New York State Conservationist

State of New York Conservation Department

August-September, 1947

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CONSERVATION IS FOR ALL THE LAND

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This Magazine

The Conservationist, having weathered its first year of publication, now embarks upon its second. The going has been rough in spots, but our progress from one issue to the next has been made a lot easier by the many people who have taken an interest in our cause. They have not only financed it through their subscriptions, but have written articles and letters for which we can pay nothing but thanks. We thank them, very much indeed.

After six issues, it doesn't seem necessary to point out that this is not a hunting and fishing magazine. It was never intended to be. One of our primary purposes was, and still is, to emphasize the scope and general importance of Conservation, which we think has been too long regarded as the exclusive province of sportsmen, or of some other group. It is certainly unfortunate that to many people, Conservation means merely Fish and Game, or perhaps Forests; nothing more.

This basic misconception is, we think, the most serious obstacle in the way of real Conservation, and our first objective is to do away with it. Our idea is that as long as the public understanding of Conservation continues to be limited, Conservation itself will be limited. And this doesn't seem to be the right time for limited Conservation.

Then how big is Conservation, or rather, how big should it be? Very big, certainly. Its proper concern is the land—all of it—as well as the forests, fish, game, and other crops that grow from the land. Real Conservation has its roots in soil and water. In other words, it is concerned with the proper use of our natural resources.

In this and future issues of the Conservationist, you will find articles based on this general concept of Conservation.—Editor

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No stamps, please.

VOL. 2, NO. 1 AUGUST-SEPTEMBER 1947

STATE OF NEW YORK
THOMAS E. DEWEY, GOVERNOR
Published Bi-Monthly By the
CONSERVATION DEPARTMENT

PERRY B. DURYEA, *Commissioner*
J. VICTOR SKIFF, *Deputy Comm'r.* ROBERT A. WELLS, Sec'y.

DIVISION OF CONSERVATION EDUCATION
CLAYT SEAGEARS, *Director*

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FRED EVERETT, R. B. MILLER
Editorial

PETE FOSBURGH, *Editor*
EARL McGUIRK, DOUG FINCH
Photography

The Conservationist is an official publication of the N. Y. S. Conservation Dep't., published every two months at the Department's offices, Arcade Bldg., Albany, N. Y. No advertising accepted. Subscription rate $1.00 per year. Entered as Second Class matter July 24, 1946 at the Post Office at Albany, N. Y., under Act of March 3, 1879.

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"The Lord helps those who help themselves"

Our

THERE has been so much loose talk about conservation, so much flag waving, so many cries of "wolf!" and so many bursts of oratory about certain pet conservation projects that it has been difficult for many people to see conservation in its broadest terms for what it really is—an essential for our domestic prosperity—and a grim necessity for our national security.

That conservation has come to be regarded by some as a plaything in their private lives, and by others as sort of a tag-end of government, is nothing short of sheer tragedy. It is fiddling while Rome burns.

I am greatly encouraged, however, to discover in talking with people in all walks of life and from all over the State that this situation is rapidly changing. The impelling motive seems to be a growing fear that the way our vital resources have been, and are being, dissipated, will inevitably result in the inability of America to prevent another national emergency, or take care of itself in the event of one.

Without assuming the role of an alarmist or stooping to play upon such fears to advance the conservation work in which I am interested, I think it is only sensible to examine the basis for these fears and do what we can to get rid of them by removing the causes.

Let me start off by saying that, at the moment, based on the best information available to me, I believe these fears are justified insofar as the handling of our resources is concerned. In the same breath, let me say that there is every reason to believe that the people of this country have it within their power to put themselves in a position where such fears are unnecessary.

The problem is simply one of restoring this country to self-sufficiency with enough of everything we need to do business and meet any national emergency that may come along.

The solution is a conservation effort so much bigger than anything heretofore envisioned that it will be regarded by many as too radical. Actually, no matter how radical such a program would appear to be—compared to what we have done heretofore—it can only be regarded as conservative in terms of our country's future. Conservation at the present level or less, on the contrary, is anything but conservative. It is national suicide.

In an article of this kind, a complete appraisal of our natural resources, their ability to meet the predictable needs of this country under normal and emergency conditions, and the writing of a conservation prescription to correct matters, is obviously impossible. Nevertheless, there are a few essentials which stand out so sharply that they can be summarized and kept before us as a check list of what this country must do.

Undoubtedly, the most important single item, because it affects our food supply, our water supply, our wood supply, and a host of other products of the soil, is to launch an all-out effort to improve our use of the land. Innumerable writers in recent months, through the medium of many national magazines, have done such a good job on such items as soil depletion, floods, lumber shortages and other inevitable consequences of the wholesale abuse of our land that it is probably unnecessary to try to duplicate that job here. The accompanying cartoon tells the story. I am more concerned with what we are going to do about it. Despite the efforts of certain of the Federal services, notably the Soil Conservation and Forest Services, and real progress in this and many other states, and despite a most heartening increase in effort on the part of national, state and local farm groups—the surface literally has been merely scratched. This is not a matter of debate or conjecture, for one has merely to fly over any part of this country to

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Future — and Conservation

confirm the facts by direct observation.

Generally speaking, the knowledge of what to do and how to do it are already available. Occasionally, from the air, an oasis of correct land use will stand out as living proof that this is so. It may take the form of a farming area where, through contour farming, strip cropping, and other well-known devices, every reasonable means has been taken to keep the soil where it belongs, to conserve water, and to use both soil and water to the best advantage for production. Or it may take the form of a green carpet of forest plantation which has re-clothed a section of barren hilltop land. We are definitely beyond the experimental and demonstration stages. It is now a question of doing a job on *all* of our land, not just part of it.

HOW can this be done? Is it a job for Federal or state government, for the counties, for local communities, or for the individual landowner? Every thoughtful citizen knows the answer—it is a job for all—but it is a job primarily for those who own and control the land. In turn, they need state and, in some cases, Federal assistance of a technical and financial nature.

In our State specifically it means stepping up the work of our local Soil Conservation Districts, of our local Forest Standard Practice Districts, of our Agricultural Extension Service, and of our State Foresters. It means multiplying by thousands and tens of thousands the number of landowners who are cooperating with these local agencies which, after all, have been set up to help them.

It means that every one of us must make up his mind, though we may work in a factory or an office, that what happens to our land, no matter who owns it, is a matter of state and national concern—and therefore our concern.

Prominent sociologists have pointed out that this is a concept far removed from our original view of the land as just another speculative commodity. Nevertheless we must accept the change.

In this State, most fortunately, we already have the essentials of the needed conservation machinery. I feel confident that as fast as the people, especially the landowners, practice conservation on their land, their legislators and their Congressmen will do their part to see that the necessary State and Federal assistance is given to keep pace with them.

At the risk of repeating myself, let me emphasize that the immediate problem is to bring the story of conservation and correct land use to our farm people and our forest landowners—*what it can mean to them in dollars and cents*—and what it can mean to our country's ability to take care of itself in the future. Official agencies such as the extension service, conservation departments, education departments and others, can do a great deal—but the gospel will never be adequately spread until this concept of conservation, and its role as a national necessity, become common table talk throughout America. All kinds of farm and home organizations, civic organizations and industrial organizations should start talking conservation and keep on talking it until the inertia of generations is overcome.

There must be some way to make conservation a by-word in America. Ways and means have been found to have less significant ideas sweep this country of ours. I throw this out as a challenge to American ingenuity.

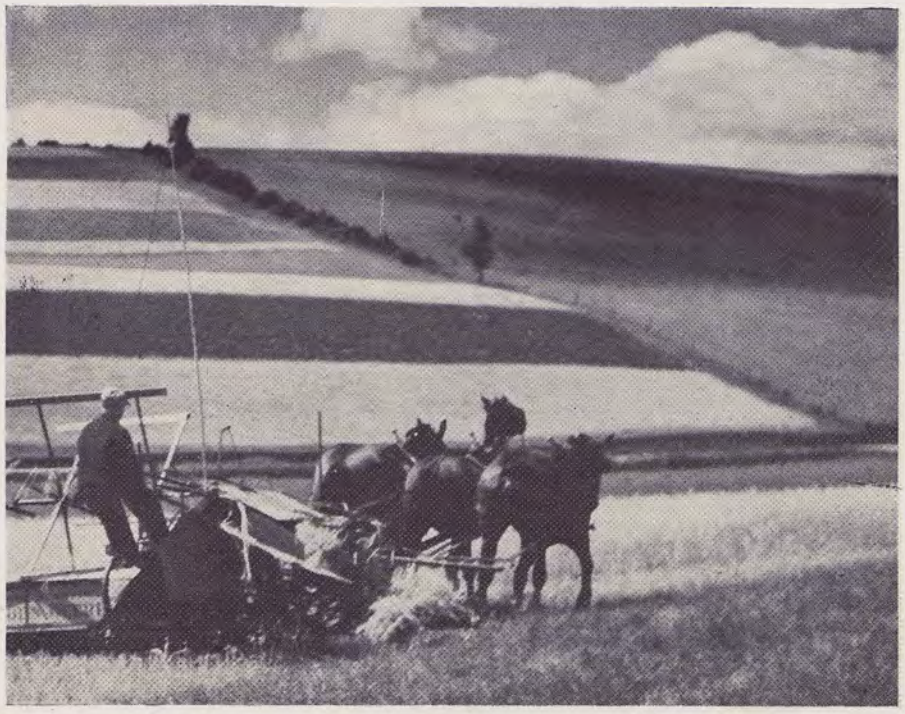
The next important step in removing fears for our national security is to see that the national cupboard is filled with stockpiles of those items which we cannot produce and which we must secure elsewhere in world markets. We were never in a better position to bargain for such supplies than we are today.

Metals and minerals of all kinds, which we have in this country in limited supply, must be carefully developed, mined and hoarded so that there will be no Achilles heel for a foreign power to strike. National defense in this modern age has become so complicated and industrialized that the shortage of even one essential commodity can be fatal. There is always a limit to what can be done through rationing, the use of substitutes and similar expedients.

We can safeguard our food supply for all time by husbanding our soil; we can, through reforestation and modern forest management, grow the timber we need; we can, through less wasteful exploitation, make many of our nonrenewable resources last for a long time; we can, by scouring the world markets and dusting off our Yankee trading abilities, secure the things which we lack in this country. In short, we can, if we put our minds, our hands, and our pocketbooks to work, keep this country strong and secure, a bulwark for peace and freedom—and so relieve ourselves of those nagging fears which tear down morale and confidence.

We can—but will we—in time?

—PERRY B. DURYEA



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The Bounty System

WITHIN recent years there has been renewed interest in the bounty system in New York. Some believe that bounties will result in the reduction of those species which, from the standpoint of the farmer and hunter, are undesirable species. Repeatedly they argue that if a bounty is high enough, practically any species can be greatly reduced in a relatively short time. But history shows us the fallacy of such reasoning. Bounties have been paid in this country for three centuries, yet there is not a single instance where control or material reduction of a species by this method can be cited.

Few hunters appreciate the complex and intricate relationship between predator and prey. To observe the telltale evidence in the snow where a fox has killed a pheasant is sufficient to condemn all foxes. To see a fox or two on the opening day and not put up a pheasant is presumptive evidence sufficient to blame the fox for the shortage. Little thought is given to the successive wet springs which are so disastrous to the pheasant nestlings.

