

FACTivity



Time Needed

- One class period

Materials (for each group of three students)

- Clear plastic container, such as a clear plastic soda bottle
- Electrical, masking, or other tape (if you are using a plastic bottle)
- Scissors (if you are using a plastic bottle)
- Paper clip
- Teaspoon or other device for stirring
- 2 tablespoons
- 1 cup of soil
- Water

The question you will answer in this FACTivity is, “How might fish (figure 14) and other aquatic life be affected by turbidity?”

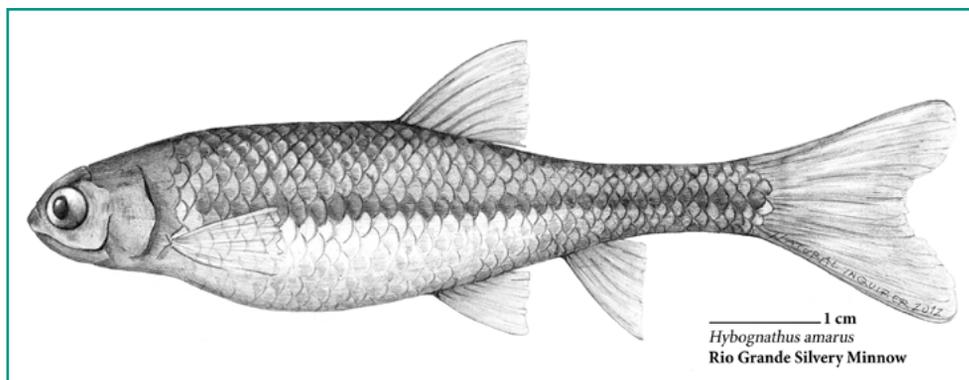


Figure 14. How do you think a minnow might be affected by turbidity?

Illustration by Stephanie Pfeiffer.

FACTivity continued

Methods

1. Your teacher will cut off the top of the plastic bottles, about 5 inches from the top and tape the edge of the bottles. (Taping will reduce the sharpness of the plastic edge.)
2. Fill the bottom of your plastic bottle with tap water to about 1 inch from the top.
3. Place the paperclip in the water.
4. One student will stir gently along the edge using the teaspoon, keeping the water and the paperclip moving.
5. Another student will use one of the tablespoons to scoop up the paperclip.
6. Using the second tablespoon, the third student will then add a heaping tablespoon of soil to the water. Continue to gently stir the water.
7. Observe what is happening to the water.
8. Replace the paperclip in the water.
9. Repeat steps 4-8 until all of the soil has been added to the water.

In this FACTivity, the water represents nearshore lake water. The soil represents soil running off of the watersheds (erosion), creating turbidity. The teaspoon represents water currents. The paperclip represents a small fish. The second tablespoon represents a larger fish, searching for and capturing smaller fish for food.

What happened to the larger fish's search for food as the water became more turbid? What is one disadvantage of turbidity for the small fish? How does this FACTivity relate to the study you just read? Now answer the question posed at the beginning of this FACTivity. Write your answer on a piece of paper, using complete sentences and proper punctuation and grammar.