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Science skewed by politics in turtle recovery plan, scientists say

By Candace Page

Fish and Wildlife Commissioner Wayne Laroche has "hijacked" a plan to rebuild populations of a threatened turtle, skewing the proposal's scientific basis to serve unrelated policy goals, the state's leading herpetologist said last week.

An advisory group of scientists led by the reptile-and-amphibian expert, Jim Andrews of Middlebury College, will recommend that the state Endangered Species Committee decline to endorse Laroche's plan at its July meeting, Andrews said.

"My read is that the commissioner would like this plan to minimize any obstacles it might put in the way of removal of the Missisquoi Bay causeway and his priorities for fisheries management," Andrews said.

"We don't like this process of one person hijacking the plan; one person saying he wants to edit the plan for four years until it meets his particular goals," he added.

Laroche rejected the scientists' criticisms, saying his only agenda was to improve the recovery plan by putting it in a standard format and adding information and recovery strategies.

"I find it difficult to understand," Laroche said of the criticism by Andrews and other scientists that he had weakened the scientific basis of the plan. "How could that be? The things that have been added in are based on science."

He said he hopes the Endangered Species Committee will endorse his draft.

The final decision about whether to adopt a plan lies with Natural Resources Secretary George Crombie. The Endangered Species Committee's recommendation is purely advisory. It is Crombie's job to balance the needs of a threatened and endangered species with other human priorities.

A contested turtle

The clash of ideas revolves around a pointy-nosed animal -- the Eastern spiny softshell turtle -- of which an estimated 200 live in Missisquoi Bay.

The turtle is included on the state's list of threatened species. A recovery plan was drafted in 2003-2004 to guide wildlife managers' actions to rebuild healthy populations so the turtle can be removed from the list.

That original plan was written by a Fish and Wildlife Department staff member and an independent researcher, in consultation with a team of scientists that included Andrews, the Middlebury herpetologist.

It was vetted by other scientists outside government, endorsed by the Scientific Advisory Group on Reptiles and Amphibians set up by the Endangered Species Committee, and endorsed by the full committee in July 2004.

The plan pointed out the role of the Missisquoi Bay Causeway between Swanton and Alburgh as a place where the turtles overwinter in the lake bottom and congregate in warm weather, too. The document identified plans to remove the causeway as an "emerging threat" to the turtle population.

The administration of Gov. Jim Douglas has promised Missisquoi Bay residents -- who blame the causeway for restricting water circulation and summertime algae blooms -- to remove the causeway.

Laroche said he was not satisfied with the turtle recovery plan and decided to redraft it himself. He called the plan inadequate and said it did not conform to a format he wants to use for all species recovery plans.

"I have the responsibility to make sure the right thing gets done," he has said in the past.

For example, he said, the original draft did not recommend removing vegetation that can shade nesting sites and make them less viable. He added

that idea, he said, and has begun implementing it.

He cited his support for more research into population numbers and the genetic makeup of the Missisquoi Bay turtles, information critical to future management decisions.

How a turtle swims

While outside scientists have a number of substantive objections to Laroche's rewrite, they most frequently cite two items they say raise questions about Laroche's intent.

First, Laroche deleted the finding that causeway removal would be a threat to the turtle.

Instead, his draft implies that removal of the causeway could actually help the turtle. It says the turtles may be blocked from moving through the causeway's opening by the strength of the current.

He also added a recommendation to the plan that the Swanton dam on the Missisquoi River be removed to allow the turtles to find spawning grounds further upriver.

Laroche has long advocated removal of the dam to increase the health of game fish populations.

"As a scientist, those rub me the wrong way," C. William Kilpatrick, a University of Vermont biologist and member of the state Scientific Advisory Group on reptiles and amphibians, said of the two points.

He said Laroche had no scientific evidence to back up either idea and that they contradict one another -- if the turtles can swim upriver, then they are also strong enough to swim through the causeway opening.

"Things got added to the plan that have poor scientific validity," he said, adding later, "There seems to be a political filter there."

Laroche defends the validity of his ideas, saying the removal of manmade barriers can only be good for restoring the natural flow of water and habitat connectivity.

But he said he plans to remove from the draft plan his theory about the causeway as a barrier to turtle movement. "It's moot," he said, since the causeway opening was widened last summer.

Norwich University vertebrate ecologist Bill Barnard, a member of the Endangered Species Committee as well as the scientific advisory panel, echoed Andrews' and Kilpatrick's overall criticism of the plan.

"There is less science in there now than there was," he said.

Kilpatrick, Barnard and Andrews said they believe recovery plans should be written by experts on each species and be peer-reviewed by other scientists, as the original turtle recovery plan was.

Then, using that information, policymakers can balance the needs of the turtles with the needs and wants of the human population.

The scientists' concerns about Laroche's rewrite were echoed by three environmental groups -- the Lake Champlain Committee, Audubon Vermont and the Center for Biological Diversity. They filed objections during a public comment period that ended April 1.

"A final adopted Eastern spiny softshell turtle species recovery plan ... should reflect the best understanding of the scientific community. The proposed plan put out for public comment does not meet these criteria," wrote Mike Winslow, staff scientist of the Lake Champlain Committee.

THREATENED TURTLE NAME: Eastern spiny softshell turtle, Apalone spinifera spinifera.
APPEARANCE: Leathery, olive-gray shell; three-clawed webfoot; tubular snout.
HOME: Midwest to Vermont.
STATUS: On Vermont, Quebec lists of threatened species.
SIZE: In Vermont, females grow up to 16 inches across and 11 pounds. Males are much smaller, up to 7 inches and 1 pound.
LIFE CYCLE: Hatch from eggs laid on gravel/sand beaches. Hibernate for six months each year. Can live for up to 50 years.
THREATS: They include loss of habitat; human disturbance; diseases introduced by pet trade; heavy predation by raccoons, skunks, snakes, wading birds and other animals.