



## THE BALD HILL RESERVATION

by Jim MacDougall

Many of the articles written for *Bird Observer* give the reader step-by-step descriptions of hot spots to bird. This article emphasizes the need for habitat preservation of those hot spots. This is a case study of why and how land in Boxford has been set aside for wildlife.

Much of the upland habitat in Essex County has been transformed and fragmented to the point that it has lost its capacity to support many once common species. Uplands have been engineered into residential lots, roadways, and industrial parks. Freshwater wetlands have been reduced by half, and pond surface has increased at the expense of some of these wetlands. These developments have had and will have severe impact on plants and on breeding birds, amphibians, reptiles, some mammals, and a number of invertebrates.

Boxford State Forest is an example of many individual efforts, culminating in more protected wildlife habitat. It is important to realize that it is individuals who protect land and wildlife. Governments and organizations offer letterhead and structure, but it is working and caring people, either employees or volunteers, who have made the difference in setting aside square miles of land for animals and plants to live relatively undisturbed. And this is just one story of such effort. There are other stories for Plum Island, Marblehead Neck Wildlife Sanctuary, Deer Run Reservation, and Lynn Woods. Each acre of protected land has associated with it the names of men and women who took on the task to see that acre set aside.

The task is still at hand and more urgent than ever. Large tracts such as Boxford State Forest need to remain connected to other large islands of forest. Continuous wooded corridors between these large tracts can minimize the effect on wildlife from encroachment on these habitat islands and maximize their capacity to sustain wildlife within their bounds. Also, we should not assume that once land is protected, one need never worry again. Protected lands are not immune to land-taking by the government for sewage treatment plants, water works, and housing. It is essential for land managers to maintain up-to-date files on the conservation value of each piece of protected land as a defense to the threat of taking. That can only be done through a process of interaction with naturalists and documentation of their sightings. What birders see in Boxford, on Plum Island, or at Halibut Point, if documented, can help that land and the species that live there.

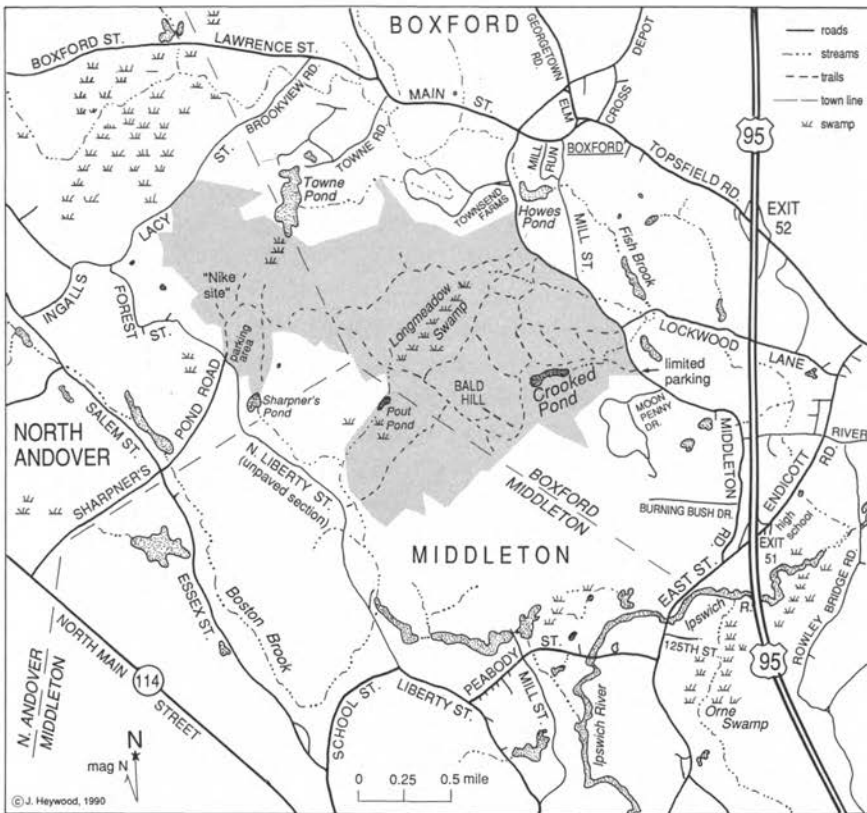
The Bald Hill Reservation is a mosaic of 1620 acres owned by the Essex County Greenbelt Association, the Massachusetts Division of Forests and Parks (MDFP) (part of the Department of Environmental Management, or DEM), and

the state Division of Fisheries and Wildlife (MDFW). Each part of the Reservation carries its own name: Boxford State Forest, John Phillips Wildlife Sanctuary, and the Greenbelt's fifteen or so contiguous woodlots. Birdwatchers have traditionally called it "Crooked Pond," after the shallow pond within the Phillips Wildlife Sanctuary. And others who have used the northwestern corner in North Andover for target practice, "motorcross" rallies, and the like have called it the "Nike Site." By whatever label, it's a great place to walk, see wildlife, cross-country ski, birdwatch, or just get away.

