is especially destruc	ctive to alfalfa,
lespedeza, flax, clover and pota		
A. A twining yellow or orange plB. Is especially destructive to	E. Dodder parasitizes	
C. Infested with dodder and wil		
209. Control: Its wide host rang	e and the long life of its dormant seeds make dodder har	d to control and
A. Pulling and destroying	D. Nearly impossible to eradicate	
B. Hard to control	E. Is a rosette-forming perennial	
C. Is classified as a pest	F. None of the Above	
210. Dodder seed can be sprea alfalfa, or along with the seed of A. Seed	ad by irrigation water, in the manures of livestock that hav crops that were D. Stems	e eaten infested
B. Especially destructive	E. Cut	
C. Infested with dodder	F. None of the Above	

produces seeds or infestations will s A. Pull D. Cover each plan B. Mow E. Dodder must be	t destroyed	before it
seed germination will prevent this pe	as, applied to the soil est. The use of a 2,4-D type herbicide or contact effective in killing established parasitic plants ons when using herbicides. A pre-emergent herbicide DCPA (Dacthal)	act herbicide directed at
but becomes much-branched in its upon crushed. A. Clump-forming perennial B. Rosette-forming perennial E.		is undivided at the base sap when cut, broken,
	D. Most vigorous growth E. Smooth edged	
	ch-long pods that generally occur in pairs. Hereproduction of plants in agronomic fields is D. By way of creeping roots E. Rows of cultivated crops F. None of the Above	np dogbane reproduces
stems that arise from the base. Folia A. Perennial or biennial D. B. Rosette-forming perennial E.	that grows up to three fee age has distinctive blue-green cast with whitis Biennial A stout perennial None of the Above	
217. The are sm yellow, small and in clusters. Flower A. Ear like projections B. Primary mode of reproduction C. Upper leaves	D. A stout perennial	ons. Flowers are bright
218are flat and occur mainly in sandy, gravelly soils A. Fruits pods B. Foliage C. Cutting as close to the ground as	D. Most vigorous growthE. Ends of main stems and prim	

219. Invades rangeland, grain f found in orchards and	ields, pastures, waste a	reas, roadsides, and fencerows. It can also be
found in orchards andA. Ear like projections B. Primary mode of reproduction	D. A stout per	ennial
B. Primary mode of reproduction	n E. In rows of c	ultivated crops
C. Grown ornamentally	F. None of the	Above
220. Flowering and	will occur mai	nly in sandy, gravelly soils, and in marginal aste areas, roadsides, and fencerows. It can also
farmlands. Invades rangeland, ç be found in orchards and in row	grain fields, pastures, wa	aste areas, roadsides, and fencerows. It can also
A Far like projections	D A stout ner	ennial
B. Primary mode of reproduction	n E. The most v	igorous growth
A. Ear like projectionsB. Primary mode of reproductionC. Grown ornamentally	F. None of the	Above
English holly		
		on ornamentally in the northwestern United States
		orests in this region. English holly's native range
		grown commercially in the Pacific Northwest and
commonly used in decorations a	and floral arrangements	as well as in landscapes.
A. Clump-forming perennial	D. Bienniai	n troo/shruh
A. Clump-forming perennial B. Rosette-forming perennial C. Perennial	F None of the Above	T (I ee/sill db
	T. Hene et alle Alberte	
English laurel	ahammalaumal ia a lamma	or avail two after wood for
		or small tree often used for s, English laurel gets its common name from its
resemblance to the true laurel tr		s, English laurer gets its common hame from its
	D. Biennial	
B. Rosette-forming perennial		
	F. None of the Above	
Control		
223. Small plants can dug up w	hen soil is moist (take c	are when handling because this plant is
poisonous).		
To control larger plants,	, cutt	ting as close to the ground as possible and
remove stems to make it easier	to control re-growth.	D. A near amount hambiaida
A. Cut stems and trunks by harB. 2,4-D combination herbicide		D. A pre-emergent herbicide E. DCPA (Dacthal)
C. Compound herbicide		F. None of the Above
·		T. Hone of the Above
Evening Primrose		that we have a second of
224. Plant Description: Commo	n evening primrose is a	that produces a rosette of
	D. Biennial	fy stalk during the second year of growth.
B. Rosette-forming perennial		
C. Perennial	F. None of the Above	
225. There are many	evenina p	rimroses that appear similar and can be difficult to
distinguish. Most have 4-petaled		
A. Evergreen shrub	D. Biennial	
B. Rosette-forming perennial		
C Perennial	F. None of the Above	

226. A few, including common common evening primrose usu he lower portion of the stem ar	evening primrose, have lance-shaped leaves without lobes. Leaves of ally appear thin and crinkled and Also, leaves on e often purplish. Reproduction is by seeds.
A. Produce viable seeds	D. May have a reddish midrib
3. Leaf margins	E. Infest crop seeds
B. Leaf margins C. An upright leafy stalk	F. None of the Above
alse Brome	
227. Description:	grass; forms short "squatty" bunches. Stems hollow with broad, flat
	de lax leaves and a leaf sheath open to the base.
A. Clump-forming perennial B. Rosette-forming perennial	
	F. None of the Above
5. Perenniai	F. Notic of the Above
228. Leaf color a bright green bower stems hairy; ligules mem	that often remains through fall and part of winter and brancus
A. Produce viable seeds	
3. Leaf margins	E. Infest crop seeds
B. Leaf margins C. An upright leafy stalk	F. None of the Above
229 Flowers born in a true spi	ke that droops noticeably, and spikelets with short or
	D. To make it easier to control re-growth
B. Stems hollow with broad	E. An erect bushy perennial
C. Droops noticeably	F. None of the Above
230. False brome plants appea solated plants are observed to control efforts.	ar to befew to a couple hundred seeds per plant. produce viable seeds and become new weed epicenters complicating
A. Clump-forming perennial	D. Self-fertile producing
3. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
leshy taproot, swollen joints ar	ur-o'clock is an erect bushy, characterized by its large and smooth heart-shaped leaves that resemble lilac leaves. It reproduces by
seeds. A. Clump-forming perennial	D. Pionniol
3. Rosette-forming perennial	
C. Perennial	F. None of the Above
232. Wild four-o'clock spreads	to new places by its seeds, which can hitch rides on vehicles and
A. Produce viable seeds	D. Appear thin and crinkled and may have a reddish midrib
3. Leaf margins	E. Infest crop seeds and livestock feed
C. An upright leafy stalk	F. None of the Above
mechanical methods. For very A. Crabgrass killer B. 2,4-D	erant of However, good control can be obtained using small infestations, digging up plants is effective. D. A pre-emergent herbicide E. DCPA (Dacthal)
C. Compound herbicide	F. None of the Above

the , only to sprout aga	mpossible to pull up, because the stems readily break of in. D. A distinct S-curve just below the root crown E. Sprout again F. None of the Above	om at
Foxtail 235. Foxtail is a summer bluegrass. It is also faster growing is much less prevalent when turn A. Clump-forming perennial B. Rosette-forming perennial	grass with wider blades and a lighter greening than bluegrass. Seed heads may form despite regula grass has good density. Re-sod or reseed bare spots. D. Biennial	
236. Control: A	E. DCPA (Dacthal)	alin or
characterized by its relatively wi and short rhizomes (horizontal u A. Clump-forming perennial B. Rosette-forming perennial	D. Biennial	
form dense stands.	D. A distinct S-curve just below the root crown E. Sprout again F. None of the Above	Tall fescue car
varieties of tall fescue makes the		nfecting many c to nearby plant
Garlic, Wild 240. Plant Description: Wild gar erect stems and leaves, and a g of tiny aerial bulblets rather than A. Clump-forming perennial B. Rosette-forming perennial C. Perennial		ed by slender, composed mostly
241. This species reproduces b(plants in the northern part of the off a strong garlic odor.A. Coarsely ridged leavesB. Aerial bulbletsC. Allelopathic	y underground and, and less freque e range rarely produce seeds). When crushed, all parts of D. Species is highly tolerant E. A strong garlic odor F. None of the Above	ently by seeds of the plant give

toothed leaves and a slender tap A. Clump-forming perennial B. Rosette-forming perennial	proot with a distinct S-curve ju D. Biennial	that forms a rosette the first spring and is characterized by triangular, coarsely ast below the root crown.
243. Young leaves give off a str nearly gone by fall. Garlic musta A. Stems are square B. Reproduces only by seeds C. Has multiple forks	ardD. Control in two generation E. Resembles a wheat kerne	d, but the odor fades with leaf age and is s el
	ra. As a result, invasion of ga cies. s weed is invasive	tablished. It tends to form dense stands that rlic mustard into forests tends to decrease
245. Garlic mustard can be con depleted.A. Crabgrass killerB. 2,4-D combination herbicideC. Compound herbicide	D. A pre-emergent herbicide E. Preventing new seed pro-	
before or during flowering, hand spring or fall). A. Crabgrass killer B. 2,4-D combination herbicide C. Compound herbicide	D. A pre-emergent herbicide E. Prevent seed formation F. None of the Above ificant portion of the root crownagement strategy is D. A pre-emergent herbicide E. To prevent establishment	n must be removed or else plants can
	surface waters) to thoroughly tions. D. A pre-emergent herbicide E. Glyphosate herbicide as a	
Geranium, Shiny 249. Description: Shiny geraniu biennial depending on moisture A. An annual weed B. Rosette-forming perennial C. Perennial	conditions. D. Biennial	though it may become

Goatgrass, Barbed 250. Description:; grows 8 to 16 inches tall with few to many culms. Leaf sheaths contain white hairs when young, becoming more or less smooth once matured. The blades are rigid, sharp, pointed, and spreading. Grain 1/4 inch long, resembling a wheat kernel. A. Annual D. Biennial B. Winter annual E. A stout perennial C. Perennial F. None of the Above	
Henbit 251. Henbit is aoccasionally found in lawns in early spring. The lower leaves have a stalk while the upper leaves clasp the stem. A. An annual weed D. Biennial B. Winter annual E. A stout perennial C. Perennial F. None of the Above	
252. Stems are square, like other members of the mint family. All the leaves are coarsely toothed and opposite from each other. Flowers appear in May and are, trumpet-shaped, pinkish white purple, and form just above upper leaves. A. Stems are square D. Two generations B. About one-half inch long E. Resembling a wheat kernel C. Multiple F. None of the Above	to
253. This weed is more often found in buffalograss than in bluegrass. Newly-seeded bluegrass and established bluegrass lawns with may have some henbit. A. Pink flowers D. Poor density B. A pungent odor E. Crowns C. Newly-seeded grass F. None of the Above	
254. Control: Henbit has a taproot and is easily pulled from moist soil. Heavy infestations can be controlled with, 2,4-D or 2,4-D combination herbicides; at or prior to flowering. Fall application of a pre-emergent herbicide (dithiopyr, isoxaben, pendimethalin or prodiamine) will prevent henbit germination. A. Triclopyr + clopyralid D. A pre-emergent herbicide B. 2,4-D combination herbicide E. DCPA (Dacthal) C. Compound herbicide F. None of the Above Herb Robert 255. Description: Herb Robert is a branching, low growing It has light green leave that are deeply dissected and release a pungent odor making this plant easy to recognize. A. Clump-forming perennial D. Biennial	es
B. Rosette-forming perennial C. Perennial E. Winter and spring annual F. None of the Above 256. As the plants mature the foliage turns red. This red color is very noticeable under bright light conditions. The stems are, have multiple forks, and are brittle at the joints. A. Square D. Round B. Highly pubescent E. Resembling a wheat kernel C. Multiple forks F. None of the Above	
257. The roots are shallow allowing for easy hand removal. The pink flowers are perfect and five petals. The receptacle is elongated into a pointed structure called a "" or "storks bill". Herb Robert reproduces only by seeds. A. Torus D. Break B. Horn E. Root crown C. Dash F. None of the Above	∍d

258. Flowers are usually	creating uniform populations.
A. Are square D. Round	
B. Self-fertile E. Resemblin	n a wheat kernel
C. Multiple F. None of the	
C. Manple 1. None of the	Above
Hydrilla	
Hydrilla	
	aquatic plant. Grows rooted to the bottom with long stems that reach
water's surface.	
A. Clump-forming perennial	D. Biennial
B. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
260. Can be	Leaves are 1/16 to 1/8 inch wide, 1/4 to 3/4 inch long and occur in
whorls of five.	-
	D. Spreading rhizomes
A. Saucer-shaped B. Does not have turions	F Flowering
C. Monoecious or dioecious	E. None of the Above
c. Mondecious of didectous	1. Notic of the Above
061 Cmall avillant loof acalas	are found payt to the stem and inserted at the base of the leaf a
	are found next to the stem and inserted at the base of the leaf, a
	drilla from other family members. The (tubers) are a key
identifying feature.	
A. Nut-like turions	D. Upright perennial
B. Perennial herbs	E. Sod-forming
C. Rhizomes and seeds	F. None of the Above
262. Egeria densa is similar in	appearance but has leaves in whorls of four and does not have
A. Loose clusters B. Turions C. Way of seeds D. Sp E. Flo	reading rhizomes
B. Turions E. Flo	wer heads
C. Way of seeds F. No.	ne of the Ahove
o. Way or seeds	
Ironweed, Tall	
	nweed iswith a highly visible dark red stem that
grows over 7 feet tall and is wi	
A. An upright perennial	
B. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
264. At the ends of branches i	n are saucer-shaped, 1/4-inch-wide flower heads
consisting of 30 or fewer purple	e disk flowers. Attached to the stem are 10-inch-long, lance-shaped,
	downy hairs on the lower surface.
A. Loose clusters	D. Spreading rhizomes
B. Turions	E. Flower heads
C. Way of seeds	F. None of the Above
	by way of seeds, but sometimes arise from the large root
crown.	
A. New shoots D. Sp	reading rhizomes
B. Turions	
C Way of seeds E No.	

Joepyeweed 266. Plant Description: Joe-Pyenode) and purplish flowers in ter A. Clump-forming perennial B. Rosette-forming perennial C. Perennial	e weeds are herbs with leaves in whorls (3 to 6 rminal clusters. D. Biennial E. A stout perennial F. None of the Above	leaves per
	ver heads	
268. Stems of SPOTTED JOEF flower heads are pinkish-purple arranged in flat-topped terminal A. Flat-topped terminal clusters B. Perennial herbs C. Rhizomes	D. An upright perennial	horl, and are
nodes, there are 3 or 4 leaves ir tubular flowers. Flower heads a A. Loose clusters are saucer-sh	oliage smells like vanilla when crushed, stems are green with pone each whorl, and flower heads are dull pink consisting of fewer re arranged in naped D. Spreading rhizomes E. Dome-shaped terminal clusters F. None of the Above	
270. Joe-Pye weeds reproduce A. Flat-topped terminal clusters B. Perennial herbs C. Rhizomes and seeds	D. An upright perennial E. Sod-forming perennials	
A. Loose clusters	stems includes spreading rhizomes (). D. Spreading rhizomes E. Horizontal underground stems F. None of the Above	
purplish, pyramidal flower heads seeds and stout rhizomes (horiz A. Clump-forming perennial	ngrass is a large, coarse,, characterize s and the prominent white midrib down the leaf blade. It reprodu contal underground stems), and can form large, dense patches. D. Biennial E. A sod-forming perennial grass F. None of the Above	uces by
Jubata Grass 273. Description: Jubata grass have long leaves arising from a A. Clump-forming perennial B. Rosette-forming perennial C. Perennial weed	tufted base or tussock. D. Biennial	tall. Plants

274. The flower cluster is a $__$		at the end of a very long stem. Stems generally are at
least twice as long as the tusso	ck.	
A. Stem height	D.	Truncate leaves Biennial or short-lived perennial
B. Japanese knotweed	E.	Biennial or short-lived perennial
C. Plumed panicle	F.	None of the Above
275. Plumes consist of		, deep violet when immature, turning pinkish or tawny
cream-white at maturity. Jubata	a gra	ass is easily confused with pampas grass (Cortaderia selloana).
A. Inflorescence	D.	Hairy female flowers
B. Tips of flower head bracts	E.	Stout stems reddish-brown, nodes slightly swollen
C. Significant threat	F.	Stout stems reddish-brown, nodes slightly swollen None of the Above
and .	-	shed by stem height, leaf, plume, and spikelet color, florets, leaf tip,
A. Presence of viable seed	D.	Truncate leaves
		Biennial or short-lived perennial
C. A plumed panicle	F.	None of the Above
277. The are le	ess e	erect and more spreading and not fountain-like, when compared to
tussocks of Cortaderia selloana		
A. Inflorescence		Tussocks of jubata grass
	E.	Stout stems reddish-brown, nodes slightly swollen
C. Tips	F.	None of the Above
Knapweed, Spotted		
278. Description:		; blooms midsummer to fall. Grows up to 3 feet tall. Multi-
stemmed plant with several ste	ms a	arising from crown.
A. Clump-forming perennial		
B. Rosette-forming perennial	E.	Biennial or short-lived perennial
C. Perennial	F.	None of the Above
279. Flowers purple or rarely o	rear	m colored are usually black, thus the name "spotted.
Seeds dispersed by wind, anim		
A. Inflorescence	D.	Not fountain-like
B. Tips of flower head bracts	E.	Stout stems reddish-brown, nodes slightly swollen
C. Significant threat	F.	None of the Above
Knotweed, Giant		
280. Description:		; blooms July to October. Grows over 12 feet tall. Closely related
and similar to Japanese knotwe	eed.	
A. Clump-forming perennial		Biennial
B. Rosette-forming perennial	E.	Biennial or short-lived perennial
C. Perennial		None of the Above
281. Leaf cordate, or heart sha	aped	l; often exceeds one foot longof creamy white
	ize (does not increase with maturity.
A. Inflorescence	D.	Fountain-like
B. Tips of flower head bracts	E.	Stout stems
C. Stem height		None of the Above

	nes	e knotweed are common. Japanese knotweed is smaller with truncate
leaves.	_	Truncata laguas
A. Hybrids P. Spotted knotwood	D.	Truncate leaves Biennial or short-lived perennial weeds
C. Giant knotweed	E.	None of the Above
G. Glant Knotweed	٠.	Notice of the Above
283. Impacts: Giant knotweed	is th	ne largest of the knotweeds, enabling this species to dominate and out
compete native or		It poses a significant threat to riparian areas where it prevents
A. Beneficial plants	D.	Not fountain-like
B. Tips of flower head bracts	E.	Stout stems
C. Significant threat	F.	None of the Above
Knotweed, Japanese		
		blooms July to October. Grows four to nine foot tall and has long
creeping rhizomes.		and the second second result to the second s
A. Clump-forming perennial	D.	Biennial
B. Rosette-forming perennial	E.	A stout perennial
C. Perennial		None of the Above
285. Stout stems reddish-brow	vn,	Leaves short stalked, trucate, broadly ovate and 2-
6" long by 2-4" wide.		
A. An erect biennial	D.	Nodes slightly swollen
B. Formation of turions	E.	A milky juice
C. Pale-colored bulblets	F.	None of the Above
	cre	eam in large plume-like clusters at the ends of the stems with
giant knotweed are common.	_	
A. Kidney to heart-shaped	D.	Perennial
B. Large infestations	<u>E</u> .	Herbaceous perennial weed
C. Hybrids	۲.	None of the Above
Lesser Celandine		
	idine	e is an herbaceous, plant in the buttercup family
(Ranunculaceae).		
A. Clump-forming perennial		
B. Rosette-forming perennial		
C. Perennial	F.	None of the Above
288. Plants have a basal rose	tte o	f dark green, shiny, stalked leaves that are kidney to heart-shaped.
		il, have eight glossy, butter-yellow petals, and are borne singly on
A. Kidney to heart-shaped	D	Delicate stalks that rise above the leaves
B. Large infestations		Herbaceous perennial weed
C. Hybrids		None of the Above
200	d	ad along the stome of the shows ground newtons of the sleet but are
		ed along the stems of the above ground portions of the plant, but are
not apparent until late in the flo A. An erect biennial		ng penod. Stout stems reddish-brown
B. Formation of turions		A milky juice
C. Pale-colored bulblets		None of the Above
a		

290. When in bloom, large inte	stations of lesser celandine appear as a green carpet with yellow dots,
A. Kidney to heart-shaped B. Large infestations C. Hybrids	D. Spreading across the forest floorE. Herbaceous perennial weedF. None of the Above
petals and dark green leaves m	lesser celandine including a double-flowered form with many crowded ottled with silvery markings.
	D. Truncate leave varieties
B. Spotted varieties	E. Biennial varieties
C. Many varieties	F. None of the Above
292. The primary reproductive	method is the formation of turions that are
A. An erect biennial	D. Stout stems reddish-brown E. Produced on the roots in large numbers
B. Formation of turions	E. Produced on the roots in large numbers
C. Pale-colored bulblets	F. None of the Above
Leafy spurge	
from seed and vegetative root by	esula L.) is a creeping,of foreign origin that reproduces
A. Herbaceous perennial weed	
B. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
Lettuce, Prickly 294. Plant Description: Prickly basal leaves during its first year A. Clump-forming perennial B. Rarely an annual C. Perennial	lettuce is an erect biennial () that grows as a rosette of D. Biennial E. A stout perennial F. None of the Above
	athat is usually erect and sometimes branched, e small, daisy-like, yellow flowers are borne.
A. Kidney to heart-shaped	
B. Large infestations	E. Herbaceous perennial weed
C. Hybrids	F. None of the Above
	prickly edges and a distinctive row of stiff, sharp prickles on the underside on the each seed consists of a beak having a tuft of silky white hairs D. Stout stems reddish-brown
B. Formation of turions	E. Stem leaves are irregularly-lobed
C. Pale-colored bulblets	F. None of the Above
297. All plant parts exude	. The plant reproduces only by seeds.
A. Stem tip	D. A biennial root crown
B. Fragmented stems	E. Purple-magenta flowers
C. A milky juice when cut or br	oken F. None of the Above
leaf margins but	ttuce can be confused with sowthistles (Sonchus spp.), which have prickly
A. Spikelets	D. Appear slightly crinkled, have toothed edges
B. Smooth midribs	E. A woody crown and rhizomes
C. Spreads by rhizomes	F. None of the Above

299. Tall lettuce (Lactuca cana except they have leaves with sr	densis) and tall blue lettuce (Lactuca biennis) look similar to prickly lettuce nooth edges and
	ribs without prickles
B. Fragmented stems E. Pur	·
C. Stem are rounded F. No	
London Rocket	
•	ean native weed belonging to the mustard family, and is one of the tin irrigated land in crops such as alfalfa and small grains, in gardens,
citrus orchards, pastures, and a	long roadsides.
A. Clump-forming perennial	D. Biennial
B. Rosette-forming perennial	E. First winter weeds to appear
C. Perennial	F. None of the Above

You are finished with your assignment.

Weed Identification and Control Assignment #3 For Students Names M-Q

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Write your answers on the Answer Key found in the front of this assignment. **ASSIGNMENT INSTRUCTIONS**

- 1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
- 2. You will need to pick one of the following five assignments to complete. This selection process is based upon your last name. If your last name begins with an A to E, you will pick assignment number 1, if your last name begins with the letter F to L, you are to complete assignment number 2 and if your last name begins with the letter M-Q, you will pick assignment number 3 and if your last name begins with the letter R-Z, you will pick assignment number 4.

Multiple Choice assignment, please select one answer and mark it on the answer key. The answer must come from the course text. (s) means answer can be plural or singular. There are no intentional trick questions

What is a Weed? Generally, the term weed is used to describe any plant that is unwanted and grows or spreads aggressively. 1. Terms such as ______are used somewhat interchangeably to refer to weeds that infest large areas.

- A. Noxious or invasive weeds D. Plants non-native to North America B. Invasive or non-invasive
 C. Noxious or not noxious
 E. Invasive, exotic or non-native
 F. None of the Above

Noxious Weed

2.	Millions	of acres	of once	healthy,	productive	rangelands,	forestlands	and ripar	ian areas	have	been
οv	errun by				·						

A. Noxious or invasive weeds D. Plants non-native to North America

B. Invasive or non-invasive E. Plant species C. Noxious or not noxious F. None of the Above

What is a noxious weed?

3. The term "	'	' means	different things to	different people.	In the broade	est sense
it is any plant	growing where it is not wa	anted				

A. Non-native (or alien)

B. No natural enemies

C. Noxious weeds

D. Native vegetation

E. Weed

F. None of the Above

4. The	mandated for control are plants non-native to North America.
Conseque	ently, these plants do not have the natural checks as found in their native land, such as insects,
diseases.	and herbivores that would keep the plant population in check.

A. Noxious or invasive weeds D. Noxious weeds B. Invasive or non-invasiveC. Noxious or not noxiousE. Plant speciesF. None of the Above

	essive ability of these plants, coupled with no natural controls, these plants s. Not only are manyout competed by these weeds,
but native vegetation and the wi	s. Not only are manyout competed by these weeds, ildlife associated with it will be replaced.
A. Noxious or invasive weeds	
B. Invasive or non-invasive	
C. Noxious or not noxious	F. None of the Above
weed management plan to cont	e weeds when they first become established and developing an integrated rol them is critical in maintaining healthy, productive land. The term sed to describe a legal designation for plant species that have been
determined to be especially und	
	D. Plants non-native to North America
B. Invasive or non-invasive	
C. Noxious or not noxious	F. None of the Above
7. These weeds are subject, by Agriculture, there are	law, to certain restrictions. Regulated by the U.S. Department of
A. Non-native (or alien)	D. Native vegetation
B. No natural enemies	E. Natural controls
C. 90 federal noxious weeds	F. None of the Above
8include not country.	only noxious weeds, but also other plants that are not native to this
A. Noxious or invasive weeds	D. Plants non-native to North America
B. Invasive plants	E. Plant species
C. Noxious or not noxious	F. None of the Above
	if they have been introduced into an environment where they did not y have no natural enemies to limit their reproduction and spread.
A. Non-native (or alien)	D. Considered invasive
B. No natural enemies	E. Natural controls
C. Noxious weeds	F. None of the Above
10. Somestructure, or ecosystem function	can produce significant changes to vegetation, composition,
	D. Plants non-native to North America
B. Invasive plants	E. Plant species
C. Noxious or not noxious	F. None of the Above
What is an Invasive Species?	
11. An'	' is defined as a species that is 1) non-native (or alien) to the
environmental harm or harm to	
A. Non-native (or alien)	D. Native vegetation
B. No natural enemies	E. Invasive species
C. Noxious weeds	F. None of the Above
Understanding Weed Terms 12.	is, simply put, all life on earth, even that which has yet to be
	includes the millions of diverse species, from bacteria to whales that
share the earth's lands and water	
A. Cultivar(s)	D. Exotic (introduced) plant
B. Biological Management	E. Ornamental plant
C. Biodiversity	F. None of the Above

	blogical control is the deliberate use of the pest's natural enemies -
predators, parasites, and pathog	ens - to reduce the pest population below damage levels.
A. Cultivar(s) B. Biological Management C. Biodiversity	D. Exotic (introduced) plant
B. Biological Management	E. Ornamental plant
C. Biodiversity	F. None of the Above
,	
14. :	When exploring chemical control options, you should select the lowest
risk and most effective products.	The key is to use pesticides in a way that complements rather than
	ategy and which also limits negative environmental effects.
	D. Exotic (introduced) plant
B. Biological Management	E. Ornamental plant
C. Chamical Control	E. Mana of the Above
C. Chemical Control	F. Notile of the Above
15 · Short for "	cultivated variety." A plant "variety" developed by man via plant selection
and/or genetic manipulation to ex	whibit a set of plant characteristics.
A Cultivar	D. Evotic (introduced) plant
A. Cultival P. Diological Management	D. Exolic (illitoduced) plant
C. Disalinamita	
A. Cultivar B. Biological Management C. Biodiversity	F. None of the Above
	tained via controlled pollination or vegetative means, so that cultivar
characteristics are passed to ens	uling generations
	D. Exotic (introduced) plant
B. Biological Management	
C. Biodiversity	F. None of the Above
C. Biodiversity	F. None of the Above
17 .	Cultural practices are a manipulation of the habitat environment to
increase nest mortality or reduce	rates of pest increase and damage.
A Growth Habit - Invasiveness	D Cultural management
P. Evotic invasive plant	E. Integrated Doct Management (IDM)
C. Ecover	D. Cultural managementE. Integrated Pest Management (IPM)F. None of the Above
C. Ecoval	F. Notic of the Above
18 There are many different cul-	tural practices that can help to reduce pest impact such as selection of
	mulching, winter cover crops, changing planting dates to minimize insect
of baneficial insect behitet, or oth	tations that include, moisture management, addition
of beneficial insect habitat, or oth	D. Cultural management
P. Evetic investigation	D. Cultural managementE. Integrated Pest Management (IPM)F. None of the Above
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Non-susceptible crops	F. None of the Above
10 · Short fo	or "acalogical variety." A plant "variety" dayalaned by man from a
	or "ecological variety." A plant "variety" developed by man from a ecies that were selected from several to many natural populations in a
specific region.	ecies that were selected from several to many hatural populations in a
A. Growth Habit – Invasiveness	D. Cultural management
	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above
20. The purpose is to have high	gangtic diversity in the parent collection, which reflects the natural
	genetic diversity in the parent collection, which reflects the natural
little to no selection is done durin	e defined region. To maintain genetic diversity in ensuing generations,
A. Growth Habit – Invasiveness	·
	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above

21: An exotic plant species that is able to invade and overrun native
ecosystems. Some native plants can become invasive under certain conditions, but most invasive
species are introduced (exotic).
A. Growth Habit – Invasiveness D. Cultural management
B. Exotic invasive plant C. Ecovar E. Integrated Pest Management (IPM) F. None of the Above
C. Ecovar F. None of the Above
22: The most important aspect of an alien plant is how it responds to a new
environment. An invasive species is one that displays rapid growth and spread, allowing it to establish
over large areas. Free from the vast and complex array of natural controls present in their native lands,
including herbivores, parasites, and diseases, exotic plants may experience rapid and unrestricted growt
in new environments.
A. Growth Habit – Invasiveness D. Cultural management B. Exotic invasive plant E. Integrated Pest Management (IPM)
B. Exotic invasive plantC. EcovarE. Integrated Pest Management (IPM)F. None of the Above
C. Ecoval F. Notile of the Above
23is enhanced by features such as strong vegetative growth, abundant
seed production, high seed germination rate, long-lived seeds, and rapid maturation to a sexually
reproductive (seed-producing) stage. Invasive plants reproduce rapidly, either vegetatively or by seed.
Their phenomenal growth allows them to overwhelm and displace existing vegetation and form dense
one-species stands.
A. Invasiveness D. Cultural management
B. Exotic invasive plant E. Integrated Pest Management (IPM)
C. Ecovar F. None of the Above
24. Some of the key components to a successful program include the following:
Identify current and potential pest species, their biology, and conditions conducive to the pest(s) (air,
water, food, shelter, temperature and light).
A. Growth Habit – Invasiveness D. Cultural management B. Exotic invasive plant E. IPM
B. Exotic invasive plant E. IPM C. Ecovar F. None of the Above
C. Ecoval
25. Understand the physical andthat affect the number and distribution of pests
and their natural enemies.
A. Growth Habit – Invasiveness D. Cultural management
B. Exotic invasive plant E. Biological factors
C. Ecovar F. None of the Above
26
26: Mechanical or physical control methods involve using barriers, traps, or physical removal to prevent or reduce pest problems.
A. Source-identified seed D. Mechanical or Physical Management
B. Noxious Weeds E. Source-identified seed
C. Native plant F. None of the Above
C. Halive plant
27. Tactics may include using row covers or trenches to prevent insects from reaching the crop, baited of
pheromone traps to capture insects, or or mowing for weed control.
A. Source-identified seed D. Mechanical or Physical Management
B. Noxious Weeds E. Source-identified seed
C. Cultivation F. None of the Above
OO
28 : A plant species that is found in a region because it developed and evolved in the transient over the upper developed.
that region over thousands of years. Plants that existed in a region prior to settlement. A. Source-identified seed D. Mechanical or Physical Management
A. Source-identified seed D. Mechanical or Physical Management E. Source-identified seed
C. Native plant F. None of the Above
o. Hairo piant

