

# **FFA Invitational 2015 Wildlife Contest**

26 March 2015

Hosted by  
Department of Wildlife, Sustainability, and Ecosystem Sciences  
Tarleton State University  
Stephenville , TX

## **Exam Answer Keys**

## SAFETY

- \_\_\_\_\_ is not a safe way to transport a firearm.
  - Unloaded
  - With the action open
  - In a gun case
  - Loaded and in a gun rack in the rear window**
- You and your friend are making plans for a duck hunt. You have decided to hunt from a boat. Together, you make your equipment list. Your friend plans to bring his life jacket, dog, waders, decoys, firearm, ammunition, drinks and snacks. You plan to bring your life jacket, waders, decoys, firearm, ammunition, drinks and snacks. Having watched the weather forecasts, you and your friend realize you will need your waders and additional warm clothing. What specific feature of your boat do you need to know as you continue making plans for a safe hunt?
  - Length
  - Weight capacity**
  - Color
  - Fuel type
- All marine safety enforcement officers and game wardens are given the authority under the Texas Water Safety Act to enforce the boating laws of Texas. This includes the right to stop and board vessels in order to check for compliance with federal and state laws.
  - True**
  - False
- Failure to properly identify game is a common cause of hunting accidents. What colors should turkey hunters avoid wearing in an effort to lessen the risk of being mistaken for game when hunting?
  - Black, green, brown
  - White, orange, blue
  - Red, white, blue**
  - Black, blue, brown
- The basic safety rules that govern firearm shooting do not apply to archery.
  - True
  - False**
- For safety purposes, when hunting in a group, hunters should be spaced \_\_\_\_ to \_\_\_\_ yards apart and always in sight of one another.
  - 4 to 5
  - 10 to 15
  - 15 to 20
  - 25 to 40**
  - 45 to 50
- Bullets can pass through game and continue on for some distance with deadly force.
  - True**
  - False

8. Observe the actions of the contest's Safety station facilitator. Which of the four primary rules of firearm safety is not being followed?
- A. Be sure of the target and what is in front of it and beyond it.
  - B. Keep your finger outside the trigger guard until ready to shoot.
  - C. Point the muzzle in a safe direction.**
  - D. Treat every firearm with the respect due a loaded gun.
9. Occasionally you may trip or stumble in the field, accidentally dipping the firearm barrel into the ground or snow. Being a safe hunter you immediately check for what before continuing the hunt.
- A. An barrel obstruction**
  - B. A bent barrel
  - C. Tears to your new hunting clothes.
  - D. To make sure no one else saw you trip.
10. Hunting laws establish safe guidelines for hunting that protect both hunters and non-hunters.
- A. True**
  - B. False
11. Which of the 4 C's demonstrates a responsible Texas hunter's commitment and attitude to basic rules of safety?
- A. Capable
  - B. Courteous
  - C. Careful**
  - D. Considerate
12. It is not necessary to refresh your memory of hunting and firearm safety rules every year, nor is it necessary to review the rules with your hunting partners.
- A. True
  - B. False**
13. If you are color-blind, you should be especially cautious when hunting.
- A. True**
  - B. False
14. If you fall into cold water while hunting you should immediately remove wet clothing.
- A. True
  - B. False**
15. The safe firearm carry easiest for long treks through open country is:
- A. Sling carry**
  - B. Trail carry
  - C. Elbow or side carry
  - D. Shoulder carry
  - E. Two-Handed or "ready" carry

## WILDLIFE TECHNIQUES

- \_\_\_A\_\_\_ 1. This wildlife management tool is commonly used for.....?
- A) **Banding birds**      B) Ear tagging small mammals  
C) Taking blood samples   D) Pulling teeth
- \_\_\_A\_\_\_ 2. What is the age and sex of this Rio Grande turkey? (showing Back and tail feathers)
- A) **Adult Male**   B) Juvenile Female   C) Adult Female   D) Juvenile Male
- \_\_\_B\_\_\_ 3. This skull is from what native Texas mammal?
- A) Skunk   B) **Jackrabbit**   C) Gopher   D) Fox Squirrel
- \_\_\_C\_\_\_ 4. What is the age of this mourning dove?
- A) Adult   B) 2 year old   C) **Juvenile**   D) Undetermined
- \_\_\_A\_\_\_ 5. What is the species of this duck?   **Wing**
- A) **Mallard**      B) Gadwall  
C) Blue-winged teal   D) Wood duck
- \_\_\_B\_\_\_ 6. This skull is from which wildlife species?
- A) Mountain Lion   B) **Javelina**   C) Black bear   D) Ocelot
- \_\_\_C\_\_\_ 7. What is the approximate age of this white-tailed deer?
- A) 3 ½ years old   B) 1 ½ year old   C) **5 ½ years old**  
D) 6 ½ years old
- \_\_\_D\_\_\_ 8. Which mammal species did this come from?
- A) Nutria      B) Pronghorn  
C) Collard Peccary   D) **Porcupine** (A Quill was shown)
- \_\_\_D\_\_\_ 9. This skull is from what native Texas mammal?
- A) Grey Fox   B) Coyote   C) Gopher   D) **Red Fox**
- \_\_\_A\_\_\_ 10. This skull is from what native Texas mammal?
- A) **Grey Fox**   B) Coyote   C) Gopher   D) Red Fox

