



Diversity of Cladocera Workshop held at the Cornell Biological Field Station

By Audrey Stanton

“From the first lab session, I could tell that this would be a very exciting opportunity.”

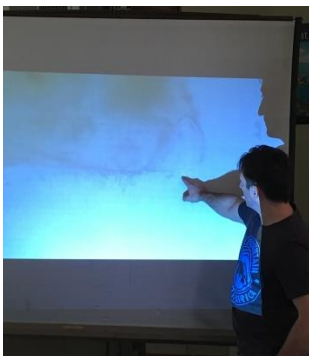
-Jim Watkins, Cornell Biological Field Station

The Great Lakes Group at the Cornell Biological Field Station recently hosted a cladoceran taxonomy workshop. The workshop, held Tuesday, May 29th through Thursday, May 31st, was led by Dr. Kay van Damme from Senckenberg Research Institute of Germany. Van Damme is a global expert on cladocerans. Cladocerans are commonly known as water fleas and are most often found in freshwater. The workshop focused on identifying the diversity of cladocerans in local and regional samples from the Great Lakes Basin.

Also in attendance was Dr. Michael Pfrender from The University of Notre Dame who brought his genetics expertise to the workshop. Pfrender is the principal investigator of the funding project supported by the Great Lakes National Program Office of the US Environmental Protection Agency. The focal point of the project is to develop “barcodes” for species by genetically analyzing individual specimens that have been verified by taxonomic experts. The barcode project ties together good taxonomic identification with genetic analysis for new cutting edge applications.



Joe Connolly and Sarah Schaefer practicing cladoceran identification during the workshop



Dr. Kay Van Damme identifying key features of a cladoceran

The workshop is similar to a copepod identification workshop led at Cornell Biological Field Station last October. The workshop series are focused around zooplankton, and allows our taxonomists and technicians to improve their identification skills with the help of world experts. The Diversity of Cladocera workshop is unique in that Van Damme brought a new key to test out, and participants looked at habitats that are not often sampled by our group, including wetlands and roadside ditches.

A few months may pass before the results of the workshop are confirmed. Fifty species were identified in total, with some likely previously unidentified in North America. Though the United States may be regarded by some as recently subdued in efforts on cladoceran taxonomy, Van Damme is excited to start a new hub at Shackleton Point. The Cornell Biological Field Station is becoming a major taxonomy center for zooplankton with its Great Lakes work.