29: An exotic plant that was introduced into an area, escaped from cultivation
and reproduces on its own (includes exotic invasive plants). Many plants commonly thought to be natives
were actually introduced by early settlers.
A. Mechanical or Physical Management D. Variety E. Pest
C. Naturalized plant F. None of the Above
C. Hataranzea plant
The Invasive Problem
Invasive Species
30. The term "native" is used to describe plants that were growing here before the arrival of Europeans.
Exotics are those that do not naturally occur in an area but have been introduced by people. Many exotic
species pose no threat, but some are invasive and grow out of control — displacing which provide food and shelter for an assortment of native wildlife.
B. Invasive non-native organisms E. Native plants
A. Aggressive invaders D. Our native fauna B. Invasive non-native organisms E. Native plants C. Native butterfly species F. None of the Above
31. It is not always possible to predict if or when a species will become a(for
example, Japanese honeysuckle was planted as an ornamental for 80 years before it escaped
cultivation!), but a red flag should run up at any non-native with fleshy fruits dispersed by birds.
A. Some native plantsB. Exotic plantsD. Exotic plants and animalsE. Pest plant
C. Natural disturbances F. None of the Above
C. Natural distarbances
Impacts of Invasive Alien Plants
32 are one of the greatest threats to the natural ecosystems of the U.S. and are
destroying America's natural history and identity.
A. Aggressive invaders D. Our native fauna
B. Invasive non-native organisms C. Native butterfly species E. Invasive species F. None of the Above
C. Native butterily species F. None of the Above
33. Theseare disrupting the ecology of natural ecosystems, displacing
native plant and animal species, and degrading our nation's unique and diverse biological resources.
A. Some native plants D. Exotic plants and animals
B. Exotic plants E. Unwelcome plants, insects and other organisms
C. Natural disturbances F. None of the Above
34 reduce the amount of light, water; nutrients and space available to native
species, alter hydrological patterns, soil chemistry, moisture-holding capacity, and erodibility, and change
fire regimes.
A. Aggressive invaders D. Our native fauna
B. Invasive non-native organisms E. Invasive species
C. Native butterfly species F. None of the Above
35 are capable of hybridizing with native plant relatives, resulting in unnatural
changes to a plant's genetic makeup; others have been found to harbor plant pathogens, such as
bacterial leaf scorch (Xylella fastidiosa) that can affect both native and non-native plants, including
ornamentals.
A. Some native plants D. Exotic plants and animals
B. Some exotics E. Native plant relatives C. Natural disturbances F. None of the Above
t. Natural distributions E. Nobe of the Above

native plants for food and shelter. While	birds, mammals, reptiles, fish and other animals, is dependent or some animals have a varied diet and can feed on a wide number hly specialized and may be restricted to feeding on several or a
single plant species.	
A. Aggressive invaders	D. Plant species
B. Invasive non-native organisms	E. Invasive species
C. Native butterfly species	F. None of the Above
(milkweeds) that contain special chemic species that is required food for at least	have evolved to feed primarily on plants in the genus Asclepias als. The term host plant is generally used to describe a plant one stage of an insect or other animal. As exotic plants replace vailable to provide the necessary nutrition for tic plants and animals to plant relatives the of the Above
Disturbance Effects	
such as road building, residential development	problematic in areas that have been disturbed by human activities opment, forest clearing, logging operations, grazing, mining, l, mowing, erosion control and fire prevention and control
A. Aggressive invaders	D. Our native fauna
B. Invasive non-native organisms	E. Invasive species
A. Aggressive invadersB. Invasive non-native organismsC. Native butterfly species	F. None of the Above
39, such as fires, flo invasive species to get started. The encepast few hundred years has thrown thin A. Some native plants D. Exc B. Exotic plants E. Nat C. Natural disturbances F. Nor	ods, tornadoes, landslides, and tree falls also provide avenues for rmity of change wrought upon the American landscape over the gs out of balance. tic plants and animals ive plant relatives le of the Above
40. Lacking, native provide opportunities for genetic mixing A. Aggressive invaders B. Invasive non-native organisms C. Native butterfly species	species and ecosystems benefit from natural disturbances that and nutrient recycling, and reduce fuel loadings. D. Exotic species E. Invasive species F. None of the Above
natural or human-caused disturbances. response to a tree fall or selective timber previously shaded areas. A. Some native plants D. Exc.	e growth tendencies in their native ranges, often as a response to For example, native grape vines in forests may grow vigorously in crut that opens the canopy and brings abundant sunlight into
	ive plant relatives
C. Natural disturbances F. Nor	e of the Above
	• ———
C. Managing existing infestations	F. None of the Above

Importance of Native Plants 43. Approximately 18,000 plants are native to the ecosystems of North Amer U.S. native plants) provides the foundation of the ecosystems and regions of the country. These plants also provide natural souwere the essential sources of nutrition and other materials for native American A. Some native plants D. Exotic plants and animals B. Exotic plants E. Historic American landscape C. Natural disturbances F. None of the Above	and defines the various irces of food and fiber, and
44. Thehave been greatly reduced as a result which has destroyed many millions of acres of natural habitat. In the U.S. alors species have become extinct since the 1800's and 5,000 species are considered of non-native plants are the second greatest threat to native species after direct A. Aggressive invaders	ne, about 200 native plant red to be at risk. Invasions
Recognize the major plant characteristics used to identify weeds. 45: Lower part of the leaf that is attached to the node. A. Sheath D. Rhizomes B. Ligule E. Stolons C. Blade F. None of the Above	
46: Located where the blade and the sheath meet. A. Collar D. Auricle B. Roots E. Shoot C. Node F. None of the Above	
47:Region of nodes with tightly compacted internodes A. Collar D. Auricle B. Crown E. Shoot C. Node F. None of the Above	
48:The region between the nodes A. Collar D. Auricle B. Internode E. Shoot C. Node F. None of the Above	
49:Enlarged areas at intervals along the stem and also buds are attached. A. Collar D. Auricle B. Roots E. Shoot C. Node F. None of the Above	o the part of the plant where
50:Underground stems that grow laterally. A. Sheath D. Rhizomes B. Ligule E. Stolons C. Blade F. None of the Above	
51:Attachment of the plant to the soil that absorbs min the plants survival. A. Collar D. Auricle B. Roots E. Shoot C. Node F. None of the Above	erals and water needed for

52			:Aboveground stems that grow laterally.
A.	Sheath	D.	:Aboveground stems that grow laterally. Rhizomes
	Ligule		
C.	Blade	F.	None of the Above
53			:Characteristic of the grass that describes how the new blades emerge from the
	eath as growt		
Α.	Sheath	D.	Rhizomes
В.	Ligule	E.	Vernation
C.	Blade	F.	None of the Above
54	·		:The aboveground parts of the plant.
	Collar		
	Roots		
			None of the Above
55	Sheath Ligule		:A structure that grows from the collar area on the inner side of the leaf.
A.	Sheath	D.	Rhizomes
В.	Ligule	E.	Stolons
C.	Blade	F.	None of the Above
56			:An appendage that grows from the edge of the collar and may wrap around the
	m.		
	Collar		
	Roots		
C.	Node	F.	None of the Above
57	·		:The upper part of the leaf. Rhizomes Stolons None of the Above
A.	Sheath	D.	Rhizomes
В.	Ligule	Ε.	Stolons
C.	Blade	F.	None of the Above
Со	mmonly Fou	ınc	Weed Section
	Z Common N		
	ichoke, Jerus		
			on: It is nearly impossible to distinguish Jerusalem artichoke from annual sunflowers
			ound growth. Jerusalem artichoke has a coarse, 5- to 10-foot tall stem, large leaves
			surface, and
	Compositae		
	Perennial we		
C.	An herbaced	ous	perennial F. None of the Above
			choke can be easily distinguished from annual sunflowers by its below-ground growth
			tubers resembling thin, knotty potatoes. Reproduction of Jerusalem artichoke is by
	eds, rhizomes	\ <u> </u>), and tubers.
	Five individu		
	Allelopathic		
C.	Fleshy tuber	S	F. None of the Above
	paragus, Wild		
			on: Wild asparagus is an herbaceous perennial, well-known for its edible young
	oots. Mature		
			like appearance D. Creeping plant with compound leaves
	Perennial we		
C.	An herbaced	ous	perennial F. None of the Above

	r is athat can frequently be seen mp of upright stems with wand-like spreading branches. In late p half of the plant. ti-branched and bushy perennial nerbaceous perennial e of the Above
	om May to July. A creeping plant with compound leaves; air. Flowers 1/4 to 1 inch long and orange-red. Many seeds in
A. Bladder-like translucent pods B. Perennial weed C. An herbaceous perennial	D. Creeping plant with compound leavesE. Annual sunflowersF. None of the Above
Bamboo 63thrive in sun Where drought may be expected or in he varieties. Established plants withstand fl A. Rhizomes D. Sprawling ta B. Bedstraw E. Phyllostachy C. Large mats F. None of the	angled mats ys species
	t 30 different bedstraws in North America, and many are oduce sprawling tangled mats from which awling tangled mats les on branches e of the Above
65. The typical bedstraw leaf is linear a nodes on the stem.A. Leaves alternate and compoundB. Spreading rhizomesC. Formed in whorls	D. Nodes on the stem. E. New plants are very fragile and easy to destroy F. None of the Above
66. Smooth bedstraw is the	lowered form
67. Reproduction is by seeds and undeA. Leaves alternate and compoundB. Spreading rhizomesC. Horizontal underground stems	rground, spreading rhizomes (). D. Nodes on the stem. E. New plants are very fragile and easy to destroy F. None of the Above
Related Information: 68. The common name 'bedstraw' has tit is said that bedstraw was placed in the A. Manger at Bethlehem B. Bedstraw C. Large mats	two possible origins: the dried plant was used to stuff mattresses; when Jesus was born. John 3:16 D. Sprawling tangled mats E. Nodes on branches F. None of the Above

the nodes and plants form large	grows four to eight inches tall. Biddy-biddy spreads by stolons that root at mats where individual plants are indistinguishable. The plant stems are epending on conditions.		
	awling tangled mats		
	ne of the Above		
Bindweed, Field 70. Field bindweed can be spreadhering to the roots of nursery A. Twining perennial vine B. Bindweed foliage C. Vines	ead by seed,, farm implements, infested soil stock, root growth from infested areas, and by animals. D. Root fragments E. Root growth F. None of the Above		
Bindweed, Hedge			
A. Twining perennial vine	indweed is a D. Dense ground cover		
B. Bindweed foliage C. Vine	E. Root		
C. vine	F. None of the Above		
tips, pinkish petals fused into fu	ng it from other vines include arrowhead-shaped leaves that have pointed nnel-shaped flowers, the presence of large bracts enclosing the base of		
A. Large bracts	D. Smaller flowers and the bracts		
C. Nodes of older stems	D. Smaller flowers and the bracts E. An annual, biennial or short-lived perennial F. None of the Above		
73. The plant reproduces by se	eeds and		
A. Short-lived perennial	D. Creeping roots E. Small yellow flowers and a deep taproot		
C. A unique flower	F. None of the Above		
Bindweed, Japanese 74. Plant Description: Japanese bindweed is a Its appearance is similar to that of hedge bindweed except it has smaller flowers and the bracts enclosing the base of each flower are			
smaller. A. Large bracts	D. Smaller flowers and the bracts		
B. Creeping perennial	E. An annual, biennial or short-lived perennial		
C. Nodes of older stems	F. None of the Above		
75. The other bindweed flowers, this is a to a rose or carnation.	_that escaped cultivation has a distinctive double flower. Compared with a unique flower in that it has twice the number of petals and looks similar		
A. Short-lived perennial	D. Seeds and creeping roots		
B. StolonsC. Weedy form	E. Small yellow flowers and a deep taproot F. None of the Above		

The species is characteric separated by a short sten	rdsfoot trefoil has a perennial root crown and stems that die back each winter. zed byconsisting of 3 clover-like leaflets at the tip in from 2 smaller leaflets at the base. Its flowers are yellow, clover like, and in the arranged such that, when pods form, they resemble a bird's foot. D. Smaller flowers and the bracts E. An annual, biennial or short-lived perennial F. None of the Above
Black medic 77. Black medic is an an A. Biennial B. Stolon C. A unique flower	nual,or short-lived perennial. D. Seeds and creeping roots E. Small yellow flowers and a deep taproot F. None of the Above
lobed leaves, similar in a	nter annual that germinates in the fall and produces awith deeply opearance to a dandelion. D. Physical destruction of a weed E. Large patche F. None of the Above
coarsely toothed and hav	in March through April. Leaves on the flowering stems are e wavy margins. D. Purple or blue flowers at the top of the plant E. A soap like lather F. None of the Above
resemble "A. Beaks [B. Germinates]	from 1 to 1 1/2 feet in height. Two-inch long, bean-like seedpods (siliques) that" mature in early summer. D. Physical destruction of a weed E. The tendency to form large patches F. None of the Above
actively growing, this wee A. Wavy margins	are most effective if applied before In the spring, while it is ed can be controlled with an application of 2,4-D. D. Weeds start to bolt in the spring E. A soap like lather when mixed with water F. None of the Above
A. Beaks E. B. Germinates E.	ontrol: Mechanical weed control involves the D. Physical destruction of a weed E. The tendency to form large patches F. None of the Above
is often used; but by far, t A. Beaks B. Germinates	nand pulling and hand hoeing which are practical for small infestations. Mowing the most common practice of mechanical control includes D. Physical destruction of a weed E. The tendency to form large patches F. None of the Above

Bouncingbet 84. Plant Description: Bouncingbet is a, a dense show of fragrant phlox-like flowers in summer, and the tendency to form large patches. A. Beaks D. Perennial characterized by smooth leafy stems B. Germinates E. The tendency to form large patches C. Tillage F. None of the Above	
Brackenfern 85. Plant Description: Brackenfern is a large, coarse, perennial fern that has almost horizontal leaves and can grow 1 1/2 to 6 1/2 feet tall (sometimes up to 10 feet). Unlike our more	_,
Brambles 86. Plant Description: Brambles are a diverse group of, shrubs or trailing vines, that are noted for their prickly stems and berry-like, usually edible fruits. A. Primitive perennial lacks true stems D. Dense patches like bouncingbet B. Roots are perennial E. Perennial herbs C. Flowering spikes F. None of the Above	
Broadleaf Plantain 87. Broadleaf Plantain is a It has broad leaves with prominent veins. The leaves are arranged in a rosette and may smother lawn grass. A. Evergreen shrub D. Prominent claw-like appendages B. Stems thicker and rougher C. Dense, fibrous roots E. Low growing perennial F. None of the Above	
Brome, Smooth 88. Plant Description: Smooth brome is a sod-forming, perennial grass, distinguished by long, slender, bronze- or purple-tinted flower clusters that make up the flower head. This species spreads by seeds an dark-colored rhizomes (ıd
Broom, French 89. Description: Perennial; blooms April to June. Grows three to ten feet tall. Evergreen shrub similar to Scotch broom except plants do not grow as erect, leaves are retained the entire year, leaves trifoliate ar more numerous, and A. Larger yellow flowers D. Clump-forming perennial grass B. Evergreen shrub E. Except pods inflated and hairy all over C. Yellow flowers smaller F. None of the Above	
Impacts: This plant,, takes advantage of land disturbances to establish and spread 90. In California, large infestations displace native plant species and significantly increase the costs of reforestation in commercial timberlands. A. Evergreen shrub D. Prominent claw-like appendages B. Stems thicker and rougher E. An aggressive pioneer species C. Dense, fibrous roots F. None of the Above	d.

Broom, Portuguese	
	oms April to June. Grows 3 to 10 ft. tall. Evergreen shrub similar to Scotch
broom except pods inflated and	hairy all over, Stems more silvery, but difficult to
distinguish until leaves and flow	
A. Larger yellow flowers	D. Clump-forming perennial grassE. Giving appearance of pussy willow buds
B. Evergreen shrub	E. Giving appearance of pussy willow buds
C. Sod-forming, perennial grass	s F. None of the Above
Broom, Scotch	
	oms April to June. Grows 3 to 10 feet tall. Evergreen shrub with many
	ed branches with small, simple leaves. Abundant small, yellow,
A. Evergreen shrub	
B. Stems thicker and rougher	E. An aggressive pioneer species
C. Dense, fibrous roots	F. None of the Above
93. Easily confused with	Spanish broom (S. Junceum) has round stems, very few
leaves, and larger yellow flower	S. , , , , , , , , , , , , , , , , , , ,
B. Evergreen shrub	D. Clump-forming perennial grassE. Except pods inflated and hairy all over
C. Sod-forming, perennial grass	s F. None of the Above
stems thicker and rougher, it ha A. Fewer in number	oms April to June. Grows 3 to 10 ft. tall. Similar to Scotch broom except s very few leaves, and flowers larger and D. Prominent claw-like appendages E. An aggressive pioneer species F. None of the Above
	edge is a clump-forming perennial grass that is most noticeable in the fall, a It reproduces by seed and short rhizomes (horizontal
underground stems).	
A. Larger yellow flowers	D. Distinctive orangish-tan to reddish-brown colorE. Except pods inflated and hairy all over
B. Evergreen shrub	E. Except pods inflated and hairy all over
C. Sod-forming, perennial gras	s F. None of the Above
	is roots are produced from(horizontal underground
stems).	
A. Short rhizomes	D. Prominent claw-like appendages
	E. An aggressive pioneer species
C. Dense, fibrous roots	F. None of the Above
Buffalo Bur	
97. Buffalo bur, sometimes call	ed Kansas thistle and, is a tap rooted annual weed.
	stems, leaves, and flower heads and can grow up to 2 feet high. Drought
resistant, its highest occurrence	is in dry, exposed soil.
	D. Flat pitted seeds
	E. Prickly nightshade
C Flower heads lilac-like	► None of the Above

	inches long with	and are covered with very
dense, stiff, and sharp spines.	D. Sootab broom	
A. Bright yellow flowers B. Deep rounded lobes		
C. Creen to blue grow	E. Upper leaves	
C. Green to blue-gray	F. None of the Above	
99. Bright yellow flowers can be	e seen in summer. In the fa	all, berries up to 3/8 inch in diameter are
enclosed in the	and are filled with b	lack, wrinkled, flat pitted seeds.
A. Five equal lobes	D. Flat pitted seeds	
B. Perennial herb	E. Dried flower parts	
C. Flower heads lilac-like	F. None of the Above	
	ind and the plant rolls like_	e Colorado potato beetle. When mature, the, widely scattering the 8500
A. Bright yellow flowers		
B. Tumbleweed	E. Upper leaves	
C. Green to blue-gray	F. None of the Above	
101. Herbicides should be appleffective in controlling Buffalo b A. Five equal lobes B. Perennial herb C. Flower heads lilac-like	ur. Glyphosate in a 2% sol	Dicamba, Triclopyr and 2,4-D can be ution can be applied as a spot treatment.
Butterfly Bush		
102. Description:	; flowers mid to la	te summer. Grows up to 10 feet tall. Leaves
narrow, opposite and green to b		
A. Bright yellow flowers	D. Scotch broom	
B. Perennial shrub		
C. Green to blue-gray	F. None of the Above	
103 lilac-like b	ut come to a more definite	point. Flowers small and purple.
A. Five equal lobes	D. Flat pitted seeds	
B. Perennial herb	E. Kansas thistle and pri	ckly nightshade
A. Five equal lobes B. Perennial herb C. Flower heads	F. None of the Above	
threat to dry-land meadows, op historically. It also invades refor A. Bright yellow flowers B. Colorado potato beetle	en slopes and dunes, dom ested sites, resulting in a lo D. Scotch broom E. Upper leaves	inates open habitats. It poses an ecological inating these sites as much ashas oss of forest productivity.
C. Green to blue-gray	F. None of the Above	
Bugloss, Common 105. Description: Perennial her overall plant is coarsely hairy.	b; flowers May to October	Grows one to two feet tall;
A. Five equal lobes	D. Flat pitted seeds	
B. Perennial herb	E. Stems and leaves fles	hv
C Flower heads lilac-like		•

106. Basal leaves are leaves are sessile (no petiole) of A. Bright yellow flowers B. Narrowly oblong C. Green to blue-gray	; mid leaves are progressively smaller up the stem, and the upper r clasping. D. Scotch broom E. Upper leaves F. None of the Above
are saw-toothed and spiny with A. Four-chambered nutlet B. Spine-tipped lobes	ennial. Young seedling leaves are oblong in shape, but mature cottony hairs on the undersurface. D. Several hundred seed heads E. Rosette leaves F. None of the Above
Burdock, Common 108. Plant Description: Commothen produces a 5-foot-tall, erect A. Rosette leaves D. Rosette leaves E. Lea C. Biennial F. Non	on burdock is a biennial that grows as athe first year and total the first year and total the first year and the flowering stem. The first year and the flower stem the flower stem to the Above
	g buttercup is a low-growing, rosette-forming, spreading perennial. It is and creeping horizontal stems (stolons) that root at the nodes to form D. 3-parted leaves E. New rosettes F. None of the Above
leaves. This species reproduces A. By actively growing plants B. By perennial weeds	D. By rhizomes
Impacts 111cacid soils and/or over-grazing. In habitat if it were allowed to invariable. Spine-tipped branches B. Buttercup C. Creeping buttercup	can dominate a pasture or meadow given the opportunity, especially with a could hinder colonization by native species in a prairie or grassland de and spread. D. Tall buttercup E. New rosettes F. None of the Above
	are toxic to grazing animals, who can suffer isters, abdominal distress, inflammation, and diarrhea. D. Fresh buttercup plants E. New rosettes F. None of the Above
113. Fortunately, palatable A. Spine-tipped branches B. Buttercup C. Creeping buttercup	has a strong, bitter taste so animals generally try to avoid it if more D. Fresh plants E. New rosettes F. None of the Above

Camelthorn 114. Description: Perennial: flo	wers June to July. Grows 1 1/2 to 4 feet tall. Stems greenish with
1/4 to 1 3/4 inches lo	na.
A. Actively growing plants B. Perennial weed C. Toxic	D. Slender spines
B. Perennial weed	E. Perennial
C. Toxic	F. None of the Above
	irless on the upper surface, 1/4 to 1 1/4 inches longsmall on, occur on short, spine-tipped branches along the upper portion of the
A. Spine-tipped branches	D. Flowers
B. ButtercupC. Creeping buttercup	E. New rosettes
C. Creeping buttercup	F. None of the Above
A. Actively growing plants B. Perennial weed C. Reddish-brown jointed seed	d upward, deeply indented with each seed clearly outlined in the pod. D. Some mature plants E. Perennial pods F. None of the Above
Campion, White	
117. Plant Description: White ca	ampion can be a winter or summer annual, biennial, or
A. Short-lived perennial	D. Winter or summer annual, biennial
B. Reproduction	E. Creeping perennial weed
C. Leaves are lance-shaped	F. None of the Above
118. This species is characterize	ed byand showy white flowers, whose petals
emerge from a green, inflated, b	ladder-like structure (calvx).
A. Bladder-like structure (calyx)	D. An aggressive, creeping perennial weedE. InfestationsF. None of the Above
B. Downy foliage	E. Infestations
C. Cool-season perennial	F. None of the Above
rise to new plants.	y seeds, although fragmented segments of thecan give
A. Central axisB. Reproduction	D. Root crown
B. Reproduction	E. Creeping perennial weed
C. Leaves are lance-shaped	F. None of the Above
Canada Goldenrod	
•	goldenrod is a perennial distinguished by numerous small yellow flowers
	at the top of individual, unbranched, leafy stems.
A. Bladder-like structure (calyx)B. Perennial	D. An aggressive, creeping perennial weed E. Infestations
C. Pyramid-shaped clusters	F. None of the Above
C. Fyramiu-snaped dusters	1. Notice of the Above
121. Flowers are crowded onto more or less horizontally.	that originate at a central axis and are arranged
A. Central axis	D. Numerous backward-curved stalks
B. Reproduction	E. Creeping perennial weed
C. Leaves are lance-shaped	F. None of the Above
122. Leaves are	, hairless on the upper surface, hairy underneath, and sharply
toothed on the edge.	, Halliese on the apper carrace, halfy andomodal, and ondiply
A. Central axis	D. Lance-shaped, tapered at both ends
B. Reproduction	E. Creeping perennial weed
C. Leaves are lance-shaped	F. None of the Above

		ib and 2 parallel lateral veins are I underground stems) emerging from the
A. Central axis	D. Wind dispersed seeds	
	E. Creeping perennial weed	
C. Leaves are lance-shaped		
	nd Ge vergrazed pastures, tilled fields o D. Is an aggressive, cre E. In infestations	
	age consumption in	because cattle typically will no
graze near infestations.	D. An aggressive crooping per	onnial wood
A. Pastures and rangelandB. Perennial	E. Infestations	erinai weed
C. Cool-season perennial		
		vegetative buds in its root system andallows it to recover from control
A. Creeping perennial	D. Extensive root system	
B. Canada thistle management		
C. Repeat applications		
127. Combining control methods imperative so the weed is continued.A. Creeping perennialB. Canada thistle managementC. Repeat applications	ually stressed, forcing it to exhau D. Root nutrient stores and ever E. Fern-like foliage	ıst
needed. Herbicides such as tricl repeat applications may be need A. Creeping perennial B. Canada thistle management	opyr + clopyralid or 2,4-D combi ed at 6 week intervals. D. Herbicide applications	iveswill be nations can be sprayed on thistle foliage
in August/September. Always rea	ad the label before D. Herbicide applications E. Repeat applications	ng, just after the green shoots appear, or
Canarygrass 130. Plant Description: Reed ca characterized in summer by its two reproduces through seeds and mathematical This species tends to grow in cluck. Bladder-like structure (calyx) B. Perennial C. Cool-season perennial	vo-tone appearance of golden senore typically by	eedheads atop green foliage. It

Carrot, Wild 131. Plant Description: Wild carrot is a biennial that looks and smells similar to
Its distinctive fern-like foliage forms a rosette during the first year.
A. Creeping perennialB. Canada thistle managementE. Fern-like foliage
C. Repeat applications F. None of the Above
132. During the second year of growth, it produces a succession ofthat terminate in umbrella-shaped clusters of small white flowers.
 A. Mat-forming species B. Reproduces by seeds C. Heart-shaped leaves appear D. Hairy flower stalks E. Leaf-like bracts and branches F. None of the Above
133. A distinctive feature of wild carrot is the appearance of a dark purple flower (rarely several flowers) in the center of most flower clusters. Once flowers mature and, the flower cluster closes forming a cuplike bird's nest. Wild carrot reproduces by seeds. A. Seeds begin to develop D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
Catnip 134. Plant Description: Catnip isbest known for the minty odor emitted by its leaves and stems when they are crushed or wilted. The odor is very attractive to cats. A. An erect perennial D. In the Mint Family B. Reproduced by seeds E. Leaf-like C. Heart-shaped F. None of the Above
135. Other distinctive characteristics areand the serrated appearance of the leaf edges, which resembles the toothed edge of a saw. A. Downy foliage D. Unbranched plant with yellow flowers and leaves B. Reproduced by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
136. The flower shape is common among members of the mint family consisting of 2 lips, and flower color is white with unusual purple dots. Along with most members of the Mint Family, catnip has square stems. This species reproduces by seeds and(horizontal underground stems). A. Mat-forming species D. It also produces short rhizomes B. Reproduces by seeds E. Leaf-like bracts and branches C. Heart-shaped leaves appear F. None of the Above
Catsear, Common 137. Plant Description: Common catsear is a perennial with a growth form similar to that of dandelion; its leaves form a basal rosette and it produces Leaves of common catsear are typically lance-shaped with irregular rounded lobes and hairs on both the upper and lower surfaces. A. Either an annual D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Yellow head-like flowers at the tips of upright stems C. Typically lance-shaped F. None of the Above
138. Emerging from the rosette arethat usually have leaf-like bracts and branches. At the tips of the branches are 1-inch-wide flower heads composed of many tubular, yellow flowers. A. Mat-forming species

139. Common catsear reproduproduce new plants if separate		by seeds and vegetatively by way of	that can
A. Buds formed on the crown	D.	Unbranched plant with yellow flowers and leaves Perennial that initially grows as a rosette None of the Above	
Chickweed, Mouseear 140. Plant Description: Mouse	ear (chickweed is a creeping, mat-forming species that note for it to exist as an annual. Plants reproduce by s	
growing from theA. Mat-forming species		It tends to form dense patches. D. Nodes of stems E. Leaf-like bracts and branches	
	1 1	F. Notice of the Above	
scattered along their length.		that initially grows as a rosette the season, leafless stems emerge with sky-blue date.	of irregularly- aisy-like flowers
A. Either an annualB. Reproduces by seedsC. A perennial	D. E. F.	Unbranched plant with yellow flowers and leaves Perennial that initially grows as a rosette None of the Above	
flower heads open at a time an A. Is a mat-forming species	d ea D. E.	Has leaf-like bracts and branches	
biennial when growing in less of A. A short-lived perennial	distu D. E.	Unbranched plant with yellow flowers and leaves Perennial that initially grows as a rosette	ivated ground, a
144. It grows as arobust stem with yellow flowers reproduces by seeds. A. Mat-forming species B. Seed C. Heart-shaped leaf	s. Le D. E.	at the beginning of the season, but later forms aves consist of 3 coarsely-toothed, hairy leaflets. Ro Rosette Leaf-like bract None of the Above	an upright, hairy, ough cinquefoil
	cons ke fii	ngers on a hand. Sulfur cinquefoil reproduces by see	ged such that they eds.

