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A picture of an eagle hangs on the wall of my office. The bird is either just rising from or just settling onto the ice of Quabbin Reservoir. The picture manages to catch, in sharp black and white, the contrast between the powerful bird, with a fierce glint in its eye and its talons open like grappling hooks, and the space behind it, the winter reservoir, frozen and still with no other sign of life on its white surface.

Jack Swedberg, the man who took the picture, spent the better part of a day—he would be hard pressed to say exactly which day, for he has spent hundreds of them in this way—crouched in a blind on the shore of Quabbin waiting for a chance to photograph the eagle. Eagles are wary, quick to spook, and once scared from a spot by a hint of human presence will not return for days or weeks and sometimes never return. Getting close enough to photograph an eagle is an art laced heavily with patience. And it is an art at which Jack Swedberg excels. He saw his first eagle at Quabbin twenty-five years ago. He was standing on the top of Rattlesnake Mountain, a high peak in the northern section of the reservation, when the eagle came drifting by the rock face below him. Swedberg purchased his first camera shortly thereafter. At that time he was working in the construction industry, but the camera and his love of the outdoors formed a passionate combination that first drew him into wildlife photog-

raphy as a hobby. Later, as his skills with the camera grew, he was able to turn his hobby into a livelihood. Today he has hundreds of pictures of eagles at Quabbin, along with a striking and varied collection of other wildlife photographs taken there. Swedberg is now chief photographer for the Massachusetts Division of Fisheries and Wildlife and in the course of his official duties spends his days and nights prowling Quabbin with his cameras and shooting photos and films of Quabbin's wildlife and its hills, valleys, and waters.

Swedberg is a big, square-jawed man in his early fifties. He has curly gray hair, dresses in jeans and workboots, and laughs easily. He has a job that frustrated executives often dream about over three-martini lunches.

I met Swedberg for the first time one Indian summer day when he took me on a tour of Quabbin. I had visited Quabbin many times before that day and indeed had lived for several years within ten miles of the main gate. I have always appreciated Quabbin as a natural wonder in Massachusetts, a wild, quiet spot where one can escape the noise and frenzy of this urban state. But Jack Swedberg's Quabbin is different from mine; to him Quabbin is something more. It is to him, perhaps, what the laboratory is to the chemist, a place of almost infinite possibilities and changing creations.

Swedberg has three 16mm films of Quabbin that he shows for the division of fisheries and wildlife, and his photographs have appeared on television and in national magazines. One of the films is a lovingly photographed, hour-long presentation that Swedberg himself narrates. In it he shows some of the abundant wildlife of Quabbin: owls, flying squirrels, red-tailed hawks, a fawn so young it cannot run, a blue-heron rookery, and an awkward bald eagle slipping on the ice of Quabbin as it makes its way toward a deer carcass. There are other Quabbin animals in the movie: beavers that work year round building and repairing their dams, caught by Swedberg's camera in various seasons and at various chores.

As we walked through Quabbin reservation on that November day, Swedberg kept up a running commentary on the trees, landmarks, and wildlife of Quabbin. "We probably won't see any eagles today," he said to me while we picked our way through a deep swamp adjacent to his eagle blind. "November's too early for eagles at

Quabbin." The blind, constructed by Swedberg and other wildlife staff, appeared to be a large beaver hut from the outside, but inside it was furnished with a bench and shelves and a propane heater. It is from that blind, located far out on Prescott Peninsula on the shores of a beaver pond, that Jack Swedberg takes most of his photographs of eagles.

"The bald eagle needs good winter feeding and Quabbin has that," Swedberg said as we stood outside the blind scanning the blue sky, where a lone crow was winging toward a tall pine. "There's a golden eagle in here too. That's a very shy bird. Some people even think it may have a nest in Quabbin because it has been here five years."

