



**UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES PROGRAM**

TELEPHONIC INTERVIEW TIME (04:57)

NORTHERN RIFFLESHELL (HOST – SARAH LEON WITH BOB ANDERSON)

This transcript was produced from audio provided by USFWS Endangered Species Program

P R O C E E D I N G S

(Music plays.)

MS. LEON: Hello there. This is Sarah Leon for the U.S. Fish and Wildlife Service. And today I have Bob Anderson on the phone. Bob is a Fish and Wildlife Biologist at the Pennsylvania field office. Hi, Bob. How are you today?

MR. ANDERSON: I'm great, Sarah.

MS. LEON: Would you tell us a little about the northern riffleshell mussel?

MR. ANDERSON: The northern riffleshell is a relatively small, freshwater mussel. It's got two halves like an oyster or a mussel that you might get in a restaurant. The shell is a light yellowish-brown color, and it's got green lines running in a ray pattern on the surface.

The male and the female shells have a very different shape. The males are sort of oval with an indented area in the middle that's called a sulcus. The males don't grow as large as the females. The females, on the other hand, have a really large, inflated extension that makes up more than half the shell, and the females don't have that indent in the middle of the shell.

Riffleshells are called this because they're usually found in the rapid areas of streams, but we also find them in areas that might be called runs or glides where the water slides more smoothly across the bottom than you might imagine in a turbulent, riffle-type area. Like most freshwater mussels, the northern riffleshell depends on the currents to bring them food and oxygen and to carry away waste.

MS. LEON: So, Bob, what is the current status of this freshwater mussel?

MR. ANDERSON: It's listed as an endangered species. Mussels, including the riffleshell, live a fairly long time. Riffleshells live 10 to 15 years. And their reproductive scheme is not all that successful. It's good for the environment that they live in, but we've changed it a lot, putting up dams and channelization and pollution.

So when something happens that takes them out, they can't usually move back into an area. And progressively, over time, more and more populations have just been eliminated until we're down to pretty much just Pennsylvania and then two streams in Canada. There's a few other small streams where they're still hanging on, where people find an occasional one every 10 to 20 years.

MS. LEON: Recently, there have been a number of translocation efforts. Bob, would you mind telling our listeners about these efforts?

MR. ANDERSON: Sure. This is pretty exciting. Only in the last few years have we learned enough about the biology of the riffleshell that we can start moving them around. And we have a few locations in Pennsylvania where we have a fairly large number of animals, and we've also got projects that are going on, bridge replacements, that would hurt those populations when the construction happened.

So we've been moving animals to locations where they used to occur and where conservation has brought the stream quality, the river quality up to a point we think the animals can live back in there.

We've moved a few thousand animals to Ohio, Central Ohio, into Big Darby Creek where there's been active conservation to improve the water quality. We've also moved the riffleshell into Illinois and to Kentucky in places that we believe that they can survive and where they used to occur.

We've got future plans to move them into West Virginia and perhaps Indiana as well to try to reestablish and spread the populations around and try to get them off the endangered species list.

MS. LEON: So, aside from these exciting translocation efforts, what else is being done to help restore the species in the wild?

MR. ANDERSON: Well, a lot of the wild work is happening the lab in understanding what the animals eat and what their stressors are, what pollutants harm them at different life stages.

Our national fish hatchery, the White Sulphur Springs Hatchery, has been propagating animals that we can then use for toxicity testing to get better information about how to protect them in the wild.

And, also, we've been propagating the young in the fish hatchery and releasing those into areas, again to help restore populations that have been damaged. Every year, we go in, and we monitor them. We put number tags on them. We're raising them up till they're about half an inch long, and we put a number tag on them before we release them. And then we go back annually through dive surveys and also radio-tagging them to try to relocate them to find out how fast they're growing and what their survival rates are.

MS. LEON: And survival rates, are they good?

MR. ANDERSON: They're surviving. With a young animal, you expect there to be some mortality, but we're finding a surprising number of them that are living in their new habitat.

MS. LEON: Oh, that's wonderful. And can you tell us about some of the key conservation partners involved in recovering this species?

MR. ANDERSON: The various states, Kentucky, Illinois, the Ohio DNR, the Nature Conservancy, have all been really active in keeping this going. The Pennsylvania Fish and Boat Commission has joint jurisdiction for management of riffleshell here in Pennsylvania, and they've been very helpful in going out and collecting animals from the Allegheny River and helping move them to other locations.

MS. LEON: Well, thank you so much, Bob, for taking the time to tell us more about this unique species. It was a real pleasure having you on today.

MR. ANDERSON: Thank you, Sarah.

MS. LEON: For the U.S. Fish and Wildlife Service, this is Sarah Leon. Thanks for listening.