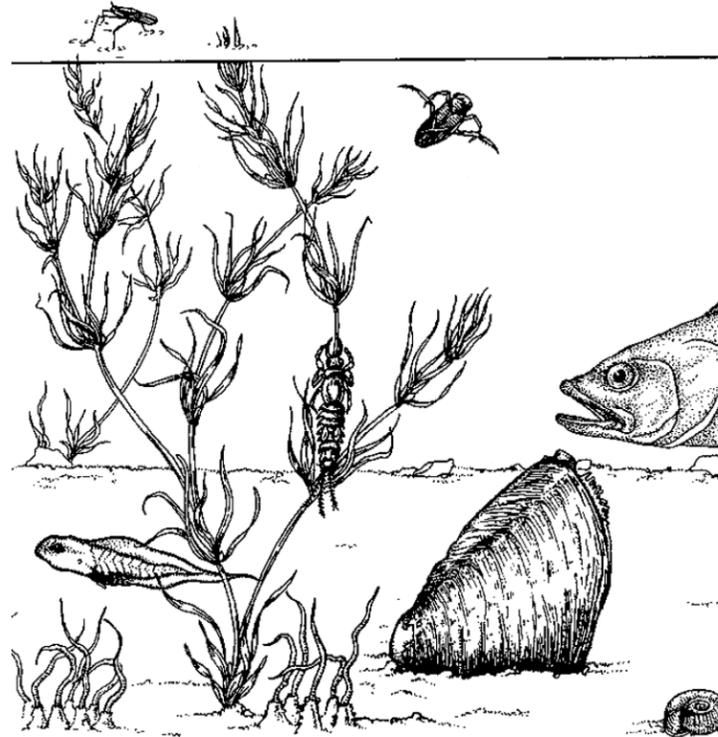


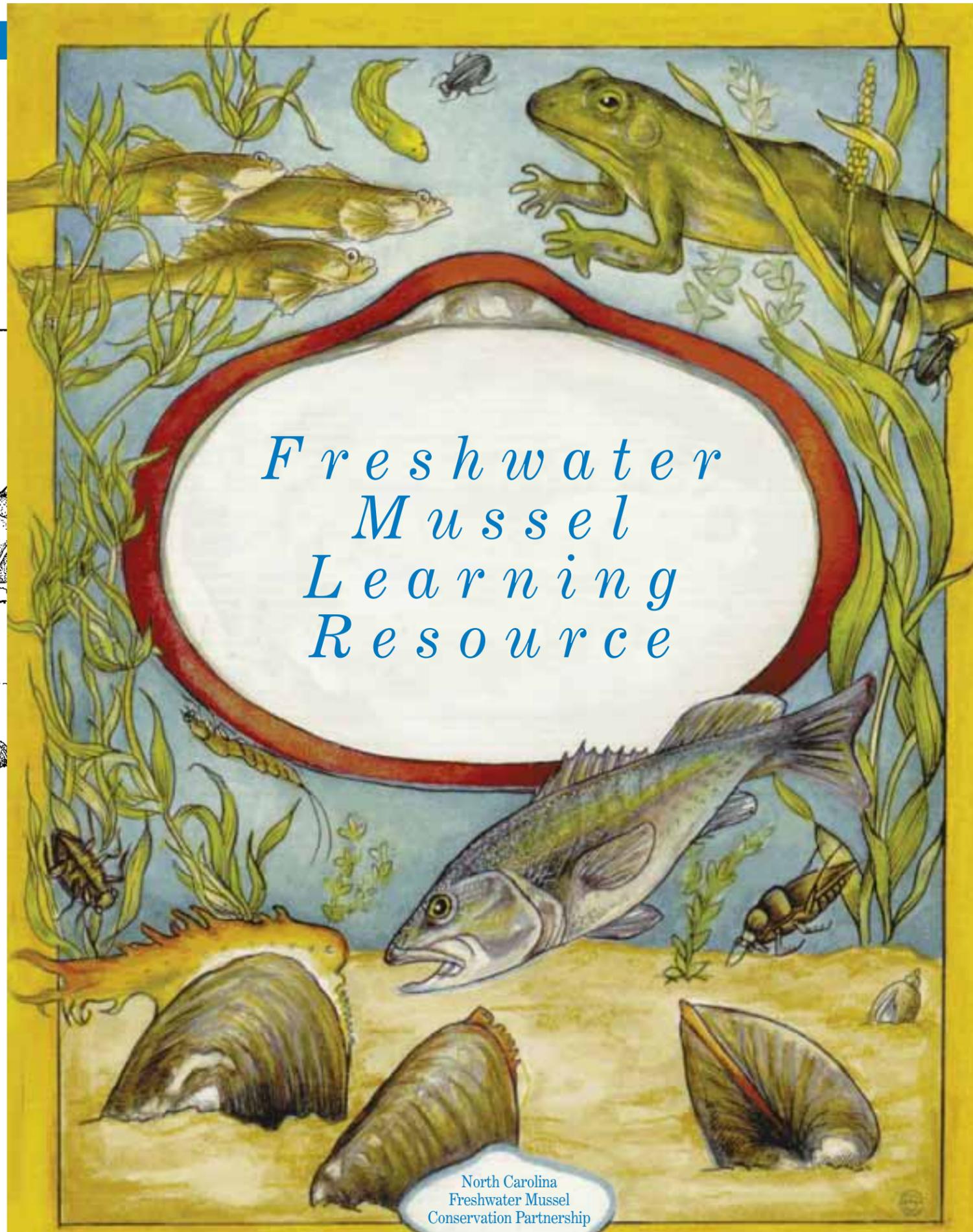
Freshwater mussels live in streams, rivers and lakes. That small stream in your neighborhood is probably full of life. It may be the home of one or more species of freshwater mussels. Although more than 290 species of freshwater mussels live in North America, many are endangered or threatened. If freshwater mussels are present, you will usually find fish, which play an important role in the life cycle of freshwater mussels.



