

Monday, December 22, 2003

SCIENTISTS: LOON EGG STUDY DISPROVES BUSH POLICY

By Stephen Frothingham

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(AP) Swain's Lake and Mendum's Pond are small ponds lined with summer cottages in Barrington, about 25 miles east of Concord. In summer, the ponds are known for their bass fishing and are home to a few pairs of breeding loons. This time of year, the call of loons has been replaced by silence and, soon, by the whine of snowmobiles.

The loons have migrated to open water.

But over the last eight years they've produced evidence – eggs with the highest mercury levels of any tested in the country – that has convinced some scientists that the Bush administration is headed down the wrong path with the mercury pollution reduction plan it announced this month.

A study published this year in the journal *Ecotoxicology* found that loon eggs in southeastern New Hampshire had the highest mercury levels of any tested in eight states. The levels in Swain's Lake and Mendum's Pond were especially high.

But the study was based on eggs tested prior to 2000. More recently, eggs from the same lakes have shown a significant decline in mercury, apparently because of state-mandated changes at municipal waste incinerators in the area, said Dr. David Evers, executive director of the BioDiversity Research Institute in Falmouth, Maine, and the coauthor of the loon egg study.

The previous high levels and their recent reduction convinced Evers that mercury pollution stays close to its source, which is usually incinerators, coal-burning power plants and home furnaces. The solution, he says, is to require plants to use the best available technology to cut mercury emissions.

However, the Bush administration plan has a wider focus, trying to reduce net mercury emissions nationally. "You end up sacrificing parts of the country like southeastern New Hampshire to try to improve mercury pollution nationally", Evers said.

Over the next six years, the administration proposes to regulate mercury pollution by allowing plant operators to buy mercury pollution credits from cleaner plants. Later, limits on mercury emissions would be imposed, although environmentalists note the limits are lower than those proposed by the Clinton administration, and that some would not take effect until 2018.

The EPA says the credits trading program would cut mercury emissions from coal plants from 48 tons a year to about 34 tons a year. When all the limits are imposed, emissions would be cut to about 15 tons a year, the EPA says. “We are calling for the largest single industry investment in any clean air program in U.S. history”, EPA Administrator Mike Leavitt said in introducing the plan.

But the plan – especially the credits trading proposal – is the wrong approach, Evers said. “Caps and trading doesn’t seem like the logical way to deal with this problem,” Evers said. The most surprising part of Evers’ argument is that he says it is bolstered, not weakened, by the recent improvements in loon egg mercury levels in Swain’s Lake and Mendum’s Pond. Across New England, about 40% of mercury pollution comes from New England sources, 40% from the Midwest and 20% from global sources, as far away as China, scientists say.

But in hot spots, like southeastern New Hampshire, an even larger percentage of the mercury originates locally, Evers said. His study found the highest mercury levels in the area roughly east of Interstate 93 as far north as Concord. He theorizes that wind patterns bring in mercury-laden air from the Boston area and the Midwest, while several area municipal incinerators, home furnaces and the Bow coal-powered generator, which is on the western edge of the region, contribute to the hot spot.

The declining mercury levels convinced Evers that mercury pollution is best dealt with on a plant-by-plant basis. “It shows that there is a point-source problem,” Evers said, “and we are starting to show that there can be rapid changes in mercury viability in the environment.” On the other hand, pollution credit trading – while it could eventually reduce mercury emissions nationally – would be less effective in dealing with the bulk of mercury contamination.

Trading makes sense for greenhouse gases or acid rain, he said, because the pollutants act globally, and a net decrease improves the environment for everybody. But, if a heavy mercury-emitting plant bought credits from a cleaner plant, perhaps in another state, it would cause little improvement to the environment near the plant, Evers said.

Evers chose to study loons because they are at the top of the food chain. He doesn’t know whether the levels of mercury he’s measured in the eggs has any affect on loons’ health. “How much mercury is too much is a question we haven’t answered yet,” he said.

But the New Hampshire Department of Health and Human Services says mercury can damage the developing brains of fetuses, babies and young children. The department advises pregnant or nursing mothers and young children not to eat fish more than a few times a month.