Jack Swedberg makes no secret of where he stands on the question of increased recreation at Quabbin. When he shows his films of Quabbin around the state, he also delivers a low-keyed pitch for the preservation of Quabbin as a wilderness. "It's a great place to do some walking," he told the West Boylston Women's Club after showing the film one day. "There are paved roads, dirt roads, and even grass roads." Briefly, he outlined the history of Quabbin, stressing that it is, after all, primarily a reservoir and that its wilderness opportunities were an afterthought and were made possible only by the limited access and stringent protection a reservoir needs. And then he answered a question from a member of the club who wanted to know why people are not allowed to skimobile or ride horses in the reservation. Though she did not ask it, another question hung in the air: why must all that wonderful land be left unused for the sake of some wild animals? It is a topic on which there is precious little middle ground, and high fortresses of opinion buttress the opposing sides.

Put simply, the issue is this: why not open Quabbin up to increased recreation for the citizens of crowded, sometimes stifling, Massachusetts? Why not let the campers, skimobilers, cross-country skiers, sailors, and horseback riders have access to Massachusetts' only wilderness? After all, don't the resources of the state belong to all its people?

Jack Swedberg frowned when we talked of the demand to open up Quabbin. "There are so many areas like that all around the state," he said. "Why make Quabbin into just another state park? It's a unique area now, a fascinating wilderness area." He paused

to consider. "It seems somebody is always trying to create the demand for opening Quabbin. The minute a professional planner becomes involved, he will try to create the demand."

It is often difficult to explain to cross-country skiers, bicyclists, and sailboat owners—all participants in quiet, nonpolluting sports—why Quabbin is best left as a restricted wilderness. "If Quabbin were opened up to cross-country skiers," Swedberg said, "you'd have busloads of people coming from Boston and New York to ski the area, because the attraction of the place is so great. And once you expand recreation at Quabbin for one group, other groups will want the same thing."

Swedberg's favorite photographic subject is the eagle, and it is his passion for this great bird of prey that has often put him on the front line in the battles over opening Quabbin up for increased recreation. "The minute you open Quabbin up to increased recreation, you'll lose the eagles," he said. "I've studied them. I know they won't stay."

Massachusetts is a populous state, with 5.6 million people jammed into 8,257 square miles, but because the population is concentrated in the eastern half, open space is abundant. There are 87 state parks in Massachusetts, totaling 247,932 acres, and most of these parks allow camping, cross-country skiing, sailing, and swimming. Add to this a variety of local and municipal parks and several Audubon wildlife sanctuaries (which have some recreational restrictions), and Massachusetts is far from being the concrete playground pictured by some.

Like any state controversy, the debate on opening Quabbin for increased recreation has spawned committees and studies. But the crux of the matter is rather simple: it is getting harder to be alone in the woods or by the shore. The whine of snowmobiles cutting through the woods on a crisp January morning, while once a rare intrusion, is now commonplace. Camping, once a fairly simple, spur-of-the-moment activity, now seems to require, as much planning, precision, and study of maps as a small-scale military operation.

As Americans take to the outdoors, they are increasingly experiencing a blunt truth: crowds cannot enjoy the wilderness. It is an experience requiring solitude, and the very popularity of the outdoors can doom it. Visitors to the National Park Service doubled in a ten-year span—from 114 million

people in 1965 to 228 million in 1975—with resulting damage to the sometimes fragile wilderness areas those visitors had come to see. It is a national dilemma. Wilderness in the United States is gradually being destroyed by the very affection it inspires in a people hungry for authentic experiences.

Quabbin, like wilderness areas elsewhere, has begun to feel the crush of human affection. It attracted more than 310,000 visitors in 1979, including 60,000 fishermen. Officials in the MDC now talk of the pressures they are under: more people every year, increased vandalism, and a reduced budget and staff. Patrolling 85,000 acres is a near-impossibility, made even more so by the nature of the terrain, the isolated hills, valleys, and islands of Quabbin. But so far Quabbin has managed to survive its increased popularity. The southern end of the reservoir, near Winsor Dam and the administration buildings, has absorbed the increased flow of traffic, leaving the rest of Quabbin almost as isolated as it was ten years ago. But as more visitors have crossed the main gate near Winsor Dam and used the hiking trails and recreational facilities available at the end of the reservoir, more voices have begun to ask the question of why Quabbin as a whole should not be opened for public use.

Quabbin's history with regard to its recreational uses is somewhat tangled. It can be seen as a good example of wise use of a wilderness area to provide some limited recreational benefits, or as an example of the state's willingness to let politically organized sporting groups, like fishermen, have their way at the expense of those that are not organized, such as sailors, of whom there is no discernible abundance in central Massachusetts.

