

# The Institute for Field Ornithology at the University of Maine at Machias

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ESTABLISHED in 1983, the Institute for Field Ornithology at the University of Maine at Machias offers novel opportunities for the study of birds, in an extraordinary and little-known location: Downeast Maine. The Institute has five major goals, designed to expand upon, rather than duplicate, the work of existing organizations. The Institute endeavors to:

- encourage closer cooperation between amateur and professional ornithologists
- hold workshops and courses for improving field skills and ornithological knowledge
- make known ways in which birders can contribute to the scientific or aesthetic appreciation of birds in their natural habitats
- contribute to the conservation of wild birds
- provide a convenient location for all to work, study, and discuss birds

Moreover, the Institute welcomes the opportunity to cooperate with any individual, group, or organization that shares these goals. To date, the Institute has worked toward these goals by developing workshops in subject areas where formal instruction has generally not been available, avoiding the traditional college-level "introduction to ornithology" course or the usual birding tours to its own or some other location. Although the workshops and courses offered may be taken for college credit, they are open to anyone whether enrolled in a degree program or not.

The Institute is almost ideally located, for the natural environment in its immediate area is remarkable for its diversity of habitats, and for the variety of birds occurring within them.

## THE ENVIRONMENT

THE UNIVERSITY of Maine at Machias (UMM) is the easternmost university in the United States, located on the Machias River in a coastal village with 3000 inhabitants. It is a four-year undergraduate institution with 825 students, one of seven individually accredited units of the University of Maine system, and offers degree programs in Biology, English, History, Business, Education, Environmental Studies, and Recreation Management.

The surrounding area is one of low population density and extensive forests. Washington County, where the University is located, is larger than Delaware but has only 35,000 inhabitants. Freshwater lakes are numerous, with 25 in the county over 1000 acres. Indeed, some 10% of the surface of the county is water. The forests are predominately coniferous—spruce, fir and tamarack. Other important terrestrial habitats include peatlands or heaths, and thousands of acres of "barrens," open lands with poor soils and low-growing grasses and shrubs, that produce a major commercial crop of "wild" low-bush blueberries. Perhaps most striking is the county's coastline, almost 1000 miles long, characterized by rocky headlands, hundreds of islands of varying sizes, and extensive tidal flats where clams are gathered commercially. Tides range between 18 and 20 feet in most areas. The cold Atlantic waters, with strong mixing and upwelling currents from these tides, support a rich marine community important to fish, whales (including the extremely endangered Right Whale) and, of course, seabirds.

Overall, this combination of features supports a richly varied and fascinating bird community. Only a few of the highlights can be mentioned here.

*Seabirds* are numerous in offshore waters. Machias Seal Island, 12 miles offshore, hosts breeding populations of Leach's Storm-Petrels, Common and Arctic terns, Razorbills and Atlantic Puffins. Common Murres and Black Guillemots breed nearby. Non-breeding Wilson's Storm-Petrels, Northern Gannets, and Greater, Sooty and Manx shearwaters are also present in summer in these waters, and winter brings Dovekies and Thick-billed Murres as well.

*Bald Eagles* both nest and winter in this area in substantial numbers. Nearly half of the Bald Eagle production in the northeastern United States comes from Washington County, Maine.

*Shorebirds* are plentiful in number and variety throughout the autumn migration. Especially noteworthy are the flocks of tens of thousands of birds at Lubec, Maine, including Black-bellied Plovers, White-rumped, Least and Semipalmated sandpipers, Sanderlings, and up to ten other species. In addition, Passamaquoddy Bay is an important staging area for Red-necked Phalaropes during late summer. Numbers have been estimated to reach one million.

*Gulls* are also present in number and variety, with some ten or eleven species occurring annually.

*Boreal specialties* found in this area include Spruce Grouse, Black-backed Woodpecker, Yellow-bellied Flycatcher, Gray Jay, Boreal Chickadee, and irruptively, White-winged Crossbill. Over twenty species of warblers breed in nearby areas.

Those seeking more details on occurrence and seasonality should consult Pierson, E.C. and Pierson, J.E. *A Birder's Guide to the Coast of Maine*, 1981, Down East Books, Camden, 133 pp.



