

HOCKOMOCK

WONDER WETLAND





Blue Flag

The HOCK OMOCK



Barred Owl

Henry Moore *Boston Globe* staff sportswriter

WHY do we value a swamp that cannot be drained, filled, flooded or even "used" or "improved" in the modern sense of those overworked words?

Stop reading here if you know the answer. Keep going if you don't.



Opossum

Hockomock Swamp is a 10-square-mile living example of why the best "use" or "improvement" of most wetlands in this or any other state is often simply to leave it alone.

Twenty-five thousand years ago the Hockomock was buried under glacial ice. Twelve thousand years ago it was a lake.

Today it is a self-perpetuating 7½-billion-gallon water storage and flood control project that didn't cost a dime to build or operate – and never will if it is preserved.

It is also a treasure house of bird, animal, fish, reptile, insect, plant and forest life that didn't cost a penny to assemble and house – and never will if it is preserved.

Possibly most important, it is a 6000-acre oasis of peace and quiet in a world gone mad with speed, noise and strife. It can always remain that way if it isn't destroyed in the name of "progress".

In the following pages experts in their field explain in more detail.

But even these experts are first to admit they have only scratched the surface of its value and content.

They are eager to obtain every scrap of information they can on every phase of the use, history and complex ecology of the area.

They ask any such knowledge from anyone be transmitted to Mrs. Kathleen S. Anderson, Director, Manomet Bird Observatory, P.O. Box Zero, Manomet, Mass., 02345.

Read what they have to say and add any help you can.

Garter Snake



Hockomock: Today

Kathleen S. Anderson

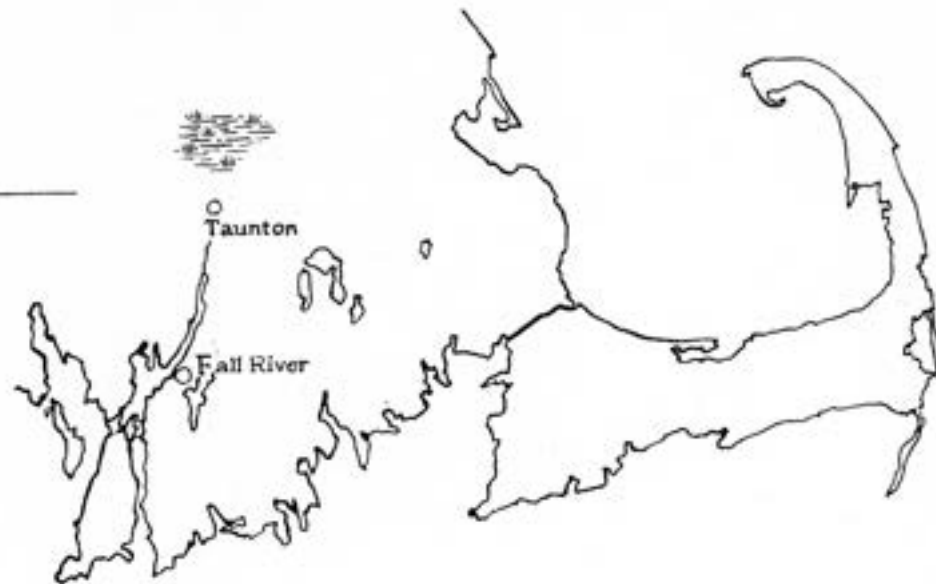
THE Hockomock Swamp is a vast wet and wooded area of about 6,000 acres in southeastern Massachusetts. Few roads cross it and, as yet, few man-made developments have encroached upon it. On a road map it can be identified as roughly that area lying between Routes 123 and 28, crossed north to south by Routes 138 and 24, and east to west in the northern quarter by the new power line, 300 feet wide, erected by Montaup Electric Company. It lies within the boundaries of Easton, Raynham, Taunton, West Bridgewater, Bridgewater and Norton. It is the largest swamp in Massachusetts and quite probably the largest in the northeastern states.

The land of the Hockomock Swamp area is largely wooded. In places there are areas of cat-tail marsh, meandering streams, small ponds of open water, and occasional wooded knolls or ridges. But in great part it is a soggy, trackless woodland of dense growth of white cedar and red maple. It is largely in private ownership and in many cases neither owners nor towns have any precise notion of exactly where property lines lie. Hunters, trappers and blueberry pickers occasionally intrude upon the solitude of the swamp. In places there has been a little wood cutting, but in large part it is as close to primeval wilderness as still remains in this long-settled part of the United States.

Occasional plans to drain it, flood it and "develop it" have been proposed. Thus far it has been more "talk" than action and the "filling" and building is only just beginning to nibble away at our wilderness. We still have the opportunity to preserve it as it has been for thousands of years. But pressures upon it are growing. The opportunity will not remain indefinitely.

What *good* is the Hockomock? This booklet will attempt to show you some of the diversity and wildness that exists in the center of southeastern Massachusetts.

Kathleen S. Anderson, Director of Manomet Bird Observatory and formerly ornithologist for the Encephalitis Field Station doing field work in the Hockomock Swamp



Ted Williams

History

WHEN the white man extricated himself from the ecology of early Europe to take up a semi-independent agricultural existence, certain fears and superstitions arose regarding the animal world that he had walked away from. The once familiar became the mysterious and the dread of the unknown haunted him.

