



# moving mussels

The southeastern United States has the greatest diversity of freshwater mussels in the world—that’s the good news. The bad news is that these animals have become increasingly rare, and several species have become extinct in the past century thanks to human activities. Land clearing for development and agriculture has caused rivers and streams to become silted, choking native mussels. Runoff and chemicals in our waters poison mussels, while dams isolate mussel populations and change the natural flows of streams. As a result, many North Carolina streams have lost their native mussel populations.

Through efforts to reduce water pollution and protect waterways with forested buffers, many streams are now clean enough to support native mussel populations. Being filter feeders, the freshwater mussels themselves can help



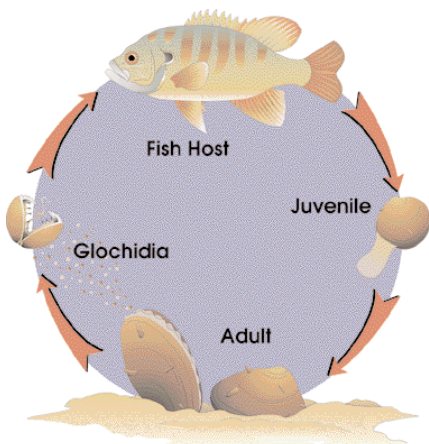
RODNEY FOSHREE/NCWRC



KEN TAYLOR/NCWRC

*Wildlife Commission biologists collect and tag freshwater mussels in Caswell County before relocating them to a nearby stream that is devoid of the native mussels.*

## Life Cycle of a Freshwater Mussel



GRAPHIC: BYEREN HANI/CO. CK/NCWRC

further clean streams by removing sediment, nutrients and harmful bacteria. Unfortunately, it may take hundreds of years for these creatures to naturally repopulate streams through a complex process that requires the movement of fish hosts. (See the mussel life-cycle graphic).

That’s why the North Carolina Wildlife Resources Commission is working to help restore freshwater mussel populations across the state. For the past two years, commission biologists have been collecting common native mussel species from stream reaches that will be disturbed by road projects or streams that have

plenty of native mussels. Biologists then tag and release the creatures in nearby streams that contain no mussels. The hope is that the mussels, once relocated to their new homes, will survive and reproduce—speeding up the recovery process.

The pilot project, which targets streams in the Yadkin-Pee Dee, Roanoke and Cape Fear river basins, is funded through a grant from the N.C. Clean Water Management Trust Fund. If the project proves successful, the Wildlife Commission may consider additional relocation efforts in the future to help rare and endangered mussel species recover.