- \_\_\_C\_\_\_ 11. What is the common name of this mammal species?
- A) Rock Squirrel                      B) Eastern Flying Squirrel  
C) **Eastern Fox Squirrel**            D) Black-tailed Prairie Dog
- \_\_\_D\_\_\_ 12. In the Boone & Crocket scoring system, what is the tool used to measure?
- A) The Main Beam                      B) The Tine Length  
C) The Beam Circumference          D) **The Inside Spread**
- \_\_\_B\_\_\_ 13. In the Boone & Crocket scoring system, which number indicates the measurement for the G-4?
- A) 4    B) **8**  
C) 2    D) 3
- \_\_\_D\_\_\_ 14. In the Boone & Crocket scoring system, which number indicates the measurement for the H-1?
- A) 3    B) 4  
C) 8    D) **5**
- \_\_\_A\_\_\_ 15. What is the age of this Rio Grande Turkey feather?
- A) **Juvenile**   B) Adult   C) Undetermined
- \_\_\_C\_\_\_ 16. This item is from what wildlife species?
- A) Banded Lizard                      B) Texas Horned Lizard  
C) **Rattlesnake**                      D) Rat Snake
- \_\_\_D\_\_\_ 17. What is the common name of this avian species?
- A) Red Winged Blackbird                      B) Yellow-headed Blackbird  
C) Boat-tailed Grackle                      D) **Cowbird**
- \_\_\_B\_\_\_ 18. Which avian species constructed this nest?
- A) Eastern Bluebird                      B) **Hummingbird**  
C) Barn Owl                                      D) Turkey Vulture
- \_\_\_B\_\_\_ 19. This scat was left by which of the following wild turkey?
- A) Male   B) **Female**   C) Juvenile unknown   D) Unknown
- \_\_\_D\_\_\_ 20. The arrow is pointing to what feather group?
- A) outcoverious   B) Secondary   C) Covarts   D) **Primary**

## Biological Facts

- 1) Hunting of Mourning dove may take \_\_\_\_\_ percent of the population.
  - a. 20 to 35
  - b. 30 to 35**
  - c. 30 to 40
  - d. 10 to 30
  
- 2) In South Texas Javelina herd home ranges vary from \_\_\_\_\_ acres.
  - a. 10-80
  - b. 100-150
  - c. 180-975**
  - d. 500-975
  
- 3) In White-tailed deer antler development begins in \_\_\_\_\_, velvet is shed in \_\_\_\_\_, and antlers are retained until \_\_\_\_\_.
  - a. May, September, February
  - b. April, September, February**
  - c. April, September, March
  - d. May, September, March
  
- 4) Which of the following is not one of the four common geese that winter in Texas
  - a. Canada
  - b. Lesser snow
  - c. Greater snow**
  - d. White-fronted
  
- 5) An antler that forms a back fork is
  - a. Spike
  - b. Bifurcated**
  - c. Paired
  - d. Branched
  
- 6) Which of the following is the correct scientific name for Javelina
  - a. Tajacu tayassu
  - b. Sciurus niger
  - c. Tayassu tajacu**
  - d. Meleagris gollopavo
  
- 7) Scaled quail do not require surface water to exist
  - a. False
  - b. True**
  
- 8) \_\_\_\_\_ are utilized to some extent year round by Fox and Eastern Gray Squirrels
  - a. Acorns**
  - b. Beech
  - c. Corn
  - d. Fungi
  