The Bald Hill Reservation is a special place within Essex County; its uniqueness has long been recognized. The area attracted the interest of John Phillips of Wenham Lake, a nationally recognized conservationist, who purchased 120 acres around Crooked Pond and donated it to the MDFW in 1922 as a sanctuary. A hill to the south of the pond is labeled on USGS topographic maps as Mount Eleanor, named by Dr. Phillips in honor of his wife. The once active Federation of Bird Clubs purchased adjacent parcels in the thirties, which were also transferred to the MDFW. Members of that federation Lawrence Fletcher and Judge Robert Walcott were also instrumental in buying much of the former Hiram Towne woodlands lying north and west of Crooked Pond and subsequently transferring this to the MDFFP. This extended the protected land into North Andover. In 1961 the newly formed Essex County Greenbelt fought a plan to develop Bald Hill into ninety-nine house lots, a plan that required the use of the road past Crooked Pond as the main access. Greenbelt won in court, and the land encompassing Bald Hill was subsequently purchased by the MDFFP. This process was headed by Jack Peirce of Topsfield, Henry Sawyer of Middleton, and Drs. Stephen and Charlotte Maddocks of Boxford. These efforts have provided us a place to roam and see nature.

The geology of the area, well documented by John Sears in his 1905 *Geology of Essex County*, is responsible for the extraordinary diversity of wild plants and wildlife found here. The early spring is a time to spend botanizing in the reservation. An interesting passage in John Sears book about the influence of bedrock on plant life may also explain variations in breeding bird life across the county. Plant communities that will grow on granite contrast markedly with those that will grow on diorite or syenite bedrock. Granite produces an acid soil, whereas the minerals within diorite or syenite raise the pH and support plants less tolerant of the more acid environ. Red cedar is an example. Around Essex County red cedar grows on old shell heaps and on the pastures of Newbury and is scattered throughout the ridge tops of Boxford State Forest. Within this Crooked Pond region of hornblende diorite is an ancient rock of hornblende epidote gneiss, which augments this sweetening effect on the soil. On a few of these outcrops and their talus swales, one can find a variety of calciphilic plants: maidenhair fern, spicebush, and ebony spleenwort. Throughout the forest, the

cobbled hillsides are covered with hepatica, bloodroot, columbine, and early saxifrage. Crooked Pond is ringed by a bog community. Later in the growing season the bog is flushed with the pink of rose pogonia and the yellow of bladderwort and is scented by the swamp azalea (swamp-honeysuckle). Some of the more remote wetlands harbor small purple fringed orchis, grape fern, poison sumac, Atlantic white cedar, and American sycamore. The great variety of plants, common and unusual, that exist in various parts of this wild area also includes yellow wood-sorrel, round-lobed hepatica, greenish-flowered pyrola, marsh-marigold, bloodroot, white baneberry, roundleaf ragwort, skunk cabbage, dog violet, dogtooth violet, pink lady's-slipper, running clubmoss, common juniper, partridgeberry, wintergreen, sheep laurel, and red oak, shagbark hickory, and mountain maple.



Location of the Bald Hill Reservation (shaded portion shows approximate area). The reservation is an assemblage of the John Phillips Wildlife Sanctuary, Boxford State Forest, and various Essex County Greenbelt properties.

The forest communities are an interesting mosaic of austral forest, which exists on south-facing slopes, and the northern hardwood forest found on the northerly and easterly exposed hillsides. In both of these areas there is a variable mix of white pine, which will exist where it gets enough light to grow. The combination of forest communities, maturity of the trees, and the interspersed ravines, wetlands, and running water attracts a wide array of breeding birds and passing migrants.

I have had some exceptional experiences while in these woods. But I have also learned a great deal more by listening to the many birders who have established regular day and night forays into the hemlock glens of Crooked Pond. The attractions are the Louisiana Waterthrush, Red-shouldered Hawk, Wood Duck, Solitary Vireo, Winter Wren, Eastern Phoebe, Pileated Woodpecker, Pine Warbler, and, of course, the Northern Goshawk. All can be found in early spring along the dirt road leading out to the edge of the pond. Some venturesome people visit at night to listen for the resident Barred Owls, of which there are several pairs and which can occasionally be heard during the day.

Early spring has also become the time to witness the recently introduced Wild Turkeys. Released by the MDFW in 1988, they have spread out across the four towns that surround the forest. There are at least two toms maintaining territories within the forest proper, and these birds are actively calling throughout April and May.

