

### WHY IS THE SPINY MUSSEL IMPORTANT?

The Spiny mussel has been on the Federal Endangered Species list since July of 1988. These mussels play a vital role for researchers monitoring water quality as they do not thrive under changing conditions. So, they are important indicators for when something is wrong with the streams.

They also help water quality while they are feeding and provide a food source for many other animals.

### HOW CAN WE HELP?

The best thing we can do to help this species survive is to improve and protect water quality!

### Cool Fact!

Mussels' beards are so strong they can stick to Teflon. Scientists are trying to emulate that bond and make glue for eye surgeries!



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## WHAT'S A SPINY MUSSEL?

Spiny mussels are bivalve mollusks. They have two shells that are held together by ligaments; inside there are organs and muscles.

Their shells play an important part of keeping them alive. They can clamp shut quickly to keep out predators or drying out (if out of water) and protecting the organs inside.

## WHAT DO THEY EAT?

The Spiny mussel is a filter feeder, meaning when water passes through the gills, they eat the plankton that the water brings with it. This type of feeder helps to keep the water clean while it gets to eat.

## IDENTIFICATION

Adult Spiny mussels are approximately 3" in length and have a dark brown shell with visible growth rings. Some adults will also have spines on each of their valves.

Young Spiny mussels have a shiny yellow shell and may or may not have spines.

## HABITAT

Spiny mussels live in freshwater streams located in Virginia and West Virginia that flow at varying intensities. They also like a variety of substrates as long as there isn't a lot of silt.



## LIFE CYCLE



## THREATS

The Spiny mussel has many threats. Habitat loss has been the culprit for the drastic decline seen in the last 20 years. However, water quality, siltation, agricultural runoff, sewage and chlorine discharge, poor logging practices and stream channelization have also played a huge role in this species' decline.