- 9) Both male and female white-tailed deer reach sexual maturity at?
  - a. 15-24 months
  - b. 15-20 months**
  - c. 3-4 years old
  - d. 2 ½ years
  
- 10) Bobwhite quail hens may nest as many as \_\_\_\_\_ times, leaving the male to incubate the nest
  - a. 2
  - b. 5
  - c. 3**
  - d. 1

- 11) Waste grain on the land cannot sustain a pheasant population through the winter.  
a. True **b. False**
- 12) In mule deer, males breed at \_\_\_\_\_.  
a. 15-20 months old c. 2 years old  
**b. 3-4 years old** d. 24 months old
- 13) How long is gestation for Pronghorn antelope  
a. ~200 days c. ~210 days  
b. 142 to 148 days **d. ~235 days**
- 14) Adult male turkeys weigh \_\_\_\_\_ pounds.  
a. 2 ¼ to 3 **c. 12 to 20**  
b. 11 to 13 **d. 3.4 to 12.5**
- 15) Mourning doves produce what food source for young  
**a. Pigeon milk** c. Seeds  
b. Insects d. Insects and seeds
- 16) 30% browse, 65% forb, 5% grass is the diet composition for which species  
a. White-tailed deer **c. Pronghorn antelope**  
b. Mule deer d. Javelina
- 17) Scaled quail are \_\_\_\_\_ than Bobwhite quail  
**a. Slightly larger** c. Larger  
b. Slightly smaller d. Darker
- 18) Pheasants are exotic and first introduced into the United States as early as \_\_\_\_\_.  
a. 1970 c. 1930  
**b. 1790** d. 1730
- 19) Eastern turkeys occur in Texas.  
**a. True** b. False
- 20) The fulvous whistling duck and black-bellied whistling duck appear to be \_\_\_\_\_ in Eastern Texas  
a. **Increasing** c. Staying the same  
b. Decreasing d. Tripling

## Habitat Evaluation and Management

### Part 4: Habitat Evaluation

The flagged area is representative of the soils, terrain and plant communities of the 1,200 acre ranch shown in the aerial photograph.

The entire ranch is an oak-shrubland community but historically was a tallgrass prairie with scattered oak and elms. The dominant ecological site is a Purvis-Dugout Complex soil listed as a Shallow ecological site. Slopes range from 1 to 8 percent with typical soil profile: 0 to 14 inches, stony clay; 14- 20 inches, bedrock. Presently transects show the site has a woody canopy cover of 51.2% while historically live oak, elm and hackberry would have made up less than 5% canopy. This site in climax condition would have produced 3,700 pounds of forage/acre but is currently producing 500 pounds/acre.

- Evaluate the habitat within the flagged area for each species given.
- Determine the quality and quantity of food, cover and water for each species listed.
- Mark (A) for Adequate and (D) for Deficient.

Species 1 = White-tailed Deer

Species 2 = Bobwhite Quail

Species 3 = Fox Squirrel

### Part 5: Habitat Management

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This ranch has put available funds into fencing to jumpstart recovery of the native grasses. This ranch will move stocker calves every 7 days into a fresh pasture. The ranch does not have the resources to mechanically grub the increasing juniper canopy but they have started hand-cutting with ax and chainsaw all junipers less than 12 feet in height.

The ranch participates with the Richardson Creek Deer Cooperative where the population of fawns has decreased 25% over the past year. Quail nest have been observed destroyed and egg shell evidence points to raccoons as the culprit.

All management practices will be completed within the next 12 months.