Colts Foot	
146. Plant Description: Coltsfo	ot is a Its flowers are the same color, size, and shape
as dandelion flowers, and the t	wo species are easily confused while in bloom if viewed from a distance.
A. Mat-forming species	D. A member of the Mint FamilyE. Wooly vegetative stem
B. Reproducer of seeds	E. Wooly vegetative stem
C. Yellow-flowered perennial	F. None of the Above
147. Coltsfoot blooms so early	that the flowers have already come and gone by the time leaves emerge.
Also, coltsfoot flowers appear a	at the tips of 1/8-inch-thick stems that are wooly and covered with
	giving them an appearance similar to that of asparagus spears.
A. Mat-forming species	D. Scaly bracts E. Leaf-like bracts and branches
B. Reproduces by seeds	E. Leaf-like bracts and branches
C. Heart-shaped leaves appear	F. None of the Above
148. After flowers have mature	ed, clumps of broad, heart-shaped leaves appear on short,
A. Mat-forming species	D. Scaly bracts
B. Wooly vegetative stems	D. Scaly bracts E. Leaf-like bracts and branches
C. Heart-shaped leaves appear	F. None of the Above
149. Coltsfoot reproduces prin	narily by (horizontal underground stems) and also
by seeds.	
A. Distinctive curled clusters	D. Horizontal creeping rhizomes
B. Perennial herb	E. Branched taproot
C. A dense, healthy turf	D. Horizontal creeping rhizomesE. Branched taprootF. None of the Above
150. Root system - Coltsfoot fo	orms an extensive system of(horizontal underground
A. Opened flowers	D. Petioles
A. Opened flowers B. Seeds	E. Thick white rhizomes
C. Good cultural habits	
Comfrey, Common	
151. Plant Description: Comm	on comfrey is a perennial herb with lower leaves that are bristly, up to 12
inches long, and attached to wi	nged leaf stalks () that emerge from the base of the
plant.	
A. Distinctive curled clusters	
B. Perennial herbsC. Stems	E. Branched taproots
C. Stems	F. None of the Above
	so bristly but lack petioles are borne on
A. Opened flowers	D. 2- to 3-foot tall flowering stems
B. Stems	E. Branched taproots
C. Rhizomes	F. None of the Above
153. Flowers are bell shaped a	and either yellow or blue. They form in distinctive curled clusters having an
appearance similar to that of a	Reproduction is by way of seeds. Also, new
	viding the roots of established plants.
A. Distinctive curled cluster	D. A broadleaf summer-annual weed
B. Perennial herb	E. A branched taproot
C Scorpion's tail	F None of the Above

Common Groundsel 154. Common groundsel is A prolific seed producer, seeds are produced within several weeks of germination, and there are several generations within the same year. This weed likes moist soil and is often found in well-irrigated areas such as lawns and flower beds. A. Opened flower D. Also bristly but lack petioles B. A prolific seed producer E. A common weed in the home vegetable garden C. An early season weed F. None of the Above
155. Control: A dense, healthy turf will prevent seeds from taking root in the lawncan be increased with proper mowing, fertilization, watering, and other cultural practices. Good drainage will also help to discourage the growth of common groundsel. A. Distinctive curled clusters D. Broadleaf summer-annual weed control measures B. Perennial herbs E. Turf density C. A dense, healthy turf F. None of the Above
156. The plants can be easily pulled by hand from moist soil. Be sure to pull and dispose of them before they set seed, as seed can mature ineven after the plants have been killed. If there is heavy infestation, spot treat with a post-emergent herbicide containing glyphosate (Roundup, Kleenup). A. Opened flowers D. Petioles B. Seed producing E. To vegetables C. Weeds F. None of the Above
Common Lambsquarters 157. Common Lambsquarters is a that can be found anyplace the soil has been disturbed. The growth habits of the common lambsquarters vary with its location. If growing along the road or in an open field, it may reach three or four feet in height. A. Distinctive curled cluster D. Broadleaf summer-annual weed B. Perennial herb E. Broadleaf winter-annual weed C. Dense, healthy turf F. None of the Above
158. Control: The best methods of weed control in the home vegetable garden are mulching, handpulling, rototilling, hoeing and preventing the weeds from A. Opened flowers D. Blooming B. A prolific seed producer E. The home vegetable garden C. Going to seed F. None of the Above
159. Because of its short, branched taproot, lambsquarters can be easily hand-pulled from moist soil. The best methods of weed control in the home vegetable garden are mulching, hand pulling, rototilling, hoeing and preventing the weeds from going to seed. Because of its
160. Prevention by use of should be the first line of defense in eliminating broadleaf weeds such as lambsquarters from lawns. A. Violence D. Fire B. Hoe E. Weed control in the home vegetable garden C. Good cultural habits F. None of the Above
161. Pre-emergent herbicides such as trifluralin (Preen) can be used to A. Control grass D. Control broadleaf summer-annual weed B. Control perennial herbs E. Prevent germination of weed seeds C. Create a dense, healthy turf F. None of the Above

162. Post-emergent herbicides	effe	ective against) are 2,4-D, MCPP and dicamba d combination formulas (Trimec).
		Broadleaf summer-annual weeds
B. Perennial herbs	F.	Weed seeds
C. Turf		None of the Above
O. Tuli	٠.	TWO IS OF THE ABOVE
Common Mallow		
163. Common mallow is most f	req	uently found in newly seeded lawns or lawns that are stressed and
lack density. It can be		
A. Opened flower	D.	Found with banana trees
B. A prolific seed producer	E.	Found with a long, branched taproot
C. An annual or biennial	F.	Found with banana trees Found with a long, branched taproot None of the Above
164. Mallow has a deep taproo	ot b	ut can be easily pulled from moist soil. The foliage resembles that of
		of common mallow are pinkish-white and the fruits look like small,
round cheeses.	_	
A. Flowers		Seeds
B. Flowering plants		
C. Rosette stage	F.	None of the Above
AGE Control		with weapon possion fortilization watering and other
165. Control: cultural practices can help in the		with proper mowing, fertilization, watering and other
A. A non-selective herbicide	D.	Spreading perceptial
B. Seed production C. Herbicide spraying		None of the Above
C. Herbicide spraying	г.	Notic of the Above
166. Post-emergent herbicides	are	eeffective. Triclopyr + clopyralid or triclopyr alone
are suggested.	u. c	should have a more production and the more productions
A. Post-emergent herbicides	D.	Only marginally
B. Very		An insecticide and are
C. Not		None of the Above
Common Mullein		
167. Common mullein, also known	own	as wooly mullein, velvet dock, flannel leaf, Aaron's rod, torch plant,
and miner's candle is a		·
A Non coloctive wood		I) Rionnial
B. Member of the figwort family	′	E. Spreading perennial
B. Member of the figwort family C. Leaves are featherlike		F. None of the Above
Common Yarrow		
		with upright flower stalks that can reach 3 feet in height.
	era	I flower stalks, which are often branched and covered by fine hairs.
A. Non-selective weed		D. Biennial
B. Member of the figwort family	'	E. Spreading perennial
C. Leaves are featherlike		F. None of the Above
One bound of		
Crabgrass		
		al grass with wider blades and a lighter green color than
· · · · · · · · · · · · · · · · · · ·	OIL	en has reddish-purple stems. It forms seedheads below mowing
height.	4dic	h nurnia
<u> </u>		h-purple ial crown
		f the Above
S. Sompound louvour 1. Non		

Creeping Yellow Cress 170. Description:	; flowers June to August. Grows up to 20 in tall. Leaves 2 to 4 in harrow, sharply toothed lobes. Flowers yellow with four small petals.
A. Non-selective weed B. Winter annual C. Perennial	D. Biennial
up 11 or more small leaflets arraclovers that are grouped into he	etch is a characterized by compound leaves made anged in pairs and pinkish flowers resembling those of peas, beans, or ad-like clusters. D. Biennial E. Spreading perennial F. None of the Above
Curlycup Gumweed 172. Description: An erect bien branching stems. Stems grow 1. A. Non-selective weed B. Winter annual C. Perennial	nial orwith one to several green, reddish, or whitish-3 feet tall. D. Biennial E. Short-lived perennial F. None of the Above
ovid to oblong, mature leaves of A. Non-selective weed B. Winter annual	
Daisy, Oxeye 174. Plant Description: Ox-eye dark green, hairless, somewhat white rays and yellow centers. A. Clump-forming perennial B. Winter annual C. Perennial	daisy is adistinguished by lower leaves that are fleshy, and coarsely toothed and conspicuous daisy-like flowers with D. Biennial E. Short-lived perennial F. None of the Above
	with an extensive taproot. Its yellow flowers can and November and are followed by fluffy seed heads. More prevalent a growth can be inhibited by increasing the turf density. D. Biennial E. Short-lived perennial F. None of the Above
Daylily, Tawny 176. Plant Description: Tawny of flowers which line the roadsides blossoms and leafless stems. A. Clump-forming perennial B. Winter annual C. Perennial	daylily is a, characterized by its beautiful orange in July. This species is not a true lily, as indicated by its unspotted D. Biennial E. Short-lived perennial F. None of the Above

Dock, Broadleaf 177. Plant Description: Broadle	af dock is awith a deep taproot that can reach
A. Clump-forming perennialB. Rosette-forming perennial	ces primarily by seeds, but there is limited regeneration from root tissues D. Biennial E. Short-lived perennial F. None of the Above
Dodder 178. Dodder (Cuscuta and Gracor red. Occasionally it is almost A. A twining plant B. Is especially destructive C. The stems can be very thin	D. Horizontal underground stemsE. Basal rosette with relatively large leaves
but becomes much-branched in or crushed.A. Clump-forming perennialB. Rosette-forming perennial	
stems that arise from the base. A. Perennial or biennial B. Rosette-forming perennial	that grows up to three feet tall. It has multiple Foliage has distinctive blue-green cast with whitish glaze. D. Biennial E. A stout perennial F. None of the Above
and Canada but is also commor is the British Isles to southern at commonly used in decorations a A. Clump-forming perennial	that is grown ornamentally in the northwestern United States ally found escaping into forests in this region. English holly's native range and central Europe. It is grown commercially in the Pacific Northwest and and floral arrangements as well as in landscapes. D. Biennial E. Broadleaf evergreen tree/shrub F. None of the Above
	D. Biennial
Evening Primrose 183. Plant Description: Commo leaves the first year and flowers A. Evergreen shrub B. Rosette-forming perennial C. Perennial	n evening primrose is athat produces a rosette of borne on an upright leafy stalk during the second year of growth. D. Biennial E. A stout perennial F. None of the Above

184. There are many	evening primroses that appear similar and can be difficult to dyellow flowers that open at dusk.
A. Evergreen shrub	D. Biennial
B. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
	evening primrose, have lance-shaped leaves without lobes. Leaves of
common evening primrose usua	ally appear thin and crinkled and Also, leaves on e often purplish. Reproduction is by seeds.
A Produce viable seeds	e often purplish. Reproduction is by seeds. D. May have a reddish midrib
B Leaf margins	F Infest crop seeds
A. Produce viable seedsB. Leaf marginsC. An upright leafy stalk	F. None of the Above
False Brome	
	grass; forms short "squatty" bunches. Stems hollow with broad, flat
	de lax leaves and a leaf sheath open to the base.
A. Clump-forming perennial	
B. Rosette-forming perennialC. Perennial	F. None of the Above
lower stems hairy; ligules meml	hat often remains through fall and part of winter and pranous
A. Produce viable seeds	D. Appear thin
B. Leaf margins	E. Infest crop seeds
A. Produce viable seedsB. Leaf marginsC. An upright leafy stalk	F. None of the Above
188. Flowers born in a true spil	ke that droops noticeably, and spikelets with short or
A. No stalks	D. To make it easier to control re-growth
B. Stems hollow with broad	
C. Droops noticeably	F. None of the Above
189. False brome plants appear	r to befew to a couple hundred seeds per plant.
	produce viable seeds and become new weed epicenters complicating
control efforts. A. Clump-forming perennial	D. Self-fertile producing
B. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
Four-o' Clock, Wild	
190. Plant Description: Wild for	ur-o'clock is an erect bushy, characterized by its large
fleshy taproot, swollen joints an	d smooth heart-shaped leaves that resemble lilac leaves. It reproduces by
seeds.	
A. Clump-forming perennial	D. Biennial
B. Rosette-forming perennialC. Perennial	F. None of the Above
C. Perenniai	F. Notic of the Above
Foxtail	
	grass with wider blades and a lighter green color than ing than bluegrass. Seed heads may form despite regular mowing. Foxtail
	ing than bluegrass. Seed heads may form despite regular mowing. Foxtall fgrass has good density. Re-sod or reseed bare spots.
	D. Biennial
B. Rosette-forming perennial	
C. Perennial	F. None of the Above

	DCPA (Dacthal)	nalin or
characterized by its relatively wide and short rhizomes (horizontal und A. Clump-forming perennial D. B. Rosette-forming perennial E). Biennial	
form dense stands.	ucing new shoots (tillers) from the D. A distinct S-curve just below the root crown E. Sprout again E. None of the Above	Tall fescue can
varieties of tall fescue makes the g species (allelopathic), thus allowin A. Coarsely ridged leaves B. One of the most widely adapte	Studies suggest that the endophytic fungus grass more drought tolerant, as well as potentially toxing tall fescue to replace native plant communities. D. Species is highly tolerant ed weeds E. A strong garlic odor F. None of the Above	infecting many ic to nearby plant
erect stems and leaves, and a glo of tiny aerial bulblets rather than fl A. Clump-forming perennial B. Rosette-forming perennial). Biennial	zed by slender, , composed mostly
an upright stem with small white fl toothed leaves and a slender tapro A. Clump-forming perennial B. Rosette-forming perennial	stard is a that forms a rosette owers the second spring. It is characterized by triang oot with a distinct S-curve just below the root crown. D. Biennial E. Stout perennial D. None of the Above	the first spring and ular, coarsely
nearly gone by fall. Garlic mustard A. Stems are square B. Reproduces only by seeds	Control in two generations	leaf age and is
crowd out herbaceous native flora the number of native spring specie A. Stems are square D. This w B. Fall application E. Reser	ry difficult to control once established. It tends to form a As a result, invasion of garlic mustard into forests to be as. I weed is invasive a wheat kernel of the Above	

200. Garlic mustard can be controlled byfor several years until the seed depleted.	lbank is
A. Crabgrass killer D. A pre-emergent herbicide B. 2,4-D combination herbicide E. Preventing new seed production C. Compound herbicide F. None of the Above	
201. Various methods can be used to, including cutting plants at ground level before or during flowering, hand pulling, burning, or spot application of herbicides (optimally in ear spring or fall).	l just ly
 A. Crabgrass killer B. 2,4-D combination herbicide C. Compound herbicide D. A pre-emergent herbicide E. Prevent seed formation F. None of the Above 	
202. When hand pulling, a significant portion of the root crown must be removed or else plants caresprout. However, the best management strategy is A. Crabgrass killer D. A pre-emergent herbicide	ın
B. 2,4-D combination herbicide E. To prevent establishment C. Compound herbicide F. None of the Above	
203. Herbicide Control: Apply a(8 ounces in a 3-gal. sprayer) with a surfactant without a surfactant when near surface waters) to thoroughly wet all foliage in April through June (flowering) to control two generations. A. Crabgrass killer D. A pre-emergent herbicide B. 2,4-D combination herbicide E. Glyphosate herbicide as a 2% solution in water	t (or (during
C. Compound herbicide F. None of the Above Geranium, Shiny	
204. Description: Shiny geranium grows predominantly asthough it may be biennial depending on moisture conditions. A. An annual weed D. Biennial B. Rosette-forming perennial E. A stout perennial C. Perennial F. None of the Above	ome:
Goatgrass, Barbed 205. Description:; grows 8 to 16 inches tall with few to many culms. Leaf sheath contain white hairs when young, becoming more or less smooth once matured. The blades are rig sharp, pointed, and spreading. Grain 1/4 inch long, resembling a wheat kernel. A. Annual D. Biennial B. Winter annual E. A stout perennial C. Perennial F. None of the Above	
Henbit 206. Henbit is aoccasionally found in lawns in early spring. The lower leave a stalk while the upper leaves clasp the stem. A. An annual weed D. Biennial B. Winter annual E. A stout perennial C. Perennial F. None of the Above	ves
207. This weed is more often found in buffalograss than in bluegrass. Newly-seeded bluegrass are established bluegrass lawns withmay have some henbit. A. Pink flowers D. Poor density B. A pungent odor E. Crowns C. Newly-seeded grass F. None of the Above	nd

controlled with,	root and is easily pulled from moist soil. Heavy infestations can be 2,4-D or 2,4-D combination herbicides; at or prior to flowering. Fall erbicide (dithiopyr, isoxaben, pendimethalin or prodiamine) will prevent
A. Triclopyr + clopyralid	D. A pre-emergent herbicide
B. 2,4-D combination herbicide	
C. Compound herbicide	F. None of the Above
that are deeply dissected and re A. Clump-forming perennial B. Rosette-forming perennial	
212. Flowers are usually	creating uniform populations.
A. Are square D. Round	ordanig annorm populations.
B. Self-fertileC. MultipleE. ResemblingF. None of the	
Hydrilla 213. Description: water's surface.	aquatic plant. Grows rooted to the bottom with long stems that reach
A. Clump-forming perennial	D. Biennial
B. Rosette-forming perennial	
C. Perennial	F. None of the Above
214. Can bewhorls of five.	. Leaves are 1/16 to 1/8 inch wide, 1/4 to 3/4 inch long and occur in
A. Saucer-shaped	D. Spreading rhizomes
B. Does not have turions	E. Flowering
C. Monoecious or dioecious	F. None of the Above
	are found next to the stem and inserted at the base of the leaf, a Irilla from other family members. The (tubers) are a key
A. Nut-like turions	D. Upright perennial
B. Perennial herbs	E. Sod-forming
C. Rhizomes and seeds	F. None of the Above

216. Egeria densa is s	imilar in appearance but has lea	ves in whorls of four and does not have
A. Loose clusters	D. Spreading rhizomes	
	E. Flower headsF. None of the Above	
C. Way or seeds	F. Notice of the Above	
grows over 7 feet tall an A. An upright perennia B. Rosette-forming per	nd is widely branched at the top.	with a highly visible dark red stem that
consisting of 30 or fewer pointed leaves that hav A. Loose clusters		
	rimarily by way of seeds, but	sometimes arise from the large root
crown. A New shoots	D. Spreading rhizomes	
B. Turions	D. Spreading rhizomesE. Flower heads	
C. Way of seeds	F. None of the Above	
node) and purplish flow A. Clump-forming pere B. Rosette-forming per	ers in terminal clusters.	herbs with leaves in whorls (3 to 6 leaves per
		llow, there are usually 4 to 6 leaves in a whorl, flowers are arranged in a domed
A. Loose clusters	D. Spreading rhizomes	
B. Turions	E. Flower headsF. None of the Above	
C. Way of seeds	F. Notic of the Above	
flower heads are pinkis arranged in flat-topped	h-purple consisting of between 8	
	leaves in each whorl, and flower heads are arranged in saucer-shaped D. Spreading	ed terminal clusters

224. Joe-Pye weeds reproduceA. Flat-topped terminal clustersB. Perennial herbsC. Rhizomes and seeds	D. An upright perennial E. Sod-forming perennials
225. Root system - The root sys A. Loose clusters B. Does not have turions C. Way of seeds	tems includes spreading rhizomes (). D. Spreading rhizomes E. Horizontal underground stems F. None of the Above
purplish, pyramidal flower heads seeds and stout rhizomes (horiz A. Clump-forming perennial B. Rosette-forming perennial	ngrass is a large, coarse,, characterized by its and the prominent white midrib down the leaf blade. It reproduces by contal underground stems), and can form large, dense patches. D. Biennial E. A sod-forming perennial grass F. None of the Above
Jubata Grass 227. Description: Jubata grass have long leaves arising from a f A. Clump-forming perennial B. Rosette-forming perennial C. Perennial weed	tufted base or tussock.
least twice as long as the tussoo	D. Truncate leavesE. Biennial or short-lived perennial
cream-white at maturity. Jubata	, deep violet when immature, turning pinkish or tawny grass is easily confused with pampas grass (Cortaderia selloana). D. Hairy female flowers E. Stout stems reddish-brown, nodes slightly swollen F. None of the Above
and A. Presence of viable seed B. Japanese knotweed	D. Truncate leaves E. Biennial or short-lived perennial F. None of the Above
tussocks of Cortaderia selloana. A. Inflorescence	D. Tussocks of jubata grass E. Stout stems reddish-brown, nodes slightly swollen F. None of the Above
stemmed plant with several sten A. Clump-forming perennial B. Rosette-forming perennial	

233. Flowers purple or rarely c Seeds dispersed by wind, anim		m colored are usually black, thus the name "spotted."
		Not fountain-like
		Stout stems reddish-brown, nodes slightly swollen
C. Significant threat		
Knotweed, Giant		
234. Description:		; blooms July to October. Grows over 12 feet tall. Closely related
and similar to Japanese knotwe	ed.	B
A. Clump-forming perennial	D.	Biennial Biennial or short-lived perennial
B. Rosette-forming perennial	<u> </u>	News of the Above
C. Perennial	Г.	None of the Above
		l; often exceeds one foot longof creamy white
		does not increase with maturity.
		Fountain-like
B. Tips of flower head bracts		
C. Stem height	F.	None of the Above
•	nese	e knotweed are common. Japanese knotweed is smaller with truncate
leaves.	_	
A. Hybrids	D.	Truncate leaves Biennial or short-lived perennial weeds
B. Spotted knotweed C. Giant knotweed	E.	Biennial or short-lived perennial weeds
C. Giant knotweed	F.	None of the Above
		ne largest of the knotweeds, enabling this species to dominate and out
		It poses a significant threat to riparian areas where it prevents
streamside tree regeneration.		
A. Beneficial plants		Not fountain-like
B. Tips of flower head bracts		Stout stems
C. Significant threat	F.	None of the Above
Knotweed, Japanese		
		blooms July to October. Grows four to nine foot tall and has long
creeping rhizomes.	—-'	and the control of th
A. Clump-forming perennial	D.	Biennial
B. Rosette-forming perennial	E.	A stout perennial
C. Perennial		None of the Above
	'n,	Leaves short stalked, trucate, broadly ovate and 2
6" long by 2-4" wide.	_	
A. An erect biennial		Nodes slightly swollen
B. Formation of turions		A milky juice
C. Pale-colored bulblets	۲.	None of the Above
240. Flowers greenish-white to giant knotweed are common.	cre	am in large plume-like clusters at the ends of the stems with
A. Kidney to heart-shaped	Ъ	Perennial
B. Large infestations		Herbaceous perennial weed
C. Hybrids		None of the Above
-· ·· / -· ·		

Lesser Celandine 241. Description: Lesser celand (Ranunculaceae).	dine	is an herbaceous, plant in the buttercup family
A. Clump-forming perennial B. Rosette-forming perennial C. Perennial	E.	Biennial A stout perennial None of the Above
		f dark green, shiny, stalked leaves that are kidney to heart-shaped. il, have eight glossy, butter-yellow petals, and are borne singly on
A. Kidney to heart-shaped B. Large infestations C. Hybrids	E.	Delicate stalks that rise above the leaves Herbaceous perennial weed None of the Above
243are prod	uce	ed along the stems of the above ground portions of the plant, but are
B. Formation of turions	D. E.	Stout stems reddish-brown A milky juice
C. Pale-colored bulblets	F.	None of the Above
244. When in bloom, large infe	stat	ions of lesser celandine appear as a green carpet with yellow dots,
A. Kidney to heart-shaped B. Large infestations C. Hybrids	D. E. F.	Spreading across the forest floor Herbaceous perennial weed None of the Above
petals and dark green leaves m	ottle	esser celandine including a double-flowered form with many crowded ed with silvery markings. The primary reproductive method is the
formation of turions that are A. An erect biennial	D.	Stout stems reddish-brown
B. Formation of turionsC. Pale-colored bulblets	Ε.	Produced on the roots in large numbers
from seed and vegetative root b A. Herbaceous perennial weed	uds D.	Biennial
B. Rosette-forming perennialC. Perennial		None of the Above
Lettuce, Prickly 247. Plant Description: Prickly I basal leaves during its first year A. Clump-forming perennial	ettu D. E.	Biennial A stout perennial None of the Above
especially the top portion where A. Kidney to heart-shaped B. Large infestations	sm D. E.	that is usually erect and sometimes branched, nall, daisy-like, yellow flowers are borne. Solitary stem Herbaceous perennial weed
C. Hybrids	F.	None of the Above

and have prickly edges and a distinctive row of stiff, sharp prickles on the underside
of midribs. Nearly half of the length of each seed consists of a beak having a tuft of silky white hairs (pappus) at the tip.
A. An erect biennial D. Stout stems reddish-brown
B. Formation of turions E. Stem leaves are irregularly-lobed
C. Pale-colored bulblets F. None of the Above
250. All plant parts exude The plant reproduces only by seeds.
A. Stem tip D. A biennial root crown
B. Fragmented stems E. Purple-magenta flowers
C. A milky juice when cut or broken F. None of the Above
251. Similar Species: Prickly lettuce can be confused with sowthistles (Sonchus spp.), which have prickly leaf margins but
A. Spikelets D. Appear slightly crinkled, have toothed edges
B. Smooth midribs E. A woody crown and rhizomes
C. Spreads by rhizomes F. None of the Above
252. Tall lettuce (Lactuca canadensis) and tall blue lettuce (Lactuca biennis) look similar to prickly lettuce except they have leaves with smooth edges and
A. Stem tip D. Midribs without prickles
B. Fragmented stemsE. Purple-magenta flowersC. Stem are roundedF. None of the Above
C. Stelli are rounded F. Norie of the Above
London Rocket
253. London rocket is a European native weed belonging to the mustard family, and is one of the
It is abundant in irrigated land in crops such as alfalfa and small grains, in gardens, citrus orchards, pastures, and along roadsides.
A. Clump-forming perennial D. Biennial
B. Rosette-forming perennial E. First winter weeds to appear
C. Perennial F. None of the Above
254. London rocket is a The stems branch from the base 1 to 3 feet high. It
has a coarse taproot. Small, yellow flowers are borne on slender stalks in small clusters at the stem tip.
A. Clump-forming perennial D. Biennial
B. Rosette-forming perennial E. Bright green fleshy winter annual
C. Perennial F. None of the Above
Loosestrife, Purple
255. Plant Description: Purple loosestrife is a plant that forms a dense bush consisting
of up to 50 stems arising from a shallow root system, which includes a woody crown and rhizomes
(horizontal underground stems).
A. Clump-forming perennial D. Biennial B. Rosette-forming perennial E. A stout perennial
C. Perennial F. None of the Above
256. Location should be considered when characterizing this plant, as it is a much more aggressive
weed when growing in wet areas. It can be identified while in bloom by its purple-magenta flowers that form on Also, upper above-ground parts of the plant should appear densely
hairy.
A. Stem tip D. Distinctive terminal spikes
B. Fragmented stems E. Purple-magenta flowers
C. Stem are rounded F. None of the Above

257. Purple loosestrife reproductA. SpikeletsB. Slow growing perennialC. Rhizomes	D. Appear slightly crinkled, have toothed edgesE. A woody crown and rhizomes
Mallow, Common 258. Plant Description: Commo second year from a biennial root A. Summer or winter annual B. Rosette-forming perennial C. Perennial	D. BiennialE. A stout perennial
shaped leaves that are shallowly A. Spikelets	ics are the fruits, which resemble tiny wheels of cheese, and kidney- / lobed, appear slightly crinkled, have toothed edges, and D. Appear slightly crinkled, have toothed edges E. Attach to stems by way of long stalks (petioles) F. None of the Above
260. Reproduction is by seeds, sufficiently moist for a long enough. Stem tip D. Roo B. Fragmented stems E. Purp C. Stem are rounded F. Nor	t at the nodes ole-magenta flowers
tall and large pink flowers that he on long stalks attached to stem A. Clump-forming perennial B. Rosette-forming perennial	D. Biennial
262. Leaves located at the base stem are deeply dissected into 5 warm weather or when crushed. A. Stem tip D. Rou B. Fragmented stems E. Purp C. Stem are rounded F. Nor	nded and slightly lobed ble-magenta flowers
and long-lived. It produces unbraside only.A. Clump-forming perennial	
narrower because blades are tig	ennial root crowns ves

A. Inconspicuous spikesB. Asclepias family	E. Twining vines, funnel-shaped flowers
C. Root system Milkweed, Butterfly	F. None of the Above
266. Plant Description: Butterfly looks similar to other family men	milkweed is a member of the Milkweed Family that nbers except for its showy orange flowers and watery rather than milky e hairy, leafy, and branched near the top of the plant. Reproduction is by
A. Clump-forming perennialB. Rosette-forming perennialC. Perennial	
butterflies. The adult females se A. Inconspicuous spikes B. Rosette-forming perennial	, are the only host plant for the monarch and queen ek out these plants on which they lay their eggs. D. Members of the Asclepias family E. Twining vines, funnel-shaped flowers F. None of the Above
·	
from other perennial vines include shaped flowers that form in axillareproduces by seeds and horizor A. Twining perennial vine B. Rosette-forming perennial	D. Biennial
Milkweed, Swamp 270. Plant Description: Swamp white milky sap if cut or broken, A. Clump-forming perennial B. Slender perennial C. Perennial	milkweed is a Its stems and leaves exude a which is a common characteristic of species in the Milkweed Family. D. Biennial E. A stout perennial F. None of the Above
characteristics with other mornin	morningglory is a that shares numerous agglories including twining vines, funnel-shaped flowers, and heartes, bigroot morningglory has a very large and deep taproot. Reproduction D. Biennial E. A stout perennial F. None of the Above

Motherwort 272. Plant Description: Motherward of the control of th	vort is a	that can grow up to 5 feet tall. As with o ngent odor if crushed.	ther
A. Stiff-stemmed perennialB. Rosette-forming perennial	D. Biennial	igent odor if crusned.	
and dissected leaves that gener A. Herbs B. Rosette-forming perennial	ally give off a strong odor. D. Biennial	elatedwith an erect growth f	form
and non-crop areas. It is a bienr A. Clump-forming perennial	nial weed, although occasion	at occurs in pastures, rangeland, roadsidenally it is	es
unpleasant stinging hairs on the creeping rhizomes (horizontal uncolonies. A. Clump-forming perennial B. Rosette-forming perennial	stems and lower leaf surfacenderground stems), and grov D. Biennial	ous that is widely known for its ce. It reproduces by wind-dispersed seeds ws in dense clumps, often forming large	s and
reproduces by seeds and rooting	g at the nodes of the prostra that are woody at the base a D. Biennial	climbing or trailing vine that te stems. It can be distinguished from oth and oval leaves with pointed tips.	ner
		mental species of Euphorbia. This plant is on a woody rootstalk with the plants reac	
Old Man's Beard 278. Description: growing up to thirty yards long. I A. Clump-forming perennial B. Rosette-forming perennial C. Perennial		mer. Woody deciduous vine with stems und, usually with five leaflets.	

		nd in clusters in the upper leaf axils. Long feather
•	•	ge are responsible for the plant's name.
	D. Flowers	
B. Rosette	E. Submersed leaves	
C. Shamrock appearance	F. None of the Above	
		imber its name. Young vines are ribbed and ofter
		in color flake when bent.
A. Fruits explode	D. Base of existing ste	ms
B. An attractive aquatic plant	E. Emergent stems	
C. Older vines	F. None of the Above	
Orchardgrass		
		o-forming, cool-season grass
		characteristically shaped flower head, consisting
		iff branches which jut out to the sides.
A. Clump-forming perennial		
B. Rosette-forming perennial	E. A stout perennial	
C. Perennial	F. None of the Above	
		n expand by producing new shoots (tillers) from
the base of		
A. Fruits explode	D. Existing stems	
B. An attractive aquatic plant		
C. Higher flow rates	F. None of the Above	
Oxalis		
283. Description: The leaves o	f oxalis, also called cree	ping woodsorrel, have aand
		oudy days, the leaves may fold up. With the
	all, leaves turn purplish i	n color. Occasionally, some plants may have
purple leaves all year round.		
A. Clump-forming perennialB. Shamrock appearanceC. Perennial	D. Biennial	
B. Shamrock appearance	E. A stout perennial	
C. Perennial	F. None of the Above	
284. Oxalis is a prostrate,	with stems	s that will take root where they touch the ground.
		de, scattering seed several feet away.
A. Clump-forming perennial	D. Biennial	
B. Rosette-forming perennial	E. Creeping perennial	weed
C. Perennial	F. None of the Above	
Parsnip, Wild		
285. Plant Description: Wild par	rsnip is a	that looks and smells similar to cultivated
parsnip.		
A. Biennial or sometimes a per	ennial D. Biennial	
B. Rosette-forming perennial	E. A stout pere	ennial
C. Perennial	F. None of the	Above
286. The plant forms a rosette	of leaves during the first	year of growth and a During the
		Il and terminate in umbrella-shaped clusters of
small yellow flowers. Wild parsn		
	D. Emergent stems	
B. Large edible taproot	E. Submersed leaves	
C. Shamrock appearance	F. None of the Above	

Parrots Feather 287. Description: Parrot's feath	er is with f	eathery lime-green leaves arranged in
whorls on long stems (rhizomes). Flowers are small and white	
A. Fruits explode	D. Base of existing stems	
B. An attractive aquatic plantC. Higher flow rates	E. Emergent stems	
C. Higher flow rates	F. Notic of the Above	
288. The submersed leaves are surface parts of the plants are the look almost like small fir trees.	limp and often appear to be d ne most distinctive trait as they	ecaying but the The can grow up to a foot above the water and
A. Rosette of leaves	D. Water level fluctuations	
B. Stems are very robust	E. Submersed leaves	
C. Shamrock appearance	F. None of the Above	
to high nutrient environments. It	tends to	ams, and canals and appears to be adapted or still water rather than in areas with
Δ Fruits explode	D. Colonize slowly moving	
B. An attractive aquatic plant	E. Emergent stems	
higher flow rates. A. Fruits explode B. An attractive aquatic plant C. Higher flow rates	F. None of the Above	
	urvive on wet banks of rivers a s. D. Base of existing stems E. Submersed leaves	and lakeshores, so it is well adapted to
	T. Itolio of the 7 boto	
Paterson's Curse 291. Description: An erect 3 feet tall. Plants are often multi- Reproduction and spread is by s A. Clump-forming perennial B. Annual or biennial C. Perennial	-branched with an abundance seed.	borage family (Boraginaceae) generally 1- of stout hairs on stems and leaves.
Perennial Pepperweed 292. Description: than upper leaves, lanceolate, b A. Clump-forming perennial B. Annual or biennial C. Perennial	right green to gray green, enti	ber. Grows 1 to 6 ft. tall. Basal leaves larger re to toothed.
B. An oil E. Forr		near the ends of branches; flowers produce d reddish brown.
Poison Hemlock 294. Plant Description: Poison I first year and forms an upright fl A. Clump-forming perennial B. Annual or biennial C. Perennial		luces leaves in a basal rosette during its the second year of growth.