*The Institute's Shorebirds workshop, taught by Wayne R. Petersen, August 1984, at Deer Island Point, New Brunswick. Photo/Shawn F. O'Brien.*

#### DEVELOPMENT OF THE INSTITUTE FOR FIELD ORNITHOLOGY

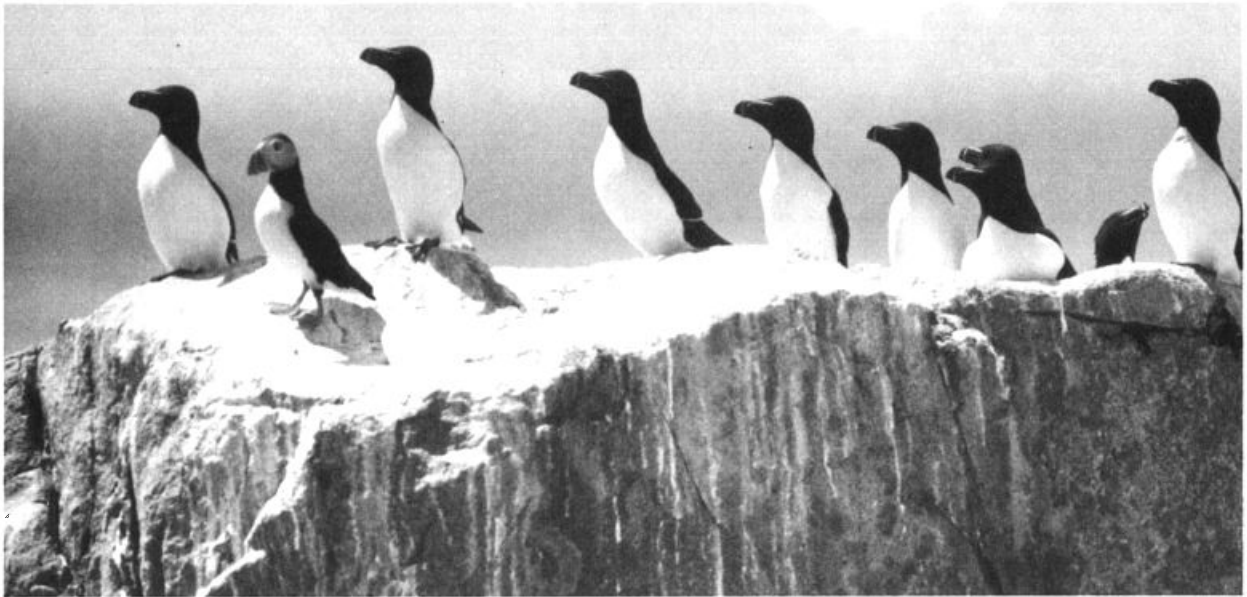
THE INSTITUTE for Field Ornithology began during the Spring of 1983 when UMM's President, Frederic Reynolds, urged the development of innovative ways to use the University's remarkable location and environment. Planning by the author began that summer, with advice solicited from several individuals. Susan Allen, Howard Einspahr, Davis Finch, Stephen Russell, Peter Vickery and Charles Walcott were especially helpful and supportive.

It has been an often-made observation that ornithology is one of the few sciences to which amateurs can and do make substantial contributions. It is equally true that some "amateurs" have a sophistication and knowledge of bird identification, and of the details of distribution and abundance, far surpassing that of many professional ornithologists. Many amateurs, however, lack some of the methodological skills needed to make their

knowledge and observations useful to the scientific community. These are scarcely novel or original ideas. Indeed, they formed much of the basis of a major conference sponsored by the national Audubon Society and the Cornell Laboratory of Ornithology in February of 1978, entitled, "The Amateur and North American Ornithology." The goals of the Institute were formulated with these thoughts, and the recommendations of that conference, in mind. The attractiveness of the Maine coast to visiting birders, coupled with instructors of the highest quality, seems to provide uniquely enjoyable opportunities for just this sort of ornithological education. The results of the Institute's first workshops during Summer 1984 reinforced this expectation.