Both the mussels and fish, like all animals in an ecosystem, are part of the food web that support the cycle of life. A food web including freshwater mussels can be complex and include many species of animals. Primary producers such as algae, convert the sun's energy into plant tissue through a process known as photosynthesis.

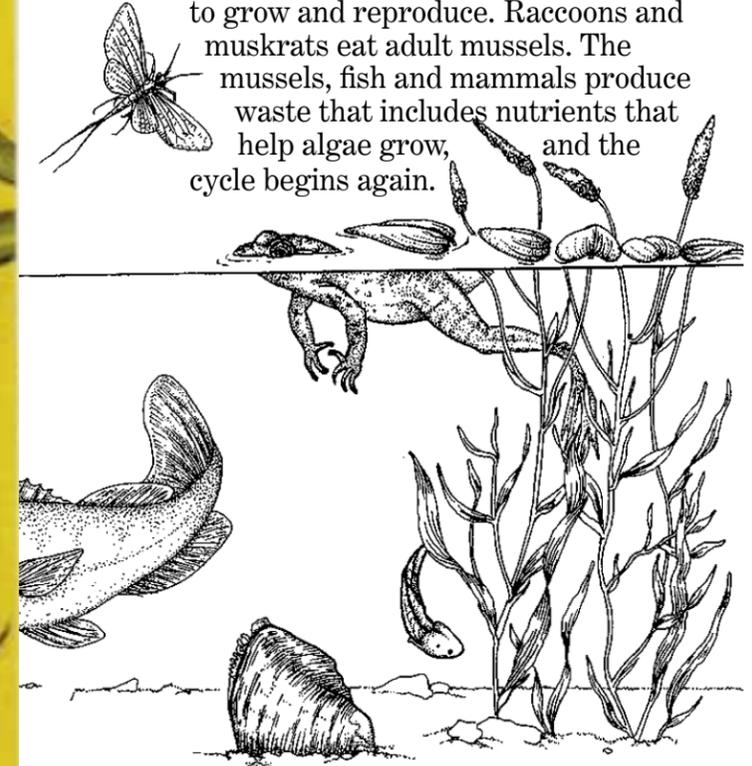
Unscramble the letters below to form words that appear in this text:

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|--------|------------|-----------|----------------|
| selsum | hatenderte | loiluoptn | eilf |
| fnfour | anreddegne | esepisc | rteifl |
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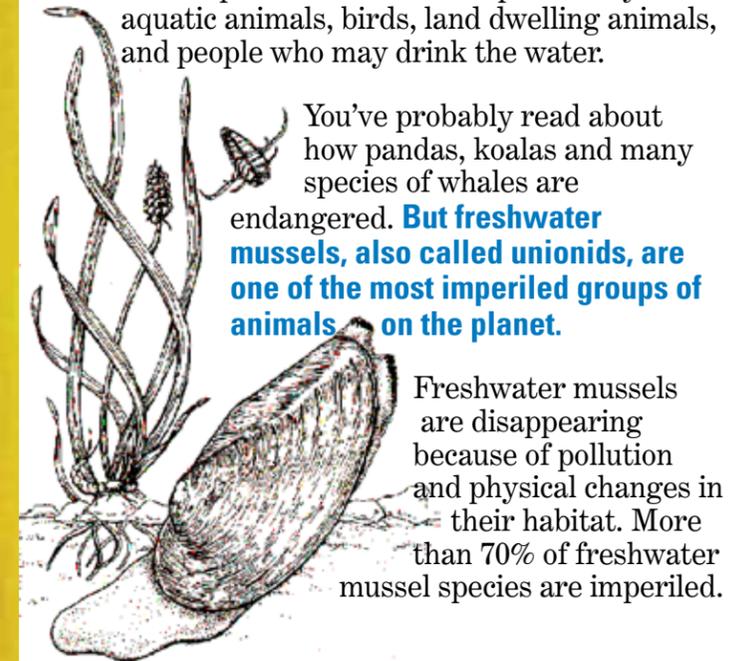


North Carolina
Freshwater Mussel
Conservation Partnership

The algae are eaten by freshwater mussels and other animals that can filter the algae out of the water. The algae provide nutrients for the mussels to grow and reproduce. Raccoons and muskrats eat adult mussels. The mussels, fish and mammals produce waste that includes nutrients that help algae grow, and the cycle begins again.



Freshwater mussels are a living filter. They are called suspension feeders because they eat algae and other particles, such as leaf debris, that are suspended in the water. Removing these particles helps keep the water clear. When they feed, they also remove pollutants that could potentially harm aquatic animals, birds, land dwelling animals, and people who may drink the water.



You've probably read about how pandas, koalas and many species of whales are endangered. **But freshwater mussels, also called unionids, are one of the most imperiled groups of animals on the planet.**

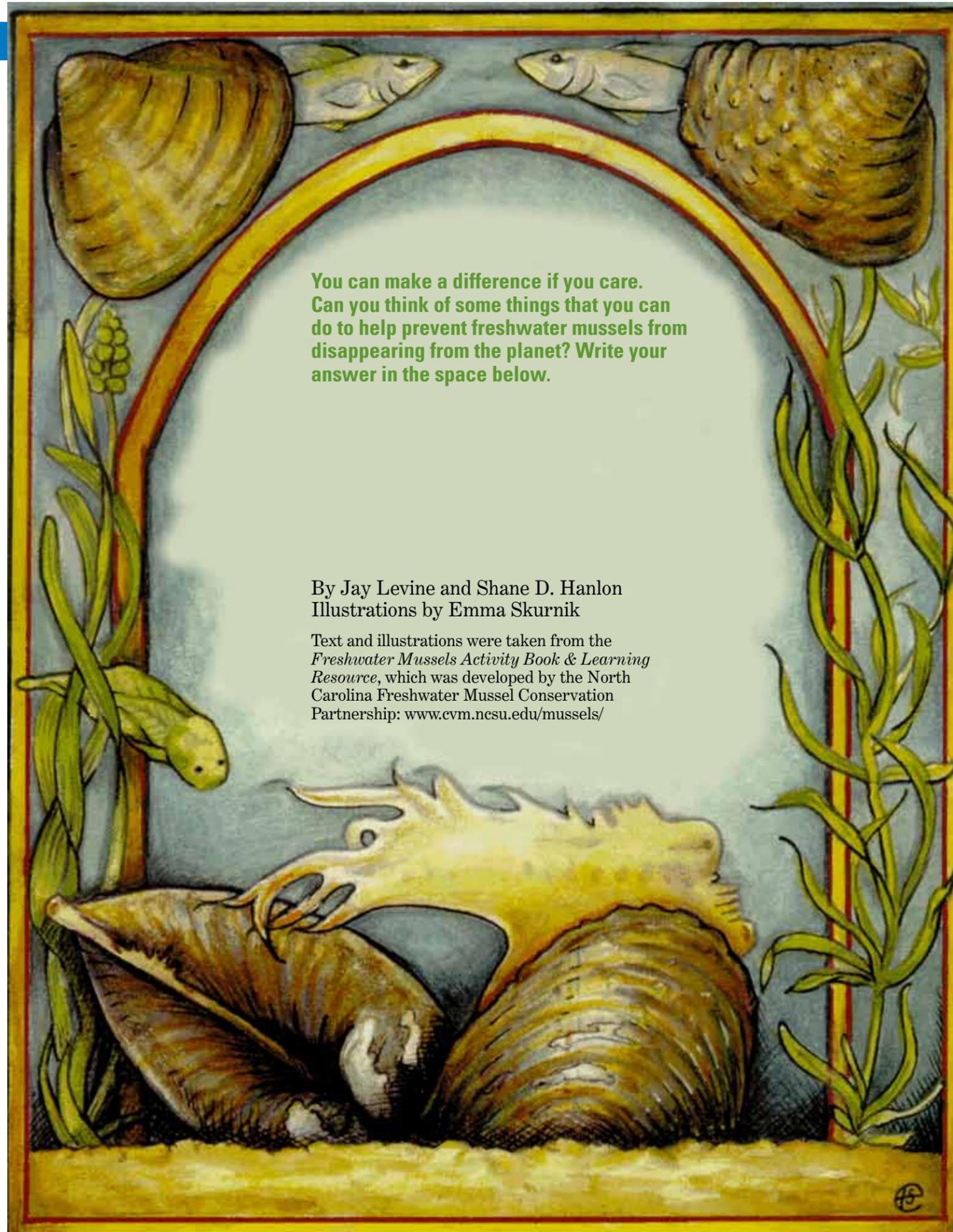
Freshwater mussels are disappearing because of pollution and physical changes in their habitat. More than 70% of freshwater mussel species are imperiled.