County clerks or law enforcement officers are often charged with the payment of the bounty. These officials are not elected to office on their knowledge of natural history. Accordingly, to hide their embarrassment or more often through sheer ignorance, they often pay a bounty on birds of prey or predatory mammals which are similar to those which have been considered harmful and on which a bounty has been offered. The little screech owl and the handsome long-eared owl, whose principal diet consists of mice, are often probated for the larger horned owl. The big fan-tailed hawks (see New York *Conservationist*, June-July 1947 issue), both red-tailed and red-shouldered, have been passed off for the fierce, grouse-eating goshawk, which invades our State in certain winters. Such errors are not exceptional; on the contrary, they are repeated frequently enough to offset any questionable value the bounty might have on the great horned owl and goshawk. This past winter a $50 bounty was paid in St. Lawrence County for a timber wolf. Yet the last authentic record of these big wolves in New York State occurred in the early years of the present century. Probably another case of mistaken identity.

Following an unprecedented increase of foxes in New York in 1945, and a simultaneous decrease in pheasants, the Board of Supervisors in my home city voted a fox bounty of three dollars on November 15, 1945. This money was exhausted shortly, the majority of claims being filed within a week or so following approval of the bounty. The reason was quite obvious. Fox trappers take a good share of their catch in the latter part of October and early November before freezing weather sets in. Many foxes were presented for bounty that would have been trapped anyhow, in spite of prevailing low fur prices. The successful fox trapper is one who traps for enjoyment as well as the profit. He is just as enthusiastic over his trap line as the grouse hunter over his favorite cover or the fisherman his special stream. In brief, foxes will be trapped in spite of a bounty and not because of it. The added incentive of a few dollars is of small moment to the man who follows his trap line year after year. These are the fellows who take the foxes, not the Sunday hunters of the game clubs who make their weekly drives when the fields are covered with snow.

Opponents of the bounty justly point to the fraudulent practices such a system must inevitably encourage. Where one county pays a bounty and an adjoining county none, who is to say or prove where the animal was trapped or shot? Some years ago the Pennsylvania Game Commission paid a dollar bounty on weasels. We are not concerned here with the questionable value of such, although it must be stated in passing that those who have investigated the food habits of these little fur-bearers are agreed on their value as a destroyer of mice. We *do* state emphatically that no authority in Pennsylvania, however learned he may be, can differentiate the same species of weasel from New York or Pennsylvania. What is to prevent an unscrupulous individual from bringing in his fur catch from one state to another to collect a bounty? To be sure, such offenders are occasionally apprehended, but all too often they go scot free after receiving a fat bounty check. Such instances have repeatedly happened in the west, where Canadian wolf cub skins and those from bordering states have been introduced into Montana for the bounty. Gopher skins have been passed off for wolf cubs and bounties collected on them. The reader will deduce that it is considerably easier to traffic in pelts from one *county* to an adjacent one.

NATURE abhors a vacuum. Let any area suffer a depletion in its predatory mammals and birds and the surplus from neighboring territories moves in. Animals are no respecters of political boundaries. Hence, once more we see the fallacies of a county or township bounty, which affords only an ephemeral relief from those species man would destroy.

There has been repeated agitation for a crow bounty in New York State. The crow blackbirds, or grackles, although smaller, are similar in appearance to a crow. I suspect that many supervisors

Bounty or no bounty, hunters kill bobcats

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By DR. W. J. HAMILTON, JR.
Assoc. Prof. of Zoology, Cornell University

in the State cannot differentiate between the two; indeed, the individual who shot the grackle might himself believe that the bird was a young crow. How many sportsmen appreciate that the crows of New York nest several hundred miles north of their winter range? Birds shot for a bounty during the winter could have had no effect on the alleged damage done during the spring and summer months.

RECENTLY, Vermont paid a dollar bounty on rattlers. There are few rattlesnakes in Vermont; practically all of those which have been turned in for the bounty have come from a point a few miles from the New York State line, where in a nearby mountain a thriving colony of rattlers exists. Is it possible that Vermont is paying to rid our State of these snakes?

The same state has long had a bounty on wildcats. At one time the bounty was ten dollars. When this was decreased to five dollars, the number of bobcats turned in for bounty decreased notably, but a decided increase in claims was noted in New Hampshire, which paid a much larger bounty. This is suggestive of certain sharp practices which often accompany a bounty.

It is not the purpose of this article to dwell on the value of predatory mammals and birds. But in passing, the reader should keep in mind the intangible as well as the more evident values of foxes, weasels, hawks, owls, and all the others that prey, at one time or another, on his favorite fish and game. The possible reduction of the weak and unfit, the destruction of excess populations that threaten their own good, and the tendency to keep prey species alert are some of the intangibles that are little understood. Game clubs would stage fox drives if there were no bounty. Every hunter revels in such a pastime and is glad for some excuse to get out between seasons. The winter crow hunter is in the same category. Both enjoy hunting and these wary targets test their skill. The fur value of the predatory mammals is known in every rural community. And by no means least, a good many individuals think the sight of a live fox stalking mice in the spring meadow is more satisfactory than tacking his hide on a stretcher.

The Conservation Department rightly frowns on the bounty system. It well knows the inadequacy of it and how miserably it has failed in other states. No program of conservation can ever attain the full measure of its ends until complete recognition is given to the body of underlying scientific facts which elevate conservation from the ranks of politics. Sportsmen may rest assured that history will repeat itself; if the State ever again provides a bounty on any animal, it will not materially reduce that species, but it will substantially reduce the county and State treasury, and result in money needlessly squandered, which might better be set aside for some much needed research into the habits of our game and predatory animals.

Under certain conditions we must, upon occasion, reduce animals which threaten human health, our livestock and even our game species. If no bounty, what then? Rabid foxes have caused measurable loss to cattle and other livestock and are a minor menace to humans. It is obvious that such animals should be reduced. The Conservation Department now has experienced trappers working in the infected regions, and every effort is being made to limit the spread of rabies. Eventually it will die out, and the foxes will once more be naturally reduced to a point where they are no longer a menace. Rabies, mange and possibly distemper in a wild population are but a few of the diseases which help to reduce any excess population. Moreover, members of the 4-H Clubs have been instructed in fox trapping measures and some lads have had notable success.

Finally, it is now well known that any animal community can accommodate just so many individuals of a given species. The annual surplus, be they pheasants, grouse, trout, or foxes, must go. How they die is of no great moment. Disease, predation, hunting, or a very high bounty might contribute to the annual decline. Those destroyed by man for a bounty will only be spared death by some natural means, always leaving sufficient individuals to again repopulate the community.

This article continues our discussion of predators and predation. No such discussion would be complete without an evaluation of the bounty system, and it won't surprise anyone that this Department heartily endorses Dr. Hamilton's views on this subject.

But as Dr. Hamilton suggests, predator control is sometimes necessary, and an alternative to the bounty system must be found. This Department is right now experimenting with one on a large scale, and the work of our professional trappers will be the subject of a future article.

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Mr. Mahoney

Assistant Director, Division of Fish and Game

ONE day last fall the phone rang and a voice said: "This is William Vandivert. I just killed an elk in the woods of Essex County. Is your Department interested?"

There sped to my lips a pious pater noster for the repose of the soul of my departed brother, and a fervent hope that he was not a member of my Lodge.

When it developed that what Vandivert had killed was a Wapiti, an American elk, a quadruped and not a biped, the years rolled back to let rush in a flood of pleasant memories. Memories, long buried in the dungeons of time, of a spring long ago when the Conservation Commission, as the Department was known in those early days, in cooperation with the New York State Association of the Benevolent and Protective Order of Elks undertook to reestablish the American Elk in the Adirondacks, where the species had been extinct for almost a hundred years.

It all unfolded in this way:

It was late fall of 1915. Llewellyn Legge, the Chief Game Protector, was comparing for T. Paul McGannon—an attorney in the Department of Law, Past Exalted Ruler of a Lodge of Elks, and an ardent hunter—the power that dwells in the majesty of the truncheon of a constable of the British Empire with the authority inherent in the badge and uniform of a State Game Protector. The conversation shifted, as conversations often do, and McGannon was reminded that no longer there roamed the forests of this State the noble animal whence the Benevolent and Protective Order of Elks had long since taken its name.

Both agreed that something should be done about it. McGannon conceded that Elkdom could do no more noble deed than to undertake restoration of their quadruped brethern to the haunts from which they had for many years been absent.

MR. MAHONEY—is fine

On that desk and under it are papers relating to many a Conservation Dream. The Elk Restoration Project which he describes here was only one of them, but he had an active part in it and the memory of it still haunts him.

It would be no great task. The Department of the Interior was permitting the capture of elk in Yellowstone Park under permit and without charge for the animals themselves. It only remained for the Order to request the permit and raise moneys to cover the cost of transporting the animals from Yellowstone to the Adirondacks.

Legge continued to paint the picture. Elk properly selected as to age and sex, and liberated in proper cover, of which there was an abundance in the Adirondacks, would increase 50 percent by the birth of calves in the spring, and would be doubled in numbers in two years, and would continue increasing in almost geometrical ratio for an indefinite number of years thereafter. The possibility of thoroughly stocking the Adirondacks with elk was dependent simply upon a reasonable number being introduced, and upon proper protection.

And as Legge was the Chief Game Protector heading up the State game protective force, it would be treason to foster for a moment any doubt concerning the adequacy of the measure of protection which would be thrown about the animals.

As the picture now was visualized, only two or three years—five at the most—remained until from the crest of every mount, hill, knoll and hummock in the Adirondacks would stand a bull elk bugling to its mate.

So enthusiastic did McGannon become that he insisted upon strictest secrecy until the elk arrived in the State, lest the Loyal Order of Moose learn of the undertaking and insist upon being permitted to embark on a similar project.

Legge also entertained fears as to what would happen if the Order of Red Men were to gain knowledge of what was in the making, and demand that Big White Father allow them to exercise their ancestral right to harvest the elk crop.

SUCH was the picture when McGannon emerged from the office of Legge to contact his State Association with respect to the elk restoration project in the Adirondacks.

Was Elkdom interested? No more generous people are there in the whole world than the members of Elkdom! The story is told of a visiting Elk in the Troy Lodge placing his hat on the magazine table instead of on the hat rack.

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and The Elk

Director, Division of Heads and Headaches

Incoming and outgoing brothers in less than an hour deposited in it several hundred dollars. So it was no surprise when McGannon reported back to the Commission with pledges aggregating a sum which suggested Elkdom might have in mind transporting a goodly part of Yellowstone Park, along with the elk.

Definitely settled that elk were to be restored to their haunts of yesteryear, little now remained but to request the permit and sit back and await the coming of spring when the animals would be produced, f.o.b. Adirondacks.

Going further, the Order of Elks in New York State passed resolutions condemning the killing of the animals and calling upon every member of the Order to exert his best moral influence for their protection.

This was followed by the Grand Lodge adopting a resolution calling upon all Elks to abandon the wearing of teeth. (Drastic measure.—Ed.)

Seldom a week passed during the winter that didn't find McGannon making a report to Legge of progress being made in selecting desirable specimens from the Yellowstone herds. And often did they sit through the day and far into the night, poring over maps, charts and sketches of the Adirondacks trying to decide where best to liberate the elk. The Commission was agog.

And so the winter passed.

CAME the spring. It was late. And so were the elk which were scheduled to arrive with it. But just when the agony of the Commission's anxiety was about to culminate in the frenzy of despair, the phone rang and a voice said: "The elk herd is assembled on location."