Another spring ritual for many is to watch at daybreak from the top of Bald Hill the goshawk courtship. Early April is best. One must make a twenty-minute trek to the top of the hill in the dark and then sit quietly awaiting the performance. This nesting site has been active since 1935 but has been struck by hard times in the past few years. For one reason or another, the ability of these goshawks to successfully produce young has waned. In 1988 we witnessed only one branching young, which was later seen on the wing. In 1989 no young were observed to have fledged. This is one of only two goshawk nests in the county, and it is vital to realize that birdwatching pressure on this pair at the wrong time can most certainly lead to egg and fledgling mortality.

This brings up a topic that is difficult to address. I have just given the reader information that can lead to the eventual mortality of rare breeding birds on public land. This information is not real news to the many birders who lead trips to see the nesting goshawks in Boxford. What I hope to convey to those who do visit this or any other raptor nest is that their visit may lead to the demise of that breeding pair and almost certainly to the eggs or young. Climbing Bald Hill in the predawn and viewing quietly from a distance is the only way to see the birds here without disturbing the nest area. The nest area should not be entered at all from April 1 through May 30. To force the incubating female to flush from the

nest during cold April rains or during the occasional heat of a sunny spring day can freeze or cook the eggs and downy young. I recommend to all birders that they resist the temptation to see raptors such as goshawks or Red-shoulders during the early stages of nesting and to wait until the young have fledged. The birds hang around the nesting area for a few weeks after fledging, generally from the middle of June to the Fourth of July, and then there is, hopefully, more to be seen. [*Editors' Note. Just one or two birdathoners or "big day" birders moving through the nesting area for the purpose of adding but a single species to the list could spell doom for the goshawks of Bald Hill and thus deprive us all.* — DRA and JLH]

The birds one sees throughout May along the road by Crooked Pond are thrushes, gnatcatchers, vireos, sapsuckers, and wood warblers, and there are many organized field trips to join. In the fall the most obvious birds are the Pileated Woodpecker and the Barred Owl. Both become more active at this time of year and are in a process of reasserting their claims to winter territory. On the western side of Bald Hill, the swamps offer a glimpse at deer, woodcock (the major migration is around October 10), and a number of finches. First light is the time to break the frost underfoot and enjoy the onset of fall. Ruffed Grouse are best seen on the southern toe of Bald Hill, and at the eastern poplar stands next to the Nike Site.

Winter is the season for tracking. Don your skis or snowshoes and wander. In March 1988 while skiing these trails looking for signs of the newly reintroduced turkeys on Bald Hill, I came upon what I thought were cow tracks. Richardson Farms has some pasture on the western side of this area, and occasionally cows break out and do some sight-seeing and meander through the woods. But this time these were most likely the tracks of a moose because within days we began to hear reports of a moose in Ipswich, Rowley, Lynnfield, and in the Boxford State Forest. It was very probably a young male with unbridled wanderlust.

During a day of skiing about the trails of Bald Hill, one can see the tracks of weasel, skunk, fisher, mink, otter, raccoon, red fox, cottontail rabbit, coyote, deer, grouse, turkey, crows, owls, voles, mice, and shrews.

The two state agencies, MDFW and MDFP, and Greenbelt have for the past six years managed their properties in this area in harmony with one another. This cooperation was established by the MDFP through their initiation of the Boxford State Forest Advisory Council. This is a group composed of the representatives of each landowner and a number of local citizens with an interest in the forest. The fine accomplishments of this group are commendable, especially when one takes into account that this area is only a satellite property for the state agencies and therefore receives only limited attention from the



## THE BIRDS OF BALD HILL RESERVATION

The following bird list was compiled by Jim MacDougall, Dorothy Arvidson, Richard Forster, Martha McClellan, and Robert Stymeist.

