

# Arsenal Against Salvinia: What LDWF uses to kill the aquatic plant

**KTBS Shreveport**

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*DOYLINE, La. -*

Giant salvinia made its home in Lake Bistineau back in 2006. Since then, Louisiana Department of Wildlife and Fisheries agents like Evan Thames have worked to get the aquatic plant under control.

"Not any one thing so far has been able to get rid of it [salvinia]," said Thames. "So we're trying to throw as much at it as we can."

He said the most effective but least favorable by land owners at the lake is the drawdown.

"The lake will go to seven feet below," he said. "This is an area in front of the state park's camp ground that was 100 percent covered [with salvinia]. You can still see areas that are still damp and wet, but you also see the vast areas that have already dried out, in the process of dying or dead."

Giant salvinia is 90 percent water, so when you remove that the plant shrivels up and dies.

"This is what we end up with after the drawdown," Thames said while holding the dead plant. "We can't drawdown the entire lake. When we pull it down, it goes to 8,000 acres."

Drawing down the lake cannot kill all of the salvinia by itself. It usually takes two or three other approaches to kill the aquatic plant.

"We spray as much as we can to keep it knocked back until we have to have a drawdown," said Thames.

Agents spray a herbicide mixture that also kills the salvinia, but the hairy-like tips on the leaves make it difficult for the spray to be effective.

"We have to add a particular surfactant to that, which is a soap that makes the chemicals stick better because of these little hairs," said Thames, a LDWF Biologist Manager. "But the salvinia weevils, how they actually kill the plant is they lay their eggs down in there and then the juvenile feed on those hairs and that's what kills the plant."

The salvinia weevil is a third weapon Wildlife and Fisheries use. It is also the most expensive of the three.

"Drawdown is the best tool, but certainly not the most popular," Thames explained. "The drawdown is the most effective, herbicide spraying and then the giant salvinia weevils behind that. hopefully they'll be some new stuff come out in the future; new ways to attack it."

Researcher Dr. Doug Boyette does just that. He studies fungus and plant diseases to hopefully get rid of giant salvinia once and for all.

"What we do is isolate these pathogens that cause these diseases and grow them using different techniques to mass produce enough quantity so we could apply these pathogens to a weed population," Boyette explained.

He said the tests he's done on giant salvinia from Lake Bistineau have been successful in the lab. He waits to get approval to test it in a real life situation.

Thames said he hopes they can come up with something soon.

"We're not going to get rid of it with the ability that we have right now. Eradication is just not in the picture. If you wiped it out of this lake, six months later a boat from Caddo Lake, or another lake with it, would bring it back in and it'd be right back infested... It's basically a management."

Salvinia isn't just a problem at Lake Bistineau. It's been found in almost every public body of water in northwest Louisiana. Gigantic Caddo Lake has about seven thousand acres covered in salvinia. Cross Lake, the source of Shreveport's drinking water has so far contained salvinia to the west side, and herbicide is being used there.