The speaker was the Elkateer who had accompanied the animals from Yellowstone. His lifetime had been spent in the Park. He even assumed to speak their language, and let it be known that those of his charges on the distaff side who were not enceinte were securely affianced. And so steeped was he in the geneology of the animals that he was able to trace the ancestry of one individual back to a stag killed by Chief Yellowstone, the redface for whom the park is named.

Came the day of liberation. A resplendent day of ineffable conservation glory. Fanned by the balmy zephyrs of spring, clothed in the gorgeous sheen of ever-blooming pines and vocal with the silver melodies of beautiful birds, the liberation ceremonies at last got under way.

The customary orations which accompany ceremonies having been completed, the elk were led into a clearing in the woods, and there released by the Elkateer with the biblical command—"Go ye forth, be fruitful and multiply!"

And with this admonition ringing in their ears, the elk sauntered into the fastness of the forests, stopping now and then only long enough to exhibit their frisky, coltish and youthful spirits and demonstrate their eagerness to get on with the plan at hand by translating into energetic action the scriptural adjuration contained in Genesis 1:22.

Time marches on! It is 1926. Ten years have elapsed since the elk were liberated. Several game technicians are dispatched to the Adirondacks to take an elk census. A most exhaustive search completed, they reported to the Commission: "Only elk found in the whole Adirondack region are members in good standing of Saranac Lake Lodge No. —."

The searchers even visited the scene of liberation in the hope that a clue could be unearthed which would throw some light on what had happened to the elk. None was found. The area seemed not to differ in any way from the surrounding terrain. Except that along a narrow strip which led for a considerable distance from the clearing, the grass appeared to be much greener than elsewhere and to grow more luxuriantly.

What became of the elk? Oh friends, I wouldn't know.

—JUSTIN T. MAHONEY

THE ELK—is dead

There are reports, however, which lead us to suspect there may be another live one in Essex County. If this is so, in order to forestall another Conservation Crime, be it known there is no open season on this elk.

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TROUT TENEMENTS

STREAM IMPROVEMENT is way beyond the experimental stage. Years of experience have shown that—given water of adequate quantity and quality—a barren and eroded stream can be transformed into a productive and well-controlled trout brook.

The improvement of small streams, such as shown in the accompanying photographs, involves no heavy equipment and very little expense, and is, therefore, an ideal project for individuals or clubs. In building any of the four structures described below, however, observe the following rules: (1) build during periods of low water—usually during late summer or early fall; (2) build so that your structure will stay put in high water, even floods; (3) use hemlock logs if available; if not, use other straight, durable material.

ROCK POOLS—If properly constructed, a rock pool can transform a barren stretch of water into ideal trout habitat. The pool shown in the photograph was man-made.

In constructing such a pool, nature provides the best example, and the pool when completed should be the closest possible reproduction of a natural one. Boulders should be placed so as to create a riff or pool in such spots as the stream bed suggests.

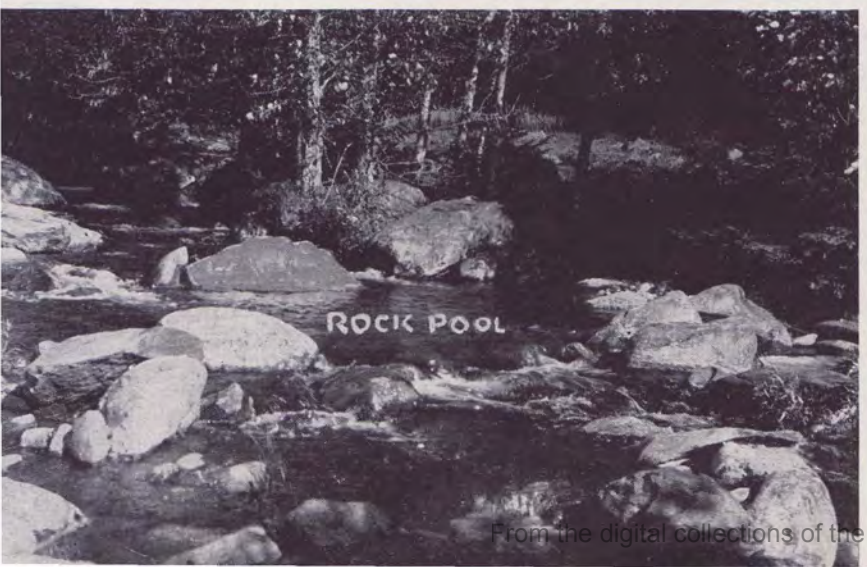
Short logs, (they are concealed by water in the photograph), are placed in the stream bed. They are fastened to the bottom by boring holes in the logs through which reinforcing rods are driven. The rods should then be driven into the stream bed as far as they will go, after which they should be bent back over the logs and cut off with a coldcut. Logs placed and anchored in this manner funnel the flow and control the water level of the pool, and at the same time provide cover for trout.

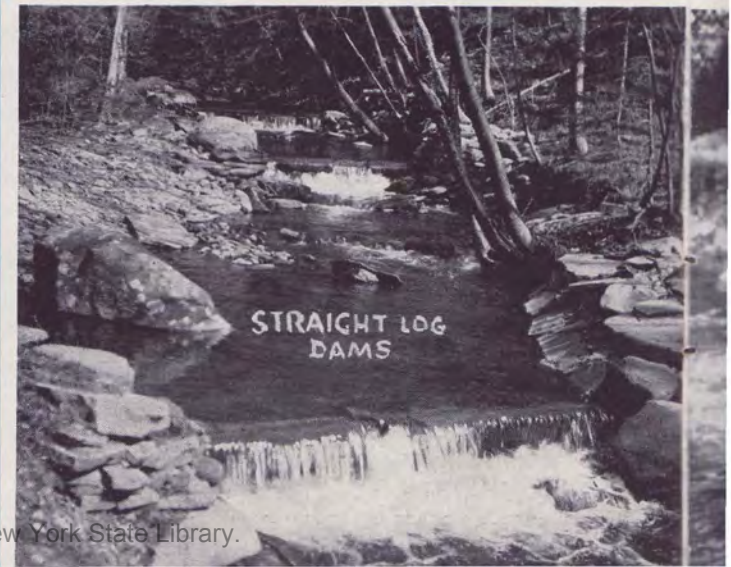
A gin pole, with block and tackle, is useful in moving large boulders. On a small stream, however, a crowbar will do all the work.

STRAIGHT LOG DAMS—These dams are particularly effective in small streams. In building them, advantage can often be taken of natural features (such as a rock ledge to which the base can be anchored). In all cases, however, certain fundamentals must be observed.

The dams should be built low and strong, and must be so constructed as not to impound much water, especially if the stream has periods of low water. The spillway should be designed for center flow. The base cribs, which direct the current and hold the ends of the logs, should be built twice as high as the flow crest. These cribs may be built of stone, as shown in the photograph, or of logs.

Straight dams of this type should never be built singly. When so built, the pool in front of the dam fills with silt and the pool under the dam, dug out by the water falling over the logs, will be taken over by a few cannibal trout. If the dams are built in series—say four of them spaced 100 feet apart—this will not happen.





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FROM EMPTY FLATS

Although seldom used for spawning, such a series of dams provides trout with excellent cover and feeding places. The spillways, however, must be so constructed that the fish can maneuver the dams even in low water. It follows that the number of logs used, and so the height of the dam, should depend upon the size of the stream. In a small stream, effective dams can be made with a single log.

V DAMS—The V Dam is the most important of all stream improvement structures. It provides food. It produces riffles. It provides locations for spawning beds at the lower ends of riffles. It makes its own pool It impounds little water. It has varied speeds of flow. There is no congregation of cannibalistic trout. It cannot be washed out.

As shown in the photograph, the apex, or point of the V, is upstream, so that it is necessary to have the ends of the logs that are anchored in the bank cribbing at least two feet higher than the apex. In other words, the dam not only points into the current; it also slopes toward the center.

The V itself is usually constructed with two logs. The logs should be sawed at such an angle that they fit neatly together to form the point of the V, and the upstream side of the logs should be faced—all the way to the bank cribbing—with shakes or planks. The base cribs on the banks (see photograph) should be well built and filled with stones.

The apron is an essential part of the V dam. Usually built of small logs and faced with planks, it is set into the point of the V on the downstream side. It is sloped according to the depth of the pool required below—the less the slope, the better the riffle.

V dams can be built singly, and as far apart as good pools are needed.

BANK PIER—The low, 2 or 3-log bank pier, usually built along a bend in the stream, prevents bank erosion and at the same time provides plenty of shade, cover, and water depth for fish. The number of logs used, and consequently the height of the pier, depends upon the maximum water level that can be expected in a particular stream.

It is essential that the base log be placed well down in the stream bed. The upstream and downstream ends of the cribbing should be built into the bank for a distance four times the width of the cribbing. Logs used as cross members to bind the structure into the bank should be cut off flush with the face of the cribbing, as shown in the photograph, so that the ends will not snag debris in high water.

A rock fill should be made behind the logs, level with the top of the structure, and the bank retained by the cribbing should be planted with willows. These willows should be planted deep enough to reach moist soil, and the stems should be at least seven feet tall to prevent the tops from being eaten by cattle. If no cattle are about, use lower cuttings. The Brittle Willow (salix fragilis) is best for stream improvement work.

—Emerson James, Supervisor of Fish Management

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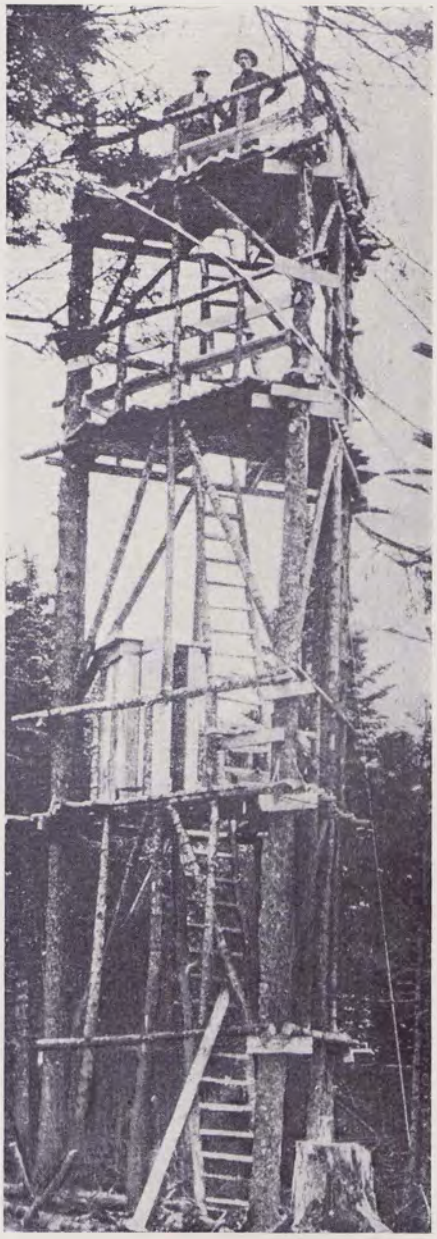


Fire tower, 1903

by

HARRY W. HICKS

Mr. Hicks, who has lived in Lake Placid for many years, knows the North Country as well as any man alive. He also knows—from bitter experience—what fire can do to it.

Although the fires which Mr. Hicks describes occurred in the spring, the article which he has contributed is a forceful reminder that the fall fire season, potentially as dangerous, is now at hand.