The shadow of his phobia followed him to North America and places like the Hockomock Swamp were promptly placed on his black list. Wolves and later wild dogs sought shelter in the "Hock's" haunted depths. On still nights the evil glitter of fox fire or the demonic cackle of a barred owl sent chills up the spines of the early settlers. Hordes of crows rose each morning from the guts of the swamp to ravage the farmer's corn. And, from time to time, young girls merrily picking blueberries along the fringes, found themselves drawn farther and farther along unfamiliar paths seduced by the increasing size of the berries until at last they were lost and claimed by the swamp forever.

Ted Williams, Managing Editor of *Massachusetts Wildlife* the official magazine of the Massachusetts Division of Fisheries and Game

But the above terrors seemed bland when it became known that the Hock harbored wild Indians. In 1675, Massasoit's son, Metacomet, known to the English as "King Philip," used the swamp as a fortress from which he launched attacks on the nearby



Muskrat

settlements. The ensuing conflict — King Philip's War — lasted a year and a half and resulted in the deaths of 600 settlers and the destruction of 13 towns.

Perhaps our ancestral fear of the Hockomock underlies our compulsion to break its wild spirit and exchange its mystery for the surrounding dullness of suburbia. As early as 1724, Benjamin Drake of Easton was paid five shillings for killing a bobcat on the edge of the swamp. Wolves were quickly persecuted out of existence and every effort was made to change the "worthless swamp" into "valuable" farmland. William L. Chaffin summed up local attitudes in his *History of the Town of Easton*, (Cambridge, 1886). "These swampy lands," he wrote, "have very little value . . . They need only thorough draining."

But for the Indians, a people who still existed as a function of the land fitting neatly into a balanced ecosystem, the Hockomock held a very different significance. During the Ceramic (Woodland) Period (from about A.D. 300 to Colonial times) the Indians, who depended on the swamp as an abundant source of game, came to worship it. Hockomock translated means "Place Where Spirits Dwell"; not only the evil spirits that struck terror into paleface hearts, but the good spirits that led the Indian to moose and deer. If they camped once a year on what is now the junction of Maple and Pleasant Streets in West Bridgewater, then called "Mollie Grounds" after a legendary Indian princess, the good spirits of the swamp would stay with them for the rest of the year.

For centuries the Indians fished in amazingly productive Lake Nippenicket — originally "Nuncketest" or "Lake of Red Waters" — red from rich bog iron deposits from which the first Colonial anchors were forged.

Seven thousand years ago when the ice cap still loomed over Hudson's Bay, aborigines camped by the Lake of Red Waters and fished for trout.

According to William Fowler, Curator of the Bronson Museum in North Attleboro, North America was probably not covered with forests at this time. Small stone hearths no more than 15 inches in diameter have been unearthed by Fowler and his associates on a sand spit about a quarter of a mile from Lake Nippenicket. The fact that they were large enough to burn only sticks and grass has lead archaeologists to believe that a tundra condition prevailed at that time. Other artifacts associated with this early archaic period have also been discovered in the swamp, among them a "plummet" or a stone sinker for fishing, an "ulu"

or a stone knife, and an "expanded base drill." Fowler himself found a "bifurcated point" — a barbed arrowhead that was probably used as a harpoon for seal and walrus, species that would be present at sea only if the general climate of the area were cold enough for tundra conditions on land.

During this period caribou roamed what is now the Hockomock and provided a staple for these nomadic tribesmen. When the glacier retreated and forests pushed up from the south, the aborigines followed tundra species north to Hudson's Bay where their direct descendants, the "Caribou Indians," still exist.

On December 13, 1970, Harvey C. Ellis of Bridgewater, an amateur archaeologist who has poked around the Hock for half a century, received a call from a trapper friend.

"I think I've got a dugout canoe," said the voice on the other end of the line. Ellis rushed to meet his friend. They slogged out to the middle of the swamp and there, partially exposed, was the blunt end of a dugout canoe.

On the morning of December 14, Ellis hacked his way through ten feet of peat and hauled out two other canoes. One was in such good shape that a young boy who had accompanied him succeeded in paddling it out of the swamp. The ends of all three canoes were surprisingly blunt.

Fowler has not yet studied the Ellis find but says the canoes could be over 500 years old. He points out that in 1586, John White on an expedition to Sir Walter Raleigh's first Virginia Colony, drew pictures of Indians fishing from blunt-ended dugout canoes.

In addition to his interest in archaeology, Ellis has spent a lifetime in the outdoors — mostly in the Hockomock — trapping, hunting and fishing. He knows the swamp perhaps better than anyone alive.

Ellis, who spent his childhood on a large farm bordering the Hockomock, reminisces about the old days with a tinge of remorse.

"The expressway went right through our gunning stand and they drained our pickerel pond and tore down our camp."

But Ellis admits he's not too unhappy.

"Most of the swamp's still the way it's always been," he says. "Last time I trapped was in '68 and I took 100 muskrats. I still hunt and fish the Nip pretty heavy and nothing's really changed. Funny thing is, though, most people don't know the Hock's there. They ask me how come I don't go North and I don't say too much. Shucks, why go North when I've got it all right here?"

Geology and Ecology

Kathleen S. Anderson



Cat-tail

THE geologic history of the earth is hard to grasp since we think in terms of decades and centuries. But to fully appreciate what the Hockomock Swamp represents, we must visualize this area as it was 25,000 years ago . . . "only yesterday" in the history of the earth. At that time southeastern Massachusetts was blanketed by glacial ice sheets.