Poison Ivy	· This is a	distinguished by its leaves that have three leaflets.
The stalk attached to the leaflets. It grows in a van A. Deciduous woody p.B. Rosette-forming per	ne middle leaflet is consi- ariety of forms including	derably longer than that attached to either of the two outer trailing, shrubby, or as a vine. ennial
resembles a small tree, smooth succulent red-p berries in the fall. This s A. Herbaceous perenn B. Rosette-forming per	, growing up to 10 feet ir ourple stems, large lance species reproduces from	ennial
A. New shoots B. Roots	mmon pokeweed production D. Herbaceous perention E. Fleshy, white taproce F. None of the Above	ces a large, (4 to 6 inches in diameter). nial ot
poisonous, are the least toxic. A. Leaves and stems		are toxic to humans, pets and livestock. Roots are the most in toxicity (toxicity increases with maturity), and berries
available, or if it is in co A. Not very palatable B. Very palatable	okeweed is ontaminated hay. D. An herbace E. A white tap F. None of the	root
been poisoned by eatin A. The stems B. Roots		oned by eating fresh leaves or green fodder, and pigs have most frequently poisoned by eating erennial

You are finished with your assignment.

Weed Identification and Control Assignment #4 Last Names R-Z

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Write your answers on the Answer Key found in the front of this assignment. ASSIGNMENT INSTRUCTIONS

What is a Weed?

- 1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
- 2. You will need to pick one of the following five assignments to complete. This selection process is based upon your last name. If your last name begins with an A to E, you will pick assignment number 1, if your last name begins with the letter F to L, you are to complete assignment number 2 and if your last name begins with the letter M-Q, you will pick assignment number 3 and if your last name begins with the letter R-Z, you will pick assignment number 4.

Multiple Choice assignment, please select one answer and mark it on the answer key. The answer must come from the course text. (s) means answer can be plural or singular. There are no intentional trick questions

Generally, the term weed is used to describe any plant that is unwanted and grows or spreads aggressively. 1. Terms such as ______are used somewhat interchangeably to refer to weeds that infest large areas. A. Noxious or invasive weeds D. Plants non-native to North America B. Invasive or non-invasive E. Invasive, exotic or non-native C. Noxious or not noxious F. None of the Above **Noxious Weed** 2. Millions of acres of once healthy, productive rangelands, forestlands and riparian areas have been overrun by A. Noxious or invasive weeds D. Plants non-native to North America B. Invasive or non-invasive E. Plant species C. Noxious or not noxious F. None of the Above What is a noxious weed? The term " means different things to different people. In the broadest sense, A. Non-native (or alien) D. Native vegetation B. No natural enemiesC. Noxious weedsE. WeedF. None of the Above mandated for control are plants non-native to North America.

Consequently, these plants do not have the natural checks as found in their native land, such as insects,

diseases, and herbivores that would keep the plant population in check.

F. None of the Above

A. Noxious or invasive weeds
B. Invasive or non-invasive
D. Noxious weeds
E. Plant species

C. Noxious or not noxious

	essive ability of these plants, coupled with no natural controls, these plants s. Not only are manyout competed by these weeds,
but native vegetation and the wi	s. Not only are manyout competed by these weeds, ildlife associated with it will be replaced.
A. Noxious or invasive weeds	
B. Invasive or non-invasive	
C. Noxious or not noxious	F. None of the Above
weed management plan to cont	e weeds when they first become established and developing an integrated rol them is critical in maintaining healthy, productive land. The term sed to describe a legal designation for plant species that have been
determined to be especially und	
	D. Plants non-native to North America
B. Invasive or non-invasive	
C. Noxious or not noxious	F. None of the Above
7. These weeds are subject, by Agriculture, there are	law, to certain restrictions. Regulated by the U.S. Department of
A. Non-native (or alien)	D. Native vegetation
B. No natural enemies	E. Natural controls
C. 90 federal noxious weeds	F. None of the Above
8include not country.	only noxious weeds, but also other plants that are not native to this
A. Noxious or invasive weeds	D. Plants non-native to North America
B. Invasive plants	E. Plant species
C. Noxious or not noxious	F. None of the Above
	if they have been introduced into an environment where they did not y have no natural enemies to limit their reproduction and spread.
A. Non-native (or alien)	D. Considered invasive
B. No natural enemies	E. Natural controls
C. Noxious weeds	F. None of the Above
10. Somestructure, or ecosystem function	can produce significant changes to vegetation, composition,
	D. Plants non-native to North America
B. Invasive plants	E. Plant species
C. Noxious or not noxious	F. None of the Above
What is an Invasive Species?	
11. An'	' is defined as a species that is 1) non-native (or alien) to the
environmental harm or harm to	
A. Non-native (or alien)	D. Native vegetation
B. No natural enemies	E. Invasive species
C. Noxious weeds	F. None of the Above
Understanding Weed Terms 12.	is, simply put, all life on earth, even that which has yet to be
	includes the millions of diverse species, from bacteria to whales that
share the earth's lands and water	
A. Cultivar(s)	D. Exotic (introduced) plant
B. Biological Management	E. Ornamental plant
C. Biodiversity	F. None of the Above

	ological control is the deliberate use of the pest's natural enemies -
predators, parasites, and pathog	gens - to reduce the pest population below damage levels.
A. Cultivar(s) B. Biological Management	D. Exotic (introduced) plant Componental plant
C. Biodiversity	F. None of the Above
C. Blodiversity	r. Notice of the Above
14	: When exploring chemical control options, you should select the lowest
	The key is to use pesticides in a way that complements rather than
hinders other elements in the str	ategy and which also limits negative environmental effects.
A. Cultivar(s)	D. Exotic (introduced) plant
A. Cultivar(s)B. Biological ManagementC. Chemical Control	E. Ornamental plant
C. Chemical Control	F. None of the Above
15. : Short for	"cultivated variety." A plant "variety" developed by man via plant selection
and/or genetic manipulation to e	xhibit a set of plant characteristics.
A. Cultivar	D. Exotic (introduced) plant
B. Biological Management	E. Ornamental plant
C. Biodiversity	F. None of the Above
16. are mair	ntained via controlled pollination or vegetative means, so that cultivar
characteristics are passed to en	suing generations.
A. Cultivar(s)	D. Exotic (introduced) plant
B. Biological Management	E. Ornamental plant
C. Biodiversity	F. None of the Above
17.	: Cultural practices are a manipulation of the habitat environment to
increase pest mortality or reduce	e rates of pest increase and damage.
A. Growth Habit - Invasiveness	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above
18. There are many different cu	Itural practices that can help to reduce pest impact such as selection of
	mulching, winter cover crops, changing planting dates to minimize insect
	otations that include, moisture management, addition
of beneficial insect habitat, or ot	her habitat alterations.
A. Growth Habit - Invasiveness	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Non-susceptible crops	D. Cultural managementE. Integrated Pest Management (IPM)F. None of the Above
19. : Short fo	or "ecological variety." A plant "variety" developed by man from a
	pecies that were selected from several to many natural populations in a
specific region.	,
A. Growth Habit - Invasiveness	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above
20 The purpose is to have high	genetic diversity in the parent collection, which reflects the natural
	e defined region. To maintain genetic diversity in ensuing generations,
little to no selection is done during	
A. Growth Habit - Invasiveness	
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above

21: An exotic plant species that is able to invade and overrun native
ecosystems. Some native plants can become invasive under certain conditions, but most invasive
species are introduced (exotic).
A. Growth Habit – Invasiveness D. Cultural management
B. Exotic invasive plant C. Ecovar E. Integrated Pest Management (IPM) F. None of the Above
C. Ecovar F. None of the Above
22: The most important aspect of an alien plant is how it responds to a new
environment. An invasive species is one that displays rapid growth and spread, allowing it to establish
over large areas. Free from the vast and complex array of natural controls present in their native lands,
including herbivores, parasites, and diseases, exotic plants may experience rapid and unrestricted growt
in new environments.
A. Growth Habit – Invasiveness D. Cultural management B. Exotic invasive plant E. Integrated Pest Management (IPM)
B. Exotic invasive plantC. EcovarE. Integrated Pest Management (IPM)F. None of the Above
C. Ecoval F. Notile of the Above
23is enhanced by features such as strong vegetative growth, abundant
seed production, high seed germination rate, long-lived seeds, and rapid maturation to a sexually
reproductive (seed-producing) stage. Invasive plants reproduce rapidly, either vegetatively or by seed.
Their phenomenal growth allows them to overwhelm and displace existing vegetation and form dense
one-species stands.
A. Invasiveness D. Cultural management
B. Exotic invasive plant E. Integrated Pest Management (IPM)
C. Ecovar F. None of the Above
24. Some of the key components to a successful program include the following:
Identify current and potential pest species, their biology, and conditions conducive to the pest(s) (air,
water, food, shelter, temperature and light).
A. Growth Habit – Invasiveness D. Cultural management B. Exotic invasive plant E. IPM
B. Exotic invasive plant E. IPM C. Ecovar F. None of the Above
C. Ecoval
25. Understand the physical andthat affect the number and distribution of pests
and their natural enemies.
A. Growth Habit – Invasiveness D. Cultural management
B. Exotic invasive plant E. Biological factors
C. Ecovar F. None of the Above
26
26: Mechanical or physical control methods involve using barriers, traps, or physical removal to prevent or reduce pest problems.
A. Source-identified seed D. Mechanical or Physical Management
B. Noxious Weeds E. Source-identified seed
C. Native plant F. None of the Above
C. Halive plant
27. Tactics may include using row covers or trenches to prevent insects from reaching the crop, baited of
pheromone traps to capture insects, or or mowing for weed control.
A. Source-identified seed D. Mechanical or Physical Management
B. Noxious Weeds E. Source-identified seed
C. Cultivation F. None of the Above
OO
28 : A plant species that is found in a region because it developed and evolved in the transient over the upper developed.
that region over thousands of years. Plants that existed in a region prior to settlement. A. Source-identified seed D. Mechanical or Physical Management
A. Source-identified seed D. Mechanical or Physical Management E. Source-identified seed
C. Native plant F. None of the Above
o. Hanto plant

			was introduced into an area, escaped from cultivation
		asive	plants). Many plants commonly thought to be natives
were actually introduced by ear			
A. Mechanical or Physical Man	agement		Variety
B. Native plant			Pest
C. Naturalized plant		F.	None of the Above
The Invasive Problem			
Invasive Species			
			t were growing here before the arrival of Europeans.
Exotics are those that do not no	iturally occur in	an a	rea but have been introduced by people. Many exotic
			grow out of control — displacing
which provide food and shelter			
A. Aggressive invaders	D. Ou	ır na	tive fauna
B. Invasive non-native organism	ns E. Na	tive	plants
C. Native butterfly species	F. No	ne o	the Above
31. It is not always possible to	predict if or whe	en a	species will become a(for
			ornamental for 80 years before it escaped
cultivation!), but a red flag shou	ld run up at any	non	-native with fleshy fruits dispersed by birds.
A. Some native plantsB. Exotic plants	D. Exotic plan	ıts aı	nd animals
B. Exotic plants	E. Pest plant		
C. Natural disturbances	F. None of the	e Ab	ove
Impacts of Invasive Alien Plants	3		
		st thr	eats to the natural ecosystems of the U.S. and are
destroying America's natural his	story and identity	y.	·
A. Aggressive invaders	D. Ou	ir na	tive fauna
B. Invasive non-native organisi	ms E. Inv	⁄asiv	e species
C. Native butterfly species	F. No	ne o	f the Above
33. These	are	disı	rupting the ecology of natural ecosystems, displacing
native plant and animal species	, and degrading	our	nation's unique and diverse biological resources.
A Some native plants	D Exotic plan	its ai	nd animals
B. Exotic plants	E. Unwelcome	e pla	nts, insects and other organisms
C. Natural disturbances	F. None of the	e Ab	ove
34. reduce	e the amount of	liaht	, water; nutrients and space available to native
			moisture-holding capacity, and erodibility, and change
fire regimes.	•	•	3 1 3
A. Aggressive invaders	D. Ou	ır na	tive fauna
B. Invasive non-native organism	ms E. Inv	⁄asiv	e species
C. Native butterfly species	F. No	ne o	f the Above
35. are o	capable of hybri	dizir	g with native plant relatives, resulting in unnatural
			een found to harbor plant pathogens, such as
			ect both native and non-native plants, including
A. Some native plants	D. Exotic plan	יב st	nd animals
B. Some exotics	E. Native plan		
C. Natural disturbances	F. None of the		

Impacts to Native Fauna 36. Our native fauna, including insects, birds, mammals, reptiles, fish and other animals, is dependent of native plants for food and shelter. While some animals have a varied diet and can feed on a wide number of, others are highly specialized and may be restricted to feeding on several or a
single plant species. A. Aggressive invaders B. Invasive non-native organisms C. Native butterfly species D. Plant species E. Invasive species F. None of the Above
37. Caterpillars of the monarch butterfly have evolved to feed primarily on plants in the genus Asclepias (milkweeds) that contain special chemicals. The term host plant is generally used to describe a plant species that is required food for at least one stage of an insect or other animal. As exotic plants replace our native flora, fewer host plants are available to provide the necessary nutrition for A. Some native plants D. Exotic plants and animals B. Exotic plants E. Native plant relatives C. Our native wildlife F. None of the Above
Disturbance Effects 38are especially problematic in areas that have been disturbed by human activities such as road building, residential development, forest clearing, logging operations, grazing, mining, ditching of marshes for mosquito control, mowing, erosion control and fire prevention and control activities. A. Aggressive invaders D. Our native fauna B. Invasive non-native organisms E. Invasive species C. Native butterfly species F. None of the Above
39, such as fires, floods, tornadoes, landslides, and tree falls also provide avenues for invasive species to get started. The enormity of change wrought upon the American landscape over the past few hundred years has thrown things out of balance. A. Some native plants D. Exotic plants and animals B. Exotic plants E. Native plant relatives C. Natural disturbances F. None of the Above
40. Lacking, native species and ecosystems benefit from natural disturbances that provide opportunities for genetic mixing and nutrient recycling, and reduce fuel loadings. A. Aggressive invaders D. Exotic species B. Invasive non-native organisms E. Invasive species C. Native butterfly species F. None of the Above
display invasive growth tendencies in their native ranges, often as a response to natural or human-caused disturbances. For example, native grape vines in forests may grow vigorously response to a tree fall or selective timber cut that opens the canopy and brings abundant sunlight into previously shaded areas. A. Some native plants D. Exotic plants and animals B. Exotic plants E. Native plant relatives C. Natural disturbances F. None of the Above
42. This "invasive" growth spurt is usually temporary though, and slows down again as trees and other plants fill in and the forest canopy is recovered. The best way to reduce plant invasions is to focus on preventing non-native species introductions,, minimizing disturbance to forests, wetlands, barrens and other natural communities. A. Aggressive invaders D. Our native fauna B. Invasive non-native organisms E. Invasive species C. Managing existing infestations F. None of the Above

Importance of Native Plants 43. Approximately 18,000 plants are native to the ecosystems of North America. Our native flora (i.e., all U.S. native plants) provides the foundation of the and defines the various ecosystems and regions of the country. These plants also provide natural sources of food and fiber, and were the essential sources of nutrition and other materials for native American Indians. A. Some native plants
44. Thehave been greatly reduced as a result of human encroachment which has destroyed many millions of acres of natural habitat. In the U.S. alone, about 200 native plant species have become extinct since the 1800's and 5,000 species are considered to be at risk. Invasions of non-native plants are the second greatest threat to native species after direct habitat destruction. A. Aggressive invaders D. Populations of many native plants B. Invasive non-native organisms E. Invasive species C. Native butterfly species F. None of the Above
Recognize the major plant characteristics used to identify weeds. 45
46: Located where the blade and the sheath meet. A. Collar D. Auricle B. Roots E. Shoot C. Node F. None of the Above
47:Region of nodes with tightly compacted internodes. A. Collar D. Auricle B. Crown E. Shoot C. Node F. None of the Above
48:The region between the nodes A. Collar D. Auricle B. Internode E. Shoot C. Node F. None of the Above
49:Enlarged areas at intervals along the stem and also the part of the plant where buds are attached. A. Collar D. Auricle B. Roots E. Shoot C. Node F. None of the Above
50:Underground stems that grow laterally. A. Sheath D. Rhizomes B. Ligule E. Stolons C. Blade F. None of the Above
51:Attachment of the plant to the soil that absorbs minerals and water needed for the plants survival. A. Collar D. Auricle B. Roots E. Shoot C. Node F. None of the Above

52.	·		:Aboveground stems that grow laterally.
Α.	Sheath	D.	Rhizomes
	Ligule		
C.	Blade	F.	None of the Above
53.			:Characteristic of the grass that describes how the new blades emerge from the
she	eath as growt	th o	ccurs.
A.	Sheath	D.	Rhizomes
В.	Ligule	E.	Rhizomes Vernation None of the Above
C.	Blade	F.	None of the Above
54.			:The aboveground parts of the plant.
Α.	Collar	D.	Auricle
В.	Roots		Shoot
C.	Node	F.	None of the Above
55.			:A structure that grows from the collar area on the inner side of the leaf.
A.	Sheath	D.	Rhizomes
В.	Ligule	E.	Stolons
C.	Blade	F.	None of the Above
56.			:An appendage that grows from the edge of the collar and may wrap around th
ste	m.		
A.	Collar	D.	Auricle
	Roots		
			None of the Above
57.			:The upper part of the leaf. Rhizomes
A.	Sheath	D.	Rhizomes
В.	Ligule	E.	Stolons
C.	Blade	F.	None of the Above
Со	mmonly Fou	und	Weed Section
	Z Common N		
Art	ichoke, Jerus	sale	? M
			on: It is nearly impossible to distinguish Jerusalem artichoke from annual sunflowers
			ound growth. Jerusalem artichoke has a coarse, 5- to 10-foot tall stem, large leaves
			surface, and
	Compositae		
	Perennial we		
C.	An herbaced	ous	perennial F. None of the Above
			choke can be easily distinguished from annual sunflowers by its below-ground growth
			tubers resembling thin, knotty potatoes. Reproduction of Jerusalem artichoke is by
	eds, rhizomes	\ -), and tubers.
	Five individu		
	Allelopathic		
C.	Fleshy tuber	S	F. None of the Above
	paragus, Wild		
			on: Wild asparagus is an herbaceous perennial, well-known for its edible young
	oots. Mature		
			like appearance D. Creeping plant with compound leaves
	Perennial we		
١ .	An herbaced	วนร	perennial F. None of the Above

	r is athat can frequently be seen mp of upright stems with wand-like spreading branches. In late p half of the plant. ti-branched and bushy perennial herbaceous perennial e of the Above
	om May to July. A creeping plant with compound leaves; air. Flowers 1/4 to 1 inch long and orange-red. Many seeds in
A. Bladder-like translucent pods B. Perennial weed C. An herbaceous perennial	D. Creeping plant with compound leavesE. Annual sunflowersF. None of the Above
Bamboo 63thrive in sun Where drought may be expected or in h varieties. Established plants withstand fl A. Rhizomes D. Sprawling ta B. Bedstraw E. Phyllostach C. Large mats F. None of the	angled mats ys species
	t 30 different bedstraws in North America, and many are oduce sprawling tangled mats from which awling tangled mats les on branches se of the Above
65. The typical bedstraw leaf is linear a nodes on the stem.A. Leaves alternate and compoundB. Spreading rhizomesC. Formed in whorls	D. Nodes on the stem. E. New plants are very fragile and easy to destroy F. None of the Above
66. Smooth bedstraw is the	lowered form
67. Reproduction is by seeds and undeA. Leaves alternate and compoundB. Spreading rhizomesC. Horizontal underground stems	rground, spreading rhizomes (). D. Nodes on the stem. E. New plants are very fragile and easy to destroy F. None of the Above
Related Information: 68. The common name 'bedstraw' has to it is said that bedstraw was placed in the A. Manger at Bethlehem B. Bedstraw C. Large mats	two possible origins: the dried plant was used to stuff mattresses; when Jesus was born. John 3:16 D. Sprawling tangled mats E. Nodes on branches F. None of the Above

	grows four to eight inches tall. Biddy-biddy spreads by stolons that root at
	mats where individual plants are indistinguishable. The plant stems are
A. Rhizomes D. Spr	epending on conditions.
B. Prostrate to erect E. Noo	
C. Large mats F. Non	
Bindweed, Field	
70. Field bindweed can be spre	ead by seed,, farm implements, infested soil
adhering to the roots of nursery	stock root growth from infested areas, and by animals
A. I wining perennial vine	D. Root fragments
A. Twining perennial vine B. Bindweed foliage C. Vines	F. None of the Above
Bindweed, Hedge	
71. Plant Description: Hedge bi	
A. Twining perennial vine	D. Dense ground cover
B. Bindweed foliageC. Vine	E. Root F. None of the Above
	ng it from other vines include arrowhead-shaped leaves that have pointed nnel-shaped flowers, the presence of large bracts enclosing the base of
each flower, and	
A. Large bracts	D. Smaller flowers and the bracts
B. Creeping perennial rootsC. Nodes of older stems	E. An annual, biennial or short-lived perennial
C. Nodes of older stems	F. None of the Above
73. The plant reproduces by se	eds and
A. Short-lived perennial	D. Creeping roots
C. A unique flower	E. Small yellow flowers and a deep taproot F. None of the Above
o. Attainguo novoi	T. None of the Above
Bindweed, Japanese	e bindweed is a Its appearance is similar to that
of hedge bindweed except it has	s smaller flowers and the bracts enclosing the base of each flower are
smaller.	J
A. Large bracts	D. Smaller flowers and the bracts
B. Creeping perennial	E. An annual, biennial or short-lived perennial
C. Nodes of older stems	F. None of the Above
75. The	_that escaped cultivation has a distinctive double flower. Compared with
other bindweed flowers, this is a to a rose or carnation.	a unique flower in that it has twice the number of petals and looks similar
A. Short-lived perennial	D. Seeds and creeping roots
B. Stolons	E. Small yellow flowers and a deep taproot
C. Weedy form	F. None of the Above
Birdsfoot Trefoil	
	trefoil has a perennial root crown and stems that die back each winter.
	consisting of 3 clover-like leaflets at the tip
	2 smaller leaflets at the base. Its flowers are yellow, clover like, and in
groups of 2 to 6. They are arran A. Large bracts	ged such that, when pods form, they resemble a bird's foot. D. Smaller flowers and the bracts
B. Compound leaves	
C. Nodes of older stems	

Black medic 77. Black medic is an annual,or short-lived perennial. A. Biennial D. Seeds and creeping roots B. Stolon E. Small yellow flowers and a deep taproot C. A unique flower F. None of the Above
Blue Mustard 78. Blue mustard is a winter annual that germinates in the fall and produces awith deeply lobed leaves, similar in appearance to a dandelion. A. Beak D. Physical destruction of a weed B. Germinate E. Large patche C. Rosette F. None of the Above
79. Blue mustard bears in March through April. Leaves on the flowering stems are coarsely toothed and have wavy margins. A. Wavy margins D. Purple or blue flowers at the top of the plant B. Application E. A soap like lather C. Bladder-like calyx F. None of the Above
80. The plant may grow from 1 to 1 1/2 feet in height. Two-inch long, bean-like seedpods (siliques) that resemble "" mature in early summer. A. Beaks D. Physical destruction of a weed B. Germinates E. The tendency to form large patches C. Tillage F. None of the Above
81. Control: Herbicides are most effective if applied before In the spring, while it is actively growing, this weed can be controlled with an application of 2,4-D. A. Wavy margins D. Weeds start to bolt in the spring B. Application of 2,4-D E. A soap like lather when mixed with water C. Bladder-like calyx F. None of the Above
82. Mechanical Weed Control: Mechanical weed control involves the A. Beaks D. Physical destruction of a weed B. Germinates E. The tendency to form large patches C. Tillage F. None of the Above
83. Techniques involve hand pulling and hand hoeing which are practical for small infestations. Mowing is often used; but by far, the most common practice of mechanical control includes A. Beaks D. Physical destruction of a weed B. Germinates E. The tendency to form large patches C. Tillage F. None of the Above
Bouncingbet 84. Plant Description: Bouncingbet is a, a dense show of fragrant phlox-like flowers in summer, and the tendency to form large patches. A. Beaks D. Perennial characterized by smooth leafy stems B. Germinates E. The tendency to form large patches C. Tillage F. None of the Above
Brackenfern 85. Plant Description: Brackenfern is a large, coarse, perennial fern that has almost horizontal leaves and can grow 1 1/2 to 6 1/2 feet tall (sometimes up to 10 feet). Unlike our more

Brambles 86. Plant Description: Brambles are a diverse group of	_, shrubs or trailing
vines, that are noted for their prickly stems and berry-like, usually edible fruits.	
A. Primitive perennial lacks true stems D. Dense patches like bouncingbet	
B. Roots are perennial E. Perennial herbs	
C. Flowering spikes F. None of the Above	
Broadleaf Plantain	
87. Broadleaf Plantain is a It has broad leaves wi	th prominent veins.
The leaves are arranged in a rosette and may smother lawn grass.	
A. Evergreen shrub D. Prominent claw-like appendages B. Stems thicker and rougher E. Low growing perennial	
C. Dense, fibrous roots F. None of the Above	
Promo Smooth	
Brome, Smooth 88. Plant Description: Smooth brome is a sod-forming, perennial grass, distinguish	ned by long slender
bronze- or purple-tinted flower clusters that make up the flower head. This species	
dark-colored rhizomes ().	
A. Larger yellow flowers D. Clump-forming perennial grass	
B. Evergreen shrub E. Horizontal underground stems	
C. Sod-forming, perennial grass F. None of the Above	
Broom, French	
89. Description: Perennial; blooms April to June. Grows three to ten feet tall. Everg	
Scotch broom except plants do not grow as erect, leaves are retained the entire ye	ar, leaves trifoliate and
more numerous, and	
A. Larger yellow flowers D. Clump-forming perennial grass B. Evergreen shrub E. Except pods inflated and hairy all over C. Yellow flowers smaller F. None of the Above	
B. Evergreen shrub E. Except pods inflated and hairy all over C. Yellow flowers smaller F. None of the Above	
C. Tellow llowers smaller F. Notile of the Above	
Impacts: This plant,, takes advantage of land disturbances to	establish and spread.
90. In California, large infestations displace native plant species and significantly ir	
reforestation in commercial timberlands.	
A. Evergreen shrub D. Prominent claw-like appendages	
B. Stems thicker and rougher E. An aggressive pioneer species	
C. Dense, fibrous roots F. None of the Above	
Broom, Portuguese	
91. Description: Perennial; blooms April to June. Grows 3 to 10 ft. tall. Evergreen s	hrub similar to Scotch
broom except pods inflated and hairy all over,	
A. Larger yellow flowers D. Clump-forming perennial grass	
B. Evergreen shrub E. Giving appearance of pussy willow but	IS
C. Sod-forming, perennial grass F. None of the Above	
Broom, Scotch	
92. Description: Perennial; blooms April to June. Grows 3 to 10 feet tall. Evergreer	າ shrub with many
slender, erect, dark green angled branches with small, simple leaves. Abundant sm	nall, yellow,
A. Evergreen shrub D. Pea-shaped flowers	
B. Stems thicker and rougher E. An aggressive pioneer species	
C. Dense, fibrous roots F. None of the Above	
93. Easily confused with Spanish broom (S. Junceum) has rou	nd stems, very few
leaves, and larger yellow flowers.	• •
A. Spanish broom D. Clump-forming perennial grass	
B. Evergreen shrub E. Except pods inflated and hairy all over	
C. Sod-forming, perennial grass F. None of the Above	

stems thicker and rougher, it ha A. Fewer in number	ms April to June. Grows 3 to 10 ft. tall. Similar to Scotch broom except s very few leaves, and flowers larger and D. Prominent claw-like appendages E. An aggressive pioneer species F. None of the Above
when its stems and leaves turn underground stems).	dge is a clump-forming perennial grass that is most noticeable in the fall, a It reproduces by seed and short rhizomes (horizontal D. Distinctive orangish-tan to reddish-brown color
B. Evergreen shrubC. Sod-forming, perennial grass	E. Except pods inflated and hairy all over
96. Root system - Dense, fibrou stems).	s roots are produced from(horizontal underground
A. Short rhizomes	D. Prominent claw-like appendagesE. An aggressive pioneer speciesF. None of the Above
	D. Flat pitted seeds E. Prickly nightshade
98. The oblong leaves are 2-3 idense, stiff, and sharp spines. A. Bright yellow flowers B. Deep rounded lobes C. Green to blue-gray	D. Scotch broom E. Upper leaves
99. Bright yellow flowers can be enclosed in the	e seen in summer. In the fall, berries up to 3/8 inch in diameter are and are filled with black, wrinkled, flat pitted seeds. D. Flat pitted seeds E. Dried flower parts F. None of the Above
	ortant, as it is a host for the Colorado potato beetle. When mature, the nd and the plant rolls like, widely scattering the 8500 D. Scotch broom E. Upper leaves F. None of the Above
101. Herbicides should be appl effective in controlling Buffalo be A. Five equal lobes B. Perennial herb C. Flower heads lilac-like	ied between Dicamba, Triclopyr and 2,4-D can be ur. Glyphosate in a 2% solution can be applied as a spot treatment. D. Flat pitted seeds E. Late bud to early flower F. None of the Above

Butterfly Bush 102. Description:	; flowers mid to late summer. Grows up to 10 feet tall. Leaves blue-gray.
narrow, opposite and green to A. Bright yellow flowers B. Perennial shrub	olue-gray. D. Scotch broom E. Upper leaves
C. Green to blue-gray	F. None of the Above
103 lilac-like bases A. Five equal lobes B. Perennial herb C. Flower heads	out come to a more definite point. Flowers small and purple. D. Flat pitted seeds E. Kansas thistle and prickly nightshade F. None of the Above
threat to dry-land meadows, op	E. Upper leaves
Bugloss, Common 105. Description: Perennial he overall plant is coarsely hairy. A. Five equal lobes B. Perennial herb C. Flower heads lilac-like	rb; flowers May to October. Grows one to two feet tall; D. Flat pitted seeds E. Stems and leaves fleshy F. None of the Above
106. Basal leaves are leaves are sessile (no petiole) of A. Bright yellow flowers B. Narrowly oblong C. Green to blue-gray	D. Scotch broom E. Upper leaves
are saw-toothed and spiny with	ennial. Young seedling leaves are oblong in shape, but mature cottony hairs on the undersurface. D. Several hundred seed heads E. Rosette leaves F. None of the Above
then produces a 5-foot-tall, ere A. Rosette leaves D. Ro B. Spiny bracts E. Lea	sette of leaves
	ng buttercup is a low-growing, rosette-forming, spreading perennial. It is and creeping horizontal stems (stolons) that root at the nodes to form D. 3-parted leaves E. New rosettes F. None of the Above