GREAT FIRES

IN the year 1903, forest fires burned over approximately 600,000 acres of land in the Adirondacks. This was the worst holocaust of its kind in the history of the State.

Cinders fell in Albany, 150 miles away from the chief fire center of Lake Placid. It has been reported that smoke from the Adirondacks caused concern in Washington, D. C. Darkness like that of an eclipse of the sun fell on northern New York, and consternation and panic seized upon the populations of many villages and isolated communities in the mountains.

In many places every able-bodied man was repeatedly called into fire fighting service. A few population centers were completely surrounded by conflagrations threatening home and hearth, and many families, carrying what they could, fled before the inferno. In the main, however, each community organized for self-preservation and fought it out with the elements in long and bitter battle.

The unpopulated areas? Like tinder these unprotected forest zones became unchecked roaring infernos of flame and smoke until there was nothing left to burn, or until in early June Nature came to the rescue with long-deferred rains.

North to south, fires burned from Malone to Mayville. East to west, they burned from Elizabethtown to Carthage. Passengers arriving in Lake Placid via the Delaware and Hudson Railroad reported that the whole country to the north, from Dannemora to Saranac Lake, was in flames.

The fire zone was not limited to one area, as many fires raged in widely separated sections. The Webb estate on the south was hard hit, as were the Rockefeller and Whitney holdings. The region of Tupper Lake in the west, and all intervening sections almost to the shores of Lake Champlain and Lake George, were likewise afflicted. In the vicinity of Keene Valley a fierce battle was fought with a fire that swept northward from North Hudson, burning all of the peak of Noonmark enroute.

This blaze threatened Keene Heights (now called St. Huberts). Keene and Keene Valley were also in the danger zone, and the people of these towns fought for the lives of their beautiful communities. On May 8 The Adirondack Record (published in Ausable Forks) listed fires as burning in Lake Placid, Saranac Lake, Bloomingdale, Blue Ridge, Lewis, Clintonville, Ausable Forks, Port Henry, Olmsteadville, Newcomb, and Schroon Lake. And on Friday, May 29, The Record carried an article which began: "Our country people are beginning to wonder for what particular sins of theirs they are being punished at the present time. They are studying up Bible history to find which of the plagues of Egypt they may expect next."

The Lake Placid area was one of the hottest centers of the 1903 fires. Charles Wood, then as now cruiser for the J & J Rogers Company, gives the facts. Starting at Tableland Farm, fires raged southward about five miles to Heart Lake, and southeast to South Meadows, and on up into the Klondyke. In this last remote region a cache of dynamite had been stored for lumbering purposes. Proof of the southeast boundary of this particular fire is that this dynamite was exploded on June 3, the culminating day of the battle.

Both Mr. Wood and Mr. Walter Goff, of Cascadeville, confirm the reports that the turning point came on June 3. They also testify that it was on this day that the fire swept from Keene through Cascade Pass, and on past Cascadeville to the west. Here it merged with another fire that roared down from Scott Mt. (now named Van Hoevenberg), and with still another that burned from Tableland Farm south to Mt. Jo and Heart Lake. This fire ended in the destruction of Adirondack Lodge, resort home of Henry Van Hoevenberg and the largest and most beautiful log structure in America.

AT Adirondack Lodge, so they say, Henry Van Hoevenberg was so frantic at the prospect of losing his building that he drew up a chair in front of the fireplace in the great living room, pistol in hand and rifle across his knees, and declared that rather than leave, he would go down with his house of logs. His chief aide tried to argue him into a state of normal reason, but at first failed. Then he announced that if Van Hoevenberg would not flee to safety, neither would he, and so a second chair was drawn up to the fireplace.

From the digital collections of the New York State Library.

OF 1903

This action is reported to have brought Van Hoevenberg to his senses. Taking his latest patents constructed of metal, along with his silverware and other valuable possessions, he submerged them in Heart Lake, and then he and his aide fled along the shore of the lake toward Indian Pass. Several hours later they heard the crash of the high tower of the Lodge as it fell in flames.

Walter Goff, 15, drove a team in the very nick of time to Cascade Lakes Hotel to rescue Mrs. Weston and her daughters. Happily the fire swept around the clearing on which the hotel was built, but it raged over the southern slopes of Pitchoff (properly called Keene Mt.), and burned all of Cascade Mt. and large sections of Porter Mt.

MR. GOFF tells how he fought the fires. His father ordered out 300 sap buckets from their sugar bush, filled them with water, and distributed them around his farm. Thus every newly-started fire was within easy distance of at least a bucketful of water. Walter recounts how large cinders, or flaming pieces of birchbark, leaving trails of fire and smoke behind them, sailed through the air like rockets, each capable of starting a new fire.

All eye-witnesses, including Henry Willis, Henry Lacy, Frank Randall, Jesse Martin, Perry and Joe Call, Morton Peacock, Dr. Godfrey Dewey, and Katherine Jones, speak of the terrifying noise created by the raging wind and fire, especially when it jumped from one treetop to another. Many witnesses reported that the roads in the vicinity of Lake Placid were filled with rabbits, porcupines, and deer, seeking refuge.

The manager of the Webb estate was reported in the June 12 issue of The Adirondack Record as having invited Carl E. Meyers to bring his "explosive balloon" to that area, to attempt artificial precipitation of rain. There was no report that Mr. Meyers accommodated the manager.

The Record also tells a story of a man named Washington Chase, whose marriage was scheduled to take place at the Caughnawaga Club Camp. The groom, however, was out on fire fighting duty. The bride and minister sent word that they were ready for the ceremony, and to report forthwith, but Chase sent back the message: "No time to be botherin' with wimmin folk." A providential rain shower, however, relieved the groom of his fire fighting duties, and he finally appeared for the wedding.

Walter Goff kept a diary in which his first record of fire fighting assignment appeared on April 27. Similar entries throughout May and well into June show that in the Lake Placid area, fires burned during a period of about six weeks. This is confirmed by Dr. Godfrey Dewey, on the basis of facts given him by Henry Van Hoevenberg. 250 men dug a trench completely around St. Huberts, and 300 more were called out to save the town of Lake Placid.

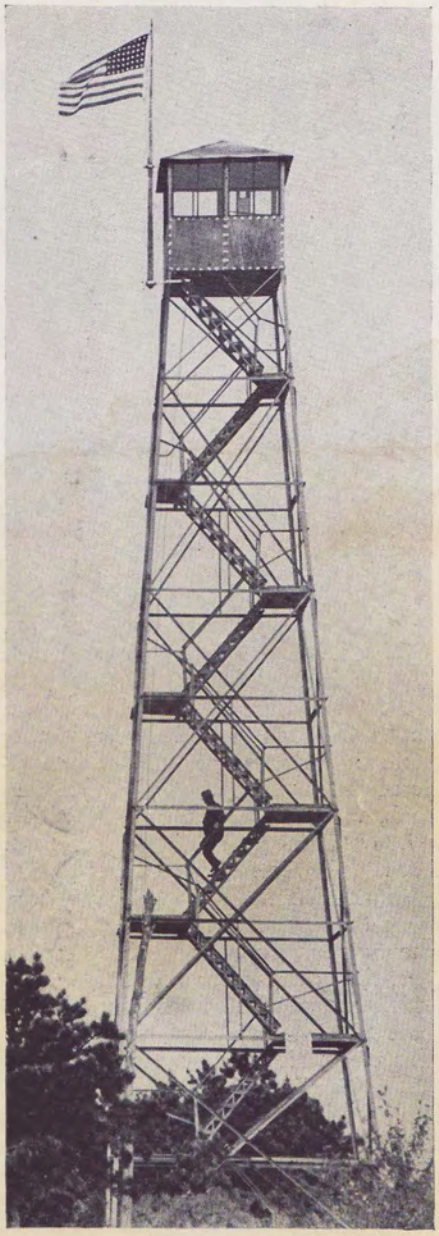
Charles Wood states that for years before the Cascade fire, a pair of fish hawks had nested and reared their young near the Lower Lake. They were favorites with the patrons of the Cascade House. During the great fire the hawks circled over the lake with loud and protesting cries, and then disappeared never to return.

How did these fires start? It must not be forgotten that for 72 days there had been no rain, the last moisture having been provided by the disappearing snows in late March. In 1903, as now, the period of spring preceding the fresh green growth of ground cover was highly dangerous, due to the layer of dry vegetation remaining from the previous autumn. Conditions were "made to order" for forest fires.

One of the many individual fires was due to the foreman of a crew which was burning stumps on Tableland Farm. Others were no doubt the result of unextinguished camp fires. Many more were attributed to sparks spread by railroad locomotives, and it is stated by some persons who were consulted in the preparation of this article that fires were sometimes started deliberately, so as to induce employment—at two dollars a day—to fight them.

In 1903 the system of fire prevention was relatively undeveloped as compared with present protective measures. Nevertheless, the experience of that year may well serve as a text on which to base an appeal to all users of the forested areas of New York: Be careful with fire!

A few years ago the late Jim Hopkins,



Fire tower, 1947

District Ranger of the Conservation Department located in Saranac Lake, stated that in 14 days 93 forest fires were extinguished, of which over 80 were on the roadside. This simply spells the guilt of the smoker who flips his unextinguished stub out the window as he drives along.

No torment meted out in hottest Hades is too awful a punishment for the careless smoker, camper, hunter, fisherman, lumberman or motorist who takes chances with fire. We have learned much as a result of what happened in 1903; since then our fire detection and fire fighting organizations have been modernized and greatly expanded. But no matter how effective these organizations, we can never afford to be careless with fire.

What happened in 1903 could happen again. We must see that it doesn't.

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BEAR MT.

New York has 77 State Parks. The Bear Mountain and Harriman Parks, in the Palisades Region, are only two of them. But year after year, and all year round, these twin playgrounds and educational centers have drawn visitors from all over the world

THE Conservation Department's Division of Parks has under its supervision 77 State Parks—far more than are found in any other state in the Union. They're scattered from Niagara Falls to Montauk, and range in size from Allegany's 57,837 acres down to six acres for Sacket's Harbor. The recreational and educational facilities they offer vary from park to park, but it will be hard to mention any form of outdoor activity that the system as a whole doesn't provide. Last year, 20 million people discovered that fact for themselves, and this year there will be more.

Of this 20 million, more than 1,579,000 checked through the turnstiles of the Bear Mountain-Harriman Parks of the Palisades Park Region. Here, only a few miles from New York City, they found two of the finest and most diversified parks in the State.

A little over 37 years ago, the New York State Prison Commission was planning to transfer Sing Sing Prison to Bear Mountain. Public opinion was aroused, as the establishment of a prison on the highlands above the Hudson River Gorge would have been a desecration not only of scenic and recreational values, but of historical traditions as well. For it was on this highland terrace that the militia of Orange and Putnam counties defended Fort Clinton and Fort Montgomery in October, 1777, against the British, to be driven out only by overwhelming numbers and after a bloody battle.

Gift to the State

In the year 1910 Mrs. Mary W. Harriman, in an act of philanthropy without parallel up to that time, offered to the State 10,000 acres of this highland area, to be held forever as a State park. Certain conditions were proposed, one of which was that "the State discontinue the work on Bear Mountain Prison site and locate the prison elsewhere." The project to move the prison was abandoned.

