





Preliminary Investigations of Bird Injuries

ast and continuing discharges of PCBs have contaminated natural resources of the Hudson River for at least 200 miles. Federal and state trustee agencies are conducting a natural resource damage assessment (NRDA) to assess and restore Hudson River natural resources that may have been injured by polychlorinated biphenyls (PCB) contamination.

PCBs are a major concern because they persist in the environment for many decades, can be harmful at low concentrations, and accumulate in living creatures. PCBs pose health hazards to Hudson River fish, mammals, birds, and other wildlife and are found at concentrations up to 1,000 times greater than those considered protective of human health or the environment.

This factsheet provides summary information about preliminary investigations on PCB impacts to birds being implemented under the NRDA.

PCB Exposure and Effects

Many laboratory and field studies done in other parts of the country have shown the potentially harmful effects of PCBs on fish, birds, mammals, and other wildlife. In birds, PCBs have been shown to cause a range of adverse impacts, including disease, behavioral abnormalities, genetic mutations, physical deformities, changes in brain chemistry, reduced hatching rates, embryo mortality, and death.

Purpose

There are four preliminary investigations in progress that will inform the trustees about the need for and design of future avian (bird) injury studies for the Hudson River.

1. Breeding Bird Survey Trustees will review available literature on bird abundance in the Hudson River. This study will help with selecting



Trustees will conduct preliminary investigations on bald eagles and other birds.

bird species for possible injury studies in the future.

- 2. Avian Egg Exposure Study Trustees will collect eggs from a number of species of Hudson River birds and analyze the eggs for contaminants. This study includes installing nest boxes. The study will provide an indication of the exposure of those species to Hudson River contaminants, and facilitate potential design of avian injury studies.
- 3. Avian Exposure from Floodplains Trustees will survey the Hudson River floodplain to determine where woodcock, robins, or other species are nesting and feeding. Trustees will also collect and analyze eggs, and possibly monitor nests and young birds. This study will help determine PCB exposure to birds living and feeding in the Hudson River floodplain, and the need for future studies of floodplain-dependent bird species.
- 4. Bald Eagle Monitoring Trustees will monitor bald eagle nests in the Hudson River area for reproductive success and potentially collect and analyze blood samples. This study is a continuation of work done previously by the USFWS and NYSDEC. It will help evaluate the possible effects contaminants have on eagle health, and aid in determining the need for future injury determination studies.

Investigators

The study is being implemented by the following trustee agencies: the U.S. Fish and Wildlife Service, the New York State Department of Environmental Conservation, and the National Oceanic and Atmospheric Administration.

For more information

www.darp.noaa.gov/neregion/hudsonr.htm www.dec.state.ny.us/website/hudson/index.html

Kathryn Jahn - USFWS 607-753-9334 x156 kathryn_jahn@fws.gov

Larry Gumaer - NYSDEC 518.402.8971; fax 518.402.9027 lwgumaer@gw.dec.state.ny.us

Lisa Pelstring - NOAA 301.713.3038 x195; fax 301.713.4387 Lisa.Pelstring@noaa.gov