## Onondaga Lake Natural Resource Damage Assessment and Restoration Trustee Council







## Waterfowl Contaminant Study on Onondaga Lake 2009/2010

Who is involved in this study? The study is being conducted as part of a natural resource damage assessment being performed by a Trustee Council, consisting of the U.S. Department of the Interior, Onondaga Nation and New York State Department of Environmental Conservation, in cooperation with Honeywell, Inc.. Biodiversity Research Institute was hired to perform the field work. Trustees, under the Superfund law, are permitted to make claims on behalf of the public and negotiate settlements to address natural resource injuries caused by the release of hazardous substances. Injuries can include ecological and recreational-use losses and cultural losses. Any resulting damages must be offset by restoration projects.

What are we doing on the lake? Onondaga Lake is an important stopover for migratory waterfowl. Periodically, from December through March, wildlife biologists will be conducting surveys to count the number of waterfowl on the lake and determine which species are present. Biologists will be live-capturing waterfowl using non-harmful netting techniques. Each trapped bird will have a small blood and feather sample collected for contaminant screening and will be banded with a federally issued leg band. Measurements from each bird will be collected to help evaluate the health of the birds. They will then be released back onto the Lake. We are also collecting small fish and other aquatic creatures that waterfowl are eating while spending time on Onondaga Lake. We will analyze these organisms to determine how much mercury is present in waterfowl food.



Photo: A Bufflehead duck ready for release back to Onondaga Lake. Photo credit – Biodiversity Research Institute.

Why are we conducting this study? Certain contaminants, particularly mercury, can be elevated in the environment as a result of past and current industrial activities. Onondaga Lake contains elevated mercury levels in some fish and other wildlife, including birds. This study is investigating the amount of mercury that is available to certain species of waterfowl that spend time on Onondaga Lake. Data collected through this study will help evaluate whether or not mercury levels on Onondaga Lake are a concern to waterfowl.

## **Mercury Facts**

- Mercury is found naturally in our environment at low levels which are not harmful to wildlife.
- Mercury is also a pollutant, and enters our local environment through atmospheric deposition and local sources.
- In aquatic ecosystems, mercury is converted by bacteria to a more toxic, organic form, called methyl-mercury.
- Methyl-mercury accumulates as it passes through the food chain, creating a greater risk of toxicity.
- Elevated levels of mercury can have impacts to the health of wildlife.