



MONTANA OUTDOORS MAGAZINE LITERACY PROGRAM EVALUATION

“Leave it to Beavers”

name: _____

1. Explain what the author means when he states, “That perspective can take time getting used to.”

2. What animal is the primary predator for beavers? _____

3. When and why do beavers leave the dry part of their lodges in the winter?

4. Beavers make dams to create deep water. Why is deep water so important to them?

5. In what two ways do beaver dams benefit streams, especially during the summer?

6. What are two natural disasters that beaver dams help make less damaging?

7. In what two ways do beavers help maintain healthy spawning areas for fish?

8. Experts estimate that there were once 30-60 million bison in North America. How many beavers do they estimate were here before Europeans arrived?

9. By 1930 it is estimated that there were only about 100,000 beavers left, mostly in remote Canada. Why were they trapped almost to extinction?

10. How did the widespread loss of beavers make North America drier?



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11. How did the absence of beaver dams change the natural shape of stream channels?

12. According to the first paragraph in the section titled “Problems and Solutions,” what are the three problems beavers can sometimes cause?

13. Another problem caused by beavers is that their dams can become “movement barriers” in certain streams. Explain what this means.

14. What can be done to prevent beaver dams from flooding roads or agricultural fields. (see bottom photo on page 22)

15. How does Elissa Chott of the Clark Fork Coalition help landowners who are experiencing problems caused by beavers?

16. What is Chott’s ultimate goal as she works to resolve human-beaver conflicts?

17. What is one way that a stream can be restored so that beavers will move back in and start building dams?

18. What is the purpose of the Beaver Restoration Assessment Tool (BRAT)?

19. Explain the strategy used to bring beavers back to the area depicted in the illustrations at the bottom of page 23.



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Teachers . . .

1. Begin by having students look at the large illustration of the wetland included in the article, and silently reading the numbered descriptions on the previous page. Discuss the illustration and descriptions. Here are some possible bell-ringers/discussion points . . .
 - a. What might be another title for the list of 28 descriptive statements?
 - b. What is an “ecosystem engineer”?
 - c. What are wetlands, and why are they important?
 - d. What is a “keystone species”?
 - e. How do beavers affect the water cycle?
2. Give students a copy of the article. Have them read it silently, read it as a class, or read it to them.
3. Give students a copy of the evaluation (worksheet) and have them answer the questions.
4. If the assignment seems to be too much for the grade level you teach, consider assigning a certain number of questions (you decide how many, and then each student gets to pick which ones they answer). Any questions they answer correctly beyond the required number can count as extra credit.
5. An excellent 10-minute PBS Terra video on YouTube titled **“Want to Solve Wildfires and Drought? Leave it to BEAVERS!”** reinforces many of the topics included in the article. Consider showing it after students have completed the assignment.

Answer Key

1. The mess of water and wood that beavers create, which stops the natural flow of water, is actually (usually) a good thing (for wildlife, people, and trout).
2. Mountain lions
3. They leave at night to cut down trees and chew off branches to eat, use in dam and lodge construction, or store underwater as food.
4. The deep water is a place where they can be safe from predators.
5. Beaver dams can increase the flow of streams in summer and lower stream temperatures.
6. Floods and wildfires.
7. They trap sediment that would cover spawning gravel, and they prevent spawning gravel from washing away.
8. 100 million
9. There was a huge demand for hats made from beaver pelts.
10. Water that beaver dams caused to be stored in ponds, wetlands, and aquifers now rushed downstream to the ocean.
11. Without the dams, faster flowing water eroded deeper channels.
12. They plug irrigation ditches, headgates, and culverts. They can cause flooding on roads, pastures, and golf courses. They can topple shade trees.
13. Their dams may prevent certain species of fish from swimming upstream to their spawning grounds.
14. They can install pond levelers - PVC pipes that limit the height of water in ponds caused by beaver dams.
15. She shows them how to install pond levelers, and fences for trees and culverts. (She also helps connect them to funding sources.)
16. She wants to get people to think of beavers as an animal they can coexist with and benefit from.
17. They can pile rocks and logs in a stream to dam it up or reduce the depth of the channel.
18. The purpose of BRAT is to find good places for beavers to live where they will not disrupt human systems (roads, bridges, canals, etc.).
19. Human-made channel-blocking structures were installed to cause the types of changes that would attract beavers to move back into the area.