

A NATURALIST REFLECTS ON THE MYTH
OF NON-CONSUMPTIVE ENVIRONMENTAL USE
AND THE SOUTH SHORE

by Wayne R. Petersen, Whitman

In reviewing the results of an information poll sent to members of the South Shore Bird Club, I noticed one particular comment: a member asked why the South Shore area lacked extensive coverage in the recent publication, Where to Find Birds in Eastern Massachusetts (1978), published by Bird Observer of Eastern Massachusetts. Obviously, the explanation is manifold, but, as I considered certain of the best South Shore natural areas, I was struck by what seemed to be a common denominator for many of them - limited extent or accessibility. This, in turn, led me to the subject of public responsibility for local ecology.

In 1945, Dr. John B. May, in reference to the South Shore, wrote, "The newcomer in the gentle art of bird-watching quickly recognizes that birds are to be found here in all kinds of surroundings and under diverse conditions. As he wanders about, bird glasses in hand and field guide and checklist in a convenient pocket, he begins to associate certain species of birds or groups of species, with certain very definite types of habitat. This is his introduction to the fascinating study of Ecology, the consideration of the interrelationships between definite groups of plants and animals in definite types of surroundings."

Indeed, Dr. May was ahead of his time. Only within the last decade has ecology become a household word. And yet, for many people ecology remains only a word, not an internalized, applied, and cherished ideology. I am continually surprised by the lack of awareness of ecological relationships, not only in my students, but also in the birding community. While I do not wish to imply any condemnation of birders who are not also "ecologists," it does seem paradoxical that many of us who are addicted to birding have little feeling for the environment beyond the objects of our quest. How often do carloads of observers arrive at a location to see some vagrant species, yet remain totally oblivious to the bird's surroundings, as well as to the impact that the observers' presence may have on both the bird and its environment?

In recent years, several leading ornithological journals have carried articles on "birding etiquette," and even the New York Times recently published an article entitled, "Birds and Environs Reported Harmed by Overzealous Throngs of Watchers." A very relevant paper, entitled, "The Myth of the Non-Consumptive User," appeared in Canadian Field-Naturalist, Vol. 91, No. 4, (1977). This stimulating article by Brian Wilkes addresses the issue of how nature-students, nature photographers, hikers, campers, and other seemingly innocuous outdoor groups are, in fact, major consumers of our natural resource base. The author builds a disturbing case arguing that the notion of non-consumptive use of our natural resources is invalid. By Wilkes' standards, the non-consumptive user can be categorized in a number of ways. Each category is based on the frequency and duration of participation in conventional non-consumptive activities. One category is the naturalist (or bird) club which organizes a specific roster of regular outings and field trips. Others are campers, wilderness users, and summer camps.

Non-consumptive use may affect spatial, visual, and physical dimensions. Spatial consumption simply means that outdoor recreation consumes space (e.g., Salisbury Beach State Reservation's camping area). Visual consumption, by Wilkes' definition, means that large numbers of people consume solitude. Parallel to this notion is the visual impact that humans may have on birds and other wildlife. Obviously, there are many species for which direct human harassment means serious disruption of one or more phases of the annual cycle. For certain rare or localized species, or for colonially nesting waterbirds, habitat options may be limited. Thus, sustained human pressure may force the species to move or to abandon the area, the net effect being consumptive use by a "non-consumptive" segment of society. The persistent use of tape recorders on local specialties or the regular disturbance of roosting waterbirds or owls for observation or photographs are familiar illustrations.

The final problem of direct physical impact is possibly the most obvious, even to the non-ecologist. While most birders do not dig up unusual plants or deliberately trample attractive flowers, they can adversely affect vegetation by tramping unchecked over the countryside, often in large groups. In fragile areas, such as sand dunes, salt marshes, the edges of freshwater marshes, or narrow trails in specialized habitat areas like bogs, the physical consumption of the environment is often conspicuous. Certain areas at Parker River Refuge or at the Cape Cod National Seashore clearly reflect this problem, and, fortunately, the managing authorities have reacted appropriately by installing boardwalks or wood-chip trails. Even in more remote forested areas, the establishment of campground facilities can provide habitat requirements for such "undesirable" species as the Brown-headed Cowbird (Molothrus ater) and House Sparrow (Passer domesticus), which might otherwise be absent.

There is an increasing need for awareness of the problem of non-consumptive use of the environment. All Americans should be cognizant of the fact that we, the "non-consumers," and not big business or overt resource abusers, are potentially the most destructive of all groups of recreationists. With the recent emphasis on ecology and the benefits to be derived from enjoying our natural environment, we are, by virtue of numbers alone, partly responsible for the increasing scarcity of unimpaired open spaces.

With this in mind, bird and nature clubs, naturalists, indeed everyone, must pay heed to rules and standards of conduct in the outdoors. Agencies, too, must fulfill their commitment to preserve an already marred environment. Tremors of public dissatisfaction aimed at certain management efforts can readily be felt at some natural areas, such as Parker River Refuge, Monomoy Wilderness Area, the Cape Cod National Seashore, and several of the Nature Conservancy's land holdings. Yet, agencies responsible for these refuges are fighting for the preservation of the very areas the "non-consumptive" users wish to consume! As Brian Wilkes stated, "The recreation we have been discussing is not a right any more; it is a privilege."