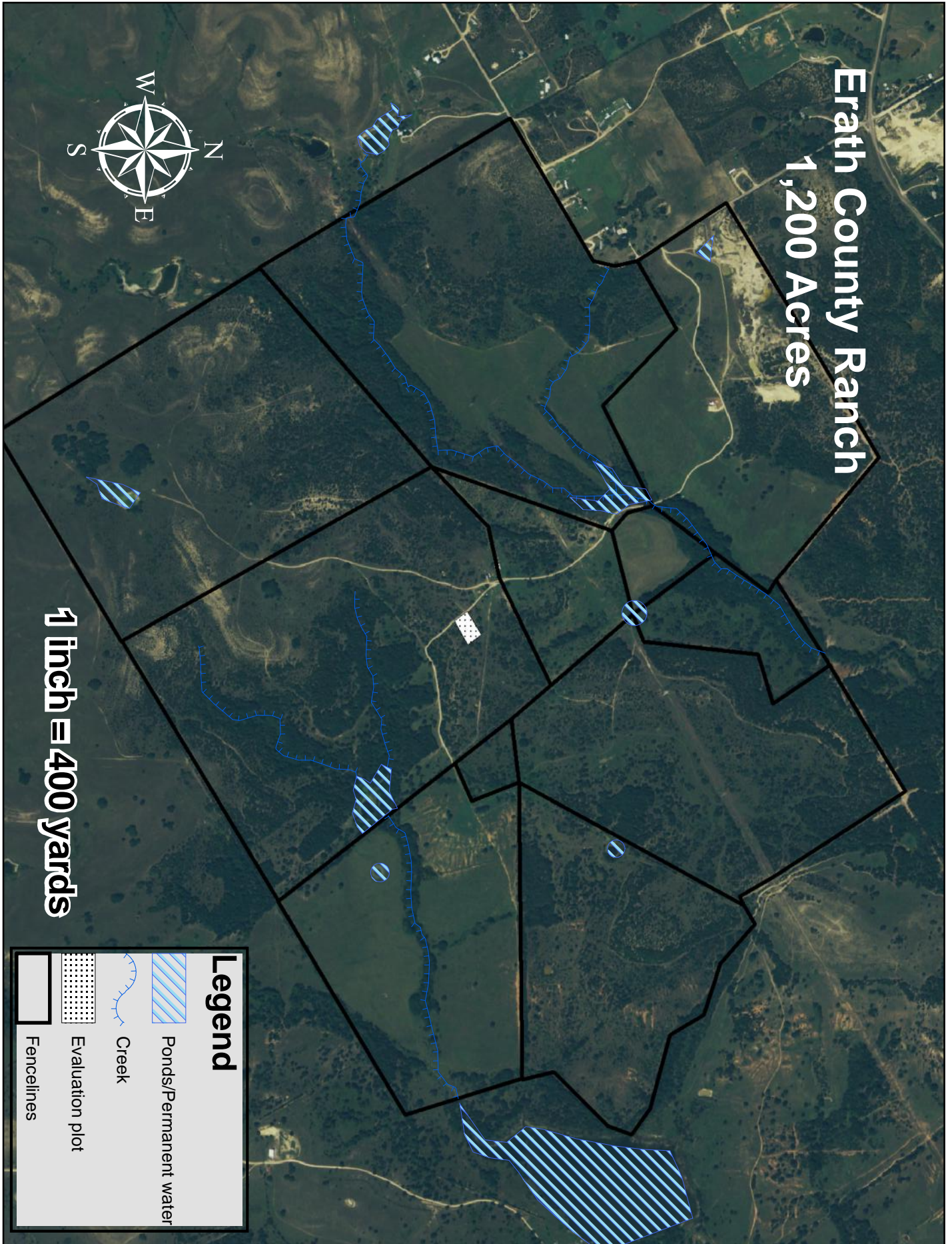
- Mark the appropriate management practice(s) needed to improve the flagged area for each wildlife species listed below considering the landowner's objective.
- 1 point will be awarded for each correct answer; 1 point deducted for each incorrect answer; and no points given or deducted for items left blank.

Species 1 = White-tailed Deer

Species 2 = Bobwhite Quail

Species 3 = Fox Squirrel





**2015 Tarleton University Wildlife Invitational Contest**  
**Answers and Justifications**  
**Questions 4 and 5**

*Ricky Linex (NRCS), Mike Miller (TPWD), Dean Marquardt (TPWD)*

**Question 4: Habitat Evaluation**

**Species 1 – White-tailed deer**

- Food – Adequate; due to good woody plant/ forb abundance and diversity. There are at least 5 preferred woody browse food items in each quadrant of the evaluation plot.
- Cover – Deficient; brush canopy cover was measured at 51% on the area. This is within the required range for deer (20-70%), but the site is lacking fawning cover. Fawning cover in the form of tall grassy areas is required for protection from predators.
- Water – Adequate; water spacing is within 1-3 miles from an available water source

**Species 2 – Bobwhite quail**

- Food – Deficient; There were very few seed-producing forbs in the evaluation plot. Two of the evaluation plot quadrants had only 2 plant food items from the Statewide plant list. Also, this area would not support insects as a food component due to limited herbaceous cover.
- Cover – Deficient; due to the lack of nesting cover for quail. Quail require nesting cover with 250 – 300 basketball sized clumps of grass (little bluestem, or hula hoop size clump of prickly pear) needed per acre. Brush canopy cover was measured at 51%. Too much canopy cover (above 20%) is not desirable.
- Water – Adequate; water requirements generally met from food consumed (metabolic water), dew, or surface water.

