AFNR Natural Resources

Water Pollution Demonstration

What are some common water pollutants? What effects do these pollutants have on water quality?

Harmful algae blooms (HAB's) have been covered widely in the news. There have been problems in areas such as Grand Lake St. Mary's and the western basin of Lake Erie. What causes these HAB's? Complete some research on HAB's while this demonstration is going on. Try to determine what will happen in each case to the algae and the water.

Materials

Mason Jars Algae Demo Supplies- Vinegar, Fertilizer, detergent Sunny window

Procedure

- 1. Collect water that contains algae.
- 2. Create a jar for one of the following conditions:

algae/water + 10 ml vinegarpH:algae/water + 1 g fertilizerpH:algae/water + 10 ml detergentpH:algae/waterpH:

- 3. Test the pH of each of the jars and record.
- 4. Observe the color and cloudiness of the water at the start.
- 5. Place the jars in a sunny window.
- 6. Observe and take notes on how the jars change over time.

Questions

- 1. What does each pollutant represent in real life?
- 2. Why are algae blooms bad for the environment?
- 3. What are some other materials you might test?

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