



2017 Eagle Hill Natural History Science Seminars . . .
. . . on the coast of eastern Maine

UNDERGRADUATE FIELD STUDIES: NATURAL HISTORY OF FRESHWATER FISHES

June 4 - 10, 2017

Freshwater fish in the northeastern United States number nearly 175 species, inclusive of native and introduced forms, resident to ponded and flowing waters of varying habitats and water quality. Sportfish species (trout, salmon, bass, pike and perch) are most recognizable, while many of the vast minnow (one-third of the fish fauna) and non-game species are more difficult to identify, particularly in the field. This seminar will focus on the taxonomy and field/ laboratory identification of 28 freshwater fish families, inclusive of diadromous (migratory) species. Through lectures, actual field sampling (minnow trapping and day/night beach seining), examination of fresh and preserved-aquarium specimens and use of technical keys, participants will gain an understanding of the taxonomy, morphology, and ecology of freshwater fish.



Fish origins, distributions and conservation status will be emphasized, along with an introduction to pre-contact fish remains found at Maine archaeological sites. A listing of historical and current scientific literature will also be provided. This introductory NE-FISH seminar will be of great interest to undergraduate students attending northeastern institutions of higher learning and natural historians who wish to learn about past and present northeastern United States freshwater fishes and resident fish species assemblages.

about the instructor

Dave Halliwell (david.halliwell@maine.gov) received his Ph.D. in Fishery Biology (1989) from the University of Massachusetts, Amherst, specializing in freshwater fish conservation, aquatic habitat classification, and vertebrate taxonomy. He has been employed as an Aquatic Biologist with Maine DEP (Augusta) since 1999. Dave has spent over three decades identifying and investigating the habitats of freshwater fishes while working with northeastern State and Federal fish and water quality agencies and has considerable experience teaching University and field courses related to New England fish and wildlife. Related interests include pre-contact indigenous fish archaeological studies, aquatic habitat restoration, hydropower-flow issues, reservoir water levels, lake water quality assessment and fish zoogeographic studies. Dr. Halliwell is a co-author of the *Inland Fishes of Massachusetts* (2002) and is currently drafting a treatise on the *Freshwater Fishes of New England Proper*. All participants will be provided with a comprehensive course notebook and study guide (\$25 fee). *Inland Fishes of Massachusetts* is currently out of print, however, limited classroom copies will be available for use and possible purchase by participants (\$100 cost).