When Quabbin filled for the first time in 1946, little, if any, demand existed for more and better recreational facilities for the citizens of the commonwealth. The state was less populated and its residents had other things on their minds: building homes, careers, and families after the trauma of World War II. Few families thought of camping out for a whole weekend or of trudging up and down mountains and trails. Quabbin was unbothered in its early days.

In 1952 things changed somewhat. The state legislature, under pressure from fishermen, expanded fishing at Quabbin and allowed the use of small, ten-horsepower, motorboats. And the cries of wilderness purists, who cringe at the sight of a motorboat,

and of sailboat owners, who are still baffled as to why motorboats are allowed on a reservoir but sailboats are banned, opened the first controversy over recreation at Quabbin.

Since 1952, decisions regarding recreation at Quabbin have been made by the MDC. Founded in 1919, the MDC in 1947 absorbed the Metropolitan District Water Supply Commission, the agency that originated Quabbin. A tall building on Beacon Hill, just around the corner from the State House, houses MDC headquarters. Its location gives an immediate hint at one of the MDC's prime problems: it is a large state agency that is far from immune to political demands and solutions. The responsibility of the MDC is to oversee parks, roadways, and water supplies for the metropolitan area. Quabbin, sixty-five miles to the west, is far outside the MDC's usual jurisdiction, yet MDC police, rather than local police, patrol Quabbin. When decisions affecting a reservoir sixty-five miles away are made in Boston, an occasional problem is inevitable. The decision to allow motorboats on Quabbin's waters is now regarded by some as the MDC's biggest mistake in an otherwise unblemished record in the administration of Quabbin. But the state's sportsmen were, and still are, an organized group with considerable political clout. In 1976 the state-appointed Quabbin Master Plan Committee looked at recreation at Quabbin and concluded a bit wistfully: "Motorboat fishing . . . is the most intensive recreational use on the Quabbin and adversely affects the water, aesthetics, and quiet, but it is an established use supported by strong sportsmen groups and difficult to curtail."

Over the years the regulations have remained somewhat steady: no hunting, camping, swimming, pleasure boating, or motor-vehicle use of any kind. With the exception of the 16,000 acres of Prescott Peninsula and the 60 islands totaling 3,500 acres, Quabbin is open to the public. Travel in the reservation is restricted to foot, and that is the single greatest reason that the Quabbin wilderness has survived in the middle of urban Massachusetts. The state, however, has made some concessions. The 25,000-acre Ware River Watershed adjoining Quabbin is open to almost every possible recreational use, including hunting, snowmobiling, trailbiking, and cross-country skiing. In

recent years the MDC has proposed, but never carried through, plans to expand the fishing area at Quabbin toward the south and nearer the restricted Prescott Peninsula, the winter home of the eagles.

The MDC is not especially enamored of plans to open more of Quabbin to the public. The water planners in the MDC like to boast that Quabbin is the largest body of untreated drinking water in the country, and that increased recreation and use, even by quiet nonpolluters like cross-country skiers, would eventually mean that the reservoir's pristine waters would require extensive chemical treatment. The initial cost of treating Quabbin's water would be $75 million to $100 million, and that cost would be paid by the users of the water in the MDC water district, water users who in general live too far from Quabbin to use it for recreation.

The Quabbin Master Plan Committee, in its 1976 study, noted that it is not a single feature but rather a combination of features—the great size of the reservoir and its watershed area, the game, and the restricted use and relative inaccessibility of much of Quabbin—that makes Quabbin what it is. The committee then went on to grapple with another question: is Quabbin underutilized? It is a charge heard often from the proponents of expanded recreation for Quabbin. For there remains something in the soul of even the most urbanized resident of an urban state that hates to see land just sitting there. It is, I think, a throwback to an earlier era when the American dream was to conquer and subdue the land and wring from it a richer and better life. No matter that a new era is upon us, an era of scarcity and conservation, there is something in the American soul that hates to let a good piece of property "go to waste."

The committee concluded that Quabbin is not underutilized. True, the skimobilers, cross-country skiers, trail bikers, off-the-road-recreation-vehicle owners, sailors, and campers are not allowed to use Quabbin. But the hikers are, and there may be far more hikers in the state than anybody suspects.