During the next 12,000 years the glaciers began to melt leaving a great shallow lake between the ice to the north and higher land to the south. This vast basin, which covered all of the area we now call the Hockomock, and more, has been named the Leverett Sea by geologists. As the ice continued its retreat, land which had been depressed by the tremendous weight of the glaciers rebounded or uplifted. The Hubbard Uplift eliminated much of the Leverett Sea and created new drainage patterns.

Streams and rivers began to cut across the glacial depositions of sands and clays of the South Bridgewater Plain (which had been a portion of the floor of the Leverett Sea) to become what we know as the north branch of the Taunton River, or Town River. The Town River flows west and then, as a part of the Taunton River, south toward Narragansett Bay.

During the late glacial period our landscape was an area of wide tundra, open fields of dwarfed plants that could survive the bitterly cold winds which swept down from the icefields to the near north, with a few intrusions of taiga creeping up from the south (spruce and birch forests). As the plants crept north following the retreating ice shield, so did the mammals. Prehistoric Indians hunted caribou across the South Bridgewater Plain and walrus along the coasts.

The glaciers continued their retreat and the climate slowly warmed. The truly Arctic plants and animals unsuited to the new conditions retreated northward to where we now find them, on the highest peaks of New England mountains and in the subarctic regions of Canada.

As the glaciers retreated and the land uplifted, the remains of the Leverett Sea began to fill with alluvium deposits washed into low spots by streams cutting through glacial deposits of gravel, clay and sand. All lakes are dying lakes from their very beginnings. Through the centuries vegetation from dying plants drifted to the bottom of the lake to form peat. Borings taken by engineers to determine the best routes for proposed roadways have disclosed that in places the loose, non-compacted peat reaches depths of 20 to 40 feet, totally unsuitable as the base for any road or solid



structure. The old bed of the Leverett Sea gradually became the soggy, swampy woodland we know as the Hockomock Swamp. One shallow pond, reduced to 368 acres, and now called Lake Nippenicket, is the largest area of open water still remaining of Leverett Sea.

The value of the Hockomock as a water storage area is incalculable. In Massachusetts generally, one-half the rainfall percolates into the ground and one-half runs off. In the relatively flat wetland that is the Hockomock the run-off is far less than one-half the rainfall, for the swamp acts as a huge sponge, or blotter, holding moisture through the dry periods when surrounding uplands become parched.

The water held in the Hockomock comes in large part from rain water and is poor in minerals. Local bedrock is largely granite and contributes no minerals to ground water flowing through it. Bog plants are starved for lime, phosphorus and nitrogen. Only plants that need few nutrients (such as the shrubs and perennials of the Arctic,) can survive in a true bog. Consequently, true bogs (and to a lesser extent all our wooded swamps) are enclaves of subarctic plants.

Wet places are cool places. Heavily-shaded white cedar swamps retain ice deep down in the sphagnum moss late into spring or early summer after a cold winter. Slow evaporation of moisture through the summer helps to maintain temperatures lower than the surrounding uplands. This coolness and the relatively sterile water and soil make the Hockomock a *refuge* where some subarctic plants and animals linger on thousands of years after most of southern New England became too warm for them. Among these species are Canoe Birch, Black Spruce, Labrador Tea, Northern Water-thrush, Red-breasted Nuthatch and the Boreal Red-back Vole.

However, a few tropical influences can also be detected in the Hockomock Swamp. Amid the plants of the muskeg are others reminiscent of the South. Sogginess and nitrogen deficiency are common to rain forests as well as to northern bogs. Some of the hardier orchids are found in the Hockomock (Lady's-slippers and Colopogon) and insectivorous plants such as the Sundews and Pitcher Plants which solve their nitrogen deficiencies by trapping insects. Holly, Smilax (green briar) and Swamp Oak are other southern plants. The Blue-winged and Hooded Warblers which have occasionally been seen in the Hockomock are examples of southern species as are the gray fox and the opossum.



Hockomock Water Storage

Paul T. Anderson

THE Hockomock Swamp contains approximately 6,000 acres including the water surface of Lake Nippenicket. Six thousand acres is just 400 acres short of ten square miles. Since one inch of rainfall on a square mile equals 17.3 million gallons of water, the Hock receives approximately 170 million gallons for every inch of rain. Rainfall in this part of Massachusetts averages approximately 44 inches (usually between 38 inches and 50 inches per year). In an average year 7,480,000,000, or about 7½ BILLION gallons of water fall on this area. What happens to it?

The Hockomock acts as a huge reservoir which allows the water to build up in the swamp around the vegetation and then flow slowly out the Town River, which eventually flows into the Matfield and then becomes the Taunton River. If this tremendous area were not available for storage of accumulated runoff, the amount of water discharged would cause scouring and flooding conditions in all of the towns adjacent to the flood plains of the Town, Matfield and Taunton Rivers. Not only would West Bridgewater, Bridgewater, Middleboro, Raynham and Taunton be subject to sudden flooding, but towns as far away as Dighton, Berkeley, Freetown, Somerset and Fall River would be endangered. Recent flooding along the Neponset River has proven the potential losses to private and commercial property when heavy rains find no natural storage areas and must race toward the sea along river channels inadequate to carry the load.

