



THE **OUTSIDE** IS IN US ALL.

## The Herd and the Bird

Assessment form for March/April 2020 "The Herd and the Bird: How an innovative federal program is conserving sage-grouse by helping ranchers improve their cattle-grazing practices." (CCRA.R.10)

1. Who is the author of the article?
  - John Grassy
  - Kim Lesh
  - Bret Lesh
  - Rebecca Knapp
2. Why did Bret Lesh visit the USDA Natural Resource Conservation Service in 2012?
  - To preserve sage-grouse on his property
  - To find a solution to feed and water his cattle during low precipitation years on his property
  - To preserve wildlife on his property
  - The article does not mention why he visited the USDA Natural Resource Conservation Service
3. What answer best describes the national Sage-Grouse Initiative?
  - An incentive program designed to remove cattle from sage-grouse habitat across the West
  - A program designed to raise sage-grouse in pens and release them across the United States
  - An incentive program designed for landowners who commit to changing grazing management to benefit sage-grouse
  - The article does not mention the Sage-Grouse Initiative

4. How did early ranchers alter the land to provide water for their cattle?
- Dug wells 1,700 to 3,000 feet deep
  - Dug shallow pits to capture snowmelt and rain
  - Dug canals from nearby rivers
  - The article does not mention how early ranchers altered the land to provide water for their cattle
5. How does a lack of grazing potentially harm native plants and animals?
- If grasses are not grazed, plants become choked out by their own thatch of leaves
  - If grasses are not grazed, cows die and tip over onto native plants and animals, killing them
  - If grasses are not grazed, there isn't enough water for the plants and wildlife
  - The article does not mention how a lack of grazing can harm native plants and animals
6. In the article, what does “take half and leave half” refer to?
- Grazing only half of the available vegetation and leaving the rest
  - Harvesting only half of the sage-grouse and leaving the rest
  - Taking half of the water available and leaving the rest
  - The article does not mention “take half and leave half.”
7. In what ways does residual standing grass benefit sage-grouse? (Select all that apply.)
- Provides seeds that feed chicks
  - Provides warm areas during chilly spring weather
  - Provides hiding areas from predators for adults and chicks
  - Provides places for sage-grouse to perch on and look for predators
  - Provides insects that feed chicks

8. In 2009, Melissa Foster led a four-year study of sage-grouse in “Core Area 13.” What was the purpose of the study?
- To learn how many sage-grouse golden eagles eat
  - To locate sage-grouse nesting sites
  - To count sage-grouse populations
  - To document sage-grouse survival rates in areas with oil rigs
9. What did Foster learn from her study?
- That grazing always decreases sage-grouse nesting success
  - That grazing may be compatible with sage-grouse nesting success
  - That sage-grouse populations are declining rapidly
  - That predators are responsible for the decline in sage-grouse
10. What improvements on ranches can SGI help pay for if ranchers agree to a management plan that benefits sage-grouse?
- Fencing and water sources for cattle
  - Outbuildings and feeding systems for cattle
  - Buying new tractors
  - Purchasing more land
11. How does woven mesh fencing create a hazard for sage-grouse?
- Sage-grouse adults fall when trying to climb the wire
  - Sage grouse chicks can be cut by barbs on the fence
  - Sage-grouse often die when they collide with fencing while flying low
  - The article doesn't mention woven mesh fencing
12. According to the article, what is the best definition of “mesic”?
- Small, colored ceramic tiles that together make a picture
  - A low-lying area that gathers water and holds it for much of the summer
  - Baked dry upland habitat
  - The article doesn't mention the word “mesic”

13. According to Bret Lesh, what has changed on his ranch now that he is doing rotational grazing? (Select all that apply.)
- Plants withstand the hot dry periods better
  - Cattle are putting on additional weight
  - Wildlife is moving back into areas where they haven't been in years
  - Cattle are losing weight due to less feed
  - Plants are drying out due to not enough water
14. Which of the following developments appear to be harming sage grouse populations? (Select all that apply.)
- Oil rigs
  - Cell phone towers
  - Wind turbines
  - Roads
15. How does a lack of water for cattle harm sage-grouse?
- The cows start feeding on sage-grouse to gain additional moisture
  - Cows congregate in the few areas where water remains and overgraze the land down to dirt, depriving sage-grouse of habitat
  - Ranchers run over sage-grouse with their pickups when bringing bottled water to their cattle.
  - A lack of water for cattle is not an issue for sage-grouse in any way

## **Get your boots on the ground and dig deeper!**

Discover: The greater sage-grouse

Objective: Research and Writing (RH.9-10.1)

The greater sage-grouse is the largest grouse in North America; it is also commonly referred to as a sagehen. Using the internet, research the following information on the greater sage-grouse: Range or distribution, habitat, ecology, diet, predators and conservation efforts. Use your findings to create a detailed informative poster expanding on each of the areas researched.



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