The last state report on recreation at Quabbin, the State Comprehensive Outdoor Recreation Plan (SCORP), completed in 1976, included a recommendation that eased some of the recreational restrictions at

Quabbin Park, a public area on the southern edge of the reservoir near the main gate. That recommendation, seen by many as the only sensible solution to the demand for recreation at Quabbin, allowed increased use of only the most public area of Quabbin. But the SCORP team also found, in a survey of the recreational habits of Massachusetts residents, that hiking and walking are the most popular year-round activities in the state. And Quabbin is a hiker's paradise. There is the biting nostalgia of the two-mile hike into Dana Center, in the western part of the reservation, of walking down a broken blacktop road that once served as the main highway for Dana and North Dana, and of arriving at what was once a town common, the road that circled the common now overgrown with briar bushes and goldenrods, and the cellar holes of the buildings that once stood on the common gaping and overgrown with weeds. There is a sense there, on that weed-clogged forgotten town common, of the people and places and family histories that comprised the town of Dana. And there is the water. The waters of Quabbin are only 500 yards away from the former common, lapping quietly against a small hill.

Old Enfield Road, in the southwestern section of the reservation, is now only one mile long. It was once the main highway linking Belchertown, Holyoke, Springfield, the Swift River Valley, and the towns beyond the valley: Petersham, Orange, and Athol. Its blacktop surface has been roughened by weather and encroaching trees, and it has been flooded in spots by several beaver ponds nearby. At the end of the mile the road runs straight into the reservoir, and if you stand on the shore there you can see across the water to Great Quabbin Mountain, far to the right but easy to spot because of its high observation tower.

Soapstone Hill, 511 feet high in the northeastern corner of the reservation, was once the site of a working soapstone quarry. Chunks of yellow-white soapstone lie about on the hill. Earlier, Indians used the stone to make bowls. On the two-mile hike into what was once Doubleday Village, part of North Dana, the remnants of a sawmill can be found scattered in a meadow near the fast-flowing stream that powered the sawmill before the reservoir was built.

In the public area of the reservation the MDC maintains a series of shorter hiking trails. These trails usually run for a mile or a

bit longer and wind in and around the summit and the Winsor Memorial. Hanks Place Trail, which begins at Enfield Lookout and follows a dirt road down to the shore, is a favorite winter trail. For it is from Enfield Lookout that the eagles of Quabbin can often be seen on the ice, feeding in the distance. The lookout, on good winter weekends, often attracts a large crowd of binocular-toting eagle watchers. It is against the law to bother the eagles by venturing out on the ice, and the MDC arrests those foolish enough to do so.

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If Quabbin Reservation is a hiker's paradise, the reservoir is a fisherman's delight. "Quabbin Reservoir is a deep, soft-water body with two-thirds of the volume consisting of cold-water habitat." So begins a small pamphlet entitled *A Summary of Eighteen Years of Salmonid Management at Quabbin Reservoir, Massachusetts*. To the uninitiated the news that Quabbin Reservoir has deep, cold waters may well bring a yawn. Not so, however, to fishermen, particularly those willing to spend good money and countless hours trapped in small boats trolling the water in the hope of an encounter with one of the Northeast's best game fish, the lake trout. Quabbin Reservoir is one of the prime fishing spots for lake trout in the Northeast, a fact attested to by the influx of anglers every year at the three public fishing and boat-launching ramps on the reservoir. Bill Easte, an aquatic biologist for the Massachusetts Division of Fisheries and Wildlife, and a man who has overseen some of the fisheries programs at the reservoir, calls the lake trout the "bread-and-butter" fish of Quabbin. The amount of lake trout taken from Quabbin equals or exceeds that of any other freshwater body in the Northeast, Easte says.

Quabbin Reservoir contains nearly 25,000 acres of water, including deep areas high in oxygen, and sandy shallows. The deep water with its high oxygen content forms an environment that is ideally suited for the propagation of trophy-size fish. The reservoir is oligotrophic, young and free of the detritus that comes with age to most lakes. When the reservoir was being flooded, prior to 1946, the bottom was full of plant life and muddied with topsoils. Within a few years this changed, and the bottom of the reservoir is now classified as rubble and stone, with

almost no mud or plant life. In the entire reservoir, according to Bill Easte, there is only one deep water hole lacking the amount of oxygen necessary to sustain salmonids, and it is near shaft 12 in Hardwick.