In addition, the storage of water in this area allows the ground water table to be maintained at a relatively high level. Raynham's present water system, which consists of shallow wells in both water districts, is maintained by the present high water table.

Obviously no attempt should be made to change this area. If it were permanently flooded as a water storage area, there would be a significant runoff problem. If it were filled, the runoff problem would precipitate an emergency with every heavy rain. The underlying material is considerably organic, not suitable for housing or industrial development, nor for most forms of agriculture. It is vital to the environmental quality and ecology of this area that the Hockomock Swamp remain in its present natural condition.

Paul T. Anderson, Regional Sanitary Engineer, Massachusetts Department of Public Health

Painted Turtle



BIRDS

Kathleen S. Anderson

THE birds known to occur in the Hockomock Swamp area comprise most of the species found regularly in the inland sections of southeastern Massachusetts, plus some of the less-common species found only in large wet areas (herons, ducks, etc.) and in large wild areas (hawks, owls, etc.). Routine capture of birds by the author has added to the list some previously unsuspected rarities. The 169 species listed below are known to have been seen at least once. Further field work will undoubtedly add to the list.

Lake Nippenicket has long been known for its ducks and other waterfowl. In the early days of this century, before habitat destruction on the breeding grounds and the inroads of shooting decreased the waterfowl, gunners regularly bagged species that would now be considered ocean ducks and extremely unexpected in an inland lake.

With the construction of Route 24, bird watchers found that the bridge over the Town River gave them an elevation from which to scan the flooded valley during the high water of early spring. Annually this spot produces ducks in both quantity and rarity. European Teal, Whistling Swan and the like have rewarded the careful observer who dares risk the traffic hazard of stopping on the bridge. A safe turn-off at this or some similar spot with a 20-foot observation tower would provide the equipment for hours of careful observation by those who enjoy watching wildlife. The small changes which could add so much to the pleasure of amateur naturalists are inexpensive and relatively easy to accomplish. As our wildlife decreases with the pressures of expanding human populations, the public's interest and appreciation increases. Hopefully the time will come when the few areas of a region where wildlife can be easily studied by amateur and professional naturalists will be set aside for the mutual benefit of the wild and the watcher. Such a spot is this portion of the flood plain of the Town River in West Bridgewater during flood time.



Wood Duck

Because many areas of the Hockomock are wild and remote, hawks and owls that have lost their required habitat in many parts of southeastern Massachusetts can still be found there in good numbers. The deep, muffled hoots of the Great Horned Owl still reward the cold ears and numb feet of those who stop along the quiet back roads on a clear, windless evening in January or February. The big buteos, Roughlegs, Red-tails, Red-shoulders and Broad-wings can be seen soaring over tree tops, along the high-tension lines and over the expressway as their keen eyes search the ground below for the small mammals.

The smaller birds are more numerous, but less easily seen than some mentioned above. Because the Hockomock is a refuge for some northern species no longer found in southern Massachusetts, except in cool, heavily-wooded swamps, one can find breeding White-throated Sparrows, Red-breasted Nuthatches, Canada Warblers, Northern Water-thrushes, Saw-whet Owls and Brown Creepers as readily as they might be found in New Hampshire. On the other hand, because it is near the coastal plain and along the Taunton River Valley, one can also search for Blue-winged Warblers, Hooded Warblers, White-eyed Vireos and similar more southern species with occasional success.

The following list was compiled by the author during ten years of field work for the Encephalitis Field Station operated by the Massachusetts Department of Public Health. Certain additions have been made based on careful observations by competent field ornithologists and others on study of specimens shot in Taunton (many at "the Nip") during the last of the 19th and the first quarter of the 20th centuries.

Among the specimens that were recently given to the Manomet Bird Observatory by Mr. Walter Baylies of Taunton are a pair of Passenger Pigeons, labeled as "shot in Taunton in September 1875". Extinction is irrevocable and none of us will ever see a live Passenger Pigeon. But we should work to insure that our descendants will still find this vast swampland teeming with the great variety of wildlife that now exists.

Great Blue Heron (*Ardea herodias*) migrant
Green Heron (*Butorides virescens*) breeds
American Bittern (*Botaurus lentiginosus*) breeds?

Whistling Swan (*Olor columbianus*) rare migrant
Canada Goose (*Branta canadensis*) migrant
Snow Goose (*Chen hyperborea*) rare migrant
Mallard (*Anas platyrhynchos*) migrant
Black Duck (*Anas rubripes*) breeds
Pintail (*Anas acuta*) migrant
Common Teal (*Anas crecca*) migrant
Green-winged Teal (*Anas carolinensis*) migrant
Blue-winged Teal (*Anas discors*) migrant-may breed
American Widgeon (*Mareca americana*) migrant
Shoveler (*Spatula clypeata*) migrant
Wood Duck (*Aix sponsa*) breeds
Redhead (*Aythya americana*) migrant
Ring-necked Duck (*Aythya collaris*) migrant
Canvasback (*Aythya valisneria*) migrant
Greater Scaup (*Aythya marila*) migrant
Lesser Scaup (*Aythya affinis*) migrant
Common Goldeneye (*Bucephala clangula*) migrant
Oldsquaw (*Clangula hyemalis*) migrant
White-winged Scoter (*Melanitta deglandi*) migrant
Ruddy Duck (*Oxyura jamaicensis*) migrant
Hooded Merganser (*Lophodytes cucullatus*) may breed
Common Merganser (*Mergus merganser*) migrant

