

Great Lakes coastal wetlands provide important habitat for Great Lakes fishes of all life stages. A literature review of ichthyoplankton surveys conducted in Great Lakes coastal wetlands found at least 82 species reported to be captured during the larval stage. Twenty of those species are of direct importance to commercial and recreational fisheries. Species richness and composition patterns were most similar among coastal wetlands in Lakes Superior, Huron and Michigan. Some ecologically important species found as larvae such as Cisco (*Coregonus artedii*) and Burbot (*Lota lota*) are not commonly captured in adult and juvenile fish surveys of coastal wetlands and their use of coastal wetlands is therefore underappreciated. The relative contribution of fish from coastal wetlands to Great Lakes fisheries is unknown. Many of the coastal wetland-using fish species are captured in the nearshore as adults and juveniles, suggesting exchange between habitats. Stable isotope analysis, used to trace movements of larvae between coastal wetlands and adjacent Lake Superior, revealed that some fishes undertake these exchanges during the larval stage (e.g., Rainbow Smelt [*Osmerus mordax*], Yellow Perch [*Perca flavescens*], and White Sucker [*Catostomus commersonii*]). These exchanges were bi-directional between wetlands and the lake. While the data indicate coastal wetlands are an important nursery habitat, and notably so for many economically and recreationally important species, the environmental factors influencing exchange between coastal wetland and other Great Lakes habitats are not well-understood. Advancing tools to track natal habitat, as well as quantitative larval survey data, is necessary to address this knowledge gap. *This abstract does not necessarily reflect USEPA policy.*