Buttercup, Tall 110. Plant Description: Tall but	ttercup is a perennial weed characterized by erect stems and deeply lobed
eaves. This species reproduce	s only
A. By actively growing plants	
By perennial weeds	E. By rosettes
C. By seeds	F. None of the Above
mpacts	
111	can dominate a pasture or meadow given the opportunity, especially with
nabitat if it were allowed to inva	
A. Spine-tipped branches	D. Tall buttercup
Buttercup Creeping buttercup	E. New rosettes
C. Creeping buttercup	F. None of the Above
rom salivation, skin irritation, b	stockare toxic to grazing animals, who can suffer listers, abdominal distress, inflammation, and diarrhea.
A. Spine-tipped branches	
3. Buttercup	E. New rosettes
C. Creeping buttercup	F. None of the Above
113. Fortunately, palatable	has a strong, bitter taste so animals generally try to avoid it if more
A Spine-tipped branches	D. Fresh plants
A. Spine-tipped branches B. Buttercup C. Creeping buttercup	F New rosettes
C Creening buttercup	F. None of the Above
5. Grooping Batteroup	1. Notice of the Alberta
Camelthorn	anners live to live One and 1/0 to 4 football. Others are arisely with
114. Description: Perennial; fid 1/4 to 1 3/4 inches lo	owers June to July. Grows 1 1/2 to 4 feet tall. Stems greenish with
A. Actively growing plants	D. Slender spines
B. Perennial weed	E. Perennial
C. Toxic	F. None of the Above
	airless on the upper surface, 1/4 to 1 1/4 inches longsmall on, occur on short, spine-tipped branches along the upper portion of the
olant.	on, essen en energ spine appea sianones along are apper peraen er are
A. Spine-tipped branches	D. Flowers
3. Buttercup	E. New rosettes
C. Creeping buttercup	F. None of the Above
	d upward, deeply indented with each seed clearly outlined in the pod.
A. Actively growing plants	D. Some mature plants
Perennial weed	E. Perennial
C. Reddish-brown jointed seed	pods F. None of the Above
Campion, White	
	campion can be a winter or summer annual, biennial, or
A. Short-lived perennial	D. Winter or summer annual, biennial
B. Reproduction	E. Creeping perennial weed
1 eaves are lance-shaped	Hone of the Δhove

		d showy white flowers, whose petals
emerge from a green, inflated, b	bladder-like structure (calyx).	coning peroppial wood
R Downy foliage	F Infestations	eeping perennial weed
A. Bladder-like structure (calyx)B. Downy foliageC. Cool-season perennial	F. None of the Abov	e
119. Reproduction is primarily b	y seeds, although fragmented	segments of the can give
rise to new plants.		
A. Central axis	D. Root crown	
B. ReproductionC. Leaves are lance-shaped	F. None of the Above	
c. Louves are large snapsu	T. Hono of the Alberta	
Canada Goldenrod	goldonrod io o noronnial diati	nguished by numerous small valley flowers
located in		nguished by numerous small yellow flowers
A. Bladder-like structure (calyx)	 D. An aggressive, cr 	reeping perennial weed
B. Perennial	E. Infestations	
C. Pyramid-shaped clusters	F. None of the Abov	e
	that or	iginate at a central axis and are arranged
more or less horizontally. A. Central axis	D. Numerous backward-curv	and atalka
	E. Creeping perennial weed	eu staiks
C. Leaves are lance-shaped	F. None of the Above	
122 Leaves are	hairless on the upper s	urface, hairy underneath, and sharply
toothed on the edge.	, namess on the upper si	unace, nany underneam, and snarpiy
	D. Lance-shaped, tapered a	t both ends
A. Central axis B. Reproduction	E. Creeping perennial weed	
C. Leaves are lance-shaped	F. None of the Above	
		nidrib and 2 parallel lateral veins are
prominent. Plants reproduce by	way of short rhizomes (horizo	ntal underground stems) emerging from the
base of aerial stems and by A. Central axis	D. Wind dispersed seeds	
B. Reproduction	F Creeping perennial weed	
C. Leaves are lance-shaped		
Canada Thistle		
	vense) is an aggressive, cree	ping perennial weed that infests crops,
,	,	• • •
pastures, rangeland, roadsides ground, including ditch banks, o		
A. Bladder-like structure (calyx)		creeping perennial weed
B. Non-crop areasC. Cool-season perennial	E. In infestationsF. None of the Abov	•
C. Cool-season perennial	r. Notile of the Abov	е
125. Canada thistle reduces for	rage consumption in	because cattle typically will no
graze near infestations. A. Pastures and rangeland	D. An aggressive, creeping	perennial weed
B. Perennial	E. Infestations	ociciiilai weeu
C. Cool-season perennial	F. None of the Above	

126. Canada thistle is a creeping from seed. It is difficult to control			
attempts.	Cytomolyca mont ayatam	_	
A. Creeping perennial B. Canada thistle management I		i l	
C. Repeat applications			
127. Combining control methods imperative so the weed is continu	ally stressed, forcing it t	o exhaust	
	Root nutrient stores a	ınd eventually die	
B. Canada thistle management EC. Repeat applications	E. Fern-like foliage F. None of the Above		
128. Herbicides such as glyphos needed. Herbicides such as trick repeat applications may be needed. Creeping perennial EB. Canada thistle management E	opyr + clopyralid or 2,4-E ed at 6 week intervals. D. Herbicide application	combinations can be s	
C. Applying any pesticide F	None of the Above		
129. The most effective times for in August/September. Always rea A. Applying any pesticide IB. Canada thistle management EC. Repeat applications	nd the label before D. Herbicide application E. Repeat applications	· · · · · · · · · · · · · · · · · · ·	green shoots appear, or
Canarygrass 130. Plant Description: Reed car characterized in summer by its tw reproduces through seeds and m This species tends to grow in clur A. Bladder-like structure (calyx) B. Perennial C. Cool-season perennial	o-tone appearance of goore typically by mps 3 feet or more in dia D. Seed	olden seedheads atop g (horizontal t ameter, and can form lar	reen foliage. It
Carrot, Wild			
131. Plant Description: Wild carrollts distinctive fern-like foliage form	ns a rosette during the fi D. Cultivated carrot E. Fern-like foliage		·
132. During the second year of gin umbrella-shaped clusters of sm	nall white flowers.		that terminate
A. Mat-forming speciesB. Reproduces by seedsC. Heart-shaped leaves appear	D. Hairy flower s E. Leaf-like brac F. None of the A	its and branches bove	
133. A distinctive feature of wild in the center of most flower cluste closes forming a cuplike bird's ne A. Seeds begin to develop	ers. Once flowers mature st. Wild carrot reproduce	e andes by seeds.	_, the flower cluster
B. Reproduces by seeds	Perennial that initially		
C Typically lance-shaped F			

Catnip 134. Plant Description: Catnip isbest known for the minty odor emitted by its leaves and stems when they are crushed or wilted. The odor is very attractive to cats. A. An erect perennial D. In the Mint Family
A. An erect perennial B. Reproduced by seeds C. Heart-shaped D. In the Mint Family E. Leaf-like F. None of the Above
135. Other distinctive characteristics areand the serrated appearance of the leaf edges, which resembles the toothed edge of a saw. A. Downy foliage D. Unbranched plant with yellow flowers and leaves B. Reproduced by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
136. The flower shape is common among members of the mint family consisting of 2 lips, and flower color is white with unusual purple dots. Along with most members of the Mint Family, catnip has square stems. This species reproduces by seeds and(horizontal underground stems). A. Mat-forming species D. It also produces short rhizomes B. Reproduces by seeds E. Leaf-like bracts and branches C. Heart-shaped leaves appear F. None of the Above
Catsear, Common 137. Plant Description: Common catsear is a perennial with a growth form similar to that of dandelion; its leaves form a basal rosette and it produces Leaves of common catsear are typically lance-shaped with irregular rounded lobes and hairs on both the upper and lower surfaces. A. Either an annual D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Yellow head-like flowers at the tips of upright stems C. Typically lance-shaped F. None of the Above
138. Emerging from the rosette arethat usually have leaf-like bracts and branches. At the tips of the branches are 1-inch-wide flower heads composed of many tubular, yellow flowers. A. Mat-forming species
139. Common catsear reproduces by seeds and vegetatively by way ofthat can produce new plants if separated. A. Buds formed on the crown D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
Chickweed, Mouseear 140. Plant Description: Mouseear chickweed is a creeping, mat-forming species that normally behaves as a perennial; however, it is possible for it to exist as an annual. Plants reproduce by seeds and roots growing from the It tends to form dense patches. A. Mat-forming species D. Nodes of stems B. Reproduces by seeds E. Leaf-like bracts and branches C. Heart-shaped leaves appear F. None of the Above
Chicory 141. Plant Description: Chicory isthat initially grows as a rosette of irregularly- toothed basal leaves. Then, later in the season, leafless stems emerge with sky-blue daisy-like flowers scattered along their length. A. Either an annual D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds E. Perennial that initially grows as a rosette C. A perennial F. None of the Above

	ng and close as sunlight increases in intensity around noon. Only a few d each head opens for a single day. Chicory
A. Is a mat-forming species	D. Reproduces by seeds
B. Reproduces by rhizomes	E. Has leaf-like bracts and branches
C. Has heart-shaped leaves	F. None of the Above
Cinquefoil, Rough	
	cinquefoil behaves as either an annual if growing in cultivated ground, a
biennial when growing in less d	D. Unbranched plant with yellow flowers and leaves
B Reproduces by seeds	E. Perennial that initially grows as a rosette
C. Typically lance-shaped	F. None of the Above
144. It grows as a	at the beginning of the season, but later forms an upright, hairy,
	Leaves consist of 3 coarsely-toothed, hairy leaflets. Rough cinquefoil
reproduces by seeds.	
A. Mat-forming species	D. Rosette
B. Seed	E. Leaf-like bract
C. Heart-shaped leaf	F. None of the Above
Cinquefoil, Sulfur	
145. Plant Description: Sulfur on with yellow flowers and leaves	cinquefoil is a perennial. It is an erect, hairy, generally unbranched plant
	ets D. Unbranched plant with yellow flowers and leaves
B. Seeds	E. Rosette
C. Roots	F. None of the Above
Colts Foot	
	ot is a Its flowers are the same color, size, and shape
	wo species are easily confused while in bloom if viewed from a distance.
A. Mat-forming species	D. A member of the Mint Family E. Wooly vegetative stem
B. Reproducer of seeds	E. Wooly vegetative stem
C. Yellow-flowered perennial	F. None of the Above
	that the flowers have already come and gone by the time leaves emerge.
	t the tips of 1/8-inch-thick stems that are wooly and covered with
	giving them an appearance similar to that of asparagus spears.
A. Mat-forming species B. Reproduces by seeds	D. Scaly bracts E. Leaf-like bracts and branches
C. Heart-shaped leaves appea	
o. Ticart-snaped icaves appea	1. None of the Above
148. After flowers have mature	d, clumps of broad, heart-shaped leaves appear on short,
A. Mat-forming species	D. Scaly bracts
B. Wooly vegetative stems	D. Scaly bracts E. Leaf-like bracts and branches F. None of the Above
C. Heart-snaped leaves appea	r F. None of the Above
	narily by (horizontal underground stems) and also
by seeds.	
A. Distinctive curled clusters	D. Horizontal creeping rhizomes
	E. Branched taproot
C. A dense, healthy turf	
	orms an extensive system of(horizontal underground
A. Opened flowers	U. Petioles Thick white rhizemes
B. Seeds C. Good cultural habits	E. Thick white rhizomes F. None of the Above
C. COOG CARLATAI HADILO	

inches long, and attached to wi	on comfrey is a perennial herb with lower leaves that are bristly, up to 12 nged leaf stalks () that emerge from the base of the
plant. A. Distinctive curled clusters B. Perennial herbs C. Stems	
152. Smaller leaves that are alA. Opened flowersB. StemsC. Rhizomes	so bristly but lack petioles are borne on D. 2- to 3-foot tall flowering stems E. Branched taproots F. None of the Above
appearance similar to that of a plants can be propagated by di A. Distinctive curled cluster B. Perennial herb	and either yellow or blue. They form in distinctive curled clusters having an Reproduction is by way of seeds. Also, new viding the roots of established plants. D. A broadleaf summer-annual weed E. A branched taproot F. None of the Above
moist soil and is often found in A. Opened flower	A prolific seed producer, seeds are produced within and there are several generations within the same year. This weed likes well-irrigated areas such as lawns and flower beds. D. Also bristly but lack petioles E. A common weed in the home vegetable garden F. None of the Above
be increased with proper mowil also help to discourage the gro	Broadleaf summer-annual weed control measures Turf density
they set seed, as seed can made is heavy infestation, spot treat v. A. Opened flowers D. Per B. Seed producing E. To	pulled by hand from moist soil. Be sure to pull and dispose of them before ture ineven after the plants have been killed. If there with a post-emergent herbicide containing glyphosate (Roundup, Kleenup) tioles vegetables ne of the Above
	the common lambsquarters vary with its location. If growing along the reach three or four feet in height. D. Broadleaf summer-annual weed E. Broadleaf winter-annual weed
	ds of weed control in the home vegetable garden are mulching, and preventing the weeds from D. Blooming E. The home vegetable garden F. None of the Above

The best methods of weed cont	ched taproot, lambsquarters can be easily hand-pulled from moist soil. rol in the home vegetable garden are mulching, hand pulling, rototilling, ls from going to seed. Because of its
lambsquarters can be easily har	nd-pulled from moist soil.
A. Distinctive curled clusters	D. Short, branched taproot E. Long, branched taproot
B. Perennial herb classification	E. Long, branched taproot
C. Rosette stage	F. None of the Above
160. Prevention by use ofbroadleaf weeds such as lambs	should be the first line of defense in eliminating quarters from lawns.
A. Violence	D. Fire
B. Hoe	D. Fire E. Weed control in the home vegetable garden F. None of the Above
C. Good cultural habits	F. None of the Above
A O	buch as trifluralin (Preen) can be used to D. Control broadleaf summer-annual weed E. Prevent germination of weed seeds F. None of the Above
(sold under many brand names)	effective against) are 2,4-D, MCPP and dicamba and combination formulas (Trimec). D. Broadleaf summer-annual weeds E. Weed seeds F. None of the Above
Common Mallow 163. Common mallow is most f lack density. It can be A. Opened flower B. A prolific seed producer C. An annual or biennial	D. Found with banana trees E. Found with a long, branched taproot F. None of the Above
164. Theof	common mallow are pinkish-white and the fruits look like small, round
cheeses.	
A. Flowers	D. Seeds
A. FlowersB. Flowering plantsC. Rosette stage	E. Stems F. None of the Above
165. Control:cultural practices can help in the	with proper mowing, fertilization, watering and other
A. A non-selective herbicide	
B. Seed production	E. Spreading perennial
C. Herbicide spraying	F. None of the Above
166. Post-emergent herbicides are suggested.	areeffective. Triclopyr + clopyralid or triclopyr alone
A. Post-emergent herbicides	D. Only marginally
B. Very	E. An insecticide and are
C. Not	F. None of the Above
Common Mullein 167. Common mullein, also known and miner's candle is a A. Non-selective weed	own as wooly mullein, velvet dock, flannel leaf, Aaron's rod, torch plant, D. Biennial
B. Member of the figwort family	
C. Leaves are featherlike	

Each plant produces one to sev	with upright flower stalks that can reach 3 feet in height. eral flower stalks, which are often branched and covered by fine hairs. D. Biennial E. Spreading perennial F. None of the Above
It is low growing, prostrate, and	nual grass with wider blades and a lighter green color than often has reddish-purple stems. It forms seedheads below mowing
height. A. Crabgrass B. Bluegrass C. Compound leaves D. Rec E. Pere F. Non	ennial crown
	; flowers June to August. Grows up to 20 in tall. Leaves 2 to 4 in arrow, sharply toothed lobes. Flowers yellow with four small petals. D. Biennial E. Spreading perennial F. None of the Above
up 11 or more small leaflets arraclovers that are grouped into he	etch is a characterized by compound leaves made inged in pairs and pinkish flowers resembling those of peas, beans, or ad-like clusters. D. Biennial E. Spreading perennial F. None of the Above
Curlycup Gumweed 172. Description: An erect bien branching stems. Stems grow 1 A. Non-selective weed B. Winter annual C. Perennial	3 feet tall.
Cutleaf Teasel 173. Description: ovid to oblong, mature leaves of A. Non-selective weed B. Winter annual C. Perennial	_; flowers July to September. Grows up to seven feet tall. Rosette leaves oposite, large, oblong and prickly. D. Biennial E. Short-lived perennial F. None of the Above
Daisy, Oxeye 174. Plant Description: Ox-eye dark green, hairless, somewhat white rays and yellow centers. A. Clump-forming perennial B. Winter annual C. Perennial	daisy is adistinguished by lower leaves that are fleshy, and coarsely toothed and conspicuous daisy-like flowers with D. Biennial E. Short-lived perennial F. None of the Above

	with an extensive taproot. Its yellow flowers can h and November and are followed by fluffy seed heads. More prevalent n growth can be inhibited by increasing the turf density. D. Biennial E. Short-lived perennial F. None of the Above
Daylily, Tawny 176. Plant Description: Tawny of flowers which line the roadsides blossoms and leafless stems. A. Clump-forming perennial B. Winter annual C. Perennial	daylily is a, characterized by its beautiful orange in July. This species is not a true lily, as indicated by its unspotted D. Biennial E. Short-lived perennial F. None of the Above
depths of up to 5 feet. It reprodu A. Clump-forming perennial B. Rosette-forming perennial	eaf dock is awith a deep taproot that can reach uces primarily by seeds, but there is limited regeneration from root tissues D. Biennial E. Short-lived perennial F. None of the Above
or red. Occasionally it is almost A. A twining plant	mmica), is a twining yellow or orange plant sometimes tinged with purple white. and thread-like or relatively stout. D. Horizontal underground stems E. Basal rosette with relatively large leaves F. None of the Above
Dogbane, Hemp 179. Plant Description: Hemp of but becomes much-branched in or crushed. A. Clump-forming perennial B. Rosette-forming perennial C. Perennial	dogbane is with a woody stem that is undivided at the base its upper half. All parts of the plant exude a milky sap when cut, broken, D. Biennial E. A stout perennial F. None of the Above
Dyers Woad 180. Description: Dyer's woad i stems that arise from the base. A. Perennial or biennial B. Rosette-forming perennial C. Perennial	Foliage has distinctive blue-green cast with whitish glaze. D. Biennial
is the British Isles to southern a commonly used in decorations a	that is grown ornamentally in the northwestern United States nly found escaping into forests in this region. English holly's native range nd central Europe. It is grown commercially in the Pacific Northwest and and floral arrangements as well as in landscapes. D. Biennial E. Broadleaf evergreen tree/shrub F. None of the Above

resemblance to the true laurel t A. Evergreen shrub B. Rosette-forming perennial	D. Biennial
leaves the first year and flowers A. Evergreen shrub B. Rosette-forming perennial	on evening primrose is athat produces a rosette of solutions borne on an upright leafy stalk during the second year of growth. D. Biennial E. A stout perennial F. None of the Above
distinguish. Most have 4-petale A. Evergreen shrub B. Rosette-forming perennial	evening primroses that appear similar and can be difficult to d yellow flowers that open at dusk. D. Biennial E. A stout perennial F. None of the Above
common evening primrose usua	evening primrose, have lance-shaped leaves without lobes. Leaves of ally appear thin and crinkled and Also, leaves on e often purplish. Reproduction is by seeds. D. May have a reddish midrib E. Infest crop seeds F. None of the Above
	E. A stout perennial
187. Leaf color a bright green t lower stems hairy; ligules meml A. Produce viable seeds B. Leaf margins C. An upright leafy stalk	
188. Flowers born in a true spil A. No stalks B. Stems hollow with broad C. Droops noticeably	ke that droops noticeably, and spikelets with short or D. To make it easier to control re-growth E. An erect bushy perennial F. None of the Above
189. False brome plants appeal Isolated plants are observed to control efforts. A. Clump-forming perennial B. Rosette-forming perennial C. Perennial	produce viable seeds and become new weed epicenters complicating D. Self-fertile producing E. A stout perennial F. None of the Above

Four-o' Clock, Wild 190. Plant Description: Wild fou fleshy taproot, swollen joints and seeds.	r-o'clock is an erect bushy, charac d smooth heart-shaped leaves that resemble lilac lea	terized by its large aves. It reproduces by
A. Clump-forming perennial B. Rosette-forming perennial C. Perennial	D. BiennialE. A stout perennialF. None of the Above	
bluegrass. It is also faster growing	grass with wider blades and a lighter grage than bluegrass. Seed heads may form despite refgrass has good density. Re-sod or reseed bare sport D. Biennial E. Annual F. None of the Above	gular mowing. Foxtail
	E. DCPA (Dacthal)	nethalin or
characterized by its relatively wi and short rhizomes (horizontal u A. Clump-forming perennial B. Rosette-forming perennial	D. Biennial	
form dense stands.	D. A distinct S-curve just below the root crown E. Sprout again F. None of the Above	Tall fescue can
varieties of tall fescue makes the	Studies suggest that the endophytic fung e grass more drought tolerant, as well as potentially ring tall fescue to replace native plant communities. D. Species is highly tolerant ted weeds E. A strong garlic odor F. None of the Above	us infecting many toxic to nearby plant
	lobe-like flower head produced at the top of each st	terized by slender, em, composed mostly

an upright stem with small white toothed leaves and a slender ta A. Clump-forming perennial B. Rosette-forming perennial	flowers the second spri proot with a distinct S-cu D. Biennial	that forms a rosette the first spring and ng. It is characterized by triangular, coarsely rve just below the root crown.
198. Young leaves give off a str nearly gone by fall. Garlic musta A. Stems are square B. Reproduces only by seeds C. Has multiple forks	ard	ushed, but the odor fades with leaf age and is rations kernel
199 and v crowd out herbaceous native flo the number of native spring spe A. Stems are square D. This B. Fall application E. Res C. Multiple forks F. Non	ra. As a result, invasion cies. sweed is invasive embles a wheat kernel	ce established. It tends to form dense stands that of garlic mustard into forests tends to decrease
200. Garlic mustard can be condepleted.A. Crabgrass killerB. 2,4-D combination herbicideC. Compound herbicide	D. A pre-emergent her E. Preventing new see	for several years until the seedbank is bicide d production
201. Various methods can be ubefore or during flowering, hand spring or fall).A. Crabgrass killerB. 2,4-D combination herbicideC. Compound herbicide	D. A pre-emergent herE. Prevent seed format	
202. When hand pulling, a sign resprout. However, the best mand A. Crabgrass killerB. 2,4-D combination herbicideC. Compound herbicide	nagement strategy is D. A pre-emergent her E. To prevent establish	crown must be removed or else plants can bicide iment
203. Herbicide Control: Apply a without a surfactant when near sflowering) to control two general A. Crabgrass killer B. 2,4-D combination herbicide C. Compound herbicide	tions. D. A pre-emergent her E. Glyphosate herbicid	
Geranium, Shiny 204. Description: Shiny geranic biennial depending on moisture A. An annual weed B. Rosette-forming perennial C. Perennial	conditions. D. Biennial	asthough it may become

Goatgrass, Barbed 205. Description:; grows 8 to 16 inches tall with few to many culms. Leaf sheaths contain white hairs when young, becoming more or less smooth once matured. The blades are rigid, sharp, pointed, and spreading. Grain 1/4 inch long, resembling a wheat kernel. A. Annual D. Biennial B. Winter annual E. A stout perennial C. Perennial F. None of the Above
Henbit 206. Henbit is aoccasionally found in lawns in early spring. The lower leaves have a stalk while the upper leaves clasp the stem. A. An annual weed D. Biennial B. Winter annual E. A stout perennial C. Perennial F. None of the Above
207. This weed is more often found in buffalograss than in bluegrass. Newly-seeded bluegrass and established bluegrass lawns withmay have some henbit. A. Pink flowers D. Poor density B. A pungent odor E. Crowns C. Newly-seeded grass F. None of the Above
208. Control: Henbit has a taproot and is easily pulled from moist soil. Heavy infestations can be controlled with, 2,4-D or 2,4-D combination herbicides; at or prior to flowering. Fall application of a pre-emergent herbicide (dithiopyr, isoxaben, pendimethalin or prodiamine) will prevent henbit germination. A. Triclopyr + clopyralid D. A pre-emergent herbicide B. 2,4-D combination herbicide E. DCPA (Dacthal) C. Compound herbicide F. None of the Above
Herb Robert 209. Description: Herb Robert is a branching, low growing It has light green leaves that are deeply dissected and release a pungent odor making this plant easy to recognize. A. Clump-forming perennial D. Biennial B. Rosette-forming perennial E. Winter and spring annual C. Perennial F. None of the Above
210. As the plants mature the foliage turns red. This red color is very noticeable under bright light conditions. The stems are, have multiple forks, and are brittle at the joints. A. Square D. Round B. Highly pubescent E. Resembling a wheat kernel C. Multiple forks F. None of the Above
211. The roots are shallow allowing for easy hand removal. The pink flowers are perfect and five petaled The receptacle is elongated into a pointed structure called a "" or "storks bill". Herb Robert reproduces only by seeds. A. Torus D. Break B. Horn E. Root crown C. Dash F. None of the Above
212. Flowers are usuallycreating uniform populations. A. Are square D. Round B. Self-fertile E. Resembling a wheat kernel C. Multiple F. None of the Above

	_ aquatic plant. Grows rooted to the bottom with long stems that reach
water's surface.	D. Diameial
A. Clump-forming perennial B. Rosette-forming perennial	D. Bienniai
C. Perennial	F. None of the Above
214. Can be whorls of five.	Leaves are 1/16 to 1/8 inch wide, 1/4 to 3/4 inch long and occur in
	D. Spreading rhizomes
B. Does not have turions	E. Flowering
Saucer-shaped Does not have turions Monoecious or dioecious	F. None of the Above
	are found next to the stem and inserted at the base of the leaf, a illa from other family members. The (tubers) are a key
A. Nut-like turions	D. Upright perennial
A. Nut-like turions B. Perennial herbs	E. Sod-forming
C. Rhizomes and seeds	F. None of the Above
216. Egeria densa is similar in a A. Loose clusters D. Spre B. Turions E. Flow C. Way of seeds F. None	appearance but has leaves in whorls of four and does not haveeading rhizomes wer heads the of the Above
grows over 7 feet tall and is wide A. An upright perennial B. Rosette-forming perennial	D. Biennial
218. At the ends of branches in consisting of 30 or fewer purple of pointed leaves that have short down the constant of the co	are saucer-shaped, 1/4-inch-wide flower heads disk flowers. Attached to the stem are 10-inch-long, lance-shaped, owny hairs on the lower surface. D. Spreading rhizomes E. Flower heads F. None of the Above
219. Reproduction is primarily b crown.	y way of seeds, but sometimes arise from the large root
A. New shoots D. Spre	eading rhizomes
B. Turions E. Flow C. Way of seeds F. None	rer heads e of the Above
Joepyeweed	weeds are herbs with leaves in whorls (3 to 6 leaves per

and flower heads consist of few	YEWEED are mostly hollow, there are usually er than 8 purple tubular flowers	 4 to 6 leaves in a whorl, are arranged in a domed
terminal cluster.	eading rhizomes	
A. Loose clusters D. Spr B. Turions E. Flow	ver heads	
C. Way of seeds F. Nor	ne of the Above	
222. Stems of SPOTTED JOEI flower heads are pinkish-purple arranged in flat-topped terminal A. Flat-topped terminal clusters B. Perennial herbs C. Rhizomes	D. An upright perennial	re 5 leaves in a whorl, and rs. Flower heads are
nodes, there are 3 or 4 leaves i	oliage smells like vanilla when crushed, stems n each whorl, and flower heads are dull pink c	
tubular flowers. Flower heads a	re arranged inhaped D. Spreading rhizomes	·
B. Turions	E. Dome-shaped terminal clusters	
C. Way of seeds	E. Dome-shaped terminal clusters F. None of the Above	
224. Joe-Pye weeds reproduceA. Flat-topped terminal clustersB. Perennial herbsC. Rhizomes and seeds	s D. An upright perennial E. Sod-forming perennials	
225. Root system - The root sy	stems includes spreading rhizomes ().
A. Loose clusters	D. Spreading rhizomes	, , , , , , , , , , , , , , , , , , ,
B. Does not have turions	E. Horizontal underground stems	
C. Way of seeds	F. None of the Above	
purplish, pyramidal flower head seeds and stout rhizomes (horiz A. Clump-forming perennial B. Rosette-forming perennial	ngrass is a large, coarse,s and the prominent white midrib down the leazontal underground stems), and can form large D. Biennial E. A sod-forming perennial grass F. None of the Above	if blade. It reproduces by
Jubata Grass		
227. Description: Jubata grass		twenty-three feet tall. Plants
have long leaves arising from a A. Clump-forming perennial	D. Biennial	
B. Rosette-forming perennial	E. Perennial grass	
C. Perennial weed	F. None of the Above	
228. The flower cluster is a		tem. Stems generally are at
least twice as long as the tusso		
A. Stem heightB. Japanese knotweed	D. Truncate leaves E. Biennial or short-lived perennial	
C. Plumed panicle	F. None of the Above	

229. Plumes consist of		, deep violet when immature, turning pinkish or tawny
		ss is easily confused with pampas grass (Cortaderia selloana).
A. Inflorescence	D.	Hairy female flowers
B. Tips of flower head bracts	E.	Stout stems reddish-brown, nodes slightly swollen
C. Significant threat	F.	None of the Above
	nguis	shed by stem height, leaf, plume, and spikelet color, florets, leaf tip,
and	_	
A. Presence of viable seed	D.	Truncate leaves Biennial or short-lived perennial None of the Above
B. Japanese knotweed	E.	Biennial or short-lived perennial
C. A plumed panicle	۲.	None of the Above
		erect and more spreading and not fountain-like, when compared to
tussocks of Cortaderia selloana		
A. Inflorescence	D.	Tussocks of jubata grass
B. Tips of flower head bracts	Ε.	Stout stems reddish-brown, nodes slightly swollen
C. Tips	F.	None of the Above
Knapweed, Spotted		
232. Description:		; blooms midsummer to fall. Grows up to 3 feet tall. Multi-
stemmed plant with several ste	ms a	arising from crown
A. Clump-forming perennial	ח	Riennial
R Rosette-forming perennial	F.	Biennial or short-lived perennial
C. Perennial	F.	None of the Above
O. I Ciciniai	٠.	Notic of the Above
233. Flowers purple or rarely c	rear	n colored are usually black, thus the name "spotted."
Seeds dispersed by wind, anim	ıals,	and people.
A. Inflorescence		
B. Tips of flower head bracts	E.	Stout stems reddish-brown, nodes slightly swollen
C. Significant threat	F.	None of the Above
Knotweed, Giant		
		; blooms July to October. Grows over 12 feet tall. Closely related
and similar to Japanese knotwe		
A. Clump-forming perennial		
B. Rosette-forming perennial	E.	Biennial or short-lived perennial
C. Perennial	F.	None of the Above
235 Leaf cordate or heart sha	nad	; often exceeds one foot long of creamy white
		· · · · · · · · · · · · · · · · · · ·
flowers sparse and the flower s A. Inflorescence		Fountain-like
B. Tips of flower head bracts		
C. Stem height		None of the Above
o. Stelli fleight	٠.	Notice of the Above
236. with Japa	nese	e knotweed are common. Japanese knotweed is smaller with truncate
leaves.		•
A. Hybrids	D.	Truncate leaves
B. Spotted knotweed	E.	Biennial or short-lived perennial weeds
C. Giant knotweed		None of the Above
		e largest of the knotweeds, enabling this species to dominate and out
		It poses a significant threat to riparian areas where it prevents
streamside tree regeneration.		
A. Beneficial plants		Not fountain-like
B. Tips of flower head bracts		
C. Significant threat	F.	None of the Above