This fact is significant, for as water temperatures get colder, water usually contains less dissolved oxygen. Bill Easte drew a diagram to explain this to me. He showed a large mixing bowl divided horizontally into three parts. At the top of the mixing bowl the water is warm, 70 to 75 degrees in summer, and well oxygenated. A second layer is deeper and colder, about 65 degrees, but still rich in oxygen. Further down the water is cold, but dissolved oxygen is not plentiful.

In most large lakes and ponds in the Northeast, the only environment conducive to lake trout, rainbow and brown trout, and landlocked salmon (all salmonids, which are coldwater fishes) is the middle layer of water. This factor limits the populations of these species in the Northeast, but Quabbin, because its bottom layer is free from oxygen-consuming detritus, does not have this problem. The salmonids, particularly the prized lake trout, feed and breed in its deep, oxygen-rich waters, waters that are as cold as 47 degrees.

Quabbin also has a generous supply of warmwater species. Bass, both smallmouthed and large-mouthed, white and yellow perch, chain pickerel, and rock bass are all abundant in different parts of Quabbin.

Warmwater fishes are influenced by the rise and fall of the reservoir's level. The drought of the mid-1960s wiped out numerous shoal areas, the favored spawning ground of the large-mouthed bass. The smallmouthed bass were not as affected and became the dominant bass in the reservoir.

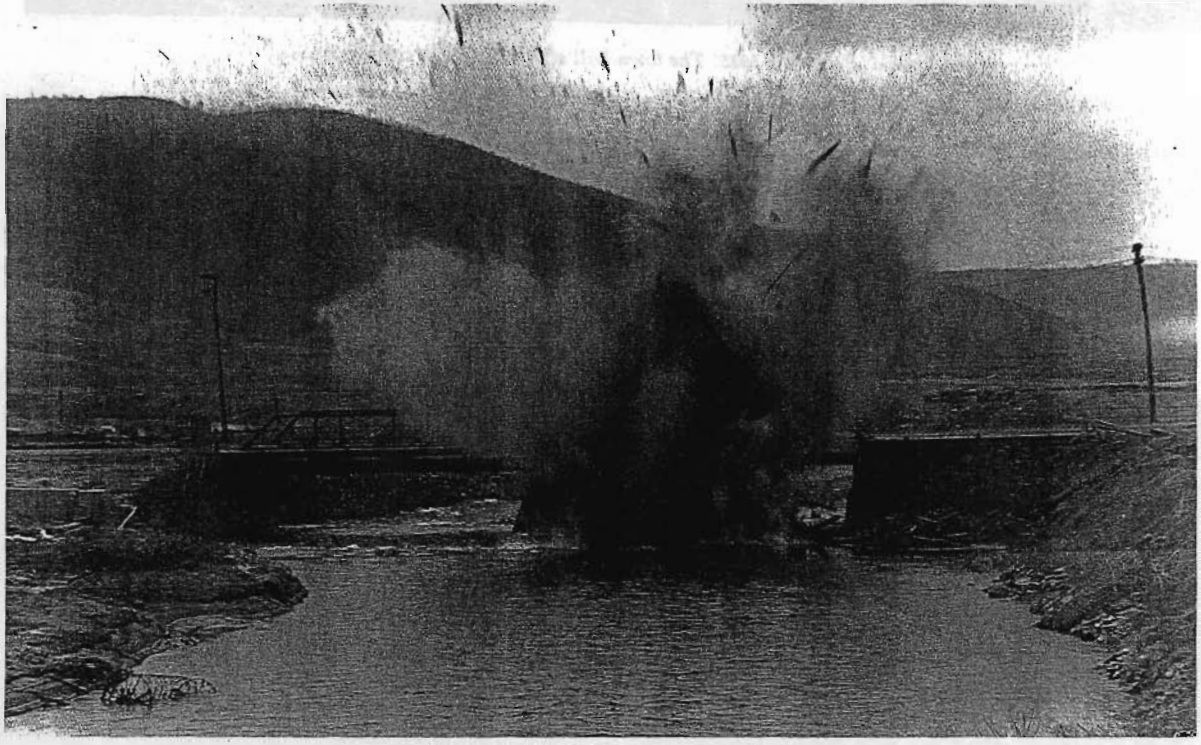
The lake trout is a self-sustaining fish in the reservoir, thanks mainly to the rise of a healthy population of smelt, the prime forage fish for the larger trout. The smallmouthed bass is also self-sustaining. The rainbow trout and the landlocked salmon are not self-sustaining and must be stocked. The landlocked salmon in particular has failed to take hold at Quabbin. The problem with the salmon is simply that not enough are produced in hatcheries to stock a body of water the size of Quabbin, and the landlocked salmon has not reproduced in the res-

