

Hubbard Brook Research Foundation

16 Buck Road, Hanover, NH 03755

BioDiversity Research Institute

Flaggy Meadow Road, Gorham, ME 04038

For Immediate Release

Contact: Theresa Daigle – 207-839-7600, theresa.daigle@briloon.org
Judy Brown – 603-653-0390 x102, jbrown@hbresearchfoundation.org

**NEW SCIENTIFIC STUDY LINKS MERCURY POLLUTION HOTSPOTS TO
U.S. COAL-FIRED POWER PLANTS AND OTHER SOURCES**

Causes of 1 Confirmed and 3 Suspected Biological Mercury Hotspots in Maine Identified

Gorham, ME – Scientists released the results of two new studies today that identify five known and nine suspected biological mercury hotspots in northeastern North America and suggest that coal-fired power plants in the U.S. are major contributors. One major biological mercury hotspot spans the upper Androscoggin and Kennebec River watersheds in Maine. The studies are the result of a three-year effort by the Hubbard Brook Research Foundation (HBRF) and are the cover story of the January issue of the peer-reviewed scientific journal *BioScience*.

The HBRF team of 11 scientists used an extensive data base of more than 7300 samples to quantify mercury levels in fish, loons and other wildlife at specific lakes and reservoirs from New York to Nova Scotia. “Statewide fish advisories are a blunt tool that are useful, but don’t demonstrate just how severely polluted some waters really are,” said Dr. David Evers, Executive Director of the BioDiversity Research Institute. “We found fish in remote areas of Maine with mercury levels four times higher than the EPA human health criterion. We believe people need to know where these highly polluted lakes exist so that they can take appropriate precautions when choosing where to fish and whether or not to consume that fish” said Evers.

Senator Susan Collins (R-Maine) commented today on the national importance of this research as she announced that she is introducing new legislation to reduce mercury pollution. “I have long-argued that EPA used faulty science in order to justify an insufficient mercury rule, and these studies prove it,” said Senator Collins. “EPA misrepresented the mercury problem based on computer data which had not been peer-reviewed, and then put out a rule which does not account for mercury hotspots and which places children and pregnant women at risk.

“With these studies, David Evers has shown the importance of real, on-the-ground mercury measurements, instead of relying solely on the computer model used by EPA to justify its misguided rule. I am introducing legislation to reduce mercury emissions by 90% and to create a nationwide mercury monitoring network. Congress should act on this issue expeditiously.”

The HBRF team linked the biological mercury hotspots to sources of mercury pollution and found that mercury emissions to the air are the leading cause. According to Dr. Evers, “We were surprised to uncover the combined effect of mercury in air pollution and the drawdown of large reservoirs. The remote waters of the Upper Kennebec River watershed are actually receiving a double-whammy. The mercury that enters the watershed from air pollution is intensified by changing water levels in the reservoirs.” The suspected biological mercury hotspots in Maine appear to be caused by airborne mercury pollution from local sources, soil contamination at a former industrial site, and watershed sensitivity to mercury pollution.

In order to more closely examine the impact of coal-fired power plants, the HBRF team conducted a case study of the biological mercury hotspot spanning southern New Hampshire and northeastern Massachusetts. “This modeling study supports a growing body of evidence that a significant fraction of the mercury that is emitted from coal-fired power plants is deposited in the area surrounding the plants,” said Dr. Thomas Holsen, Professor of Civil and Environmental Engineering at Clarkson University and co-author of the studies. This finding calls into question the appropriateness of the methods EPA used to dismiss the potential for mercury hotspots and justify the cap-and-trade policy of the new Clean Air Mercury Rule. The cap-and-trade approach allows some units at coal-fired power plants to buy emissions allowances rather than reduce mercury emissions. The concern over local impacts has prompted several states to reject mercury trading and adopt more stringent emissions standards for coal-fired power plants in their EPA-mandated plans, potentially calling into question the viability of a national trading program.

The good news is that the HBRF team also determined that mercury levels in fish and wildlife can decline relatively quickly in response to decreased airborne mercury emissions within the region – a new finding for the Northeast.

Importantly, the results of these studies have prompted the writing of new draft federal legislation aimed at tracking mercury pollution and its effects by Congressman Tom Allen of Maine.

“There is still a lot that we don’t understand about mercury, but it is clear that biological mercury hotspots occur and that mercury emissions from sources in the U.S., as opposed to China and other countries overseas, are the leading cause. Mercury emissions will have to be reduced substantially from current levels if we are to see recovery in sensitive watersheds in the Northeast,” said Dr. Evers.

###

Available for Interviews:

Dr. David Evers, Executive Director, BioDiversity Research Institute – 207-839-7600
Wing Goodale, BioDiversity Research Institute – 207-839-7600

For copies of the studies, B-roll, photographs, and other supporting material contact Judy Brown at: 603-653-0390 x102, jbrown@hbresearchfoundation.org

Materials will be available on the HBRF website on Tuesday, January 9, 2007 EST at: www.hubbardbrookfoundation.org/MercuryStudy/