Knotweed, Japanese	: blooms, July to October, Grows four to nine feet tall and has long
creeping rhizomes.	; blooms July to October. Grows four to nine foot tall and has long
A. Clump-forming perennial	D. Biennial
B. Rosette-forming perennial	
C. Perennial	F. None of the Above
	n, Leaves short stalked, trucate, broadly ovate and 2-
6" long by 2-4" wide.	
A. An erect biennial B. Formation of turions	D. Nodes slightly swollen
B. Formation of turions C. Pale-colored bulblets	E. A MIKY JUICE
C. Pale-colored bulblets	F. Notile of the Above
240. Flowers greenish-white to giant knotweed are common.	cream in large plume-like clusters at the ends of the stems with
A. Kidney to heart-shaped	D. Perennial
	E. Herbaceous perennial weed
C. Hybrids	F. None of the Above
Lesser Celandine	
241. Description: Lesser celand	dine is an herbaceous, plant in the buttercup family
(Ranunculaceae). A. Clump-forming perennial	D. Riennial
B. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
	e of dark green, shiny, stalked leaves that are kidney to heart-shaped. April, have eight glossy, butter-yellow petals, and are borne singly on
A. Kidney to heart-shaped	D. Delicate stalks that rise above the leaves
B. Large infestations	E. Herbaceous perennial weed
C. Hybrids	F. None of the Above
243are prod	uced along the stems of the above ground portions of the plant, but are
not apparent until late in the flow	
	D. Stout stems reddish-brown
B. Formation of turions	
C. Pale-colored bulblets	F. None of the Above
244. When in bloom, large infe	stations of lesser celandine appear as a green carpet with yellow dots,
A. Kidney to heart-shaped	D. Spreading across the forest floor
B. Large infestations	E. Herbaceous perennial weed
C. Hybrids	F. None of the Above
	of lesser celandine including a double-flowered form with many crowded ottled with silvery markings. The primary reproductive method is the
A. An erect biennial	D. Stout stems reddish-brown
B. Formation of turions	E. Produced on the roots in large numbers
C. Pale-colored bulblets	F. None of the Above

Leafy spurge 246 - Leafy spurge (Funhorbia e	esula L.) is a creeping,of foreign origin that reproduces
from seed and vegetative root b	
A. Herbaceous perennial weed	D. Biennial
B. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
Lettuce, Prickly	
	ettuce is an erect biennial () that grows as a rosette of
basal leaves during its first year.	D. Diammial
A. Clump-iorming perennial B. Rarely an annual	D. Blennial Ε Δ stout perennial
A. Clump-forming perennial B. Rarely an annual C. Perennial	F. None of the Above
248. Each rosette gives rise to	that is usually erect and sometimes branched,
A. Kidney to heart-shaped	small, daisy-like, yellow flowers are borne.
B. Large infestations	E. Herbaceous perennial weed
C. Hybrids	E. Herbaceous perennial weed F. None of the Above
∠49 and nave p of midrihs. Nearly half of the lend	orickly edges and a distinctive row of stiff, sharp prickles on the underside gth of each seed consists of a beak having a tuft of silky white hairs
/manneral at the tim	
A. An erect biennial	D. Stout stems reddish-brown
B. Formation of turions	E. Stem leaves are irregularly-lobed
C. Pale-colored bulblets	D. Stout stems reddish-brownE. Stem leaves are irregularly-lobedF. None of the Above
250. All plant parts exude	The plant reproduces only by seeds.
A. Stem tip	. The plant reproduces only by seeds. D. A biennial root crown E. Purple-magenta flowers
B. Fragmented stems	E. Purple-magenta flowers
C. A milky juice when cut or bro	ken F. None of the Above
251. Similar Species: Prickly let	tuce can be confused with sowthistles (Sonchus spp.), which have prickly
leaf margins but	
A. Spikelets	D. Appear slightly crinkled, have toothed edges E. A woody crown and rhizomes F. None of the Above
B. Smooth midribs	E. A woody crown and rhizomes
C. Spreads by rhizomes	F. None of the Above
252. Tall lettuce (Lactuca canad	densis) and tall blue lettuce (Lactuca biennis) look similar to prickly lettuce
except they have leaves with sm	
	ribs without prickles
B. Fragmented stems E. Purp	
C. Stem are rounded F. Nor	ne of the Above
London Rocket	
253. London rocket is a Europe	an native weed belonging to the mustard family, and is one of the
A. Clump-forming perennial	D. Biennial
B. Rosette-forming perennial	E. First winter weeds to appear
C. Perennial	F. None of the Above
054	TI
254. London rocket is a	The stems branch from the base 1 to 3 feet high. It ow flowers are borne on slender stalks in small clusters at the stem tip.
A. Clump-forming perennial	D. Biennial
B. Rosette-forming perennial	E. Bright green fleshy winter annual
C. Perennial	F. None of the Above

Loosestrife, Purple 255. Plant Description: Purple loosestrife is a plant that forms a dense bush consisting of up to 50 stems arising from a shallow root system, which includes a woody crown and rhizomes (horizontal underground stems). A. Clump-forming perennial D. Biennial B. Rosette-forming perennial E. A stout perennial C. Perennial F. None of the Above
256. Location should be considered when characterizing this plant, as it is a much more aggressive weed when growing in wet areas. It can be identified while in bloom by its purple-magenta flowers that form on Also, upper above-ground parts of the plant should appear densely hairy. A. Stem tip D. Distinctive terminal spikes B. Fragmented stems E. Purple-magenta flowers C. Stem are rounded F. None of the Above
257. Purple loosestrife reproduces by seeds and it spreads by A. Spikelets D. Appear slightly crinkled, have toothed edges B. Slow growing perennial E. A woody crown and rhizomes C. Rhizomes F. None of the Above
Mallow, Common 258. Plant Description: Common mallow is athat has been known to sprout a second year from a biennial root crown. A. Summer or winter annual D. Biennial B. Rosette-forming perennial E. A stout perennial C. Perennial F. None of the Above
259. Distinguishing characteristics are the fruits, which resemble tiny wheels of cheese, and kidney-shaped leaves that are shallowly lobed, appear slightly crinkled, have toothed edges, and A. Spikelets D. Appear slightly crinkled, have toothed edges B. Slow growing perennial E. Attach to stems by way of long stalks (petioles) C. Spreads by rhizomes F. None of the Above
260. Reproduction is by seeds, but fragmented stems canif conditions remain sufficiently moist for a long enough period of time. A. Stem tip
Mallow, Musk 261. Plant Description: Musk mallow is a with an upright stem that can grow 3 1/2 feet tall and large pink flowers that have 5 petals and appear in clusters at the end of each stem or individually on long stalks attached to stem nodes. A. Clump-forming perennial D. Biennial B. Rosette-forming perennial E. A stout perennial C. Perennial F. None of the Above
262. Leaves located at the base of the stem arewhile leaves located further up the stem are deeply dissected into 5 to 7 toothed sections. Leaves and flowers emit a strong musky odor in warm weather or when crushed. Reproduction is by seeds. A. Stem tip

Matgrass 263. Description: Matgrass is a and long-lived. It produces unbr	a slow growing bunchgrass that is densely tufted, ranched flower-spikes that carry the single-flowered spikelets along one
side only. A. Clump-forming perennial B. Rosette-forming perennial C. Perennial	E. A stout perennial
264 are narrower because blades are tig A. Stem tips D. A big B. Fragmented stems E. Lea C. Stems are rounded F. Nor	ennial root crowns ves
eight inches tall. This grass is tig	that bear all spikelets on one side of the stems and grows up to ghtly rooted therefore hard to remove. D. Horizontal spreading roots E. Twining vines, funnel-shaped flowers F. None of the Above
looks similar to other family mer sap. It has upright stems that ar seeds. A. Clump-forming perennial B. Rosette-forming perennial	y milkweed is a member of the Milkweed Family that mbers except for its showy orange flowers and watery rather than milky the hairy, leafy, and branched near the top of the plant. Reproduction is by D. Biennial E. A stout perennial F. None of the Above
butterflies. The adult females se A. Inconspicuous spikes	, are the only host plant for the monarch and queen sek out these plants on which they lay their eggs. D. Members of the Asclepias family E. Twining vines, funnel-shaped flowers
from other perennial vines inclushaped flowers that form in axill	ine milkweed is a Characteristics distinguishing it de opposite (2 leaves per node), heart-shaped leaves and whitish, vaseary clusters. Also, foliage exudes a cloudy sap if crushed or cut. D. Biennial E. A stout perennial F. None of the Above
Milkweed, Swamp 270. Plant Description: Swamp white milky sap if cut or broken, A. Clump-forming perennial B. Slender perennial C. Perennial	

characteristics with other morning shaped leaves. Unlike its relative is by seeds and creeping roots. A. Clump-forming perennial B. Rosette-forming perennial	D. Biennial	that shares numerous nel-shaped flowers, and heart- large and deep taproot. Reproduction
Motherwort 272. Plant Description: Motherwork mint species, it has square stem A. Stiff-stemmed perennial B. Rosette-forming perennial C. Perennial	ns and its foliage emits a pungent od D. Riennial	an grow up to 5 feet tall. As with other or if crushed.
and dissected leaves that generA. HerbsB. Rosette-forming perennial	ally give off a strong odor. D. Biennial	with an erect growth form
Musk thistle 274. Musk thistle is an aggress and non-crop areas. It is a bienr A. Clump-forming perennial B. An annual C. Perennial	ive weed of foreign origin that occurs nial weed, although occasionally it is D. Biennial E. A stout perennial F. None of the Above	s in pastures, rangeland, roadsides
unpleasant stinging hairs on the	nderground stems), and grows in de D. Biennial	roduces by wind-dispersed seeds and
reproduces by seeds and rootin	veet nightshade is aog at the nodes of the prostrate stems that are woody at the base and oval D. Biennial E. A stout perennial F. None of the Above	s. It can be distinguished from other
		pecies of Euphorbia. This plant is an oody rootstalk with the plants reaching

	; blooms most of summer. Woody deciduous vine with stems
A. Clump-forming perennialB. Rosette-forming perennial	E. A stout perennial
C. Perennial	F. None of the Above
	greenish white and found in clusters in the upper leaf axils. Long feathery hite during the seed stage are responsible for the plant's name. D. Flowers E. Submersed leaves F. None of the Above
purple in color. Older vines are	y seed heads give this climber its name. Young vines are ribbed and often woody, often gray/brown in color flake when bent. D. Base of existing stems E. Emergent stems F. None of the Above
that starts growing early in the s of rounded clumps of flowers the A. Clump-forming perennial B. Rosette-forming perennial	
	by seeds, and clumps can expand by producing new shoots (tillers) from
A. Fruits explode B. An attractive aquatic plant C. Higher flow rates	E. Emergent stems
the plant is often mistaken for a	f oxalis, also called creeping woodsorrel, have aand clover. At night, or on cloudy days, the leaves may fold up. With the all, leaves turn purplish in color. Occasionally, some plants may have D. Biennial E. A stout perennial F. None of the Above
284. Oxalis is a prostrate,	When mature, fruits explode, scattering seed several feet away. D. Biennial
Parsnip, Wild 285. Plant Description: Wild pa parsnip. A. Biennial or sometimes a per B. Rosette-forming perennial C. Perennial	ennial D. Biennial E. A stout perennial F. None of the Above

	of leaves during the first year of growth and a During the stems that grow 5 feet tall and terminate in umbrella-shaped clusters of pip reproduces by seeds.	е
A. Rosette of leavesB. Large edible taproot	E. Submersed leaves	
C. Shamrock appearance	F. None of the Above	
Parrots Feather 287. Description: Parrot's feat	ther is with feathery lime-green leaves arranged in	
	s). Flowers are small and white.	
A. Fruits explodeB. An attractive aquatic plant	E Emergent stems	
C. Higher flow rates	F. None of the Above	
288. The submersed leaves are surface parts of the plants are t look almost like small fir trees.	e limp and often appear to be decaying but the The the most distinctive trait as they can grow up to a foot above the water an	; id
A. Rosette of leaves	D. Water level fluctuations	
B. Stems are very robust	E. Submersed leaves	
C. Shamrock appearance	F. None of the Above	
289. Parrot's feather is found in to high nutrient environments. I higher flow rates. A. Fruits explode	n freshwater lakes, ponds, streams, and canals and appears to be adapted tends to or still water rather than in areas with	ed
A. Fruits explode	D. Colonize slowly moving	
B. An attractive aquatic plant	E. Emergent stems	
C. Higher flow rates	F. None of the Above	
290. Thecan : moderate water level fluctuation	survive on wet banks of rivers and lakeshores, so it is well adapted to ns.	
A. Emergent stems	D. Base of existing stems	
B. Rosette of leaves	E. Submersed leaves	
C. Shamrock appearance	F. None of the Above	
Paterson's Curse 291. Description: An erect	member of the borage family (Boraginaceae) generally 1 ti-branched with an abundance of stout hairs on stems and leaves.	1-
Reproduction and spread is by		
A. Clump-forming perennial		
B. Annual or biennial	E. A stout perennial	
C. Perennial	F. None of the Above	
Perennial Pepperweed 292. Description:	; blooms May to September. Grows 1 to 6 ft. tall. Basal leaves large	er
	bright green to gray green, entire to toothed.	٠.
A. Clump-forming perennial	D. Biennial	
B. Annual or biennial	E. A stout perennial	
C. Perennial	F. None of the Above	
293. Flowers white, very small		е
	mall, flattened, slightly hairy, and reddish brown.	
	brella-shaped clusters m dense clusters	
	ne of the Above	

first year and forms an u	Poison hemlock is a biennial that produces leaves in a basal rosette during its upright flower stalk when it bolts during the second year of growth. D. Biennial E. A stout perennial F. None of the Above
The stalk attached to the leaflets. It grows in a val A. Deciduous woody pe	This is adistinguished by its leaves that have three leaflets. e middle leaflet is considerably longer than that attached to either of the two outer riety of forms including trailing, shrubby, or as a vine. erennial D. Biennial E. A stout perennial F. None of the Above
resembles a small tree, smooth succulent red-puberries in the fall. This s A. Herbaceous perenni B. Rosette-forming pere	Common pokeweed is a large, bushy, that sometimes growing up to 10 feet in height. It is characterized by an enormous taproot, urple stems, large lance-shaped leaves and grape-like clusters of dark purple pecies reproduces from seeds. al D. Biennial ennial E. A stout perennial F. None of the Above
297. Root system - Cor A. New shoots B. Roots C. Few raw berries	nmon pokeweed produces a large, (4 to 6 inches in diameter). D. Herbaceous perennial E. Fleshy, white taproot F. None of the Above
poisonous, are the least toxic. A. Leaves and stems	of common pokeweed are toxic to humans, pets and livestock. Roots are the most are intermediate in toxicity (toxicity increases with maturity), and berries D. Herbaceous perennial E. White taproot F. None of the Above
299. Since common polavailable, or if it is in cor A. Not very palatable B. Very palatable C. Toxic	ntaminated hay.
	d cattle have been poisoned by eating fresh leaves or green fodder, and pigs have gethe roots. Children are most frequently poisoned by eating D. This herbaceous perennial E. The taproot F. None of the Above

You are finished with your assignment.

Weed Identification and Control Assignment #5

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Multiple Choice assignment, please select one answer and mark it on the answer key. The answer must come from the course text. (s) means answer can be plural or singular. There are no intentional trick questions

1.	Α	is any plar	nt gro	owing in an area where it is not wanted. We try to control
				or light, moisture, space and nutrients.
	Seed			Other species
	Weed			Crops for light, moisture, space and nutrients
C.	Medical and econo	mic problems	F.	None of the Above
			ed s	species may be dormant for many years, with only a small
ре	rcentage germinatin	g each year.		
Α.	Seeds		D.	Other species
В.	Weeds		E.	Crops for light, moisture, space and nutrients
C.	Medical and econo	mic problems	F.	None of the Above
ma We	ature earlier than the	crop and often	seed	without intense heat, like from a wild fire. Weeds generally ds will be dropped before crop harvest and remain in the field n crops and can often survive under unfavorable growing
	Seeds		D	Other species
R	Weeds		F.	Crops for light moisture space and nutrients
C.	Medical and econo	mic problems	F.	Crops for light, moisture, space and nutrients None of the Above
4. en A. B.	erge from the seed.	may convenient	ly be D. E.	Other species Crops for light, moisture, space and nutrients
5.		emerge	with	a single seed leaf whereas dicots emerge with two seed
	aves.			
A.	Monocots	D. Summer a	nnua	als
В.	Perennial weeds	E. Correct ide	ntific	cation
C.	Biennial weeds	F. None of the	e Ab	ove
6.		have a life of	more	e than two years, though new seeds may be produced every
	ar.			
	Monocot weeds	D. Summer a	nnua	als
	Perennial weeds			
	Riennial weeds			

7have a life of two years, generally storing up food reserves in the leaves and
roots the first year and producing seed in the second year.
A. Monocot weeds D. Summer annuals
B. Perennial weeds E. Correct identification
C. Biennial weeds F. None of the Above
8. The are often grouped with perennial weeds since control is similar.
A. Monocot weeds D. Summer annuals
B. Perennial weeds E. Correct identification
C. Biennial weeds F. None of the Above
o. Bioliniai Woodo 11 Hollo of the Alberto
9. Most found in turfgrass are from the family Gramineae and are termed weedy
grasses. Examples include crabgrass, annual bluegrass, tall fescue, and quackgrass.
A. Monocot weeds D. Summer annuals
B. Perennial weeds E. Correct identification
C. Biennial weeds F. None of the Above
O. Biofilial Woods 1. Notic of the Above
10. Certain weed species can harborand insect pests and can be a serious threat to
the ecosystem's health. Other species may be poisonous, allergenic or an irritant to humans and/or
livestock.
A. Seeds D. Other species
B. Plant diseases E. Crops for light, moisture, space and nutrients
C. Medical and economic problems F. None of the Above
C. Medical and economic problems F. None of the Above
11. Medical and economic problems such as illness, death, rash, hayfever, or ao
fur, meat and milk products may result.
B. Weeds E. Crops for light, moisture, space and nutrients C. Medical and economic problems F. None of the Above
C. Medical and economic problems F. None of the Above
12 Woods have many unique characteristics which make them extremely difficult to central. Most
12. Weeds have many unique characteristics which make them extremely difficult to control. Most
produce a tremendous number of
A. Seeds D. Other species
B. Weeds E. Crops for light, moisture, space and nutrients
C. Medical and economic problems F. None of the Above
13, on the other hand, are termed broadleaf weeds and include such plants
as dandelion, clover, ground ivy, knotweed, and plantain.
A. Monocot weeds D. Summer annuals
B. Perennial weeds E. Dicots
C. Biennial weeds F. None of the Above
14. Weedy grasses andare further divided into groups according to the plants
length of life.
A. Monocot weeds D. Summer annuals
B. Perennial weeds E. Broadleaf weeds
C. Biennial weeds F. None of the Above
15. germinate from seed, grow, flower, and produce seed in less than one year.
A. Monocot weeds D. Summer annuals
B. Perennial weeds E. Annual weeds
C. Riannial weeds — E. None of the Above

	KA warm season annuals) germinate in the spring and mature in the fall, (AKA) germinate in fall or late winter and mature in late
spring.	/ Total
. •	D. Summer annuals
	E. Cool season annuals
C. Biennial weeds	F. None of the Above
17	complete their lifecycle from seed to maturity in less than one year. They
	mature, set seed and die in the fall.
	D. Summer annuals
B. Perennial weeds C. Biennial weeds	E. Correct identification
C. Biennial weeds	F. None of the Above
18	live for more than two years. They reproduce vegetatively from roots,
rhizomes, buds, or tillers	s, or from seed, or both. They can be especially difficult to control because of their
persistent root systems.	
	D. Summer annuals
B. Perennial weeds	
C. Biennial weeds	
19 Farly identification o	of emerged weed species is critical for choosing the best weed control methods.
This guide will enable yo	
A Monocot weeds	D. Weeds at three growth stages
P. Poroppial woods	D. Weeds at three growth stages E. Correct identification
C. Bienniai weeds	F. None of the Above
20. Effective control of	is based on correct identification.
A. Monocot weeds	D. Weeds in turf
B. Perennial weeds	E. Correct identification
C. Biennial weeds	F. None of the Above
21.	is, simply put, all life on earth, even that which has yet to be
	ically, it includes the millions of diverse species, from bacteria to whales that
share the earth's lands a	
A. Cultivar(s)	D. Exotic (introduced) plant
B. Biological Manageme	ent E. Ornamental plant
C. Biodiversity	F. None of the Above
22	Biological control is the deliberate use of the pest's natural enemies -
predators, parasites, and	d pathogens - to reduce the pest population below damage levels.
A. Cultivar(s)	D. Exotic (introduced) plant
B. Biological Manageme	ent E. Ornamental plant
C. Biodiversity	F. None of the Above
23.	germinate in the fall, overwinter as seedlings or small rosettes and mature,
	owing spring or early summer. Some weeds are capable of both summer and
winter annual lifecycles.	
-	D. Summer annuals
B. Perennial weeds	E. Winter annuals
C Riennial weeds	E. None of the Above

24.		C	omplete their lifecycles in less than two years. Germination and the
prod	duction of an overwir	ntering r	osette of leaves occur the first year.
	Monocot weeds		
	Perennial weeds		
			e of the Above
C.	Dicililais	I . INOI	e of the Above
25	The second year flo	woring	and plant death accur. Control is heat obtained
		wening,	, and plant death occur. Control is best obtained
	ng the first year.	D 0	
	Monocot weeds		
B. I	Perennial weeds	E. See	d production
C.	Biennial weeds	F. Non	e of the Above
26.			: When exploring chemical control options, you should select the lowest
risk	and most effective p	roducts	. The key is to use pesticides in a way that complements rather than
hind	ders other elements i	n the st	rategy and which also limits negative environmental effects.
Α. (Cultivar(s)		D. Exotic (introduced) plant
В. І	Biological Manageme	ent	E. Ornamental plant
C.	Chemical Control		D. Exotic (introduced) plant E. Ornamental plant F. None of the Above
•			
27.			: The most important aspect of an alien plant is how it responds to a new
env	ironment An invasiv	e speci	es is one that displays rapid growth and spread, allowing it to establish
			vast and complex array of natural controls present in their native lands,
		rasiles,	and diseases, exotic plants may experience rapid and unrestricted growth
	ew environments.		
Α. (Growth Habit – Invas	siveness	D. Cultural management
B.	Exotic invasive plant		E. Integrated Pest Management (IPM)
C.	Ecovar		F. None of the Above
28.			is enhanced by features such as strong vegetative growth, abundant
see			nination rate, long-lived seeds, and rapid maturation to a sexually
			tage. Invasive plants reproduce rapidly, either vegetatively or by seed.
			s them to overwhelm and displace existing vegetation and form dense
	-species stands.	an anow	s them to ever whem and displace existing vegetation and form dense
			D. Cultural management
	Invasiveness		D. Cultural management
			E. Integrated Pest Management (IPM)
C.	Ecovar		F. None of the Above
			onsidered harmful. For example, a small number of(e.g.,
			s of our agricultural industry and pose little to no threat to our natural
eco	systems. However, e	each ali	en plant is one less native host plant for our native insects, vertebrates
and	other organisms tha	it are de	ependent upon them.
Α. (Growth Habit – Invas	siveness	D. Cultural management
B. 1	Exotic invasive plant		E. Integrated Pest Management (IPM)
	Non-invasive alien pl		F. None of the Above
30.	: S	hort for	"cultivated variety." A plant "variety" developed by man via plant selection
			exhibit a set of plant characteristics.
	Cultivar		D. Exotic (introduced) plant
	Biological Manageme	ant	E. Ornamental plant
	Biological Manageme Biodiversity	⊏11l	F. None of the Above
٠,	DIOUIVEISILV		F. INDIE OF LIE ADDIVE

31 are maintained	via controlled pollination or vegetative means, so that cultivar
characteristics are passed to ensuing g	enerations.
A. Cultivar(s) D. Exi B. Biological Management E. Orr	one (introduced) plant
C. Biodiversity F. Noi	ne of the Ahove
O. Diodiversity	ic of the Above
32. : Cultur	ral practices are a manipulation of the habitat environment to
increase pest mortality or reduce rates	
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)F. None of the Above
C. Ecovar	F. None of the Above
OO The second se	and the state of t
	actices that can help to reduce pest impact such as selection of
	ng, winter cover crops, changing planting dates to minimize insect that include, moisture management, addition
of beneficial insect habitat, or other hab	itat include, moistare management, addition
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Non-susceptible crops	D. Cultural managementE. Integrated Pest Management (IPM)F. None of the Above
34: Short for "eco	ogical variety." A plant "variety" developed by man from a
collection of plants of a native species t	hat were selected from several to many natural populations in a
specific region.	D 0 11 1
A. Growth Habit – Invasiveness	D. Cultural management
A. Growth Habit – Invasiveness B. Exotic invasive plant C. Ecovar	E. Integrated Pest Management (IPM) F. None of the Above
C. Ecoval	F. Notile of the Above
35 The purpose is to have high geneti	c diversity in the parent collection, which reflects the natural
	ed region. To maintain genetic diversity in ensuing generations,
	development process.
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above
00 A.	But a few but a service will be a served and a service will be a served as a service will be a served as a service will be a service with a service with a service with a service will be a service with
36. An Is an interme	diate step between a wild-growing plant and a cultivar.
A. Growth Habit – invasiveness	D. Cultural management
C. Ecovar	D. Cultural management E. Integrated Pest Management (IPM) F. None of the Above
C. LCOVAI	1. Notice of the Above
37. : A plan	t species that exists in a region because it was brought to that
	nent of the region. We are still introducing exotic plants, by
intention or by accident.	
	otic (introduced) plant
	namental plant
C. Biodiversity F. Nor	ne of the Above
20	
	exotic plant species that is able to invade and overrun native
species are introduced (exotic).	ecome invasive under certain conditions, but most invasive
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above

39	: A plant species or cultivar that is grown for its beauty (in its end use),
rather than commercial or produ	
A. Cultivar(s)	D. Exotic (introduced) plant
B. Biological Management	E. Ornamental plant
C. Biodiversity	F. None of the Above
	plant species that is found in a region because it developed and evolved in
	ears. Plants that existed in a region prior to settlement.
A. Source-Identified seed	D. Mechanical or Physical Management
B. Noxious Weed	E. Source-Identified seed
C. Native plant	F. None of the Above
41.	: An exotic plant that was introduced into an area, escaped from
	s own (includes exotic invasive plants). Many plants commonly thought to
be natives were actually introduce	
A. Mechanical or Physical Mana	
B. Native plant	E. Pest
C. Naturalized plant	F. None of the Above
·	
	e term noxious is a legal designation used specifically for plant species
	e major pests of agricultural ecosystems and are subject, by law, to
certain restrictions. The U.S. De	partment of Agriculture regulates noxious weeds.
A. Source-identified seed	D. Mechanical or Physical Management E. Source-identified seed F. None of the Above
B. Noxious Weeds	E. Source-identified seedF. None of the Above
C. Native plants	F. None of the Above
"noxious weed boards". Many no natural areas. Melaleuca (Melale seasonal wetlands in the Evergl weed. Additional listings of exoti ecological and economic impact	D. Mechanical or Physical Management E. Source-identified seed
4.4	
44.	_: Is a comprehensive, environmentally sensitive approach to managing n of strategies that pose the least hazard to people, property, and the
environment.	in or strategies that pose the least hazard to people, property, and the
A. Growth Habit – Invasiveness	D. Cultural management
B. Exotic invasive plant	E. Integrated Pest Management (IPM)
C. Ecovar	F. None of the Above
	at control will be more effective, andwill be less
	of measures is deployed against a pest. These measures can include,
	biological, and chemical methods for managing the pest.
A. Growth Habit – Invasiveness	•
B. Exotic invasive plant	E. Resistance
C. Ecovar	F. None of the Above
46. Some of the kev componen	ts to a successful program include the following:
	st species, their biology, and conditions conducive to the pest(s) (air,
water, food, shelter, temperature	
A. Growth Habit - Invasiveness	D. Cultural management
B. Exotic invasive plant	E. IPM
C. Ecovar	F. None of the Above