Bald Eagle (*Haliaeetus leucocephalus*) accidental
Goshawk (*Accipiter gentilis*) winter
Sharp-shinned Hawk (*Accipiter striatus*) resident
Cooper's Hawk (*Accipiter cooperi*) winter-may breed
Red-tailed Hawk (*Buteo jamaicensis*) breeds
Red-shouldered Hawk (*Buteo lineatus*) breeds
Rough-legged Hawk (*Buteo lagopus*) winter
Marsh Hawk (*Circus cyaneus*) migrant
Osprey (*Pandion haliaetus*) formerly bred
Sparrow Hawk (*Falco sparverius*) resident

Ruffed Grouse (*Bonasa umbellus*) resident
Bobwhite (*Colinus virginianus*) resident on edges of swamp
Ring-necked Pheasant (*Phasianus colchicus*) resident

Virginia Rail (*Rallus limicola*) breeds
Sora (*Porzana carolina*) migrant
American Coot (*Fulica americana*) migrant

Killdeer (*Charadrius vociferus*) breeds nearby
American Woodcock (*Philohela minor*) breeds
Common Snipe (*Capella gallinago*) migrant
Spotted Sandpiper (*Actitis macularia*) breeds
Solitary Sandpiper (*Tringa solitaria*) migrant
Greater Yellowlegs (*Totanus melanoleucus*) migrant
Pectoral Sandpiper (*Erolia melanotos*) migrant
Least Sandpiper (*Erolia minutilla*) migrant
Herring Gull (*Larus argentatus*) vagrant

Mourning Dove (*Zenaidura macroura*) breeds

Yellow-billed Cuckoo (*Coccyzus americanus*) breeds
Black-billed Cuckoo (*Coccyzus erythrophthalmus*) breeds

Screech Owl (*Otus asio*) resident
Great Horned Owl (*Bubo virginianus*) resident
Snowy Owl (*Nyctea scandiaca*) winter
Barred Owl (*Strix varia*) resident
Long-eared Owl (*Asio otus*) maybe resident
Saw-whet Owl (*Aegolius acadicus*) resident

Whip-poor-will (*Caprimulgus vociferous*) breeds
Common Nighthawk (*Chordeiles minor*) transient overhead

Chimney swift (*Chaetura pelagica*) breeds nearby

Ruby-throated Hummingbird (*Archilochus colubris*) breeds

Belted Kingfisher (*Megaceryle alcyon*) breeds

Yellow-shafted Flicker (*Colaptes auratus*) breeds
Yellow-bellied Sapsucker (*Sphyrapicus varius*) migrant
Hairy Woodpecker (*Dendrocopos villosus*) resident
Downy Woodpecker (*Dendrocopos pubescens*) resident

Eastern Kingbird (*Tyrannus tyrannus*) breeds
Great Crested Flycatcher (*Myiarchus crinitus*) breeds
Eastern Phoebe (*Sayornis phoebe*) breeds
Yellow-bellied Flycatcher (*Empidonax flaviventris*) migrant
Traill's Flycatcher (*Empidonax traillii*) suspect breeding
Least Flycatcher (*Empidonax minimus*) breeds
Eastern Wood Pewee (*Contopus virens*) breeds
Tree Swallow (*Iridoprocne bicolor*) summer
Bank Swallow (*Riparia riparia*) breeds
Rough-winged Swallow (*Stelgidopteryx ruficollis*) breeds
Barn Swallow (*Hirundo rustica*) breeds
Cliff Swallow (*Petrochelidon pyrrhonota*) breeds
Purple Martin (*Progne subis*) uncommon transient
Blue Jay (*Cyanocitta cristata*) resident
Common Crow (*Corvus brachyrhynchos*) resident
Fish Crow (*Corvus ossifragus*) vagrant-all year
Black-capped Chickadee (*Parus atricapillus*) resident
White-breasted Nuthatch (*Sitta carolinensis*) resident
Red-breasted Nuthatch (*Sitta canadensis*) resident
Brown Creeper (*Certhia familiaris*) resident
House Wren (*Troglodytes aedon*) breeds
Winter Wren (*Troglodytes troglodytes*) migrant
Carolina Wren (*Thryothorus ludovicianus*) rare
Mockingbird (*Mimus polyglottos*) rare
Catbird (*Dumetella carolinensis*) breeds
Brown Thrasher (*Toxostoma rufum*) breeds
Robin (*Turdus migratorius*) breeds