**Species 3 – Squirrel**

- Food – Deficient; due to lack of abundance and diversity of hard/soft mast producing trees. Site has Texas oak and Live oak which are desirable hard mast producing species but a diversity of mature hard and soft mast trees provides the best year-round food supply.
- Cover – Deficient; there is a lack of diverse, mature hardwoods with both hard and soft mast producing species.
- Water – Adequate; due to the fact that multiple streams and ponds are spaced throughout the property based on the provided map.

## Question 5: Habitat Management

**Animal Damage** – Yes for deer and quail. The scenario indicates that deer fawn recruitment has declined and quail nests are being destroyed by raccoons.

**Population Management** – Yes for deer. The scenario references a 25% decline in fawn numbers. This indicates some sort of population measure to estimate the number of deer on the ranch.

**Brush Management** – Yes for deer and quail. The scenario indicates that the landowner is hand-cutting junipers less than 12' tall. The current brush canopy cover is 51%. The removal of some juniper will result in canopy coverage that falls within the 20-70%, which is "ideal" according to the study guide. It also may result in the re-sprouting and increase of desirable woody plants. The current brush canopy cover is above the suitable range for quail (5-20%), so some juniper removal would improve quail habitat. Brush management would not markedly improve "mature oak-hickory woodland" or increase den cavities.

**Cropland Management** – No for all species. No cropland present.

**Food Plots** – No for all species. Nothing is mentioned in the scenario indicating that the landowner wishes to implement this practice. Soils are not suitable for farming.

**Grazing Management** – Yes for all species. The scenario mentions that the ranch funds have targeted fencing work to jumpstart native grass recovery and will move stockers every 7 days. Nesting and fawning cover are sorely lacking, and pasture deferral should improve standing cover.

**Prescribed Burning** – No for all species. The ranch currently produces 500 pounds/acre of forage. A minimum of 1,200 pounds of dry grass per acre is necessary to conduct a reasonably good fire and 2,000 pounds per acre is desirable. The scenario has no indication that the landowner will implement this practice.

**Provide and Manage Water** – No for all species. Permanent water sources are shown on the map.

**Range Planting** – No for all species. Scenario indicates the landowner does not have the resources to mechanically grub the juniper, so there is no soil disturbance for broadcast seeding.

**Disking** – No for all species. There is no indication for the use of this practice. Soils are not suited to this practice.

**Overseeding Legumes** – No for all species. Habitat type and/or land use not appropriate. Nothing in scenario to suggest the use of this practice.

**Forb, Woody and Grass Species used As Food Found in Evaluation Area**

Northwest	D Q S	D Q S	Northeast
	<i>Spanish Oak</i>	<i>Spanish Oak</i>	
	Live oak	Live oak	
	Elbowbush	Elbowbush	
	Skunkbush sumac	Skunkbush sumac	
	Honeysuckle	Prickly pear	
	Hackberry	Flameleaf sumac	
	Bumelia	Plantain	
	Prickly pear		
	<u>7 5 2</u>	<u>6 5 1</u>	
	<i>Spanish Oak</i>	<i>Spanish Oak</i>	
	Live oak	Live oak	
	Elbowbush	Elbowbush	
	Skunkbush sumac	Skunkbush sumac	
	Honeysuckle	Prickly pear	
	Prickly pear	Greenbriar	
	Greenbriar		
	<u>6 2 1</u>	<u>5 2 1</u>	
Southwest			Southeast

Plants shown in italics are found on the Region V plant list, but not the State list.  
 Plants in caps were found infrequently and did not contribute to overall food supply  
 D = Deer                      Food Evaluation - Divide plot into four parts.  
 Q = Quail                     List food plants by species in each quarter plot.  
 S = Squirrel                 If four preferred plants are found in at least three  
    of the four plots then food is adequate for that  
    species.  
    FOOD:  
 D = Deer                      = Adequate  
 Q = Quail                     = Deficient  
 S = Squirrel                 = Deficient

## Fish and Game Laws

1. Statewide bag and length limits have many exceptions. Under normal conditions, state bag and length limits for channel catfish set a daily bag limit at 25 (in any combination) and a minimum of 12 inches. "Ctfsh1" is the exception that alters the daily bag to:
  - 1A. **5**
  - 1B. 10
  - 1C. 15
  - 1D. 20
  