\* = confirmed breeder  
(PB) = probable breeder

(?B) = possible breeder  
unmarked = reported as heard or seen

Green-backed Heron (?B)	Blue Jay *	Palm Warbler
Canada Goose *	American Crow *	Bay-breasted Warbler
Wood Duck *	Black-capped Chickadee *	Blackpoll Warbler
American Black Duck *	Tufted Titmouse *	Cerulean Warbler
Mallard *	Red-breasted Nuthatch *	Black-and-white Warbler *
Sharp-shinned Hawk	White-breasted Nuthatch *	American Redstart (PB)
Northern Goshawk *	Brown Creeper *	Worm-eating Warbler
Red-shouldered Hawk *	House Wren (PB)	Ovenbird *
Broad-winged Hawk *	Winter Wren *	Northern Waterthrush
Red-tailed Hawk (?B)	Golden-crowned Kinglet	Louisiana Waterthrush *
American Kestrel	Ruby-crowned Kinglet	Mourning Warbler
Ring-necked Pheasant *	Blue-gray Gnatcatcher *	Common Yellowthroat (PB)
Ruffed Grouse *	Veery *	Hooded Warbler
Wild Turkey (PB)	Swainson's Thrush	Wilson's Warbler
Virginia Rail	Hermit Thrush (?B)	Canada Warbler (PB)
Solitary Sandpiper	Wood Thrush *	Scarlet Tanager *
Spotted Sandpiper	American Robin *	Northern Cardinal (PB)
American Woodcock *	Gray Catbird *	Rose-breasted Grosbeak *
Mourning Dove *	Northern Mockingbird (PB)	Indigo Bunting (PB)
Black-billed Cuckoo (PB)	Brown Thrasher (PB)	Rufous-sided Towhee *
Great Horned Owl *	Cedar Waxwing (?B)	Chipping Sparrow *
Barred Owl *	European Starling *	Field Sparrow
Common Nighthawk	Solitary Vireo (PB)	Fox Sparrow
Chimney Swift	Yellow-throated Vireo *	Song Sparrow (PB)
Ruby-thrted. Hummingbird (?B)	Red-eyed Vireo *	Swamp Sparrow *
Belted Kingfisher (?B)	Blue-winged Warbler	White-throated Sparrow
Yellow-bellied Sapsucker	Tennessee Warbler	Dark-eyed Junco
Downy Woodpecker *	Nashville Warbler	Red-winged Blackbird *
Hairy Woodpecker *	Northern Parula	Rusty Blackbird
Northern Flicker *	Yellow Warbler (PB)	Common Grackle *
Pileated Woodpecker *	Chestnut-sided Warbler	Brown-hded. Cowbird (?B)
Eastern Wood-Pewee (PB)	Magnolia Warbler	Northern Oriole *
Least Flycatcher *	Cape May Warbler	Purple Finch *
Eastern Phoebe *	Black-throated Blue Warbler	House Finch *
Great Crested Flycatcher (PB)	Yellow-rumped Warbler	Pine Siskin *
Eastern Kingbird *	Black-thrted. Green Warbler *	American Goldfinch *
Tree Swallow *	Blackburnian Warbler (PB)	Evening Grosbeak
Barn Swallow *	Pine Warbler (PB)	House Sparrow *

state. The maintenance that is performed is generally accomplished when the state staff has extra time or a volunteer takes action.

The Boxford State Forest Advisory Council first focused on acquisition of land to improve access for management, reduce future impact on the wildlife associated with this area, and to maintain control of the existing trail network. This has led over the past four years to the state's purchasing the following properties: 1) the Estey, Murphy, and Killam lots in North Andover, eighty-two acres that bridge the state-owned Sharpner's Pond Road to the state forest (this road is the location of the new parking area); 2) the Lockwood Woodlot (fifty-four acres) on Middleton Road in Boxford, which protects the easterly margin of the Phillips Wildlife Sanctuary and preserves fifteen hundred feet of forested frontage on Middleton Road; and 3) Greenbelt has added most recently the Chaplin Woodlots (forty-four acres received by donation), which protect interior woods roads and valuable wildlife habitat. But the Advisory Council did not stop there. They convinced the MDFP to prohibit the use of all motorized vehicles within the portion called the Boxford State Forest, bringing the regulation of that area in line with the rules of Greenbelt and the wildlife sanctuary. It is the coordination of efforts by caring people that has unified management objectives and regulations.

Because of this attention, the Boxford State Forest has been identified by the DEM as an area to undergo a complete land-use planning process, called GOALS, an acronym for Guidelines for Operations and Land Stewardship. This process has characterized the birdlife and other rare breeding species of the Crooked Pond area as special and emphasized the importance of maintaining the forest for these reasons. It has also pointed out the continuing need for volunteers to keep the trails open, report vandalism and the illegal use of motorized vehicles, and to document the wildlife and plants so that future management decisions can be made with the best available information. Greenbelt is helping to form a group of volunteers called the Friends of Bald Hill Reservation. All are welcome to pitch in to help maintain a great natural area in our state. The Essex County Greenbelt Association is located at 82 Eastern Avenue, Essex, MA 01929 (508-768-7241).

**JIM MACDOUGALL**, a resident of Topsfield, is currently Land Manager of Essex County Greenbelt Association and has for the past fifteen years worked to acquire, protect, and manage wildlife habitat in Essex County. He is treasurer of the Essex County Ornithological Club and editor of the sixth edition (1988) of *Birds of Essex County, Massachusetts, A Field List*.