Wood Thrush (*Hylocichla mustelina*) breeds
Hermit Thrush (*Hylocichla guttata*) breeds
Swainson's Thrush (*Hylocichla ustulata*) migrant
Gray-checked Thrush (*Hylocichla minima*) migrant
Veery (*Hylocichla fuscescens*) breeds
Eastern Bluebird (*Sialia sialis*) rare-formerly common breeder
Golden-crowned Kinglet (*Regulus satrapa*) migrant
Ruby-crowned Kinglet (*Regulus calendula*) migrant
Water Pipit (*Anthus spinoletta*) migrant
Cedar Waxwing (*Bombycilla cedrorum*) breeds
Northern Shrike (*Lanius excubitor*) winter
Starling (*Sturnus vulgaris*) resident
White-eyed Vireo (*Vireo griseus*) summer-rare
Yellow-throated Vireo (*Vireo flavifrons*) migrant
Solitary Vireo (*Vireo solitarius*) migrant
Red-eyed Vireo (*Vireo olivaceus*) breeds
Black-and-white Warbler (*Mniotilta varia*) breeds
Worm-eating Warbler (*Helmitheros vermivorus*) rare-banded o
Blue-winged Warbler (*Vermivora pinus*) breeds rarely
Tennessee Warbler (*Vermivora peregrina*) migrant
Orange-crowned Warbler (*Vermivora celata*) migrant
Nashville Warbler (*Vermivora ruficapilla*) migrant-suspect bre
Parula Warbler (*Parula americana*) migrant
Yellow Warbler (*Dendroica petechia*) breeds
Magnolia Warbler (*Dendroica magnolia*) migrant
Cape May Warbler (*Dendroica tigrina*) migrant
Black-throated Blue Warbler (*Dendroica caerulescens*) mi
may breed
Myrtle Warbler (*Dendroica coronata*) migrant
Black-throated Green Warbler (*Dendroica virens*) breeds
Blackburnian Warbler (*Dendroica fusca*) migrant
Chestnut-sided Warbler (*Dendroica pensylvanica*) may breed

Black-and-White Warbler



Bay-breasted Warbler (*Dendroica castanea*) migrant
 Blackpoll Warbler (*Dendroica striata*) migrant
 Pine Warbler (*Dendroica pinus*) breeds
 Prairie Warbler (*Dendroica discolor*) breeds
 Palm Warbler (*Dendroica palmarum*) migrant
 Ovenbird (*Seiurus aurocapillus*) breeds
 Northern Water-thrush (*Seiurus noveboracensis*) breeds
 Louisiana Water-thrush (*Seiurus motacilla*) unusual
 Kentucky Warbler (*Oporornis formosus*) rare-banded 2
 Connecticut Warbler (*Oporornis agilis*) migrant
 Mourning Warbler (*Oporornis philadelphia*) migrant
 Yellowthroat (*Geothlypis trichas*) breeds
 Yellow-breasted Chat (*Icteria virens*) migrant
 Wilson's Warbler (*Wilsonia pusilla*) migrant
 Canada Warbler (*Wilsonia canadensis*) breeds
 American Redstart (*Setophaga ruticilla*) may breed
 House Sparrow (*Passer domesticus*) resident nearby
 Bobolink (*Dolichonyx oryzivorus*) breeds nearby
 Eastern Meadowlark (*Sturnella magna*) breeds nearby
 Redwinged Blackbird (*Agelaius phoeniceus*) breeds
 Baltimore Oriole (*Icterus galbula*) breeds
 Rusty Blackbird (*Euphagus carolinus*) migrant
 Common Grackle (*Quiscalus quiscula*) breeds
 Brown-headed Cowbird (*Molothrus ater*) breeds
 Scarlet Tanager (*Piranga olivacea*) breeds
 Rose-breasted Grosbeak (*Pheucticus ludovicianus*) breeds
 Indigo Bunting (*Passerina cyanea*) breeds
 Evening Grosbeak (*Hesperiphona vespertina*) migrant
 Purple Finch (*Carpodacus purpureus*) breeds
 Common Redpoll (*Acanthis flammea*) winter
 Pine Siskin (*Spinus pinus*) winter
 American Goldfinch (*Spinus tristis*) breeds
 Rufous-sided Towhee (*Pipilo erythrophthalmus*) breeds
 Savannah Sparrow (*Passerculus sandwichensis*) breeds
 Slate-colored Junco (*Junco hyemalis*) migrant & winter
 Tree Sparrow (*Spizella arborea*) migrant & winter
 Chipping Sparrow (*Spizella passerina*) breeds
 Field Sparrow (*Spizella pusilla*) breeds
 White-throated Sparrow (*Zonotrichia albicollis*) breeds
 Fox Sparrow (*Passerella iliaca*) migrant
 Lincoln's Sparrow (*Melospiza lincolni*) migrant
 Swamp Sparrow (*Melospiza georgiana*) abundant breeding
 Song Sparrow (*Melospiza melodia*) breeds



Red Fox

Mammals

Kathleen S. Anderson

AN area as large and as unsettled as the Hockomock Swamp would be expected to be occupied by many of the larger mammals requiring large territories or hunting areas, as well as the smaller mammals common to most local wooded areas. The mammals listed below were identified by the author or by thoroughly competent observers, but this does not pretend to be a complete list. Further study would certainly add to the list, particularly to the rodents.

A few species deserve special mention. The author contacted Mr. Arnold Thomas of Middleboro, who has for many years bought furs from trappers working in the Hockomock Swamp.

Beaver have been found as near as Rockland and Carver, but Mr. Thomas has no knowledge of Beaver being present in the Hockomock in recent times. Two specimens of Nutria were trapped in the swamp, but he believes that they were escapes from captivity. There have been no subsequent captures and he does not believe they are living and reproducing in the Hockomock.

As recently as November, 1970, Harvey C. Ellis of Bridgewater who has trapped the Hockomock for almost 50 years, saw a bobcat cross the new boat landing at Lake Nippenicket.