During the following years, lands were acquired between the Harriman tract and the Hudson River to round out the preserve until, to date, the Bear Mountain-Harriman Section extends 17 miles southwest from Bear Mountain nearly to Tuxedo and Sloatsburg. It is approximately eight miles wide in the section between the front of the Highlands and the Ramapos, on a line between Dunderburg Mountain and Suffern.

After the property had been acquired, a detailed study of the forest land revealed that it was in poor shape as a result of over-cutting, fires, and the chestnut blight. A thinning and reforestation project was accordingly initiated, and this has resulted in great improvement of the hardwood and mixed natural stands.

There followed a wildlife restoration project. Beaver, which for many years had been extinct in the area, were introduced in the spring of 1919, and they have flourished since that time. In the swamps and ponds created by the dams they built, aquatic plants such as wild rice and celery have been planted, with the result that the lowland areas of the park now offer a haven for wildlife of many species.

The Trailside Museum is popular with all ages

Conservation Education

The Park Commission also launched an extensive educational program. The nucleus of this program is the famous Trailside Museum, completed in 1924 and operated in cooperation with the American Museum of Natural History and the New York Zoological Society. Although the Museum also houses exhibits of a biological, geological, and historical nature, the most popular section has always been the zoological exhibit. Here are found

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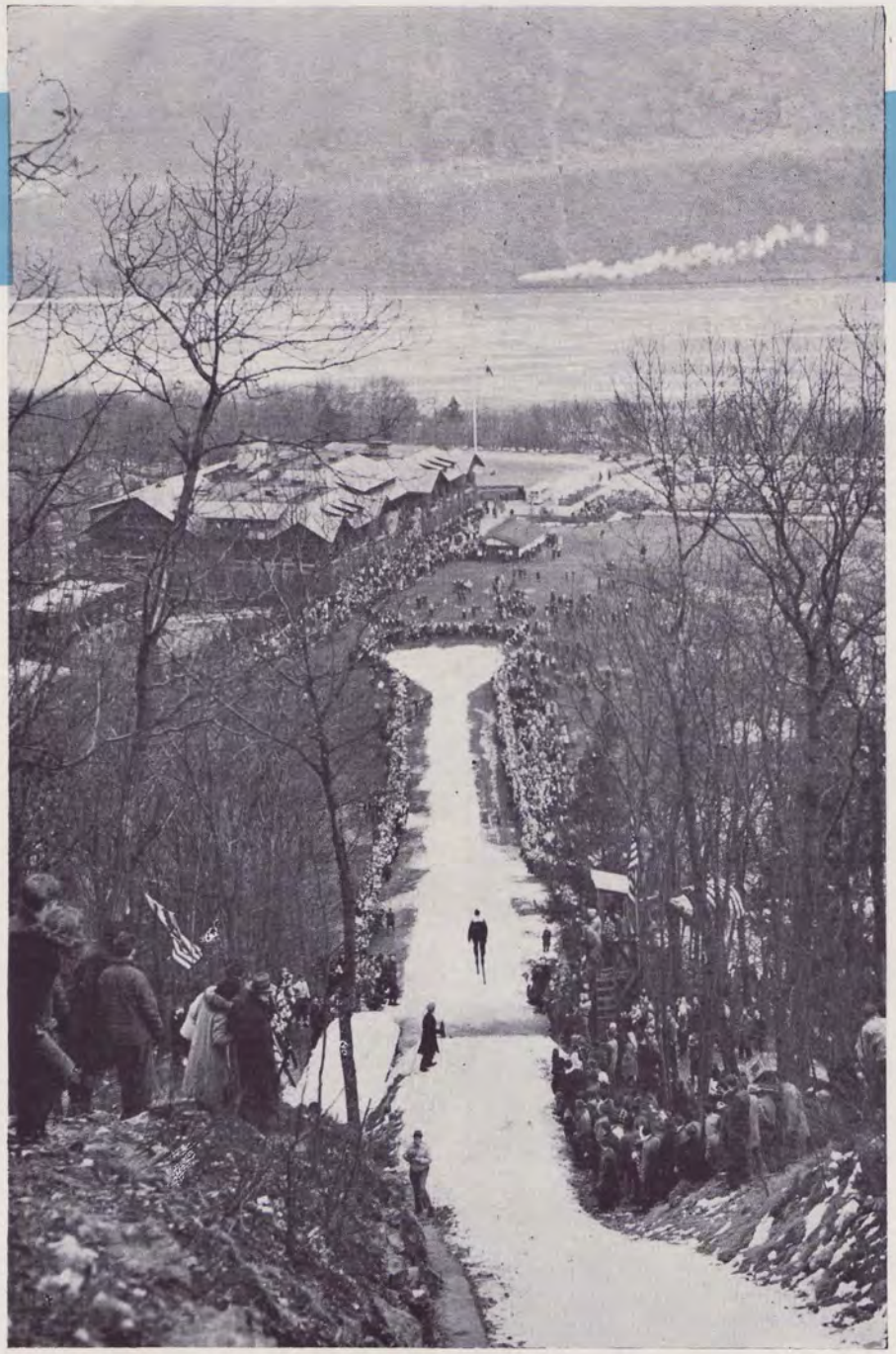
PARK



It's a year-round park. Hudson River and the Inn in background

live animals indigenous to the surrounding country—black bear, deer, beaver, raccoon, skunk, fox, woodchuck, hawks and owls, and snakes.

There are also five Regional Nature Museums in the Bear Mountain-Harriman Section. Each museum is directed by a staff of two persons chosen for their background and training in conservation and the natural sciences. They instruct visitors and campers in the identification and care of the flora and fauna in the Park, and conduct informal discussions and illustrated talks on wildlife subjects.

Plenty to See and Do

Another educational and recreational feature is found in the many miles of nature trails maintained by the Park attendants. Along these trails at convenient and attractive places are located overnight shelters to meet the needs of the hiker, and near each shelter there are fireplaces, adequate sanitary facilities, and tested drinking water. The hiking tradition is of long standing in the Park area. During the Revolutionary War, Washington and his army crossed the region many times on foot, and there is still evidence of the skirmishes they fought.

In addition to the foot trails, there are many drives from which the motorist can view the Hudson Highlands and the Ramapo Mountains. One of the best known of these is the Seven Lakes Drive, which winds among the hills past the seven artificial and natural lakes which give it its name.

These lakes, and many others in the Park, are centers of activity. At Lakes Tiorati and Sebago there are sandy beaches, bathhouses, picnic groves, refreshment stands, and parking and play areas. At Lake Kanawauke there is a tennis court and roller skating rink. Approximately 80 different organizations rent camps at the various lakes, where, during a single season, as many as 60,000 persons have participated in athletics, dramatics, music, crafts, nature study, and fishing.

At Bear Mountain proper one finds a year-round recreational center. The Bear Mountain Inn, built of native stone and chestnut logs, provides comfortable accommodations and excellent food. Other facilities include a swimming pool in a natural wooded ravine, boating on beautiful Hessian Lake, and a playground adjacent to the Inn where baseball, football, and organized group games can be played. There are also picnic groves, a children's playfield, amusements, and several miles of trails for horseback riders.

In the winter, visitors enjoy skiing, ice skating, and tobogganing. Gentle slopes are available for novice skiers both at Bear Mountain and at the newly developed Old Silver Mine Ski Center, about five miles from the Inn. There are also ski jumping tournaments, skating races and exhibitions, and hockey games.

It will be seen, then, that the Bear Mountain and Harriman Parks in the Palisades Park Region are year-round playgrounds and educational centers for the people of this and many other states. Their steady popularity is a tribute not only to the Parks, but also to the millions of people who enjoy their beauty without defacing it. We want them to come back year after year, and a lot of them do.—HENRY JAMES, Administrative Executive.

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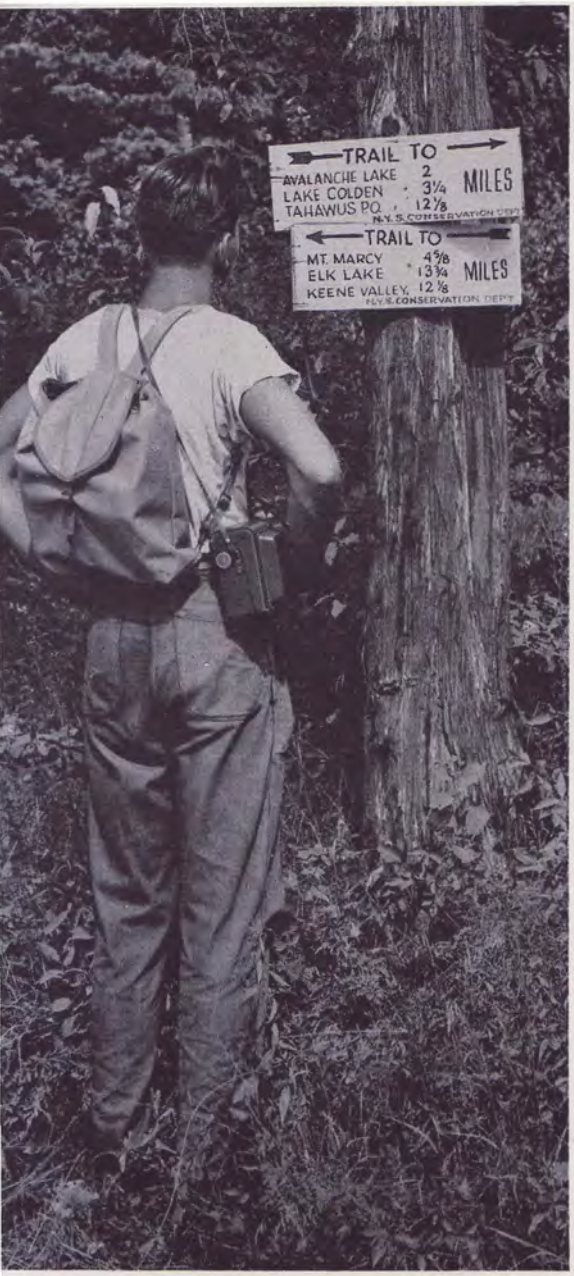

TRAILS for

APART from its wilderness character, the charm of the Adirondack High Peak area, which makes it distinctive among all other mountain regions in the northeastern United States, is the great variety of shapes its mountains take. No two are alike. Each one of the great range summits—Wolf Jaws, Armstrong, Gothics, Saddleback, Basin, Haystack, Colden, MacIntyre, Marcy—cuts its own peculiar silhouette on the immense Adirondack skyline.

Threading their way to and among these peaks are approximately 100 miles of foot trails, along which are scattered 35 Adirondack lean-tos for overnight shelter. These trails, along with 500 additional miles outside the High Peak area, are maintained by this Department's Bureau of Camps and Trails.

In this article we will do what thousands of tired but happy hikers have done in the past few years: we will take the trail from Heart Lake through Avalanche Pass to Lake Colden, and come back through Indian Pass. We will walk 20 miles in three days, and climb 2,000 feet. Ready?

The trip begins on private property, at the automobile parking lot at Adirondack Loj on Heart Lake, nine miles south of Lake Placid village. It will be well to plan an early start. The trail is indicated by the Conservation Department's round blue discs nailed to trees, but after half a mile, a trail with yellow markers turns right and leads to the MacIntyre range. Continuing on the blue trail, level going through nice woods brings us after two miles to Marcy Dam, where three lean-tos and a campsite caretaker are located. All hikers are urged to register here. At Marcy Dam, the blue trail, known as the Van Hoevenberg trail to Marcy, continues straight ahead, but hikers headed for Avalanche Pass turn right on a yellow disc trail. If the hiker reaches Adirondack Loj by three o'clock, Marcy Dam is a good place to spend the night.