The Swift River Valley: 1939

Photos from the Metropolitan District Commission contract books

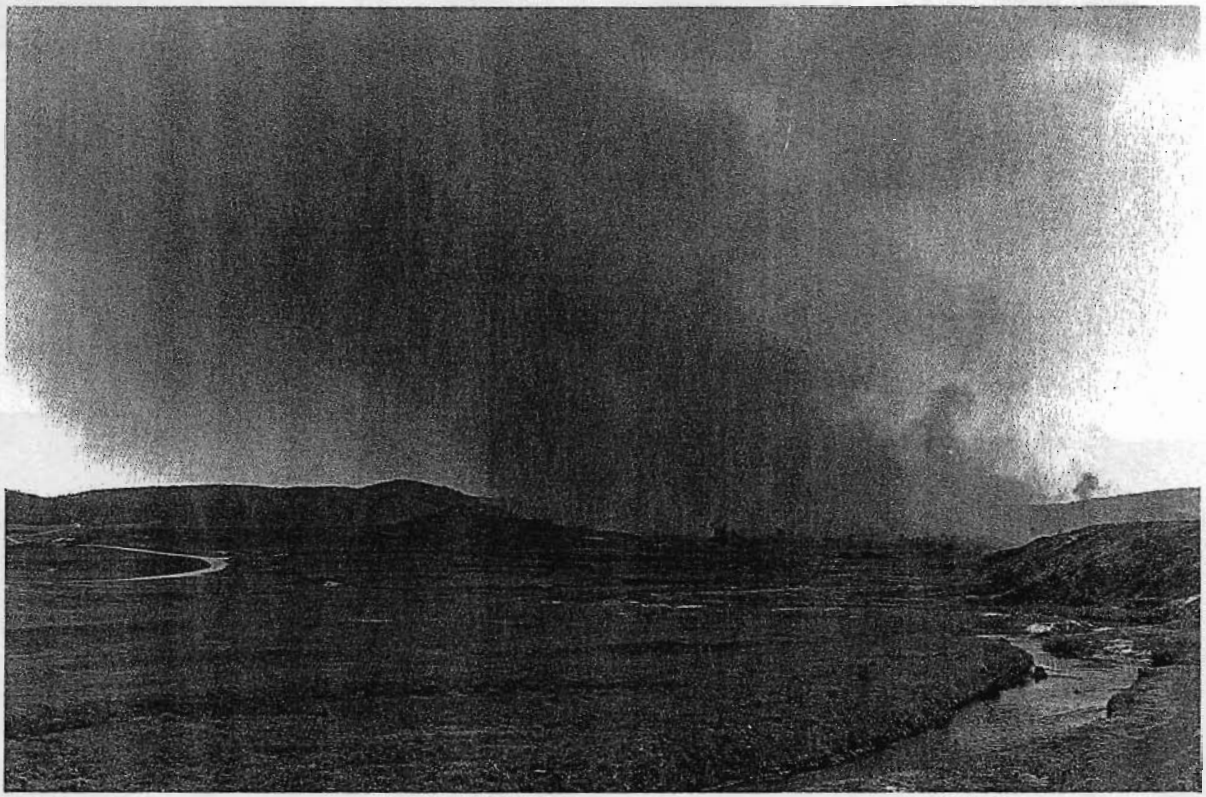
Moving the Thayer House from Greenwich

Pushing down the Old Stone Mill, Enfield



Blowing up the Enfield Bridge

Enfield, February 1939. The town hall still stands; the town is gone.