Opossum (*Dedelphis virginiana*)
 Star-nosed Mole (*Condylure cristata*)
 Eastern Mole (*Scalopus aquaticus*)
 Masked Shrew (*Sorex cinereus*)
 Smokey Shrew (*Sorex fumeus*)
 Northern Water Shrew (*Sorex palustris*)
 Shorttail Shrew (*Blarina brevicauda*)
 Little Brown Bat (*Myotis lucifugus*)
 Keen Myotis Bat (*Myotis keeni*)
 Big Brown Bat (*Eptesicus fuscus*)
 Red Bat (*Lasiurus borealis*)
 Raccoon (*Procyon lotor*)
 Shorttail Weasel (*Mustela erminea*)
 Longtail Weasel (*Mustela frenata*)
 Mink (*Mustela vison*)
 River Otter (*Lutra canadensis*)
 Striped Skunk (*Mephitis mephitis*)
 Red Fox (*Vulpes fulva*)
 Gray Fox (*Urocyon cinereoargenteus*)
 Bobcat (*Lynx rufus*)
 Woodchuck (*Marmota monax*)



Arrowhead

White-footed Mouse (*Peromyscus leucopus*)
 Boreal Redback Vole (*Clethrionomys gapperi*)
 Meadow Vole (*Microtus pensylvanicus*)
 Pine Vole (*Pitymys pinetorum*)
 Muskrat (*Ondatra zibethica*)
 Norway Rat (*Rattus norvegicus*)
 House Mouse (*Mus musculus*)
 Woodland Jumping Mouse (*Napaeozapus insignis*)
 Nutria (*Myocaster coypu*)
 Snowshoe Hare (*Lepus americanus*)
 Eastern Cottontail (*Sylvilagus floridanus*)
 White-tailed Deer (*Odocoileus virginianus*)

Eastern Chipmunk (*Tamias striatus*)
 Red Squirrel (*Tamiasciurus hudsonicus*)
 Eastern Gray Squirrel (*Sciurus caolinensis*)
 Southern Flying Squirrel (*Glaucomys volans*)



Spotted Salamander

Reptiles and Amphibians

Kathleen S. Anderson

THE Hockomock Swamp is in large part a wet area, and one would expect to find all of the reptiles and amphibians common to southeastern New England. The species listed below are those for which the author and/or the Encephalitis Field Station has definite records. It is undoubtedly incomplete.

Turtles

Snapping Turtle (*Chelydra serpentina*)
 Musk Turtle (or Stinkpot) (*Sternotherus odoratus*)
 Spotted Turtle (*Clemmys guttata*)
 Wood Turtle (*Clemmys insculpta*)
 Eastern Box Turtle (*Terrapene carolina carolina*)
 Eastern Painted Turtle (*Chrysemys picta picta*)



Leopard Frog

Snakes

Eastern Ribbon Snake (*Thamnophis sauritus sauritus*)
Northern Black Racer (*Coluber constrictor constrictor*)

Amphibians

Spotted Salamander (*Ambystoma maculatum*)
Red-backed Salamander (*Plethodon cinereus cinereus*)
American Toad (*Bufo americanus*)
Spring Peeper (*Hyla crucifer*)
Bullfrog (*Rana catesbeiana*)
Green Frog (*Rana clamitans melanota*)
Pickerel Frog (*Rana palustris*)
Wood Frog (*Rana sylvatica*)

Largemouth Bass



Fish

George Wood

THE following list consists of some of the fishes one might expect to find in the Hockomock Swamp and surrounding areas. Those marked with a # have been caught in Town Brook and other streams and waterways of the Hockomock by Philip C. Tucker of West Bridgewater.

Fisheries Manager, Southeast District, Massachusetts Division of Fisheries and Game.

- # Alewife (*Pomolobus pseudo-harengus*)
- # Brook trout (*Salmo trutta*)
- # Eel (*Anguilla bostoniensis*)
- # White sucker (*Catostomus commersonnii*)
- Lake chubsucker (*Erimyson sucetta*)
- Goldfish (*Carassius auratus*)
- # Common shiner (*Notropis cornutus*)
- Spottail shiner (*Notropis hudsonius*)
- Bridled minnow (*Notropis bifrenatus*)
- Fall fish (*Leucosomus corporalis*)
- # Golden shiner (*Notemigonus crysoleucas*)
- # Brown bullhead (*Ameiurus nebulosus*)
- # Chain pickerel (*Esox niger*)
- # Redfin pickerel (*Esox americanus*)
- Killifish (*Fundulus diaphanus*)
- # Yellow perch (*Perca flavescens*)
- Johnny darter (*Boleosoma nigrum*)

Pickerel



- # Largemouth bass (*Micropterus salmoides*)
- # Smallmouth bass (*Micropterus dolomieu*)
- # Bluegill (*Lepomis macrochirus*)
- Pumpkinseed (*Lepomis gibbosus*)
- Banded sunfish (*Enneacanthus obesus*)
- # White perch (*Roccus Americanus*)
- # Black crappie (*Pomoxis nigro-maculatus*)



High Bush Blueberry

Plants

Kathleen S. Anderson

THE list of plants was made during the summer of 1968 and is only a beginning to the botanical possibilities of this fascinating area. It includes plants found blooming about the edges of the swamp as well as those that actually grow in the wetter areas. When noted, the dates when the plants were found in bloom have also been included. Adding to this list could provide many rewarding months in the field for any amateur botanist.