Along the Avalanche Pass-Indian Pass trail, the Conservation Department's Bureau of Camps and Trails maintains 19 Adirondack lean-tos for transient hikers, policed by trail Rangers stationed at Marcy Dam and at Lake Colden. Usually each lean-to will have a generous supply of balsam boughs for bedding and a small supply of firewood.

So here we are at Marcy Dam, with four and five thousand-foot peaks in all directions except to the northeast. At four o'clock the sun is just about tipping Wright Peak. Little Marcy Dam Pond has hardly a ripple. The caretaker, a tall lanky young man named Stan Heidenreich, saunters by and watches and talks as the fire is started.

A powerful twilight prevails. The last rays of the sun slanting off the MacIntyre range hit the top of old Phelps Mountain to the southeast. Cooking, eating and dishwashing finished, we rest on the deacon seat in front of a cheerful campfire. The food has been packed in a bag and hung up out of reach of wandering porcupines and thieving raccoons. An enormous quiet covers everything.

It gets dark, and we edge closer to the fire as the mountain chill settles down. At eight thirty a hiker comes swinging down the Marcy trail. We like his looks and invite him to spread his blanket in our lean-to, and soon new friendships are formed. As the embers glow we crawl into our blankets, first making ready a pile of shavings for a quick start on breakfast.

The rising sun—breaking in brilliance over the Keene Valley ranges and slanting its long rays all the way across the long south meadows right to our feet—wakes us up about six, but is soon lost in the mists rising all about us. A cool night and misty morning presage a good day. We eat, pack up, clean up, cut some dry fire wood for the next comer, consult the map in the Department's Trails to Marcy Circular, heave on our packs and start out on the yellow trail.

The trail, level and soft and wet in places, follows the banks of Marcy Brook. After a bit over a mile from last night's resting place we pass the two Avalanche lean-tos. Beyond is the headwall of the Avalanche Pass. It looks tough. It is. Two hikers on their way out call it "Misery Hill" and we soon discover why: that hill goes straight up. Up we go.

WE are now in a narrow, rock-lined defile lying between Mt. Colden and Avalanche Mountain (some call it Caribou). Big spruces and balsams line the trail, which winds snakelike between big boulders. After a quarter of a mile of this we reach the head of Avalanche Lake in a slightly wider part of the Pass. The sheer rock sides of Colden, glistening in the sun, rise out of the lake on the southeast side and on the opposite side the equally precipitous walls of Avalanche Mountain disappear into a cloud. We wonder how we can get through this wild defile which shows scant foothold. But the trail markers beckon us on and we are soon crawling under bigger boulders and walking on catwalks over the water alongside the cliff.

The last of these catwalks is known as "Hitch Up, Matilda." In early days the way past this cliff was over a moored raft which settled in the water when traversed. A guide had a city lady on his back and when the raft settled more than usual he called out, "Hitch Up, Matilda, and keep your feet dry."

We are now on the Hudson watershed. The yellow trail follows the out-

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TRAMPERS

let to Colden, where it swings left at a lean-to around the southeast shore. We take the blue trail along the northwest shore because we wish to see the Colden Ranger Cabin, built by State Rangers and pronounced as fine a piece of axe craft as exists anywhere. This cabin is presided over by genial Forest Ranger Ernest Hamner, who makes all hikers feel like honored guests and who sees to it that they are bedded down in the best available lean-to. There are 10 of them.

Across from the cabin a red-marked trail ascends Colden. Lake Colden is so unusually beautiful that we are a bit bewildered by it all. Ranger Hamner, pointing it all out, takes it for granted we wish to spend the night and sends us to a beautiful spot across the dam at Colden outlet on the Opalescent River. More peace and quiet.

Next morning after the usual chores we explore the Opalescent. In an open glade where the slanting sun rays hit the water, a fiery opal flashes. Curious, we seek its source and fish out of the brook a small smooth pebble of a dull blue color. In the water, however, with the sun at the right angle, its hidden fires come to life. It is a Labradorite pebble, polished to a nicety to bring out its opalescent hue.

Reluctantly we get on our way, cross the dam at Colden outlet, and follow a red-marked trail to the Flowed Lands, another outstanding beauty spot. This little mountain-begirt pond has two outlets, via the Opalescent and via Calamity Brook. At Calamity Landing we doff packs and really skip down the red-marked trail to see Hanging Spear Falls. It takes an hour for this trip. Then we don our packs and follow the blue markers down Calamity Brook, to tiny Calamity Pond and the Henderson monument. This monument in the wilderness was erected to the memory of David Henderson, discoverer of Tahawus iron ore, who lost his life here over 100 years ago in a shooting accident.

Our course is now down hill, alongside the tumbling brook to the lowlands where we swing north, still on the blue markers around the southwest end of the MacIntyre range. We eat a late lunch at an old shanty clearing on Indian Pass Brook.

We waste no time, for we are eager for the adventure ahead—the trip through Indian Pass, "Ot-ne-yar-heh" of the Indians, or "Stone Giants." At this point we join a red trail. This trail goes west and then north into the wild Cold River country of the hermit, Noah John Rondeau. Our direction is northeast and slightly up-grade through a dense, cold forest, the habitat of sub-arctic flora and the rare Broun's holly fern. Near the headwall stands the Indian Pass lean-to.

The trail up the headwall is rough and steep, over jagged rocks, slippery ledges and sprawling roots, but the scenery is the most awesome the mountains have to offer. As we climb we look down into a chasm filled with boulders larger than houses. Soon we are winding our way between other boulders, and as we top the last rise the sudden chill in the air is similar to the experience of walking into an ice house. And that, literally, is what we are doing. In crevices under the boulders, covered by several inches of duff, is blue ice that seems to be the last remnant of the ice cap that once covered this entire area.

About halfway across the headwall, a path leads left to the flat top of a boulder that is larger than a modern office building. We pause here, and gaze at the 1,300-foot sheer cliff of Wallface Mountain, said to be the highest rock wall east of the Rockies. The view to the west down the narrow gorge is of a succession of ranges rising one above the other and topped by old Santanoni. As we watch, a low flying cloud, swirling through the pass, blots out parts of Wallface cliff, giving an eerie ghost-like effect. No wonder the Indians thought the place haunted!

At four o'clock we reluctantly don our packs and start the five mile trek downhill, back to Adirondack Loj where bed and board await us. As we start down the northeast headwall we leave the Hudson watershed and follow the headwaters of the Ausable River, which, after much meandering and tumbling, reaches the Atlantic via the Gulf of St. Lawrence.

What a trip! Why go west, young man?

—A. T. SHOREY
Campsite Inspector

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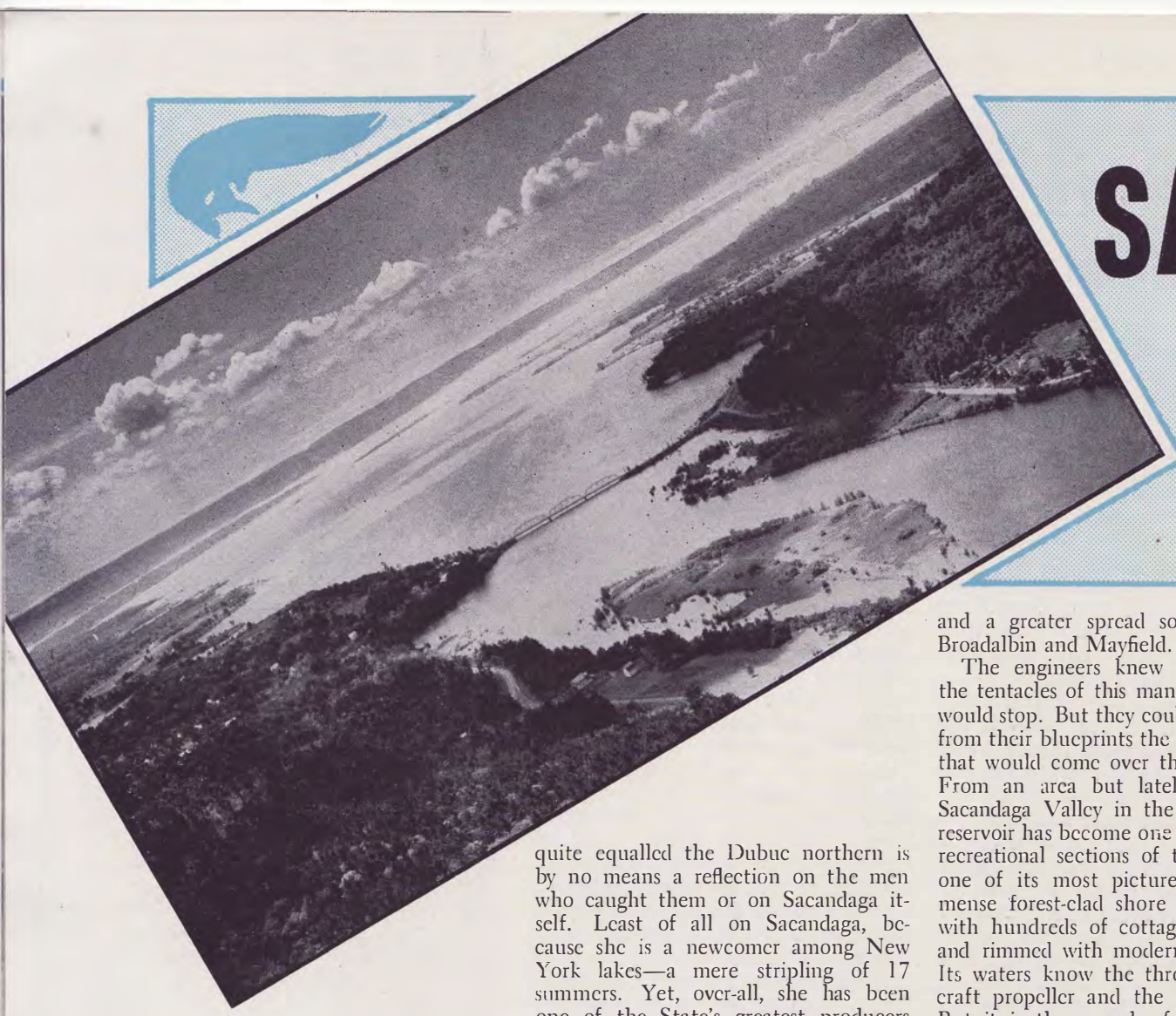

SACAN

A MAN-MA
FOR RECC

THE NAME of an individual isn't often important to an article descriptive of New York's lakes, but in this treatise on Sacandaga the name of Peter Dubuc is a "must." For, whereas a bunch of engineers and a dam put Sacandaga on the map, Mr. Dubuc, who is a fisherman, put it in the public eye for all time.

He did this in June, 1940, by taking from Sacandaga (a place more or less modestly known in New York angling circles up to that time) a great northern pike which set a world's record for the species and one which still stands. Two years later, to clinch his reputation (and the lake's), he caught a 10 lb. 6 oz. largemouth bass which is tied for State honors.

The pike weighed 46 lbs. 2 ozs. It got its picture in the papers, won a lot of fishing tackle for Mr. Dubuc in a national contest, and sent anglers by the hundreds scurrying to Sacandaga to catch its big brother. Some have since come close. In 1946 a chap named Arthur Klein nabbed one weighing 35; the preceding year, Herbert Orton took one 32 lbs. 4 ozs. And fish in the 20-pound class have been a dime a dozen.

