

## Presentation at Greater Akron Audubon Society – May 27, 2014

Title – *How the Great Lakes Got To Be So Great*

Phil Meyers, Professor Emeritus of Marine Geology, The University of Michigan

Phil studies the evidence for environmental and climate changes that is archived in marine and freshwater sediments. His interests have taken him to most of the world's oceans and continents, but he always returns to the Great Lakes, which have fascinated him for five decades. His background includes a BS in Chemistry from Carnegie Mellon University, a PhD in Oceanography from the University of Rhode Island, and visiting positions at universities in Brazil, China, Germany, Japan, Sweden, and Switzerland.

More details:

Phil Meyers is an emeritus professor in the Marine Geology and Geochemistry Program of the Department of Earth and Environmental Sciences at the University of Michigan. He is a Fellow of the American Geophysical Union, the Geochemical Society, the Geological Society of America, and the American Association for the Advancement of Science. He holds a BS in chemistry from Carnegie-Mellon University and a PhD in Oceanography from the University of Rhode Island. His research specialty is organic geochemistry, and his scientific interest is to apply the elemental, isotopic, and molecular compositions of the organic matter that is buried in marine and freshwater sediments to reconstruct paleoceanographic, paleolimnologic, and paleoclimatic histories. This organic matter provides “chemical fossils” of the biota that formerly inhabited these settings and hence contains evidence of the past environmental conditions in which the creatures existed. He has sailed on 7 expeditions of the Deep Sea Drilling Project and the Ocean Drilling Program to study marine sediment records, and he has studied freshwater records in the United States, Sweden, Russia, Japan, China, and Brazil. His investigations of the sediment records of the Laurentian Great Lakes started in 1975 with Lake Huron and then shifted to Lake Michigan before focusing for the past decade on Lake Erie. In the course of these studies, Phil has become intrigued by the dynamic geological history of the Great Lakes and how they came to be. Although their present configuration and surrounding landscape date from “only” five thousand years ago, the geological processes important to their formation go back at least one billion years. Both the ancient and more recent of these processes have participated in shaping the hills, valleys, flatlands, ponds, and marshes that are the homes of the Akron area wildlife.