2. Anyone born on or after \_\_\_\_\_ must complete a boater's education course for the operation of a vessel over 15 horsepower and 14 feet in length.
  - 2A. **Sept. 1, 1993**
  - 2B. Oct. 1, 1971
  - 2C. Nov. 1, 1982
  - 2D. Jan. 1, 1997
  - 2E. Mar. 1, 1998
  
3. Hunting, as defined by Texas Parks and Wildlife Dept., is to capture, trap, take, or kill, and includes any attempt to do so.
  - 3A. **True**
  - 3B. False
  
4. Despite its recent decline, daily bag limit for quail is \_\_\_\_\_.
  - 4A. 5
  - 4B. 10
  - 4C. **15**
  - 4D. 20
  - 4E. 25
  
5. What species of quail does not have a hunting season in Texas?
  - 5A. Northern bobwhite (*Colinus virginianus*)
  - 5B. Scaled quail (*Callipepla squamata*)
  - 5C. Gambel's quail (*Callipepla gambelii*)
  - 5D. **Mearns quail (*Cyrtonyx montezumae*)**
  
6. Traps may not be used to legally catch game animals, including game birds.
  - 6A. **True**
  - 6B. False
  
7. In antler restricted counties, what is the minimum inside spread that a buck must have in order to be legally harvested?
  - 7A. 14"
  - 7B. 15"
  - 7C. **13"**
  - 7D. 12"
  - 7E. 11"
  
8. In general, a deer must be tagged immediately after harvest using which of the following type of tag?
  - 8A. MLD permit
  - 8B. LAMPS permit
  - 8C. TPWD Special Drawn Legal Deer Tag
  - 8D. **Texas Parks and Wildlife Annual Hunting License Tag**
  - 8E. All of the above

9. The statewide regular season for hunting woodcock is from \_\_\_\_\_ to \_\_\_\_\_.

9A. Jan. 27, 2014- Feb. 10, 2014

**9B. Dec. 18, 2014 – Jan. 31, 2015**

9C. Apr. 1, 2014- Apr. 30, 2014

9D. Mar. 1, 2014- May 31, 2014

10. Which of the following is not a legal method of hunting a Rio Grande Turkey?

10A. .223 caliber rifle

**10B. .177 pellet gun**

10C. .22 caliber rimfire rifle

10D. 12 gauge shotgun

11. Which of the following does not require CITES documentation if taken or possessed in Texas?

11A. Alligator

11B. Otter

**11C. Nutria**

12. Legal shooting hours for migratory game birds are:

12A. sunrise to sunset

**12B. 30 minutes before sunrise to sunset**

12C. 30 minutes before sunrise and 30 minutes after sunset

12D. sunrise to 30 minutes after sunset

12E. There are no specified legal shooting hours

13. The legal definition of a spike during special late season is which of the following? **A**



A



B



C



D

14. What is the daily bag limit for alligator gar in Texas?

14A. no daily bag limit

**14B. 1**

14C. 5

14D. 10

14E. 25

15. Coastal waters, as distinguished by Texas Parks and Wildlife Dept., include all of the following except:

15A. Outside water

15B. Inside water

15C. Major bays

15D. Bait bays

**15E. International water**

**KEY for Fish and Game Laws with page numbers for answers in Outdoor Annual**

1. 1A, pg. 40
2. 2A, pg. 52
3. 3A, pg. 54
4. 4C, pg. 67
5. 5D, pg. 67
6. 6A, pg. 59
7. 7C, pg. 64
8. 8D, pg. 60
9. 9B, pg. 75
10. 10B, pg. 55
11. 11C, pg. 73
12. 12b, pg. 70
13. 13A, pg.64 and 65
14. 14B, pg. 37
15. 15E, pg. 46

## **Plant ID Answer Key**

- A. 198. Texas Winter Grass
- B. 154. Live Oak
- C. 203. Western Ragweed
- D. 172. Prickly Pear
- E. 112. Blackjack Oak
- F. 132. Elm
- G. 127. Dewberry/Blackberry
- H. 149. Juniper
- I. 174. Red Bud
- J. 200. Vetch
- K. 169. Plum
- L. 145. Honey Mesquite
- M. 149 Juniper (Sapling)
- N. 119. Bumelia (Chittamwood)
- O. 153. Little Bluestem