The fact that none of these catches quite equalled the Dubuc northern is by no means a reflection on the men who caught them or on Sacandaga itself. Least of all on Sacandaga, because she is a newcomer among New York lakes—a mere stripling of 17 summers. Yet, over-all, she has been one of the State's greatest producers of game fish.

Sacandaga was born at 2:30 p.m., March 27, 1930, when the board of the Hudson River Regulating District closed the gates on a 115-foot dam at Conklingville, Saratoga County, which was ultimately to turn Sacandaga River into a reservoir of more than 40 square miles of water with a shore line of 125.

The purpose of this vast reservoir was to prevent further flood damage in the valley of the Hudson River, of which the Sacandaga is one of the main tributaries. Its creation involved clearing a valley floor of 29,000 acres of forest and brush and relocation of 44 miles of road. During the job—which required three years' labor—three small villages and parts of 11 other hamlets were moved bodily beyond the prospective water level, along with 22 cemeteries that were replaced *in toto*.

As the waters backed up, the newly-created lake formed an irregular "Y" affecting parts of three counties, scores of tributaries of the original river, and a vast tract of marsh known as the Vlaie—now lying many feet below the reservoir surface. There was an inexorable creeping of water levels from Conklingville to Northville (see map) and a greater spread south as far as Broadalbin and Mayfield.

The engineers knew exactly where the tentacles of this man-made octopus would stop. But they could not visualize from their blueprints the further change that would come over the valley itself. From an area but lately agricultural, Sacandaga Valley in the region of the reservoir has become one of the liveliest recreational sections of the State, and one of its most picturesque. Its immense forest-clad shore line is dotted with hundreds of cottages and resorts and rimmed with modern scenic roads. Its waters know the throb of pleasure craft propeller and the swish of sails. But it is the squeak of oar-locks that more readily marks Sacandaga, coupled with the fact that a man can catch a walleye in what was once a village street, or snake a great northern out of some long defunct petunia bed.

As Sacandaga grew from a river to a reservoir a great change took place in the fish life of its watershed. Species once confined to small streams, back bays and marsh suddenly found themselves with thousands of acres of newly-rich water at their disposal. The soil of the flooded lands provided a wealth of organic material for the production of forage fish and, consequently, the meat-eating species thrived and multiplied phenomenally.

For the most part these were pike. It is believed they came originally from the previously mentioned Vlaie, where they had been largely inaccessible to anglers. When rising waters inundated this tract the hatch of pike fry of that

NEXT I
LAKE CHA

From the digital collections of the New York State Library.

NDAGA

ADE HOME
CORD FISH

season fanned out to all parts of the reservoir, with a resulting high rate of survival. They grew rapidly and, soon after, began to appear in great numbers on fishermen's stringers. There were literally tons of pike taken from the reservoir each year for nearly a decade and most of them were big.

Unfortunately, that does not hold today. There are still plenty of pike to be caught, but the original gold rush is over. Like all newly-formed lakes, once the original fertility has worn off, Sacandaga is now in the process of stabilizing herself—a job made difficult, incidentally, by a fluctuating water level which sometimes amounts to as much as 30 feet when the Conklingville power gates are opened. There is a limitation, however, that between May 1 and Labor Day the lake level may be lowered no more than 15 feet, and abundant rains of the current season have today filled the reservoir to a level which compensates for even that depreciation.

The Conservation Department contemplated the change that would inevitably occur in Sacandaga's pike population as the lake grew up, and stepped in early to fill the gap with other warm-water species. The first plant was made as early as 1933, when a million walleye fry were released. Subsequently, since 1938, there have been a million and a half of these midgets stocked annually by the Department.

Smallmouth bass were listed as fairly common when the Department made its surveys of Sacandaga in 1931 and '32, and have since been supplemented by six annual plants. Pickerel were as plentiful as pike and are still taken in good numbers. Largemouth bass, also native to the watershed, have done well and today provide considerable fishing. In addition to Mr. Dubuc's State record fish, there have been many catches over seven pounds.

Northern pike can be taken in any part of the reservoir, but the man who leans to walleyes and bass will probably do best in the Northville-Mayfield-Broadalbin triangle and at Batchellerville Bridge. Particular "hot spots" for walleyes include Northville Bridge, Cranberry Creek, and the spillway from Hunter's Creek ponds at Northville. For that matter, the natives will tell you that any spot on Sacandaga can be depended on to produce fish—not in the numbers it did up to five years ago, but still enough to make Sacandaga one of the more popular lakes in the North Country.

One of Sacandaga's most encouraging features is that facilities for visiting firemen are nearly as abundant as places to fish. Boat liveries, tourist cabins, picnic grounds, bait shops and eateries are numerous. A partial listing of these spots follows:

West side: Aldrich Farms, Town of Day, boats and lodging; Timberline Lodge, Edinburg, meals and lodging; at Northville, Eddie's boat livery, Arnold's livery and cabins, and the Northville Hotel; at Cranberry Creek, Carr's livery and cabins and Wojeski's livery and bait shop.

East side: Broadalbin livery and bait shop; same at Northampton. At Batchellerville Bridge, east side, Batchellerville Lodge provides boats and bait. At the west end of the bridge there are cabins, a pleasantly located trailer park and a boat livery.

There are few spots on Sacandaga that are not accessible by car, and it is worth anyone's while to take time out for a trip around the entire lake. Best approach from the east is Route 29 from Saratoga Springs to Broadalbin, thence to Batchellerville, Hadley and Conklingville Dam via South Shore Road. From the west, take Route 148 from Gloversville to Mayfield, thence to Northville, Edinburg and the dam via the Sacandaga Trail. If traveling by train, take the main line of the New York Central to Fonda and bus to Northville.

Whichever way, make darned sure you start for Sacandaga Reservoir. There's another Sacandaga Lake (the original) lying off to the northwest. It's a nice lake, and all that, but it ain't the place where Peter Dubuc caught that world's record pike.—Bob Bush

T ISSUE
HAMPLAIN

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FIRST AID
for
PHEASANTS and DUCKS

A report on efforts of the State Game Farms to revive New York's ailing game-bird populations.

THIS YEAR'S RECORD PRODUCTION

274,360 pheasant chicks hatched
100,625 sent to cooperators
80,000 mature pheasants distributed
10,000 pheasant breeders held
3,598 ducklings hatched

EVERYONE knows by now that pheasant and duck populations all over the country are pretty sick. They're desperately in need of "the Doctor" who is none other than old Dame Nature. But Doc seems to have been too busy to give these birds a break the last few years. So it's up to mere mortals to apply what first aid they know to relieve the patient until the Doctor gets around to lend a helping hand.

That's what the Department's game farms have been doing on an increasing scale. With the life expectancy of a game bird in the wild about a year and a half, new birds must be produced each season if there are to be breeders left for the following year. With nature failing to provide favorable breeding weather over the last five years, the first "first aid" needed is production of young birds to help overcome the loss. Therefore, game farms and artificial propagation must provide treatment until a better remedy is found. The search for such a remedy has been on for some time.

PHEASANTS—This year a record production goal was set The weather tried to throw a monkey wrench into the machinery in the form of floods, cold waves and other unfavorable factors, while pheasant-egg shortages cut into the program from every angle.

Despite all the obstacles, the goal of 100,000 day-old chicks shipped to cooperating sportsmen's and 4-H Clubs was reached and passed. The final figure was 100,625, an increase of 27,331 over last year's all-time high of 72,294.

Now the game farms are battling toward the final goal —an all-time record production of birds for distribution across New York State. In spite of all the difficulties encountered, not less than 80,000 pheasants, ranging from a minimum of 10 weeks of age to mature birds, will be stocked this year, while 10,000 more will be held over as breeders for next season.

Requests for day-old chicks rather than for eggs, especially from the 4-H Club cooperators, reduced the number of eggs distributed this year. The 4-H Club officials believe that the Department incubators get a higher percentage of hatch than the youngsters do using brood hens. Some of the day-old chicks, instead of the eggs, are put under the hens for rearing while others are cared for in brooders.

This method has been used at the John A. White Memorial Game Farm with very satisfactory results.

DUCKS—The rapidity with which ducks took a nose dive from a high population to a dangerously low one caught almost everybody by surprise. At the first indication that something was drastically wrong with waterfowl, the Department set in motion experiments on how to raise wild mallards, and at the same time initiated other measures that would aid these amphibians in increasing their population in suitable waterfowl regions in this State.

These experiments are being pushed as fast as possible. Primary problems are to get a supply of wild-strain mallard breeders and to evolve efficient incubating and hatching techniques. Some of the projects are being conducted through cooperative efforts with such organizations as the Northeastern Waterfowl Association and other sportsmen's groups in good waterfowl areas.

This year, 3,598 ducklings were hatched at the game farms. Of these, with luck, approximately 3,000 should be raised. With improved breeding stock and better incubation techniques, the goal is a substantial production of ducks from the available facilities for future stocking.

—FRED EVERETT

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The INSIDE on the OUTDOORS

by Clayt Seagears

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Game Protector

A tough life but a good one, according to Bryan Burgin

WHAT kind of a story does one of our Game Protectors have to tell? What are his experiences, his gripes, his program? What's his position in his community. To find out, the *Conservationist* picked at random a fellow who happens to be one of the biggest men on the force, and plied a few questions. He was Bryan Burgin, strapping 200-pounder, 6 feet 4, and since 1932 stationed at Margaretville in Delaware County.

That's him on the front cover with Bobby, nine, one of his two sons.

Burgin's territory is typical. It covers a square of six big townships. His job, under Civil Service, provides a salary which, after 15 years, is above the average of $2,200 per Game Protector, and his monthly expense allowance is also slightly above the average of $60. Out of this allowance he must pay for his phone calls, mileage on his personal car, and meals and lodging when away from home. Last year he drove more than 18,000 miles, and walked an estimated 1,000. His territory lies partly within the Catskill Forest Preserve. Deer, grouse, bear, cottontails, varying hare and trout account for nearly all the hunting and fishing activity. Occasionally he is assigned to special detail elsewhere in the Binghamton Division, and he is also liable to be transferred temporarily for special duty in another division. In that case, he receives an additional allowance.

Burgin loves fishing, camping, the outdoors in general and the Catskill woodland in particular, and is very active in his community which, incidentally, boasts one of the most loyally supported village hospitals in the Nation. Burgin is a blood donor there. People in his territory agree that he is highly respected and definitely an asset to the community.

If you ask Burgin what he thinks of his job, he will begin by giving you a bit of his philosophy. He feels that a Game Protector should be a good deal more than a cop, and he takes very seriously the statement in his Manual of Instructions which says that it's his duty to aid and assist sportsmen. Respect for the law, he says, depends a good deal on respect for the officer who's supposed to enforce it, and so the first thing Burgin tried to do, when he started out in 1932, was to establish himself in the community. He has never quit working on this, and he seems to have made quite a success of it.

When he first moved into Margaretville, he was warned by another Protector never to go alone in a certain valley. The farmers in that valley raised a lot of cauliflower, and when deer got into the cauliflower the farmers took the law into their own hands and shot off the deer. They wanted no interference. But Burgin went out there, alone, introduced himself to all the farmers, helped them mend their fences, sat up nights pricking the deer with a dose of fine shot, and recommended special permits be issued to control the deer damage. There hasn't been any trouble in that valley since.

