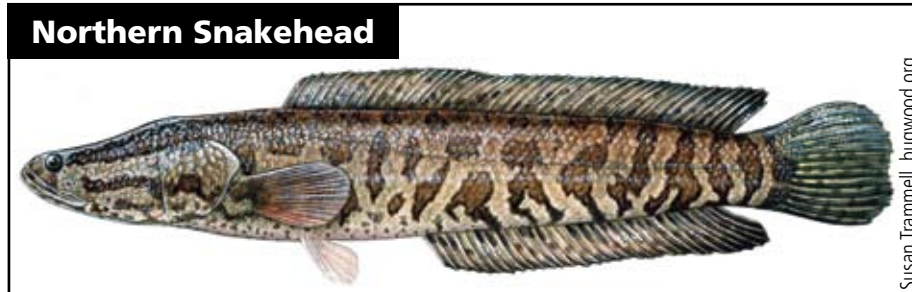


SNAKEHEAD ERADICATION ALERT

Because of the recent discovery of reproducing northern snakehead fish in the Piney Creek drainage in Monroe and Lee counties, the Arkansas Game and Fish Commission will conduct a large-scale eradication in October.



Why is eradication necessary?

Because snakeheads

- Are aggressive top predators that eat most fish species
- Are strong competitors with other fish species
- Can tolerate Arkansas water temperatures year-round
- Can spawn up to five times a year
- Can severely impact fisheries
- Receive care from both parents (unlike native species), which improves their survival rate
- Thrive in delta environments with sluggish water with vegetation, undercut banks and low oxygen (snake-heads breathe air at the surface).
- Can survive out of water for up to three days in a moist environment

The AGFC must act now to attempt to eradicate this nuisance species. Infestation of the White River National Wildlife Refuge is highly likely – these aggressive fish could invade the lower Mississippi River.

The Eradication Effort

The AGFC will use a chemical called rotenone in Piney Creek drainage. Rotenone kills all fish species; unfortunately, this is the only method that will eradicate northern snakeheads.

AGFC ground and air crews will treat the area, which will take at least two weeks. Only AGFC personnel and partner agencies involved in the effort may be in the treatment area. After the treatment, the area will be assessed and the AGFC will stock fish.

(More information on other side)

Questions? Call the AGFC Fisheries Division

Little Rock Headquarters
(501) 223-6371 or (800)-364-GAME

Brinkley Regional Office
(877) 734-4581



Keeping the Natural State natural.

Rotenone Q&A

What is rotenone?

Rotenone is a substance from roots of tropical plants in the bean family. It has been used as a fisheries management tool since 1934 and is very effective in eradicating unwanted fish without harming habitat. Rotenone may be powder or liquid. It works and breaks down quickly, leaving no harmful residue. The Environmental Protection Agency closely monitors rotenone, its use and effects.

How does rotenone work?

Rotenone stops fish from using oxygen absorbed in the blood. It affects fish and some amphibians and aquatic invertebrates.

How long is rotenone effective?

Its effectiveness is based on temperature. In Arkansas it breaks down in 72-96 hours. It breaks down quickly when exposed to light, heat, oxygen and alkaline water. Potassium permanganate quickly neutralizes rotenone. The AGFC will use it to ensure that rotenone doesn't travel to other water.

Is rotenone safe for people and animals (livestock)?

The EPA conducted an intense, 10-year study and concluded that, if used according to label instructions, rotenone does not pose a risk to humans and the environment. The EPA has not established rotenone tolerances for livestock. Therefore, the AGFC recommends finding an alternate water supply for livestock in the affected area. Livestock should not drink treated water until 96 hours after final treatment.

Is there danger in drinking rotenone-treated water?

As a precaution, the AGFC advises against it. Water containing rotenone residue cannot legally be used as a domestic water source. However a 160-pound person would have to drink more than 23,000 gallons of water at one time to receive any effects.

Is rotenone dangerous around agricultural crops, trees and other vegetation?

Rotenone has been used as an insecticide on a variety of plants. The EPA has not established effects of rotenone on vegetation and trees. The AGFC will take utmost care in applying rotenone, and will avoid contact with crops. As a precaution, the AGFC recommends against using water recently treated with rotenone to water crops (water may be used 96 hours after treatment). During aerial application, some trees and vegetation will come into contact with rotenone, which will break down over time.

May people eat fish killed by rotenone?

No. The EPA has not established such guidelines.

How soon may people enter the treated area?

Although guidelines for rotenone use state that people may enter the treatment area after application, the AGFC will restrict entry until 72 hours after application.

Does rotenone affect bees and other land-dwelling insects?

One study found rotenone to be virtually non-toxic to terrestrial insects. The AGFC advises beekeepers to move hives in rotenone-treated areas.

Can rotenone enter ground water and pollute water supplies?

Rotenone moves through soil very slowly. Studies found no rotenone contamination in ground water.

Will wildlife and birds that consume water treated with rotenone or fish killed by rotenone be harmed?

No.