

## Contaminants in Great Lakes Fish

# Monitoring Contaminant Concentrations in Open Water Fish

Legacy contaminants such as PCBs and DDT have declined in open water top predator fish, such as lake trout and walleye, in all five of the Great Lakes (Figures 1 and 2). Large declines were initially



Lake trout

observed after PCB production was banned in 1977 and DDT use was banned in

1972. However, PCB and DDT concentrations in open water top predator fish remain above the EPA wildlife criteria and the Great Lakes Water Quality Agreement criteria values for these contaminants. For example, current PCB concentrations in Lake Michigan lake trout are 23% higher than the Great Lakes Water Quality Agreement criteria.

The Great Lakes Fish Monitoring Program was established in the 1970s to understand how

changes in regulations and improved industrial practices affect the contaminant content of the Great Lakes open water fish. Contaminant levels in two species of open water top predator fish (lake trout and walleye) are measured each year. This monitoring program helps us determine the effectiveness of previous pollution abatement measures and also assesses risks to wildlife consumers of these fish. Contaminants of concern, such as PBDEs (polybrominated diphenyl ethers, chemicals widely used as flame retardants) and mercury, were recently added to the list of monitored contaminants.

Without the remediation and clean up of Great Lakes sediments and the control of toxic chemical releases, open water top predator fish will never reach the Great Lake Water Quality Agreement criteria of 0.1 parts per million for PCBs or 1.0 parts per million for DDT.

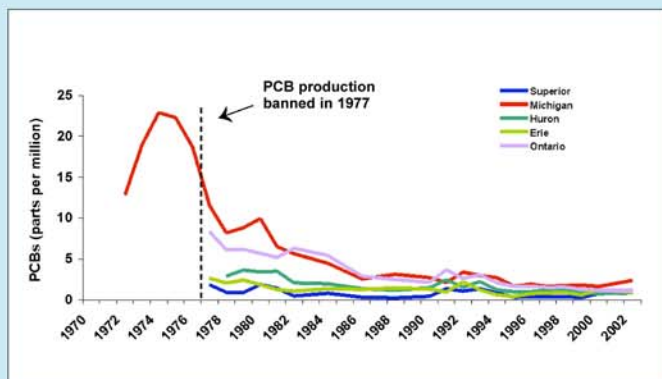


Figure 1. PCB concentrations in Great Lakes open water top predator fish.

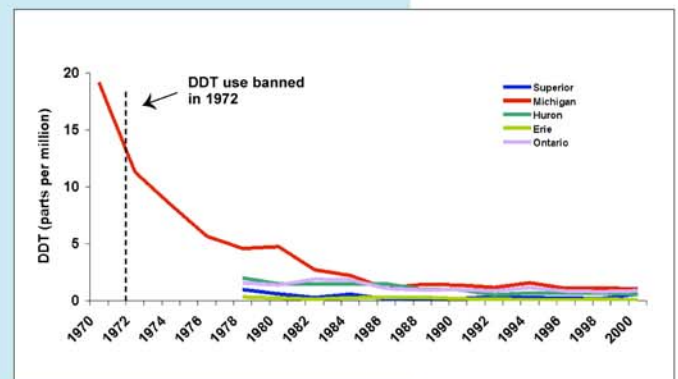


Figure 2. DDT concentrations in Great Lakes open water top predator fish.

Educational materials like these are available from Illinois-Indiana Sea Grant at [www.iisgcp.org](http://www.iisgcp.org). This poster series was produced in cooperation with the Illinois-Indiana Sea Grant College Program.

Photo credit:

Lake trout: Fisheries and Oceans Canada

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