Burning Brush on the West Branch of the Swift River, June 1939

The End at Enfield

The Former Town Common at Greenwich

Last Days of a House on the Petersham–North Dana Road

ervoir. The brown trout has not reproduced in the reservoir either.

The game fish totals for the 1980 fishing season at Quabbin, as might be expected, are impressive. Among the three most sought-after species in the reservoir, 8,328 lake trout were caught, down from 8,427 in 1979; 3,700 rainbow trout were creeled, up from 3,516 in 1979; and 10,319 small-mouthed bass were caught, up from 9,703 in 1979. High numbers of the warmwater fishes also were caught: large-mouthed bass, chain pickerel, yellow and white perch, rock bass, and brown bullhead. While the catches of most other species remained about the same from 1979 to 1980, the bullhead catch declined. That decline has been part of a steady downward slide for the bullhead during the past five years. In 1975, 23,693 bullhead were taken from the waters of Quabbin. In 1979 that figure had declined over three-fold to 7,355. The 1980 catch was even worse, totaling 3,801 bullhead.

There are two theories about the declining bullhead harvest. The first is fairly simple: since the cost of fishing has increased in recent years, fishermen may be losing interest in the less spectacular fish and concentrating on getting their money's worth by angling for trophy-size fish. The second theory is more ominous: bullhead are thought by some aquatic biologists to be more susceptible to acid rain, and the heavy-metal pollution that often comes with acid rain, than other fish species. If this is true, then the fishing waters of Quabbin could be in jeopardy.

Acid rain, as has been fairly well documented by now, is caused by pollutants released into the air by factories that may be thousands of miles away from the water that is eventually acidified. The acid rain causes the pH level in water to drop, making the water acidic. A pH of 4.5 or less is usually considered fatal for fish. Quabbin has a pH of 6.1 in the spring, but the level is thought to have plummeted below that several times in the past. The reservoir is such a large body of water that a diluting effect often saves it. That is to say, even if a particularly acidic rain were to fall on the reservoir, it might be diluted by the larger volume of acid-free water and cause no real harm. However, with continued exposure to acid rain, the waters of Quabbin will gradually become more acidic. Like many lakes in the Adirondacks, Quabbin will gradually

lose its fish populations if the pH drops below 5.0. If the pH drops to 4.5, there will no longer be sport fishing at Quabbin. At that point, the dilution effect will make lake restoration more difficult. As the pH decreases, toxic metals normally bonded to substrate are released in solution to become absorbed in gill membranes and other tissues. So far, no major studies have been done at Quabbin to determine if it is being affected by acid rain.

The premier fishing spot in Massachusetts required some fisheries management before it reached its current status. Prior to 1946, when the reservoir was filled, the roads to Quabbin were closed and fishing was banned. If fishing had been allowed, it would have been bad. The oxygen content of the bottom water from 1939 to 1942 fell to nearly zero as topsoil and plants from the former towns clogged the reservoir, and it was not until 1943 that the dissolved-oxygen content of the water began to reach acceptable levels. Beginning in 1946, fishing was allowed on 46 miles of the reservoir's 118 miles of shoreline, and boat fishing was permitted in 1952 from the three MDC boat ramps. Today 65 percent of the reservoir is open for fishing.

Three separate fisheries-management programs have been in effect at Quabbin at different points in its history. The first ran from 1952 through 1960 and involved stocking lake trout and walleye. Lake trout is a coldwater fish and walleye a warmwater one. The reservoir, it was thought, was large enough to provide habitat for both fishes. However, the lake trout prospered and the walleye did not. The lake trout was stocked first in 1952, and during the next five years almost 300,000 specimens of various sizes were added. The key to the lake trout's prosperity was the introduction of the rainbow smelt as a forage fish. The smelt was introduced in 1953 and 1954. It was to become one of the greatest factors in the success of Quabbin lake-trout populations.

Walleye were first caught in the reservoir in 1960 and have been caught sporadically since then, but the failure of the species to establish itself has been attributed to competition from other warmwater fishes and to the Quabbin water, specifically the limiting effects of water that is slightly acidic.

