



### Session 1: May 11 – May 29 (CUP Summer I)

**Principles of Ecology (BIOL 202)** An introduction to the study of organisms and their environments. Lectures and laboratory exercises emphasize environmental factors, populations, communities, ecosystems, biodiversity. Field experiences illustrate ecological principles through hands-on exercises. (Venesky)

**Wetland Ecology (BIOL 475)** Wetlands provide services that are critical to the health and functioning of the ecosystem, but in many ways wetlands defy easy definition. This class will investigate the different types of wetlands, the properties that define wetlands, the benefits they supply to the ecosystem and society, and the history and present status of ecosystem management. (TBD)

**Behavioral Ecology (BIOL 492: Animal Behavior)** Behavior is studied from an evolutionary and ecological perspective. Current models of foraging, mating, and social behavior are evaluated through lecture, readings, field observation and experiments (Regester)

### Session 2: June 1 – June 19 (CUP Summer II)

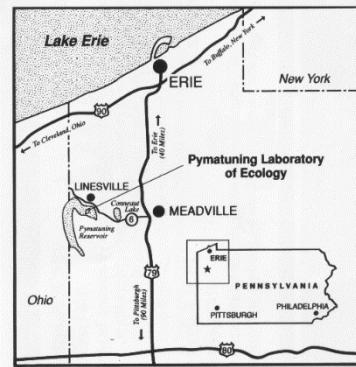
**Herpetology (BIOL 375)** Students will study the ecology and evolution of amphibians and reptiles. Topics to be studied include behavior, morphology, physiology, taxonomic diversity, systematic practice, evolutionary biology, and conservation biology. Course includes a substantial field component. (Lindeman)

**Field Botany (BIOL 427)** Identification of and field experiments with herbaceous and woody plants in the context of their communities. Topics of field experiments may include pollination biology, demography, and effects of herbivory on species diversity. (Krayesky)

**Entomology (BIOL 456)** An introduction to insects. Subjects emphasized will include ecology, morphology, evolution, habitats, and identification. Field and laboratory exercises will be supplemented with lectures and selected readings. (Layne)



# Clarion University Summer Courses Pymatuning Laboratory of Ecology 2020



The Pymatuning Laboratory of Ecology is a field station dedicated to environmental education and ecological research. In PLE courses, direct observation and hands-on experience with living organisms under field conditions are combined with modern laboratory and analytical methods in the study of ecological systems.

Through a cooperative program with the University of Pittsburgh and other universities in the region, Clarion University is able to offer an outstanding program in field ecology at PLE. Sessions at Pymatuning are three weeks in length, students normally reside on site. Each class meets Monday through Friday, and only one class may be taken per session. **Students pay Clarion tuition.** Student room and board provided at PLE for each three-week session is \$520. All students are charged a \$165 laboratory fee. Room, board, and lab fees are payable to the University of Pittsburgh at the beginning of each session. For further information contact Kurt Regester or Andy Turner.



### Session 3: June 22 – July 10 (CUP Summer II)

**Principles of Ecology (BIOL 202)** An introduction to the study of organisms and their environments. Lectures and laboratory exercises emphasize environmental factors, populations, communities, ecosystems, biodiversity. Field experiences illustrate ecological principles through hands-on exercises. (Cothran)

**Ecology of Fishes (BIOL 425: Fisheries Biology)** The population and community ecology of freshwater fishes. Topics covered include identification, age and growth, life-history, trophic interactions, and biogeography. The course will involve extensive field sampling and will emphasize observational and experimental approaches to testing original hypotheses. (Turner)

### Session 4: July 13 – July 31 (CUP Summer III)

**Field Methods in Environmental Biology (BIOL 410)** This class is designed to give practical, hands-on experience in a variety of field techniques used in terrestrial and aquatic ecology and conservation. Topics include orienteering, vegetation sampling, radio telemetry, GIS and GPS, animal population sampling, aquatic insect surveying, and the design of research studies. (Janetski)

**Wildlife Management (BIOL 411)** A study of the ecology and management of mammals, birds, amphibians, and reptiles. Lectures cover population dynamics, sampling techniques, habitats, disease, and both game and non-game management. Labs emphasize wildlife population modeling, habitat assessment using GIS, and evaluation of alternative management strategies. (TBD)