Freshwater mussels have unusual and sometimes humorous common names based on a unique characteristic or something the mussel closely resembles. The common and scientific names of a few endangered and threatened species of freshwater mussels are named below:

Scientific names:	Common names:
<u><i>Alasmidonta heterodon</i></u>	<u>Dwarf wedge mussel</u>
<u><i>Lampsilis abrupta</i></u>	<u>Pink mucket</u>
<u><i>Quadrula cylindrica strigillata</i></u>	<u>Rough rabbitsfoot</u>
<u><i>Plethobasus cooperianus</i></u>	<u>Orange-foot pigtoe</u>
<u><i>Pleurobema plenum</i></u>	<u>Southern pigtoe</u>
<u><i>Epioblasma obliquata obliquata</i></u>	<u>Catspaw</u>
<u><i>Lasmigona decorata</i></u>	<u>Carolina heelsplitter</u>
<u><i>Elliptio steinstansana</i></u>	<u>Tar spiny mussel</u>

Things you, your friends and family can do to help protect freshwater mussels

- If you live near a stream, be careful not to disturb the stream bottom; you may be damaging a freshwater mussel's home.
- Don't pick up any mussels that you may see in a stream. It may be one of the last few members of its species on the planet.
- Help your family find ways to reduce the amount of chemicals that you pour down the drain in your home or possibly use on your lawn or garden.
- Check to see if the water draining off your roof or driveway flushes directly into a stream. Plant a garden to catch the water before it enters the stream. The garden will act like a filter and help purify the water.
- Recycle as much as you can to reduce the amount of waste you place in the garbage.
- Support conservation efforts that protect these unique animals and the habitats they live in.
- Become a biologist and discover new ways to help protect freshwater mussels and other wildlife.



You can make a difference if you care. Can you think of some things that you can do to help prevent freshwater mussels from disappearing from the planet? Write your answer in the space below.

By Jay Levine and Shane D. Hanlon
Illustrations by Emma Skurnik

Text and illustrations were taken from the *Freshwater Mussels Activity Book & Learning Resource*, which was developed by the North Carolina Freshwater Mussel Conservation Partnership: www.cvm.ncsu.edu/mussels/

A O Q X O G F Z O F Y U F R C
 E E P S P E C I E S S R P F G
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Find the following words in the word search above:
 freshwater sediment ecosystem mussels
 nutrients algae food web species
 threatened fish streams cycle
 endangered photosynthesis

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