While the walleye foundered, the smelt stocked as forage for the larger game fishes flourished to the point that its population had become too large by 1958. Smelt were

spawning in the tributaries of Quabbin and the fry were returning to the reservoirs in such numbers that they were clogging the water-distribution intake screens. The trout of Quabbin grew quickly on a rich diet of smelt, but by 1959 the MDC had had enough and began a smelt-control program that consisted of applying copper sulfate to smelt eggs. The smelt declined, but so did the prized lake trout.

The second fisheries program for Quabbin began in 1957. Lake trout were being caught in the reservoir then, but it was thought that they were not reproducing there. The solution was to try to establish brook, brown, and rainbow trout to replace the lake trout. A new stocking program got underway between 1957 and 1965. Rainbow and brown trout were stocked heavily. Brook trout were stocked in 1957 but failed to establish themselves and were never stocked again in the reservoir. Some still can be found in Quabbin's tributary streams. The rainbow and brown trout in the reservoir showed rapid gains in weight, which were attributed to their plentiful diet of smelt.

As a means of determining whether or not they were reproducing in the reservoir, stocking of lake trout was stopped between 1958 and 1962. Stocking was resumed in 1963 and continued through 1965, by which time it had been determined that lake trout had begun reproducing in the reservoir in 1961 and were on their way to becoming one of the dominant species there. Meanwhile, the smelt-control program continued. This in turn almost ruined the lake-trout project. By 1964, trout caught in the reservoir contained only small amounts of smelt in their stomachs, a big difference from previous years, and the growth rate of lake trout was declining.

All of which brought about the third fish-management program at Quabbin. Brown trout and rainbow trout, it was decided, were never going to be self-sustaining. It was time to try a different sort of fish: the landlocked salmon. In order to give the landlocked salmon, also a coldwater fish, a good start in the reservoir, the brown and rainbow trout, possible competitors, were not stocked during the seven-year landlocked-salmon program. From the start the salmon program faced a serious drawback in the unavailability of enough landlocked salmon in hatcheries. In 1965, 14,420 spring yearlings were put into Quabbin. The recommended rate for stocking the reservoir

was 61,000 spring yearlings. In addition, the landlocked salmon stocked in 1965 and again in 1967 had to contend with the declining smelt population. The smelt-control program, combined with a drought that reached its peak in 1967 and reduced smelt breeding areas, and the increasing lake-trout population feeding off the smelt, led to a drastic decline in the once-abundant smelt. Landlocked salmon failed to establish themselves in the reservoir, and by the early 1970s the stocking program was discontinued.

Smelt hold the key to the success of game fishes like the lake trout at Quabbin. Without smelt the trout do not grow large enough or fast enough to sustain a serious sport fishery at Quabbin. This became evident in 1966 and 1967, when catches of coldwater fish declined as the smelt population declined. At that time fishermen began to complain to the MDC and to the Massachusetts Division of Fisheries and Wildlife; one of the best fishing spots in the Northeast was turning barren. The solution was not complicated. The MDC agreed to allow the reintroduction of smelt provided that rotating screens were installed over the intake pipes in the reservoir. The screens were installed and worked. Smelt no longer clogged the water-intake works. In 1968, smelt were restocked in the tributaries along with trays of fertilized smelt eggs. Smelt were stocked again in 1969, and by 1970 they were back in the reservoir in force and stocking was no longer necessary, though they have never reached the level of their abundance in the early days at Quabbin.

Now, in the fourth decade of fishing at Quabbin Reservoir, the situation has stabilized. Every year for the past several years, 15,000 rainbow trout have been stocked in the reservoir. The rainbow does not breed in the reservoir, so it appears that it will always need to be stocked. Only 2,100 brown trout were introduced into Quabbin in 1978. Brown trout have not been stocked since but may be in the future if a suitable strain of the fish can be acquired. Stocking of the landlocked salmon was given another try in May of 1980, when 17,920 were added to the reservoir. By October of that year fifteen-inch salmon, the minimum legal size, were being caught. The landlocked salmon have never bred in the reservoir in the past, so they too, undoubtedly, will always be what fisheries workers call a "put-and-take" fish.