The first offerings were chosen in two areas to which amateurs can contribute highly useful material—censusing shorebirds, and recording bird songs and vocalizations. In the latter case there was no other known opportunity for a "hands-on" introduction to the subject, and there

is, of course, a tremendous need for more recordings of more species from more parts of the world. Moreover, recent technical advances in recorders and microphones have brought their price and size into a range where they are no more difficult to carry than a camera and telephoto lens. The Institute's location, with a good variety of habitats, well away from heavy aircraft or highway traffic, seemed ideal. This can hardly be over-emphasized, since microphones can pick up a truck two miles away. The choice of instructor was obvious—a staff member from the Cornell Library of Natural Sounds. Fortunately, Greg Budney, Assistant Curator of the Library, agreed to develop a one-week course, which was taught during early July. The result was a most exciting mixture of classroom discussion, field work, and careful critique of recordings made in the field sessions. A flawless recording of a male White-winged Crossbill in full song, made by two students who had not done any recording before this course, was a memo-



*Razorbills and an Atlantic Puffin at Machias Seal Island, New Brunswick, August 1984. Photo/C.D. Duncan.*

rable highlight.

The Shorebirds course was taught by Wayne R. Petersen, a gifted instructor with contagious enthusiasm. Shorebirds, of course, are a group that requires experience and close scrutiny for correct identification. Since their migration is extended in time, and covers much of the continent, an extensive network of trained observers is needed to follow their movements. The Institute's course was designed to provide the skills needed for correct identification, aging, and estimation of numbers and of habitat use. Describing, and encouraging participants to become involved with projects such as the International Shorebird Survey or the Pan American Shorebird Program, were also important goals. This proved a most popular undertaking, with participants from ten states and ranging from a high school student to two professors of biology. No fewer than seventeen species of shorebirds were seen well, and repeatedly, by all participants. For many, this intensive focus on a given group of birds, examining them in minute detail, at leisure over several days, opened an entirely new way to look at birds.

#### CURRENT AND FUTURE OFFERINGS

**T**HE INSTITUTE for Field Ornithology will host five one-week courses during the Summer of 1985. Costs will be in the range of \$250-400, depending on the individual course, and include an initial social gathering and a traditional Down-east "lobster feed." Dormitory housing

will be available for less than \$50 for the week, and inexpensive cafeteria food will be available for some sessions as well. A trip to Machias Seal Island will be a part, or an option, for each course. College credit for "Special Topics in Field Ornithology" can also be arranged at \$94.20 for two credit hours. A detailed brochure will be sent on request.

*June 2-8* "Watching Closely with Davis Finch" will examine the small details of bird identification with one of North America's most careful, capable, and articulate observers.

*June 9-15* "Bird and Nature Photography" will be taught by Michael Hopiak, designer and co-author of Cornell's "Home Study Course in Bird Photography."

*June 23-29* "Bird Song Recording," with Greg Budney, will repeat last summer's introduction to song and other vocalizations, equipment, and field techniques.

*July 26-August 1* "Seabirds," taught by R. G. B. Brown of the Canadian Wildlife Service Seabird Research Unit, will examine identification and ecology of this fascinating group, with a combination of classroom work and observations at sea and at several offshore seabird colonies.

*August 4-10* "Shorebirds," taught by Wayne R. Petersen, will repeat last year's examination of the biology, identification, and research of shorebirds, at a time when autumn migration is in full swing.

Besides courses and workshops, a number of other services are available to

those visiting or developing research or teaching projects in this area. Dormitory housing can be arranged through the summer months, and the University's Greenland Point Nature Center on Long Lake in Princeton, Maine, is available year-round. The capacity of the latter is about 40, in the main lodge and cabins. Laboratory space can be arranged on campus, as can access to our library of ornithological journals. A small bird specimen collection is available for teaching.

Contact with boat captains and other local resources can also be provided, if desired. A field-card checklist of the birds of Maine, following the Sixth Edition of the A.O.U. *Check-list*, is available for purchase at modest cost.

The Institute for Field Ornithology as a new and novel undertaking encourages input from any professional or amateur interested in helping to shape its growth and offerings. Toward this end, an Interest Survey has been developed to facilitate such input. Anyone interested in receiving one is asked to send a self-addressed, stamped envelope to the author. The Institute is especially keen to hear from anyone interested in developing new courses, workshops or research projects. Similarly, organizations are encouraged to use UMM's facilities and setting as an inexpensive and attractive location for conferences and working sessions.

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