Common Cat-tail (Broad-leafed) (*Typha latifolia*)
 Broad-leafed Arrowhead (*Sagittaria latifolia*)
 Wild Calla – or Water-arum (*Calla palustris*)
 Skunk cabbage (*Symplocarpus foetidus*)
 Pickerel Weed (*Pontederia cordata*)
 Canada Mayflower (*Maianthemum canadense*)

Larger Blue Flag (*Iris versicolor*)
 Pink Lady's-slipper (*Cypripedium acaule*)
 Long-bristled Smartweed (*Polygonum cespitosum*)
 Lady's-thumb (*Polygonum persicaria*)
 Black Bindweed (*Polygonum convolvulus*)
 Evening Lychnis (*Lychnis alba*)
 Lesser Stitchwort (*Stellaria graminea*)
 Bullhead Lily (*Nuphar variegatum*)
 Fragrant Water-Lily (*Nymphaea odorata*)
 Tall Meadow-rue (*Thalictrum polygamum*)
 Goldthread (*Coptis groenlandica*)
 Meadowsweet (*Spiraea latifolia*)
 Rough-fruited Cinquefoil (*Potentilla recta*)
 Round-headed Bush Clover (*Lespedeza capitata*)
 Peppergrass (*Lepidium virginicum*)
 Wild Indigo (*Baptisia tinctoria*)
 Cow Vetch (*Vicia cvacca*)
 Groundnut (*Apios americana*)
 Poison Ivy (*Rhus radicans*)
 Spotted Touch-Me-Not (*Impatiens capensis*)
 Common St. Johnswort (*Hypericum perforatum*)
 Pilewort, Fireweed (*Erechites hieracifolia*)
 Indian-pipe (*Monotropa uniflora*)
 Yellow bladderwort (*Utricularia-sp?*)
 Spotted Wintergreen (*Chimaphila maculata*)
 Checkerberry, Wintergreen (*Gaultheria procumbens*)
 Whorled Loosestrife (*Lysimachia quadrifolia*)
 Yellow Loosestrife or Swamp Candles (*Lysimachia terrestris*)
 Bartonian (*Bartonia virginica*)
 Spreading Dogbane (*Apocynum androsaemifolium*)
 Dodder (*Cuscuta gronovii*)
 Bluecurls (*Trichostema dischotonum*)
 Bittersweet Nightshade (*Solanum dulcamara*)
 Monkey Flower (*Mimulus ringens*)
 Cow-wheat (*Melampyrum lineare*)
 Cardinal Flower (*Lobelia cardinalis*)
 Joe-Pye-Weed (*Eupatorium dubium*)
 Boneset (*Eupatorium perfoliatum*)
 Tickseed-Sunflower (*Bidens aristosa*)
 Toothed White-topped Aster (*Sericarpus asteroides*)
 Yarrow (*Achillea millefolium*)



Sheep Laurel

Ferns

- Marsh Fern (*Thelypteris palustris*)
- Bracken (*Pteridium aquilinum*)
- Royal Fern (*Osmunda regalis*)
- Cinnamon Fern (*Osmunda cannamonea*)
- Horsetail (*Equisetum*)
- Club Moss (*Lycopodium*)
- Tree Club Moss (*Lycopodium obscurum*)
- Ground Pine (*Lycopodium tristachyum*)
- many others, not specifically noted

Trees and Shrubs

- White Pine (*Pinus strobus*)
- Eastern Hemlock (*Tsuga canadensis*)
- Atlantic White Cedar (*Chamaecyparis thyoides*)
- Sheep Laurel (*Kalmia angustifolia*)
- Buttonbush (*Cephalanthus occidentalis*)
- Swamp Loosestrife (*Decodon verticillatus*)
- Viburnum sp?
- Red Maple (*Acer rubrum*)
- Poison Ivy (*Rhus radicans*)
- Mottled Pipsissewa (*Chimaphila maculata*)
- Greenbrier (*Smilax*)
- Bigtooth Aspen (*Populus grandidentata*)
- Quaking Aspen (*Populus tremuloides*)
- Swamp Oak (*Quercus bicolor*)
- Red Oaks — species undetermined
- American White Birch (*Betula papyrifera*)
- Gray Birch (*Betula populifolia*)
- Yellow Birch (*Betula lutea*)
- Juneberry (*Amelanchier sp?*)
- Sweetfern (*Comptonia peregrina*)
- Meadowsweet (*Spiraea sp?*)
- Black Alder (*Ilex verticillata*)
- Highbush blueberry (*Vaccinium sp?*)
- Huckleberry (*Gaylussacia sp?*)
- Swamp Azalea (*Rhododendron viscosum*)
- Leatherleaf (*Chamaedaphne calyculata*)
- Coast Pepperbush (*Clethra alnifolia*)



White Pine



Red-tailed Hawk

PRESERVATION

of Hockomock

ON March 23, 1649, Captain Myles Standish, Samuel Nash and Constant Southworth bought the Hockomock from Massasoit, King Philip's father. Negotiations took place at Sachem Rock, East Bridgewater, and the agreed price was seven coats, nine hatchets, eight hoes, 20 knives, four moose skins, and ten yards of cotton.

In our 322 years of tenure, the Hock has withstood efforts to destroy it. Corners have been nibbled away and its face has been scarred with roads and power lines, but miraculously most of the swamp still exists in its natural state, resisting mindless "progress" by its inaccessibility.