47. Understand the physical and and their natural enemies.	that affect the number and distribution of pests
	D. Cultural management
A. Growth Habit – InvasivenessB. Exotic invasive plant	E. Biological factors
C. Ecovar	F. None of the Above
48	: Mechanical or physical control methods involve using barriers, traps, or duce pest problems.
physical removal to prevent or re-	duce pest problems.
A. Source-identified seed I	D. Mechanical or Physical Management
B. Noxious Weeds C. Native plant	Source-Identified seed None of the Above
C. Native plant	Notice of the Above
	w covers or trenches to prevent insects from reaching the crop, baited or
A Source-identified seed	cts, oror mowing for weed control. D. Mechanical or Physical Management
B Noxious Weeds	F Source-identified seed
B. Noxious Weeds C. Cultivation	F. None of the Above
50. : Any livi	ng organism (plant or animal) that occurs where it is not wanted or that
causes damage to crops or huma	ans or other animals.
A. Mechanical or Physical Mana	gement D. Variety
B. Native plant	E. Pest F. None of the Above
•	
51. :	Off-spring of plants collected from a single defined natural population of
	f seed. No selection is done during the collection and subsequent seed e genetic diversity. The genetic diversity is less than for an ecovar.
Δ Source_identified seed	r genetic diversity. The genetic diversity is less than for an ecoval.
B. Noxious Weeds	F. Source-identified seed
C. Native plant	D. Mechanical or Physical Management E. Source-identified seed F. None of the Above
52. :	Within a species, a naturally occurring sub-group of plants that have one
or more minor characteristics tha	t set it apart from the rest of the species. Ex.: Solidago odora var.
chapmanii.	·
A. Mechanical or Physical Mana	
B. Native plant	E. Pest
C. Naturalized plant	F. None of the Above
53	: The term weed is a subjective word used to describe any plant
	n other words, weeds can include native and non-native plants alike,
growing wherever someone wish referred to as natural areas weed	es they weren't. Invasive exotic plants of natural ecosystems are often
	D. Weeds, Wildlands and Natural Areas
	E. Source-identified seed
	F. None of the Above
54. s	spread by seed. They have no natural means of spreading vegetatively.
However, if injured or cut, the cut	pieces may produce new plants. For example a dandelion or dock root
	duce two plants. The roots are usually fleshy and may grow very large.
•	D. Biennials and winter annuals
	E. Perennials
C. Summer annuals	F. None of the Above

	y creeping roots, creeping above ground stems (stolons),
or creeping below-ground stems (rhizomes). In a	
A. Creeping perennials D. Biennials ar B. Annual plants E. Perennials	id winter annuals
C. Summer annuals F. None of the	Above
o. Cammor annuale	715070
56. Some weeds maintain themselves and	, which are modified rhizomes
adapted for food storage. Nutsedge (nutgrass) a	and Jerusalem artichoke are examples.
A. Tubers	D. Some creeping perennials
B. Agricultural advances	E. Propagate by means of tubers
C. Roundup and Roundup Ready crops	F. None of the Above
57 Once a field is infected	are probably the most difficult group of weeds to control.
57. Once a field is infested,a Cultivators and plows often drag pieces about the	
A. Tubers	D. Creeping perennials
B. Agricultural advances	E. Roundup-resistant weeds
C. Roundup and Roundup Ready crops	
	1 or 2 years, or persistent herbicides are often necessary
for control.	D. Continuous and reported cultivations
A. Tubers	D. Continuous and repeated cultivations E. Roundup-resistant weeds
B. Agricultural advancesC. Roundup and Roundup Ready crops	F. None of the Above
C. Roundup and Roundup Ready Grops	1. Notice of the Above
59. Cultivation, in combination with herbicides,	is proving effective on some creeping perennials. An
effective eradication program also requires	·
A. Tubers	D. The killing of seedlings
B. Agricultural advances	E. Roundup-resistant weeds
C. Roundup and Roundup Ready crops	F. None of the Above
Roundup-Resistant Weeds	
60 like horsew	eed and giant ragweed are forcing farmers to go back to
60 like horsew more expensive techniques that they had long a	go abandoned.
A. Tubers	D. Some creeping perennials
B. Agricultural advances	E. Roundup-resistant weeds
C. Roundup and Roundup Ready crops	F. None of the Above
	an area of land or water with predominantly native
	allowed to respond to the forces of nature with little to no
direct human interference. The term wildlands is	
A. Source-identified seed D. Natural area	
	dlands and Natural Areas
C. Native plant F. None of the	Above
The Invasive Problem	
Invasive Species	
•	that were growing here before the arrival of Europeans.
	an area but have been introduced by people. Many exotic
	nd grow out of control — displacingwhich
provide food and shelter for an assortment of na	tive wildlife.
	native fauna
	ve plants
C. Native butterfly species F. Non	e of the Above

				species will become		(for
					ears before it escaped	
Cultivation!), bu Δ Some native	i a red i e nlante	iag snould ri	un up at any noi Exotic plants a	n-native with fleshy fri and animals	uits dispersed by birds.	
B. Exotic plant	s plants	E.	Exotic plants a Pest plant	ina ariimais		
C. Natural dist	urbance	s F.	None of the Ab	oove		
			eristics used to i			
A. Sheath	D Rhi	_: Lower pa	art of the leaf th	at is attached to the n	ode.	
B. Ligule						
C. Blade	F. Nor	ne of the Ab	ove			
65		: Located	I where the blad	e and the sheath mee	et.	
A. Collar	D. Au					
B. Roots	E. Sho		-11-			
C. Node	F. Nor	ne of the Ab	ove			
66	D A		of nodes with tig	htly compacted intern	odes.	
A. Collar B. Crown						
C. Node		ne of the Ab	ove			
67		·The regi	on between the	nodes		
A. Collar			on botwoon the	110400		
B. Internode	E. Sho	oot				
C. Node	F. Nor	ne of the Ab	ove			
			eed, such as the	e	(leaves emerging after	
cotyledons) and						
			ohysical and bio ground vegetativ			
C. Leaf shape				e stems		
·						
alternately or o				sistent key to	The leaves may	be
				logical factors		
B. Leaf surface	es	E. Plant id	ohysical and bio dentification	9		
C. Leaf shape		F. None o	f the Above			
70. Some leav	es may	be attached	to a short stem	, known as the petiole	e, while others may lack a	
			of plant, animal,	fungi, bacteria		
B. Petiole			enous) species			
C. Rhizomes	F. Nor	ne of the Ab	ove			
71.		:Enlarged	d areas at interv	als along the stem an	d also the part of the plant	where
buds are attach A. Collar	nea. D. Aur	ricla				
B. Roots	E. Sho					
C. Node		ne of the Ab	ove			
72		:Undergr	ound stems that	grow laterally.		
A. Sheath		izomes		•		
B. Ligule	E. Sto		01/0			
C. Blade	F. INOI	ne of the Ab	UVE			

73	:Attachment of the plant to the soil that absorbs minerals and water needed for
the plants surviv	val.
A. Collar	D. Auricle
B. Roots	E. Shoot
C. Node	
74.	:Aboveground stems that grow laterally. D. Rhizomes
A. Sheath	D. Rhizomes
B. Ligule	E. Stolons
C. Blade	F. None of the Above
75.	:Characteristic of the grass that describes how the new blades emerge from the
sheath as grow	
A. Sheath	D. Rhizomes
B. Ligule	E. Vernation
C. Blade	F. None of the Above
76.	:The aboveground parts of the plant.
A. Collar	D. Auricle
B. Roots	E. Shoot
C. Node	F. None of the Above
77.	:A structure that grows from the collar area on the inner side of the leaf.
A. Sheath	
B. Ligule	
C. Blade	F. None of the Above
78.	:An appendage that grows from the edge of the collar and may wrap around the
stem.	
A. Collar	D. Auricle
B. Roots	E. Shoot
C. Node	F. None of the Above
79	:The upper part of the leaf.
A. Sheath	
B. Ligule	
C. Blade	
Broadleaves (di	cots) Grasses (managets) and Sedges
	cots), Grasses (monocots), and Sedges be classified into three primary categories: broadleaves (dicots), grasses (),
and sedges.	, see state time time times primary eategenest streamed res (disease), grasses (
A. Cotyledons	D. Every species of plant, animal, fungi, bacteria
B. Monocots	E. A native (indigenous) species
C. Rhizomes	F. None of the Above
81 To identify	broadleaf seedlings, it is common to look first at the cotyledons or seed leaves. The
or. To identify	are the first pair of leaves that open after emergence.
A. Endemic	D. Other physical and biological factors
B. Leaf surface	
C. Leaf shape	F. None of the Above
82.	have various shapes and sizes; they may be linear-, egg-, round- or butterfly-
	variations of each.
A. Cotyledons	D. Every species of plant, animal, fungi, bacteria
B. Petiole	E. A native (indigenous) species
C. Rhizomes	F. None of the Above

86. Check the leaf surfaces for the presence of hair and the A. Endemic D. Other physical and biological factors B. Amount of waxiness E. Underground vegetative stems C. Leaf shape F. None of the Above
87. Stems can also assist in identifying a weed; they have various shapes and amounts of hair, if any. Finally, dig or carefully remove the roots from the soil and look for the presence of rhizomes, creeping roots, or other structures such as A. Cotyledons D. Tubers B. Petiole E. A native (indigenous) species C. Rhizomes F. None of the Above
are underground vegetative stems from which new plants are generated. The presence of these vegetative structures will indicate that the weed's life cycle is perennial. A. Endemic D. Other physical and biological factors B. Leaf surfaces E. Rhizomes C. Leaf shape F. None of the Above
89. Every species of plant, animal, fungi, bacteria and other organism has a home in some part of the world, where it has existed for thousands of years as a result of natural forces and influences like climate storms, moisture, fire, soils and A. Cotyledons D. Species interactions B. Petiole E. A native (indigenous) species C. Rhizomes F. None of the Above
90. Over long periods of time, these and other physical and biological factors direct the A. Endemic D. Distributions of organisms in nature B. Leaf surfaces E. Underground vegetative stems C. Leaf shape F. None of the Above
91. A native () species is one that occurs in a particular region, ecosystem, and habitat without direct or indirect human actions. A. Cotyledons D. Every species of plant, animal, fungi, bacteria B. Petiole E. Indigenous C. Rhizomes F. None of the Above
92. Species native to North America are generally recognized as those occurring on the continent prior to European settlement is used to describe populations of native animals, plants or other organisms, that are have relatively restricted distributions and are confined to certain environments. A. Endemic D. Other physical and biological factors B. Leaf surfaces E. Underground vegetative stems C. Leaf shape F. None of the Above
93. Organisms are considered non-native (alien, exotic, foreign, introduced, non-indigenous) when they occur artificially in locations beyond their known A. Cotyledon D. Species of plant, animal, fungi, bacteria B. Petiole E. Historical natural ranges C. Rhizome F. None of the Above
94 can refer to species brought in from other continents, regions, ecosystems and even other habitats. A. Considered exotic B. Species exotic C. Non-native Can refer to species brought in from other continents, regions, ecosystems provided by the continents provided by the c

95	to the U.S. include those transported from Europe, Asia, Africa, South
America, Australia and	other parts of the world. It also includes any species moved by people from one
locality in the U.S. to a r	
	D. Large numbers of species
	E. Many introduced plants
C. Non-native	F. None of the Above
96. Black locust (Robin	ia pseudoacacia) is native to the southern Appalachian region of the eastern U.S.
Because of its	, it was planted all around the U.S. during this century for ontrol, wind breaks and other purposes. Even though it is native to the U.S., black
locust is considered exc	officially which breaks and other purposes. Even thought it is halive to the o.s., black office anywhere it occurs outside its known historical natural range of southern
Appalachia.	the anywhere it occurs outside its known historical hatural range of southern
• •	D. Large numbers of species
	E. Rapid growth and hardiness
C. Non-native	E. None of the Δhove
O. INOTHIBUTE	1. Notice of the Above
	ways an Exotic! European settlers brought hundreds of plants to North America
	for food, medicinal, ornamental, and other purposes. Introductions of exotic plants
continue today, and are	increasing due to, increased international travel, and the
	tal movement of large numbers of species between continents as a result of
expanded international	
A. Considered exotic	D. Large numbers of species
B. Species exotic	E. Many introduced plants
C. An exploding humar	n population F. None of the Above
98	have become naturalized across the continent and some are replacing
North American native	plant species. These naturalized plants, however much a part of our current
landscapes and ecosys by natural means.	tems, are nonetheless exotic, since they were moved here by people rather than
•	D. Large numbers of species
	E. Many introduced plants
C. Non-native	
C. Non-native	1. Notice of the Above
99. Because the	of some species are unknown or unclear, research
continues to attempt to	unravel the tangle of human and natural influences responsible for their current
ranges.	
 A. Historical distribution 	
B. Species exotic	E. Many introduced plants
C. Non-native	F. None of the Above
100. Most common we	eds fit into two large general classifications: broadleaves and grasses.
Broadleaves and grasse	es may be further divided into
A. Annuals and perenn	ials D. Biennials and winter annuals
B. Annual plants	E. Perennials
C. Summer annuals	E. PerennialsF. None of the Above
101	_may be even further subdivided by the seasons in which they germinate and
grow.	_may be even further subdivided by the seasons in which they germinate and
	al weeds D. Biennials and winter annuals
r Annual and perennic R. Annual nlants	F Perennials
C. Summer annuals	E. PerennialsF. None of the Above
	complete their life cycle in less than one year. ials D. Biennials and winter annuals
C. Summer annuals	E. Perennials F. None of the Above

because of an abundance of do	ered easy to control. This is true for any one crop of weeds. However, brmant seed and fast growth, annuals are very persistent. They actually inial weeds. Most common field weeds are annuals. There are two types;
A. Annuals and perennials B. Annual plants C. Summer annuals	D. Biennials and winter annualsE. Summer and winter annualsF. None of the Above
and the plants mature and die i	germinate in the spring, make most of their growth during the summer, n the fall. The seeds lie dormant in the soil until next spring. D. Biennials and winter annuals E. Perennials F. None of the Above
In this group, high soil tempera are most troublesome in fall an A. Annuals and perennials	geminate in the fall and winter and usually mature seed in the spring onts die. The seeds often lie dormant in the soil during the summer months. tures (125°F or above) have a tendency to cause seed dormancy. These dearly spring in ornamental plant areas. D. Biennials and winter annuals E. Winter annuals F. None of the Above
troublesome weeds fall in this of the winter annual group normal A. Annuals and perennials B. Annual plants	lives for more than 1 year but not more than 2 years. Only a few group. There is confusion between biennials and winter annuals, because ly lives during 2 calendar years and during 2 seasons. D. Biennials and winter annuals E. A biennial plant F. None of the Above
by seed and many are able to s reproduction as simple and cre A. Annuals and perennials	D. Biennials and winter annuals E. Perennials
	member of the borage family (Boraginaceae) generally 1- i-branched with an abundance of stout hairs on stems and leaves. seed.
Perennial Pepperweed 109. Description: than upper leaves, lanceolate, A. Clump-forming perennial B. Annual or biennial C. Perennial	; blooms May to September. Grows 1 to 6 ft. tall. Basal leaves larger bright green to gray green, entire to toothed. D. Biennial E. A stout perennial F. None of the Above

a distinctive odor. SeedA. Is not allergenicB. An oil	ery small, and d very small, flattened, slightl D. Umbrella-shaped cluste E. Form dense clusters F. None of the Above	
first year and forms an A. Clump-forming pere	upright flower stalk when it be	al that produces leaves in a basal rosette during its polts during the second year of growth. al ove
The stalk attached to the leaflets. It grows in a variable A. Deciduous woody por B. Rosette-forming per	ne middle leaflet is considera ariety of forms including traili	al
resembles a small tree, A. Herbaceous perenn B. Rosette-forming per	, growing up to 10 feet in hei	al
A. New shootsB. Roots	ommon pokeweed produces D. Herbaceous perennial E. Fleshy, white taproot F. None of the Above	a large, (4 to 6 inches in diameter).
poisonous,are the least toxic.		oxic to humans, pets and livestock. Roots are the most oxicity (toxicity increases with maturity), and berries
116. Since common po available, or if it is in co A. Not very palatable B. Very palatable C. Toxic		
been poisoned by eatin	nd cattle have been poisoned ng the roots. Children are mo D. This herbaceous peren E. The taproot F. None of the Above	d by eating fresh leaves or green fodder, and pigs have st frequently poisoned by eating nial
adhering to the roots of A. Twining perennial vi	an be spread by seed, f nursery stock, root growth f ine D. Root fragments E. Root growth F. None of the Ab	

	p ro	oot system that competes with	for water and
nutrients.	_		
A. Flowers are funnel-shaped			
B. Bindweed leaves	E.	Dense field bindweed infestations None of the Above	
C. Herbicide application	۲.	None of the Above	
120. Vines climb on plants and	sh	ade crops, cause lodging of	_, and make harvesting
difficult by clogging machinery.		, , , , , , , , , , , , , , , , , , , ,	_
A. Twining perennial vine	D.	Dense ground cover	
B. Bindweed foliage	Ε.	Root growth	
A. Twining perennial vineB. Bindweed foliageC. Small grains	F.	None of the Above	
121. Dense field		_ may reduce crop yields by 50 to 60 percen	t. Land infested with field
bindweed is reduced in value.		_ , , , , ,	
A. Flowers are funnel-shaped	D.	Deep root system	
B. Bindweed leaves	E.	Bindweed infestations	
C. Herbicide application			
122. Field bindweed is a		which produces a dense	around cover. The twining
stems vary from 1.5 to 6 feet or	mc		greatia eeven niie iiiiing
A. Twining perennial vine	D.	Dense ground cover	
A. Twining perennial vineB. Long-lived perennialC. Vine	E.	Root growth	
C. Vine	F.	None of the Above	
123. Leaf size and shape are v	aria	able, but generally the leaves are 1 to 2 inche	s long, smooth, and
shaped like an arrowhead. Flow	ers	are, about 1 inch diameter	and white or pink in
color.			
A. Flowers are funnel-shaped	D.	Funnel-shaped	
B. Bindweed leaves	Ε.	Dense	
C. Herbicide application	F.	None of the Above	
124 The ha	e tv	vo small bracts located ½ to 2 inches below the	ne flower. The bracts
along with loof chang and small	lor f	lower size, distinguish field bindweed from he	edge hindwood
A Twining perennial vine	ם וופו	Dense ground cover	age billaweed.
A. Twining perennial vineB. Bindweed foliageC. Flower stalk	D.	Poot growth	
C. Flower stells	 	None of the Above	
C. Flower Stark	Г.	Notice of the Above	
	as	glyphosate can be painted on	Repeat applications
will be needed.			
A. Flowers		Deep roots	
B. Bindweed leaves		Infestations	
C. Herbicide application	F.	None of the Above	
126. Herbicides such as 2,4-D	cor	nbinations can be sprayed on	; repeat
applications may be needed.		, ,	•
A. Twining perennial vine	D.	Dense ground cover	
B. Bindweed foliage		Root growth	
C. Vines		None of the Above	
127. The most effective times f	or	are during t	lowering, or in
	_	e label before applying any pesticide.	ionomig, or in
A. Flowers are funnel-shaped			
B. Bindweed leaves		Dense field bindweed infestations	
C. Herbicide application		None of the Above	
	- •	* * =	

128. Plant Description: Hedge	bing	dweed is a
A Twining perennial vine	D	Dense ground cover
A. Twining perennial vine B. Bindweed foliage	F	Root
C. Vine	F.	None of the Above
O. VIIIC	٠.	Notic of the Above
pointed tips, pinkish petals fuse	ed in	it from other vines include arrowhead-shaped leaves that have to funnel-shaped flowers, the presence of large bracts enclosing the
	D	Smaller flowers and the bracts
R Creening perennial roots	F.	An annual hiennial or short-lived perennial
C. Nodes of older stems	F.	Smaller flowers and the bracts An annual, biennial or short-lived perennial None of the Above
C. Nodes of older stems	٠.	Note of the Above
130 The plant reproduces by	seed	ds and
A Short-lived perennial	D	Creeping roots Small yellow flowers and a deep taproot None of the Above
B Stolons	F.	Small vellow flowers and a deep tanroot
C A unique flower	 E	None of the Above
C. A unique nower	١.	Notic of the Above
131. Plant Description: Japane that of hedge bindweed except smaller.	ese l it ha	bindweed is a Its appearance is similar to as smaller flowers and the bracts enclosing the base of each flower are
Λ Large bracts	П	Smaller flowers and the bracts
R Creening perennial	D.	Smaller flowers and the bracts An annual, biennial or short-lived perennial None of the Above
C. Nodos of older stoms	<u>-</u> .	None of the Above
C. Nodes of older sterris	г.	Notic of the Above
		hat escaped cultivation has a distinctive double flower. Compared with ique flower in that it has twice the number of petals and looks similar
A. Short-lived perennial	D.	Seeds and creeping roots
B. Stolons	E.	Small yellow flowers and a deep taproot
C. Weedy form	F.	None of the Above
Scotch broom except plants do	not	s April to June. Grows three to ten feet tall. Evergreen shrub similar to grow as erect, leaves are retained the entire year, leaves trifoliate and Clump-forming perennial grass Except pods inflated and hairy all over None of the Above
of reforestation in commercial to A. Evergreen shrub	stati imbe D. E.	ons displace native plant species and significantly increase the costs
	ated es a	as April to June. Grows 3 to 10 ft. tall. Evergreen shrub similar to and hairy all over, Stems more silvery, but not flowers fall off. D. Clump-forming perennial grass E. Giving appearance of pussy willow buds F. None of the Above

	oms April to June. Grows 3 to 10 feet tall. Evergreen shrub with many d branches with small, simple leaves. Abundant small, yellow,
A. Evergreen shrub	D. Pea-shaped flowersE. An aggressive pioneer species
leaves, and larger yellow flower	
A. Spanish broomB. Evergreen shrubC. Sod-forming, perennial grass	D. Clump-forming perennial grassE. Except pods inflated and hairy all overF. None of the Above
stems thicker and rougher, it ha	oms April to June. Grows 3 to 10 ft. tall. Similar to Scotch broom except s very few leaves, and flowers larger and D. Prominent claw-like appendages E. An aggressive pioneer species F. None of the Above
Buffalo Bur 139. Buffalo bur, sometimes ca weed. It bears long, yellow spine Drought resistant, its highest oc A. Five equal lobes B. Perennial herb C. Flower heads lilac-like	D. Flat pitted seedsE. Prickly nightshade
140. The oblong leaves are 2-3 dense, stiff, and sharp spines.	inches long withand are covered with very
A. Bright yellow flowers	D. Scotch broom
B. Deep rounded lobes	E. Upper leaves
C. Green to blue-gray	F. None of the Above
141. Bright yellow flowers can be enclosed in theA. Five equal lobes	be seen in summer. In the fall, berries up to 3/8 inch in diameter areand are filled with black, wrinkled, flat pitted seeds.
A. Five equal lobes	D. Flat pitted seeds
B. Perennial herb	
	F. None of the Above ortant, as it is a host for the Colorado potato beetle. When mature, the nd and the plant rolls like, widely scattering the 8500 D. Scotch broom E. Upper leaves
C. Green to blue-gray	F. None of the Above
143. Herbicides should be appl	ed between Dicamba, Triclopyr and 2,4-D can be ur. Glyphosate in a 2% solution can be applied as a spot treatment. D. Flat pitted seeds E. Late bud to early flower F. None of the Above

Bull Thistle 144. Description: An uprigl	nt biennial. Young seedling leaves are oblong in shape, but mature
	with cottony hairs on the undersurface.
B. Spine-tipped lobes	D. Several hundred seed heads E. Rosette leaves
C. Spiny wings	F. None of the Above
145green and are arranged alternative.	generally grow 2 - 12 inches long and 3/4 - 4 inches wide. Leaves are dark ernately along the rigid flower stalk, that grows 1 - 5 feet tall and can be highly
A Rosette leaves D	Strong competition to native plant communities Leaf axils on the flower stem
146h form spiny wings.	ave distinctly pointed, spine-tipped lobes, with bases that clasp the stem to
A. Four-chambered nutlet	D. Several hundred seed heads
C. Spiny wings	E. Stem leavesF. None of the Above
147	, 1 to 2 inches diameter, are borne on branch tips, and are subtended by
an egg-shaped cluster of sp	piny bracts.
A. Rosette leaves D.	Purplish/pink flower heads
C. Biennial F.	Leaf axils on the flower stem None of the Above
	re rise to seed heads that contain many single-seeded fruits, each topped by a
plume of feathery white hai	rs.
A. Rosette leaves D. B. Spiny bracts E.	
C. Biennial F.	Leaf axils on the flower stem None of the Above
	s: Bull thistle reproduces solely by seed. Each plant can produce between one neads, and seed heads produce
A. Four-chambered nutlet	D. An average of 100 seeds each
B. Spine-tipped lobes	E. Rosette leaves F. None of the Above
C. Spiny wings	F. None of the Above
Campion, White	its compien can be a winter or summer appual biomicl or
A. Short-lived perennial	ite campion can be a winter or summer annual, biennial, or D. Winter or summer annual, biennial
B. Reproduction	E. Creeping perennial weed
	ed F. None of the Above
151. This species is characteristics	
	ed, bladder-like structure (calyx). alyx) D. An aggressive, creeping perennial weed
B. Downy foliage	E. Infestations
	F. None of the Above
	arily by seeds, although fragmented segments of thecan give
rise to new plants. A. Central axis	D. Root crown
	E. Creeping perennial weed
C. Leaves are lance-shape	ed F. None of the Above

	goldenrod is a perennial distinguished by numerous small yellow flowers
 A. Bladder-like structure (calyx) 	at the top of individual, unbranched, leafy stems. D. An aggressive, creeping perennial weed
Perennial Pyramid-shaped clusters	E. InfestationsF. None of the Above
154. Flowers are crowded onto more or less horizontally.	that originate at a central axis and are arranged
A. Central axis 3. Reproduction	D. Numerous backward-curved stalks E. Creeping perennial weed
C. Leaves are lance-shaped	
155. Leaves areoothed on the edge.	hairless on the upper surface, hairy underneath, and sharply
A. Central axis	D. Lance-shaped, tapered at both ends E. Creeping perennial weed
Reproduction Leaves are lance-shaped	E. Creeping perennial weed F. None of the Above
	D. Wind dispersed seedsE. Creeping perennial weed
pastures, rangeland, roadsides ground, including ditch banks, o	vense) is an aggressive, creeping perennial weed that infests crops, and Generally, infestations start on disturbed vergrazed pastures, tilled fields or abandoned sites. D. Is an aggressive, creeping perennial weed E. In infestations F. None of the Above
158. Canada thistle reduces for graze near infestations.	rage consumption inbecause cattle typically will no
A. Pastures and rangeland	D. An aggressive, creeping perennial weed E. Infestations
	g perennial that reproduces from vegetative buds in its root system and because itsallows it to recover from control
A. Creeping perennial B. Canada thistle management C. Repeat applications	D. Extensive root systemE. Fern-like foliageF. None of the Above
mperative so the weed is contin	s is the best form of Canada thistle management. Persistence is ually stressed, forcing it to exhaust D. Root nutrient stores and eventually die
A. Creeping perennialB. Canada thistle managementC. Repeat applications	E. Fern-like foliage

161. Herbicides such as glyphosate can be painted on thistle leaves	will be
needed. Herbicides such as triclopyr + clopyralid or 2,4-D combinations can be sprayed	on thistle foliage;
repeat applications may be needed at 6 week intervals.	
A. Creeping perennial D. Herbicide applications	
B. Canada thistle management E. Repeat applications	
C. Applying any pesticide F. None of the Above	
 162. The most effective times for herbicide applications are spring, just after the green shin August/September. Always read the label before. A. Applying any pesticide D. Herbicide applications 	noots appear, or
B. Canada thistle management E. Repeat applications	
C. Repeat applications F. None of the Above	
Canarygrass 163. Plant Description: Reed canarygrass is a tall, coarse, sod-forming, cool-season percharacterized in summer by its two-tone appearance of golden seedheads atop green folioreproduces through seeds and more typically by(horizontal underground).	age. It
This species tends to grow in clumps 3 feet or more in diameter, and can form large, dens	
A. Bladder-like structure (calyx) D. Seed	
B. Perennial E. Vigorous rhizomes	
C. Cool-season perennial F. None of the Above	
164. Plant Description: Wild carrot is a biennial that looks and smells similar to	
Its distinctive fern-like foliage forms a rosette during the first year.	
A. Creeping perennial D. Cultivated carrot	
B. Canada thistle management E. Fern-like foliage	
C. Repeat applications F. None of the Above	
165. During the second year of growth, it produces a succession of	_that terminate
in umbrella-shaped clusters of small white flowers.	
A. Mat-forming species D. Hairy flower stalks E. Loef like breats and branches	
B. Reproduces by seeds E. Leaf-like bracts and branches E. None of the Above	
C. Heart-shaped leaves appear F. None of the Above	
166. A distinctive feature of wild carrot is the appearance of a dark purple flower (rarely s in the center of most flower clusters. Once flowers mature and, the flocioses forming a cuplike bird's nest. Wild carrot reproduces by seeds.	
A. Seeds begin to develop D. Unbranched plant with yellow flowers and leaves	
B. Reproduces by seeds E. Perennial that initially grows as a rosette	
C. Typically lance-shaped F. None of the Above	
Catnip	h ita da acces
167. Plant Description: Catnip isbest known for the minty odor emitted	by its leaves
and stems when they are crushed or wilted. The odor is very attractive to cats.	
A. An erect perennial B. Reproduced by seeds D. In the Mint Family E. Leaf-like	
B. Reproduced by seeds C. Heart-shaped E. Leaf-like F. None of the Above	
o. Heatr-shaped	
168. Other distinctive characteristics are and the serrated appearance of which resembles the toothed edge of a saw.	the leaf edges,
A. Downy foliage D. Unbranched plant with yellow flowers and leaves	
B. Reproduced by seeds E. Perennial that initially grows as a rosette	
C. Typically lance-shaped F. None of the Above	

169. The flower shape is common among members of the mint family consisting of 2 lips, and flower color is white with unusual purple dots. Along with most members of the Mint Family, catnip has square stems. This species reproduces by seeds and(horizontal underground stems).
A. Mat-forming species D. It also produces short rhizomes
A. Mat-forming species D. It also produces short rhizomes B. Reproduces by seeds E. Leaf-like bracts and branches
C. Heart-shaped leaves appear F. None of the Above
Catsear, Common 170. Plant Description: Common catsear is a perennial with a growth form similar to that of dandelion; its leaves form a basal rosette and it produces Leaves of common catsear are
typically lance-shaped with irregular rounded lobes and hairs on both the upper and lower surfaces.
R. Renroduces by seeds F. Vellow head-like flowers at the tins of unright stems
A. Either an annual D. Unbranched plant with yellow flowers and leaves B. Reproduces by seeds C. Typically lance-shaped D. Unbranched plant with yellow flowers and leaves E. Yellow head-like flowers at the tips of upright stems F. None of the Above
171. Emerging from the rosette arethat usually have leaf-like bracts and branches. At the tips of the branches are 1-inch-wide flower heads composed of many tubular, yellow flowers.
A. Mat-forming species D. Wiry hairless stems E. Leaf-like bracts and branches
C. Heart-shaped leaves appear F. None of the Above
172. Common catsear reproduces by seeds and vegetatively by way ofthat can produce new plants if separated.
A. Buds formed on the crown D. Unbranched plant with yellow flowers and leaves
B. Reproduces by seeds E. Perennial that initially grows as a rosette C. Typically lance-shaped F. None of the Above
Chickweed, Mouseear 173. Plant Description: Mouseear chickweed is a creeping, mat-forming species that normally behaves as a perennial; however, it is possible for it to exist as an annual. Plants reproduce by seeds and roots growing from the It tends to form dense patches. A. Mat-forming species B. Reproduces by seeds C. Heart-shaped leaves appear D. Nodes of stems E. Leaf-like bracts and branches F. None of the Above
Common Lambsquarters 174. Common Lambsquarters is a that can be found anyplace the soil has been
disturbed. The growth habits of the common lambsquarters vary with its location. If growing along the road or in an open field, it may reach three or four feet in height.
A. Distinctive curled cluster D. Broadleaf summer-annual weed
B. Perennial herb E. Broadleaf winter-annual weed
C. Dense, healthy turf F. None of the Above
175. Control: The best methods of weed control in the home vegetable garden are mulching, handpulling, rototilling, hoeing and preventing the weeds from
A. Opened flowers D. Blooming D. A prolific good producer F. The home vegetable gorden
A. Opened flowers D. Blooming B. A prolific seed producer E. The home vegetable garden C. Going to seed F. None of the Above
176. Because of its short, branched taproot, lambsquarters can be easily hand-pulled from moist soil. The best methods of weed control in the home vegetable garden are mulching, hand pulling, rototilling, hoeing and preventing the weeds from going to seed. Because of its
A. Distinctive curled clusters D. Short, branched taproot
B. Perennial herb classification E. Long, branched taproot
C. Rosette stage F. None of the Above