The ultimate solutions to the concerns reflected here should not lie solely in the hands of politicians, but must be sought at the grass-roots level. For years birders and other naturalists have enjoyed these areas as if they were ours alone. It is our responsibility to prevent damage to these areas so that they are preserved for future generations.

With these considerations in mind, I realize that I have resisted describing the abundant attractions of the area that I most cherish - the South Shore. While the South Shore offers many easily reached and accessible birding spots, it is also true that certain areas are private or otherwise inaccessible. But with a little discretion, many of these areas can be readily explored without generating animosity from the natives and without stumbling into the ecological pitfalls described earlier.

As the size of this region precludes its description in a single article, I will depict the area in the broadest terms. For clarity, the region should be defined at the outset, since few maps identify the South Shore as such. For my purposes, the South Shore is Plymouth County, including the geographical appendage of Cohasset, which, by a quirk of political gerrymandering, lies in Norfolk County.

Most of the coastal South Shore region is characterized by features typical of what geologists call a coastal plain. The whole region, however, is part of a great glacial outwash plain, left behind as the last continental ice sheet retreated ages ago. The outer coast is formed mainly of sand beaches between low bluffs and partially eroded drumlins, though in the northern sectors of Cohasset and Scituate, granite headlands, offshore ledges, and tiny islets are reminiscent of Essex County's Cape Ann region. In the southern part of the county, Plymouth's Manomet Hills are all that remain of a terminal moraine where it met the sea.

Water is abundant on the South Shore. Inland from the coast, numerous swamps and ponds exist, some with tiny out-flow streams, all meandering coastward, either as small streams or via the larger Taunton River (to Narragansett Bay) or the Indian Head-North River (to Massachusetts Bay). Ponds ranging in size from mighty Lake Assawompsett (the largest natural lake in the Commonwealth) to tiny kettle ponds provide a key component that influences much of the biota of the region. In fact, some of the most biologically productive habitats are the many man-made cranberry bog reservoir ponds. Often closely associated with the cranberry bogs are swamps of Coast White Cedar (Chamaecyparis thyoides). These areas, like the more numerous Red Maple (Acer rubrum) swamps, provide habitat for some of Plymouth County's most interesting plant and animal life. Extensive freshwater marshes are scarce on the South Shore and occur mainly as occasional pockets along the river edges or in quiet corners of certain cranberry bog reservoirs. Good examples exist in the towns of Marshfield, South Hanson, and West Bridgewater.

South Shore woodlands are primarily second-growth, clearly a reflection of the agricultural past. The major tree communities in the more mature woodlands are either oak-hickory, pine-oak, or beech-hemlock. The previously mentioned cedar and maple swamps represent two distinctive local biotic communities. In the extreme southern sections of Plymouth County, a northward extension of true pine barren habitat occurs, which is epitomized by the extensive Pitch Pine (Pinus rigida) - Scrub Oak (Quercus ilicifolia) barrens of Plymouth's Myles Standish State Forest.

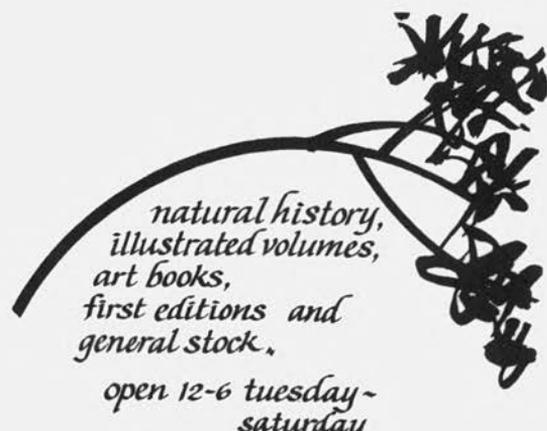
Farmland and open country are two of the major features of interior southeastern Massachusetts. In the towns of Halifax, Bridgewater, and Middleboro, several large dairy operations exist, with their associated hay fields,

corn fields, and pastureland.

Other important habitats include two modest barrier beaches, Duxbury Beach and Plymouth Beach, each backed by varying acreage of salt marsh and enclosing fine saltwater bays with extensive mud flats and mussel beds. Other salt marsh habitat is to be found at the mouths of the North and South Rivers in Marshfield and Scituate.

Finally, the influence of Massachusetts and Buzzards Bays should not be overlooked. The proximity of saltwater not only attracts large numbers of vertebrate and invertebrate forms, but also serves to moderate the local climate in such a way that the coastal areas tend to be cooler in the summer and milder in the winter than more inland areas. This often dramatically affects local bird populations.

I hope that future articles will provide more specific descriptions of South Shore habitats. The interested reader is also referred to articles appearing in Where to Find Birds in Eastern Massachusetts (1978) published by Bird Observer of Eastern Massachusetts. This publication covers the Bridgewater-Lakeville area, Plymouth, and Plymouth Beach.



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