1//. Prevention by use of	should be the first line of defense in eliminating
broadleaf weeds such as lambs	quarters from lawns.
A. Violence	D. Fire
B. Hoe	E. Weed control in the home vegetable garden
C. Good cultural habits	D. Fire E. Weed control in the home vegetable garden F. None of the Above
178. Pre-emergent herbicides s	such as trifluralin (Preen) can be used to
A O t 1	D. Oantral brandlast armanan annual
B Control perennial herbs	F Prevent germination of weed seeds
C Create a dense healthy turf	E. Prevent germination of weed seedsF. None of the Above
179. Post-emergent herbicides	effective against) are 2,4-D, MCPP and dicamba
) and combination formulas (Trimec).
Broadleaf weeds	D. Broadleaf summer-annual weeds
B. Perennial herbs	E. Weed seeds
C. Turf	F. None of the Above
	requently found in newly seeded lawns or lawns that are stressed and
lack density. It can be	D. Found with banana trees E. Found with a long, branched taproot
A. Opened flower	D. Found with banana trees
B. A prolific seed producer	E. Found with a long, branched taproot
C. An annual or biennial	F. None of the Above
181. Mallow has a deep taproo	t but can be easily pulled from moist soil. The foliage resembles that of
the geranium. The	of common mallow are pinkish-white and the fruits look like small,
round chaeses	
A. Flowers	D. Seeds
B. Flowering plants	E. Stems
A. Flowers B. Flowering plants C. Rosette stage	F. None of the Above
	with proper mowing, fertilization, watering and other
cultural practices can help in the	e control of this weed.
A. A non-selective herbicide	
B. Seed production	E. Spreading perennial
B. Seed productionC. Herbicide spraying	F. None of the Above
	are effective. Triclopyr + clopyralid or triclopyr alone
are suggested.	areenective. Thoopyr + dopyralid or thoopyr alone
A. Post-emergent herbicides	
B. Very	E. An insecticide and are
C. Not	F. None of the Above
184. Common mullein, also kno	own as wooly mullein, velvet dock, flannel leaf, Aaron's rod, torch plant,
and miner's candle is a	
A. Non-selective weed	D. Biennial
B. Member of the figwort family	
C. Leaves are featherlike	F. None of the Above
185 Common mullein was broa	ught over from Europe by early settlers. It was used as a medicinal herb in
the treatment of coughs and dia	
	insecticide for mosquito larvae.
A. Post-emergent herbicide	D. As a respiratory stimulant for the lungs when smoked
B. Is a flowering plant	E. An insecticide for mosquito larvae
C For skin disorders	F. None of the Above

			ein plants are low-g	growing rosettes at	bout 5 inches in width
The felt-like leaves are					
A. Non-selective weed					
B. Seed producer	E. Sprea	ding perenni	al		
C. Featherlike plant	r. None	or the Above			
187. Flowering plants a spike. Thistiny seeds can germina		roduces five	-petaled flowers tha	at bloom a few at a	
Δ Spreading perennia	ite aitei iyii I	ng donnant id Neen tanr	not		
A. Spreading perenniaB. Flowering plant	'	Leafy spik	9		
C. Rosette stage	F	. None of th	e Above		
188. Mullein plants have tetrum) that food on the					
tetrum) that feed on the	seeus na r	Ve been louii	u enecuve in reduci n roots	ing seed production	111.
R Seed production	- -	Snreading	roots		
A. Spreading stemsB. Seed productionC. Featherlike leaves	F	. None of th	e Above		
189. Control: When ha					
effective option. This is of the leaves, herbicide	e should h	enective dui a mivad with	a surfactant to facil	Decaus	e of the wooly hattire
A. Post-emergent stag				illate uptake.	
B. Flowering stage		Spreading	stane		
C. Rosette stage	F	None of th	e Above		
190. A 2% solution of qusing a hand sprayer.	glyphosate	or triclopyr a	nd water, plus a		_, can be applied
A. A non-selective herl	hicide [) Glynhosat	e or triclonyr		
R Seed reducer	oiciae E	Non-ionic	surfactant		
B. Seed reducerC. Liquid	F	. None of th	e Above		
· '					
Common Yarrow					
191. Description: A low	v-growing,		_ with upright flowe	r stalks that can re	each 3 feet in height.
Each plant produces or				branched and cov	ered by fine nairs.
A. Non-selective weed	ant family	D. Bi	enniai 		
B. Member of the figwoC. Leaves are feather!	ort iamily iko	E. 5µ	oreading perennial		
C. Leaves are realifein	IKC	r. INC	ille of the Above		
192	, w	ith tiny, fine I	eaflets lining each s	side of the leaf ste	m. Leaves are
arranged along the ster	n at even	ntervals.			
A. Spreading stemsB. Seed production). Shallow ta	p roots		
B. Seed production	Е	. Spreading	roots		
C. Leaves are feather	ike F	. None of th	e Above		
193.	arow bety	een 1 and 6	inches long and 1/4	4 - 1 inch wide.	
A. Spreading stems			J		
B. Seed production					
C. Leaves	F. None	of the Above			
194. Flower heads are	horne in f	attened or ur	nhrella-shaned clus	sters at stem tone	Fach individual
					rs surrounding 10-20
pale yellow disk flowers		-,	.g, 10 piink		g 10 20
A. Spreading stem	D. Flowe	er heads			
B. Seed production	E. Sprea	ding root			
C. Leaf		of the Above			

195. Crabgrass is a summer ar	nnual grass with wider blades and a lighter green color than
	often has reddish-purple stems. It forms seedheads below mowing
height. A. Crabgrass	ldish-nurnle
B. Bluegrass E. Per	ennial crown
C. Compound leaves F. Non	e of the Above
196. Crabgrass is less prevaler	nt when turf has In particular, mowing too low ination. Maintain mowing heights of 2.5 - 3 inches.
A. Stems	D. Sharply toothed lobes
	D. Sharply toothed lobesE. Immature, young seedlings
C. Bright yellow flower heads	F. None of the Above
197. Control:	(benefin + trifluralin, dithiopyr, DCPA, oxadiazon, pendimethalin, or
prodiamine) applied correctly ar	nd at the proper time should provide control.
A. Crabgrass killer	D. A pre-emergent herbicide
B. Applied correctlyC. Compound herbicide	E. Perennial spray
·	
198. Do not use	on a newly seeded or sodded lawn or when overseeding a lawn.
A. Crabgrass killer B. Applied correctly	D. A pre-emergent herbicide
C. Compound herbicide	F None of the Above
•	
	"crabgrass killer" (MSMA, DSMA, MAMA) sprays are not s are immature, young seedlings. Always read the label before applying
any pesticide.	s are inimature, young seedings. Always read the label before applying
A. Post-emergent	D. A pre-emergent herbicide
B. Applied correctly	E. Perennial spray
A. Post-emergent B. Applied correctly C. Compound herbicide	F. None of the Above
Creeping Yellow Cress	
200. Description:	; flowers June to August. Grows up to 20 in tall. Leaves 2 to 4 in
long and pinnately divided into i	narrow, sharply toothed lobes. Flowers yellow with four small petals.
A. Non-selective weed B. Winter annual	D. Biennial
B. Winter annual	E. Spreading perennial
C. Perennial	F. None of the Above
201. Plant Description: Crownv	
	anged in pairs and pinkish flowers resembling those of peas, beans, or
clovers that are grouped into he	
A. Non-selective weed	D. Biennial
B. Winter annual C. Perennial	E. Spreading perennial F. None of the Above
C. Felelillal	F. Notie of the Above
	, forming a tangled mass less than 2 feet tall. Reproduction is by
seeds.	and D. Champly to athe ad labor
A. Long and trail along the groum.B. An erect biennial	und D. Sharply toothed lobes E. Immature, young seedlings
C. Bright yellow	F. None of the Above
203. Root system - Roots form A. Rhizome	a D. Reddish-purple stem
B. Sharply toothed lobe	E. Perennial crown
C. Compound stem	F. None of the Above

Curlycup Gumweed	nial orwith one to several green, reddish, or whitish
branching stems. Stems grow 1	
A. Non-selective weed	
B. Winter annual	E. Short-lived perennial
C. Perennial	F. None of the Above
have an oval or linear shape wit	ely along the stem, and typically clasp the stem, with no stalk. Leaves th serrated margins, are 1/2 - 2 1/2 inches long, and
A. Long and trail along the grou	und D. Sharply toothed lobes
B. An erect biennialC. Bright yellow	E. Are covered with glands that exude a sticky resinF. None of the Above
206 ar	e borne at the tip of each branch, held in bright green cups of tiny,
resinous bracts that curl in hook	s away from the flowers.
A. Long and trail along the grou	und D. Sharply toothed lobes
B. An erect biennial	E. Immature, young seedlingsF. None of the Above
C. Bright yellow flower heads	F. None of the Above
replaced by tiny, ridged, four-sig	1 inch across and are sticky with resin. As the plant matures, flowers are ded, off-white seeds, to which two to three bristles are
A. Long and trail along the grou	und D. Sharply toothed lobes
B. An erect biennial	und D. Sharply toothed lobes E. Attached at the tip F. None of the Above
C. Bright yellow	F. None of the Above
ovid to oblong, mature leaves of A. Non-selective weed B. Winter annual	_; flowers July to September. Grows up to seven feet tall. Rosette leaves pposite, large, oblong and prickly. D. Biennial E. Short-lived perennial F. None of the Above
209. Common teasel is similar,	but has purple flowers and
A. An extensive taproot	D. No lobes on upper leaves E. Stems tall and prickly
B. Rhizomatous roots	E. Stems tall and prickly
C. A single, bright-yellow flower	r head F. None of the Above
210. Plant Description: Ox-eye dark green, hairless, somewhat white rays and yellow centers.A. Clump-forming perennialB. Winter annualC. Perennial	daisy is adistinguished by lower leaves that are fleshy, and coarsely toothed and conspicuous daisy-like flowers with D. Biennial E. Short-lived perennial F. None of the Above
211. are an	other identifying feature. The plant reproduces by seeds and short
rhizomes (horizontal undergroui	
A. An extensive taproot	D. A simple herbaceous perennial
B. Rhizomatous roots	E. Stems tall and prickly
C. A single, bright-yellow flower	r head F. None of the Above
under low turf density, dandelion	with an extensive taproot. Its yellow flowers can h and November and are followed by fluffy seed heads. More prevalent n growth can be inhibited by increasing the turf density.
A. Clump-forming perennial	
B. Winter annualC. Perennial	E. Short-lived perennial F. None of the Above
O. I OTOTITIO	1. 110110 01 1110 / 100 40

	it with special tools, but any part of the	that is left is
capable of regenerating a plant.	D. Dlant	
A. An extensive taproot	D. Plant E. Stem	
A. An extensive taproot B. Rhizomatous roots C. Root	F. None of the Above	
5 . 1.650	T. Hone of the Alberta	
214. Control: A 2,4-D or	is most effective and should be	used in spring and fall.
Always read the label before ap	plying any pesticide.	-
A. Crabgrass killer		
B. 2,4-D combination herbicide		
C. Compound herbicide	F. None of the Above	
215	and are 2-12 inches long and 1/2 - 4 inches	wide. Leaf shane varies
from having wavy or toothed ma	_, and are 2-12 inches long and 1/2 - 4 inches vargins to having deep, pointed lobes.	mae. Lear enape varies,
A. A globe shape	D. Coarsely toothed	and conspicuous flowers
B. Fluffy seed heads	E. Or toothed margir	ns to having deep lobes
C. Leaves are arranged in a lov	w-growing rosette F. None of the Above	е
046. The resette was divised and	an many hallow flower stalks that snow 2. 24 in	aabaa tall dananding an
	or more hollow flower stalks that grow 2 - 24 ir develops at the apex of each stalk, and is 3/	
A An extensive tanroot	D. A single, bright-yellow flower head	4 - 2 mones in diameter.
B. Rhizomatous roots	D. A single, bright-yellow flower head E. Stems tall and prickly	•
C. A single, bright-yellow flowe	r head F. None of the Above	
3		
	ed of many 1/8 inch-long rough, brown, oblong	fruits with white hairs
attached at the tip,	 ·.	
A. Collectively forming a globe	shape D. Coarsely toothed and conspicuous	s daisy-like flowers
B. Fluπy seed neads	E. Or toothed margins to having deep F. None of the Above	p, pointed lobes
C. Spring and fall	F. None of the Above	
218. Plant Description: Tawny	daylily is a, characterized	by its beautiful orange
flowers which line the roadsides	s in July. This species is not a true lily, as indica	ated by its unspotted
blossoms and leafless stems.		
A. Clump-forming perennial	D. Biennial	
A. Clump-forming perennial B. Winter annual C. Perennial	E. Short-lived perennial	
C. Perennial	F. None of the Above	
210 Tawny daylily reproduces	primarily by rhizomes () and	tuber-like roots, and rarely
by seeds.	primarily by mizomes () and	rtaber-like roots, and rarery
A. A twining vine	D. Horizontal underground stems	
B. Is especially destructive	E. Basal rosette	
C. Vertical underground stems	F. None of the Above	
000 DI (D.) (
220. Plant Description: Broadle	eaf dock is awith a deep t	aproot that can reach
	uces primarily by seeds, but there is limited reg	eneration from root tissues.
A. Clump-forming perennial B. Rosette-forming perennial	F Short-lived perennial	
C. Perennial	F. None of the Above	
	al rosette with relatively large leaves. The	
-	e smaller versions of the basal leaves arrange	d alternate.
A. Plant	D. Horizontal underground stem	
B. Vine C. Hairless reproductive stem	E. Basal rosette	
Hairiace ranfonlictive etam	E NONE OF THE ADOVE	

222. The smartweed family is c	haracterized by a papery sheath (called the ocrea) that
A. Easy to pull and destroy	D. Cover each node
B. Is hard to control	E. Is a rosette-forming perennial
C. Is classified as a perennial	F. None of the Above
or red. Occasionally it is almost	mmica), is a twining yellow or orange plant sometimes tinged with purple white. and thread-like or relatively stout. D. Horizontal underground stems E. Basal rosette with relatively large leaves F. None of the Above
224 Description: Dodder is class	ssified as a member of thein older references, and as
a member of the Dodder Family A. Clump-forming perennial	(Cuscutaceae) in the more recent publications.
	E. Morning-Glory Family (Convolvulaceae)
C. Perennial	F. None of the Above
lespedeza, flax, clover and pota	nds of wild and cultivated plants, and is especially destructive to alfalfa, toes.
A. A twining yellow or orange p	lant to D. Horizontal underground stems with
B. Is especially destructive to C. Infested with dodder and wi	lant to D. Horizontal underground stems with E. Dodder parasitizes Il destroy F. None of the Above
o. Intested with dodder and wi	1. Notice of the Above
226. Control: Its wide host rang	e and the long life of its dormant seeds make dodder hard to control and
A Pulling and destroying	D. Nearly impossible to eradicate
B. Hard to control	D. Nearly impossible to eradicate E. Is a rosette-forming perennial
C. Is classified as a pest	F. None of the Above
alfalfa, or along with the seed of	ad by irrigation water, in the manures of livestock that have eaten infested forops that were
A. Seed	D. Stems
A. Seed B. Especially destructive C. Infested with dodder	E. Cut E. None of the Above
C. Illiested with dodder	F. Notile of the Above
produces seeds or infestations v	
A. Pull D. Cover each B. Mow E. Dodder mus	piani it be destroyed
C. Spray F. None of the	
229. Preemergent herbicides si	uch as, applied to the soil in the spring prior to
	is pest. The use of a 2,4-D type herbicide or contact herbicide directed at s is effective in killing established parasitic plants (as well as the host).
Always read and follow label dir	
A. Crabgrass killer	D. A pre-emergent herbicide
B. 2,4-D combination herbicide	
C. Compound herbicide	F. None of the Above
an upright stem with small white	nustard is a that forms a rosette the first spring and a flowers the second spring. It is characterized by triangular, coarsely
	proot with a distinct S-curve just below the root crown. D. Biennial
A. Clump-forming perennialB. Rosette-forming perennial	
C. Perennial	F. None of the Above

231. Young leaves give off a strong garlic odor when crushed, but the odor fades with leaf age and is nearly gone by fall. Garlic mustard A. Stems are square D. Control in two generations B. Reproduces only by seeds E. Resembles a wheat kernel C. Has multiple forks F. None of the Above
232 and very difficult to control once established. It tends to form dense stands that crowd out herbaceous native flora. As a result, invasion of garlic mustard into forests tends to decrease the number of native spring species. A. Stems are square D. This weed is invasive B. Fall application E. Resembles a wheat kernel C. Multiple forks F. None of the Above
233. Garlic mustard can be controlled by
234. Various methods can be used to, including cutting plants at ground level just before or during flowering, hand pulling, burning, or spot application of herbicides (optimally in early spring or fall). A. Crabgrass killer D. A pre-emergent herbicide B. 2,4-D combination herbicide E. Prevent seed formation C. Compound herbicide F. None of the Above
235. When hand pulling, a significant portion of the root crown must be removed or else plants can resprout. However, the best management strategy is A. Crabgrass killer D. A pre-emergent herbicide B. 2,4-D combination herbicide E. To prevent establishment C. Compound herbicide F. None of the Above
236. Herbicide Control: Apply a(8 ounces in a 3-gal. sprayer) with a surfactant (or without a surfactant when near surface waters) to thoroughly wet all foliage in April through June (during flowering) to control two generations. A. Crabgrass killer D. A pre-emergent herbicide B. 2,4-D combination herbicide E. Glyphosate herbicide as a 2% solution in water C. Compound herbicide F. None of the Above
237. Description: Shiny geranium grows predominantly asthough it may become biennial depending on moisture conditions. A. An annual weed D. Biennial B. Rosette-forming perennial E. A stout perennial C. Perennial F. None of the Above
Goatgrass, Barbed 238. Description:; grows 8 to 16 inches tall with few to many culms. Leaf sheaths contain white hairs when young, becoming more or less smooth once matured. The blades are rigid, sharp, pointed, and spreading. Grain 1/4 inch long, resembling a wheat kernel. A. Annual D. Biennial B. Winter annual E. A stout perennial C. Perennial F. None of the Above

239. Henbit is a have a stalk while	occasionally found in lawns in early spring. The lower leaves the upper leaves clasp the stem.
A. An annual wee	
	E. A stout perennial
C. Perennial	F. None of the Above
opposite from eac purple, and form j	quare, like other members of the mint family. All the leaves are coarsely toothed and nother. Flowers appear in May and are, trumpet-shaped, pinkish white to est above upper leaves. are D. Two generations inch long E. Resembling a wheat kernel F. None of the Above
	more often found in buffalograss than in bluegrass. Newly-seeded bluegrass and
	ass lawns withmay have some henbit.
A. Pink flowers	D. Poor density E. Crowns
	grass F. None of the Above
controlled with application of a punchabit germination A. Triclopyr + clo B. 2,4-D combination	abit has a taproot and is easily pulled from moist soil. Heavy infestations can be, 2,4-D or 2,4-D combination herbicides; at or prior to flowering. Fall e-emergent herbicide (dithiopyr, isoxaben, pendimethalin or prodiamine) will prevent . yralid D. A pre-emergent herbicide ion herbicide E. DCPA (Dacthal) bicide F. None of the Above
that are deeply di A. Clump-forming B. Rosette-forming	Herb Robert is a branching, low growing It has light green leaves sected and release a pungent odor making this plant easy to recognize. perennial D. Biennial g perennial E. Winter and spring annual F. None of the Above
conditions. The st A. Square B. Highly pubesc	mature the foliage turns red. This red color is very noticeable under bright light ems are, have multiple forks, and are brittle at the joints. D. Round E. Resembling a wheat kernel F. None of the Above
The receptacle is Robert reproduce A. Torus D. Horn E.	Break
246. Flowers are	usuallycreating uniform populations.
A. Are square D	Round
	Resembling a wheat kernel None of the Above
o. Manapio I	140110 01 1110 / 100 10

purplish, pyramidal flower head	ngrass is a large, coarse,s and the prominent white midrib o contal underground stems), and ca	, characterized by its down the leaf blade. It reproduces by
A. Clump-forming perennial		an form large, derise patches.
R Rosette-forming perennial	E. A sod-forming perennial gras	9
	F. None of the Above	3
o. i ciomiai	1. None of the Above	
have long leaves arising from a	tufted base or tussock.	anges six to twenty-three feet tall. Plants
A. Clump-forming perennial		
B. Rosette-forming perennial		
C. Perennial weed	F. None of the Above	
249. The flower cluster is a	at the end of a	a very long stem. Stems generally are at
least twice as long as the tusso	ck.	
A. Stem height	D. Truncate leavesE. Biennial or short-lived perenrF. None of the Above	
B. Japanese knotweed	E. Biennial or short-lived perenr	nial
C. Plumed panicle	F. None of the Above	
250. Plumos consist of	doon violat w	when immature, turning pinkish or tawny
cream-white at maturity luhata	grass is easily confused with pan	npas grass (Cortaderia selloana).
	D. Hairy female flowers	npas grass (Cortaderia selloaria).
	E. Stout stems reddish-brown,	nodes slightly swollen
C. Significant threat	F. None of the Above	gy cc
3		
and .		me, and spikelet color, florets, leaf tip,
A. Presence of viable seed	D. Truncate leavesE. Biennial or short-lived perenr	
B. Japanese knotweed	E. Biennial or short-lived perenr	nial
C. A plumed panicle	F. None of the Above	
252. The are le	ss erect and more spreading and	not fountain-like, when compared to
tussocks of Cortaderia selloana		, ,
A. Inflorescence	D. Tussocks of jubata grass	
B. Tips of flower head bracts	E. Stout stems reddish-brown,	nodes slightly swollen
C. Tips	F. None of the Above	
Knapweed, Spotted		
253. Description:	: blooms midsummer to	fall. Grows up to 3 feet tall. Multi-
stemmed plant with several ste		- 1
A. Clump-forming perennial		
B. Rosette-forming perennial	E. Biennial or short-lived perenr	nial
C. Perennial	F. None of the Above	
25/ Flowers numbe or rarely o	ream colored ar	e usually black, thus the name "spotted."
Seeds dispersed by wind, anim		e asaany black, thas the hame spotted.
A. Inflorescence	D. Not fountain-like	
	E. Stout stems reddish-brown,	nodes slightly swollen
C. Significant threat	F. None of the Above	3 ,
-		
Knotweed, Giant	blooms lukits Ostalisis	Crown over 12 feet tell. Classic related
255. Description:		Grows over 12 feet tall. Closely related
and similar to Japanese knotwe A. Clump-forming perennial	eu. D. Biennial	
B. Rosette-forming perennial	E. Biennial or short-lived perenr	nial
C Perennial	F None of the Above	

		; often exceeds one foot long	of creamy white
		loes not increase with maturity.	
		Fountain-like	
B. Tips of flower head bracts	E.	Stout stems	
C. Stem height	F.	None of the Above	
	nese	knotweed are common. Japanese kn	otweed is smaller with truncate
leaves.			
A. Hybrids	D.	Truncate leaves	
B. Spotted knotweed	E.	Biennial or short-lived perennial weed None of the Above	S
C. Giant knotweed	F.	None of the Above	
050	:_ 4 _	-	
258. Impacts: Glant knotweed	is th	e largest of the knotweeds, enabling th	is species to dominate and out
compete native or A. Beneficial plants	_	 Not fountain-like	
A. Deriencial plants	D.	Stout stome	
B. Tips of flower head bracts	Ε.	None of the Above	
C. Significant threat	Г.	None of the Above	
Knotweed Jananese			
Knotweed, Japanese		blooms July to October. Grows four to	ning foot tall and has long
erooping rhizomos	'	blooms July to October. Grows lour to	Time foot tall and has long
creeping rhizomes.	Ь	Pionnial	
A. Clump-forming perennial B. Rosette-forming perennial	D.	A stout peroppiel	
C. Perennial			
C. Perenniai	Г.	None of the Above	
260 Stout stems reddish-brow	'n	Leaves short stalke	ad trucate broadly ovate and 2
6" long by 2-4" wide.	'11,	Leaves short staine	tu, ilucate, broadly ovate and 2-
	Ь	Nodes slightly swellen	
		Nodes slightly swollen	
B. Formation of turions			
C. Pale-colored bulblets	Г.	None of the Above	
261 Flowers greenish white to	cro	am in large plume-like clusters at the e	ands of the stems with
giant knotweed are common			with
A Kidney to heart shaped	П	Perennial	
A. Kidney to heart-shaped B. Large infestations C. Hybrids	D.	Horbacous peroppial wood	
D. Large infestations	 	None of the Above	
C. Hybrids	Г.	None of the Above	
Lesser Celandine			
	dine	is an herbaceous, plant in th	e huttercup family
	unic	is an nerbaceous, plant in th	e buttercup fairing
(Ranunculaceae). A. Clump-forming perennial	П	Biennial	
B. Rosette-forming perennial			
		A stout perennial	
C. Perennial	Г.	None of the Above	
263 Plants have a basal roset	to of	dark green, shiny, stalked leaves that	are kidney to heart shaped
		il, have eight glossy, butter-yellow peta	
The nowers open in March and	Aþi	ii, riave eigrit glossy, butter-yeilow peta	ils, and are borne singly on
A. Kidney to heart-shaped	П	Delicate stalks that rise above the lear	VAC
			ves
B. Large infestations		Herbaceous perennial weed None of the Above	
C. Hybrids	Г.	None of the Above	
264. are prod	duco	d along the stems of the above ground	I portions of the plant, but are
not apparent until late in the flo	weri	a along the sterns of the above ground	portions of the plant, but ale
A. An erect biennial		Stout stems reddish-brown	
B. Formation of turions		A milky juice	
C. Pale-colored bulblets	Г.	None of the Above	

265. When in bloom, large infe	stations of lesser celandine appear as a green carpet with yellow dots,
	D. Spreading across the forest floorE. Herbaceous perennial weedF. None of the Above
petals and dark green leaves m formation of turions that are	of lesser celandine including a double-flowered form with many crowded ottled with silvery markings. The primary reproductive method is the
formation of turions that areA. An erect biennial B. Formation of turions C. Pale-colored bulblets	D. Stout stems reddish-brown E. Produced on the roots in large numbers F. None of the Above
267. Leafy spurge (Euphorbia of from seed and vegetative root by A. Herbaceous perennial weed	
B. Rosette-forming perennial	
basal leaves during its first year	lettuce is an erect biennial () that grows as a rosette of
A. Clump-forming perennialB. Rarely an annualC. Perennial	D. BiennialE. A stout perennialF. None of the Above
especially the top portion where A. Kidney to heart-shaped B. Large infestations	that is usually erect and sometimes branched, small, daisy-like, yellow flowers are borne. D. Solitary stem E. Herbaceous perennial weed F. None of the Above
270 and have of midribs. Nearly half of the ler (pappus) at the tip.	prickly edges and a distinctive row of stiff, sharp prickles on the underside gth of each seed consists of a beak having a tuft of silky white hairs
A. An erect biennial	E. Stem leaves are irregularly-lobed
271. All plant parts exudeA. Stem tip B. Fragmented stems C. A milky juice when cut or bro	. The plant reproduces only by seeds. D. A biennial root crown E. Purple-magenta flowers oken F. None of the Above
272. Similar Species: Prickly le leaf margins but	ttuce can be confused with sowthistles (Sonchus spp.), which have prickly
A. Spikelets B. Smooth midribs C. Spreads by rhizomes	D. Appear slightly crinkled, have toothed edges E. A woody crown and rhizomes F. None of the Above
except they have leaves with sr	densis) and tall blue lettuce (Lactuca biennis) look similar to prickly lettuce nooth edges and ribs without prickles
B. Fragmented stems E. Pur	

	ean native weed belonging to the mustard family, and is one of the
It is abundant citrus orchards, pastures, and al A. Clump-forming perennial	
B. Rosette-forming perennial C. Perennial	E. First winter weeds to appear
has a coarse taproot. Small, yell	. The stems branch from the base 1 to 3 feet high. It low flowers are borne on slender stalks in small clusters at the stem tip. D. Biennial E. Bright green fleshy winter annual F. None of the Above
of up to 50 stems arising from a (horizontal underground stems). A. Clump-forming perennial B. Rosette-forming perennial	D. Biennial
weed when growing in wet areas form onhairy.	
A. Spikelets	ces by seeds and it spreads by D. Appear slightly crinkled, have toothed edges E. A woody crown and rhizomes F. None of the Above
butterflies. The adult females se A. Inconspicuous spikes	, are the only host plant for the monarch and queen sek out these plants on which they lay their eggs. D. Members of the Asclepias family E. Twining vines, funnel-shaped flowers F. None of the Above
from other perennial vines include	D. Biennial E. A stout perennial

Milkweed, Swamp 282. Plant Description: Swamp milkweed is a Its stems and leaves exude a white milky sap if cut or broken, which is a common characteristic of species in the Milkweed Family. A. Clump-forming perennial B. Slender perennial C. Perennial D. Biennial E. A stout perennial F. None of the Above	
283. It can be distinguished from other milkweeds by its habitat, as it is the only native milkweed species preferring wet ground. Reproduction is by way of seeds and A. Flowers are distinctively prickly D. Long-spreading rhizomes B. Deep taproot and thick E. Inconspicuous flower clusters C. Weakly creeping roots F. None of the Above	:s
Morningglory, Bigroot 284. Plant Description: Bigroot morningglory is a that shares numerous characteristics with other morningglories including twining vines, funnel-shaped flowers, and heart-shaped leaves. Unlike its relatives, bigroot morningglory has a very large and deep taproot. Reproduction is by seeds and creeping roots. A. Clump-forming perennial D. Biennial B. Rosette-forming perennial E. A stout perennial C. Perennial F. None of the Above	on
285. Root system - The root system consists of a large,, yellowish-white creeping roots. A. Flowers are distinctively prickly D. Long-spreading rhizomes B. Deep taproot and thick E. Inconspicuous flower clusters C. Milkweed Family F. None of the Above	
Motherwort 286. Plant Description: Motherwort is athat can grow up to 5 feet tall. As with other mint species, it has square stems and its foliage emits a pungent odor if crushed. A. Stiff-stemmed perennial D. Biennial B. Rosette-forming perennial E. A stout perennial C. Perennial F. None of the Above	ər
287. The pink to pale purple flowers are grouped in clusters of 6 to 15 at the axils where upper leaves attach to the stem. Sepals located directly beneath the flowers are The plant reproduce by seeds. A. Flowers are distinctively prickly D. Long-spreading rhizomes B. Deep taproot and thick E. Inconspicuous flower clusters C. Distinctively prickly F. None of the Above	∋s
Mugwort 288. Plant Description: Mugwort is one of several closely-relatedwith an erect growth formula dissected leaves that generally give off a strong odor. A. Herbs D. Biennial B. Rosette-forming perennial E. A stout perennial C. Perennial F. None of the Above	m
289. Mugwort can be distinguished by its dark-green leaves, which are hairless above and silvery-white beneath due to a covering of wooly hairs, and A. Flowers are distinctively prickly B. Deep taproot and thick C. Its sage-like odor D. Long-spreading rhizomes E. Inconspicuous flower clusters F. None of the Above	;

portion of the stem. New plants underground stems). The plant of A. Flowers are distinctively price	flower clusters on upright branches located at leaf axils on the upper arise at the upturned ends of short, stout,(horizontal rarely reproduces from seeds. kly D. Long-spreading rhizomes E. Inconspicuous flower clusters F. None of the Above
Musk thistle 291. Musk thistle is an aggress and non-crop areas. It is a bienr A. Clump-forming perennial B. An annual C. Perennial	ive weed of foreign origin that occurs in pastures, rangeland, roadsides nial weed, although occasionally it is D. Biennial E. A stout perennial F. None of the Above
293. The key to successful mustA. Crabgrass killerB. 2,4-D combination herbicideC. Compound herbicide	D. A pre-emergent herbicide E. To prevent seed production
294. Apply herbicides such as Apply up to to A. Crabgrass killer B. 2,4-D combination herbicide C. Compound herbicide	D. A pre-emergent herbicide E. Ally or Telar
establishment are correlated wit	a management system for best results. Germination and seedling the moisture and light. Thus, more seeds germinate and establish plants in led areas. D. A pre-emergent herbicide E. DCPA (Dacthal) F. None of the Above
	competes with musk thistle, andoccur in pastures where nusk thistle also can become a problem in pasture or rangeland that is in D. Weedy escaped ornamental species E. Musk thistle rosettes F. None of the Above
unpleasant stinging hairs on the	nettle is an erect, herbaceous that is widely known for its stems and lower leaf surface. It reproduces by wind-dispersed seeds and inderground stems), and grows in dense clumps, often forming large D. Biennial
B. Rosette-forming perennialC. Perennial	E. A stout perennialF. None of the Above

Nightshade Bittersweet			
298. Plant Description: Bittersw	eet nightshade is a	climbing or trailing vine that	
reproduces by seeds and rootin	g at the nodes of the prostra	ate stems. It can be distinguished from other	
viney plants by its hollow stems	that are woody at the base	and oval leaves with pointed tips.	
A. Clump-forming perennial	D. Biennial	·	
B. Rosette-forming perennial	E. A stout perennial		
	F. None of the Above		
		r leaves are, which are	
		ms that, along with its blue-violet flowers and	
•	•	ightshade from other nightshade species. All	
parts of the plant give off a disag	greeable odor when bruised		
A. 2 opposite lobes			
B. Moisture and light	E. Woody deciduous vine	with stems	
C. Finely toothed margins	F. None of the Above		
		mental species of Euphorbia. This plant is an	
	at produces up to 20 stems	on a woody rootstalk with the plants reaching	g
nearly three feet in height.			
A. Clump-forming perennial			
B. Rosette-forming perennial	E. A stout perennial		
C. Perennial	F. None of the Above		

You are finished with your assignment.