Burgin does have his troubles, though. He says he still runs into a few "sportsmen" who think there's no earthly way a Game Protector can help them, and so they don't help the Game Protector. These are the fellows who slyly inform him that somebody shot a doe a couple of weeks ago, but when asked for the facts on the violation they tell him to find out for himself—"That's your job, isn't it?" Burgin would much prefer it if these smart characters would either shut up or give him the facts. He points out to them that it's their game that's being taken illegally, and if they don't want to do anything about it it's their funeral.

Burgin finds that reports of violations are usually actuated by one of two motives: a sincere desire to protect fish and game, or—the grudge. He can usually tell them apart, because the good sportsman comes right out with facts and figures and is willing to back them up with a sworn statement. But the grudge complaints have a different tone.

One day he received a complaint about a fellow who was supposed to be doing some pre-season trapping. He was, all right, and Burgin took him in, but on the way to court the fellow told him: "I know who complained on me, and I'll show you some of his traps." Which he did, and both trappers went before the Justice.

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Burgin will also tell you that a lot of characters phone the Game Protector just to find out where he is. On one occasion a man called and said that somebody was shooting pheasants near his house, and could the Protector come at once. The Protector said that unfortunately he couldn't make it for at least an hour, instead of which he immediately dashed out of the house and went to the scene by way of a back road. He arrived just in time to catch the man who had phoned him—with three pheasants.

Violations, and checking reports on violations, take a lot of Burgin's time. He feels that any information he gets should be kept in strictest confidence, and he keeps it that way. The result is that his job has been made a lot easier and more pleasant, hard feelings in his community are at a minimum, and fish and game at a maximum.

Aside from violations, one of the big things he has to contend with is the problem of dogs running at large. They kill a lot of deer in the Catskills, especially on the late winter snows. One year, when this situation was particularly bad, Burgin stopped in to see about 20 of the dog owners in his community and asked them to keep their dogs home for a few days, until the deer could move around a little easier. Of all the men he visited, only one agreed to cooperate, and thanked Burgin for stopping in. The rest either told him to mind his own business or denied that their dogs would run a deer. Two of them, however, were arrested within the next couple of days because their dogs were doing exactly that.

Another thing that makes trouble for Burgin is the landowner-sportsman problem, especially during the hunting season. He feels that this relationship could be improved a good deal if sportsmen would just stop in and chat with the farmers every once in a while and ask permission to hunt or fish whether the land is posted or not. If they've had any luck they might even give the farmer a trout or two. But in any case, not just barge onto the man's property and then barge off again.

Burgin feels that he's a public relations man and an educator rather than a policeman. He loves wildlife and thinks that if he can get other people to love it too, then the violation angle of his job will be a lot easier. So he tries to reason with even the most case-hardened violator. So he visits every school in his community at least once every two years and gives talks. So he takes an active part in Boy Scout work, hospital drives, church suppers, and a good many other aspects of community life. He likes that sort of thing anyway.

He says that the finest part of his job is the people he meets. Not long ago he ran into a man who was obviously having a tough time trying to fish the East Branch of the Delaware, and Burgin gave him some pointers on flycasting. During a rest period on the bank, the man admitted he was an artist, and brought out a stack of paintings from his car. Burgin said he wished he could paint like that. The artist said he wished he could fish like Burgin. This ended up with the proposition that—well, you get the idea, but Burgin says he still can't paint, and the artist still snaps off a lot of flies.

Something else that Burgin gets a kick out of is giving strangers directions on where to hunt and fish—provided his directions turn out to be good. Otherwise he just gets a kick. The best he ever did in this line involved three men from Ohio who wanted to know where to hunt deer. Burgin sent them out with a carefully marked map, and five days later the men stopped in to see him with three deer and a bobcat. Repeat: this is the *best* he ever did; no need to go into the worst.

What about an average day for the Game Protector? Burgin thumbed through his diary and came up with the following:

"A farmer called at 6 a.m. to report that a deer had all but ruined his garden and I was to get over there and do something about it. Wrote him out a permit. On the way home a fellow stopped me and said he had a 'coon in a trap. Something had been taking his chickens, he had set the trap and caught the 'coon. Would I take it out of the trap? I did. Got bitten.

"Advised some fishermen where they might have luck with trout. Tried to calm an excited landowner whose fences had been broken down by thoughtless angler. Returned home to find a call from a man who had lost his dog; would I keep my eyes open for it? Yes. Went downtown for bread and answered three questions: (1) Where are the fish biting? (2) Why weren't you around my place last Sunday; somebody shot a hole in the roof of my barn. (3) Why don't that —— Conservation Department change the deer season? Went home for lunch.

"In the afternoon patrolled the East Branch by car and on foot until 8 p.m. On way home stopped in at meeting of Fire Department. Planned to stay home rest of night, but at 11 p.m. man called from Grand Gorge that he had just run over a deer; would I come at once. Yes. In bed 1 a.m."

Oh for the life of a Game Protector.

New York has 179 uniformed Game Protectors. It's their duty to protect the fish and wildlife of our State, to aid and assist our sportsmen, and to see that the games of hunting and fishing are played fairly. Even if this were all they had to do it would be a big order, because each one of them has to cover a territory that averages better than 360 square miles.

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Warm Weather Angling May Be Fun But It's the Cool Months That Pay Off

FISHING has too long been identified with hot weather. The majority of anglers take it for granted that Labor Day automatically spells finis to their sport, and put away their gear to prove it—ignorant of the fact that in our State the fall months offer the best fishing for some species.

Specifically, these are bass, walleyes, muskies and northern pike. We know them as "warm-water" fish, but it is cool weather—even cold weather—that gives them an appetite and the punch to match it. Bass, in particular, are unusually active in most New York waters from first frost to freeze-up.

Fortunately, too, for the fisherman, the Conservation Law takes cognizance of that fact and provides open seasons which extend well into, and in some cases through, these productive months. Muskies may be taken until October 15 in Chautauqua and Cattaraugus counties, and elsewhere until December 1. With but few exceptions walleyed and northern pike are fair game until March 1. Bass may be taken in the majority of waters until November 30.

There is an advantage too, for the amateur at least, in the fact that these are largely "live bait" months, particularly for smallmouths and walleyes. Northern pike will normally respond to plugs, however, right up to freezing weather, and bigmouth bass can be taken in goodly numbers during October on plugs and fly-rod bass bugs. But it ordinarily follows that colder weather brings live bait into its own.

Generally speaking, much of this late season fishing will be done in somewhat deeper water than during the summer months. For smallmouths and walleyes in streams, fish the holes, the deep flats, and "step-offs" at the tails of rapids. In lakes, work the deep-water shoals, and ledges that break off into deep water. If you can see bottom on one side of your boat and not see it on the other, you're generally in a good spot.

Both smallmouths and walleyes congregate in such locales as cooler weather progresses, and where both species are native to the waters concerned they usually travel pretty much together. Muskies and pike will be more scattered, but still in fair proximity to their summer haunts.

New York has a wealth of water which does not really hit its peak productiveness until late fall. Pick your species and take your choice of the spots listed below. And don't let foul weather discourage you; the finest catch of smallmouths this writer has ever seen came from a hole in the Susquehanna River during an Election Day sleet storm.

The following summary lists some of the more popular spots by species, recommended lures and normally best dates. It is not a dope sheet:

Muskalonge

Chautauqua Lake—Bemus Point to Long Point and Midway to Chautauqua Point, east side; Prendergast Point to Chautauqua Assembly and Lighthouse Point, west side, Sept. 15 to Oct. 15 (close of open season). Numerous boat liveries both sides. Some daytime trolling with plugs, spoons and live bait, but nights most productive. Use surface plugs or drift-fish the weed line with large chubs or suckers. (Note: Special 25¢ musky license required in addition to regular license.)

St. Lawrence River—Chippewa Bay, Waddington, Clayton and Alexandria Bay. Guide boats operating for day trolling September through November. Large red and white plugs most productive. Liveries at Massena Point, Clayton, Alexandria Bay.

Smallmouth Bass

Kensico Reservoir—Normally good in general over much of the area, with most fish in deeper waters, up to close of season. Minnows, crayfish, dobson, sawbellies, deep-running plugs. Fishing permit and boat permit required of all anglers, obtainable from New York City Department of Water Supply. No boats available on lake.

Lake Champlain—Point au Fer region, north end of lake, considered best through Nov. 30 in water up to 15 ft. Minnows, plugs. Boats at Rouse's Pt.

St. Lawrence—(See muskies). Soft crayfish and log perch best baits, but plugging popular.

Lake Ontario—Cape Vincent, Henderson Harbor, Sacket's Harbor, Chaumont Bay, to early November. Reef and shoal fishing from charter boats and rowboats obtainable at spots mentioned. Lake storms unpredictable this season of year. Minnows best bet.

Seneca Lake—Long Point to Glenora, west side; Glen Eldridge and Lodi,

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FACTS ON FALL FISHING

east side, Oct. 15-Nov. 30. Deep troll or drift-fish water 15 to 30 ft. Minnows, dobson, grasshoppers. Some boats available at Dresden, Starkey Point, Glenora, but take own if possible. There is a big livery at Lodi.

Keuka Lake—Willow Grove, Bluff Point (opposite Keuka Village), Marlena Point, all east side; Gibson's, west side, Oct. 1-Nov. 15. Dobson, crayfish, minnows. Boats at Willow Grove, Lakeside (for Gibson's), Keuka Village. (Note: Night fishing in Seneca and Keuka particularly productive. Pick dark nights and use weighted black fly rig [size #2 or larger] fished deep.)

Canandaigua Lake—Woodville, Vine Valley, Oct. 15-Nov. 15. Dobson, crayfish, minnows. Boats at both places.

Lake George—Deep waters off Tongue Mountain, Diamond Point and Hulett's Landing, through to close of season Oct. 31. Fish water 40 ft. and better with minnows, crayfish, frogs, weighted spinners. Boat liveries at Hulett's and at many spots on west shore.

Saranac Region—Lower Saranac Lake, Big Tupper, Raquette Pond, Simon's Pond, Osgood Pond, through October. Minnows and plugs. Boats available except at Osgood Pond.

Chautauqua Lake—Maple Springs to Chautauqua Point, east side of lake, with Warner Bar particularly good. Good to close of season Oct. 15. Minnows, crabs, plugs, bugs. Boats at Bemus Point, Long Point, Midway.

Susquehanna River—Apalachin to Nichols and state line, through November. Dobson, stone-cats, crayfish, minnows; plugs and large streamer flies in shallow water. Some boats usually available and wading possible.

Delaware River—Generally good fishing Port Jervis to Deposit, with such selective spots as Narrowsburg, Callicoon, Long Eddy and Hale Eddy, Oct. 1 to close of season Nov. 30. Same choice of baits as Susquehanna. Some boats.

Walleyed Pike

Brant Lake—Cook's Bay, others where shoals and reefs, Sept. 1 to freeze-up. Night fishing with dark plugs, either floaters or sinkers, best bet. Day fishing hit-or-miss, but trolling near bottom with nightwalkers sometimes productive. Boats at Bolton livery, west end; Day's livery at east end, near Horicon.

Saratoga Lake—Reef water mid-way down east shore probably best, and night fishing with dark plugs most productive, Sept. 1 to freeze-up. Boats at Christopher livery near Newman's; others at Fish Creek outlet (north end of lake) and along east shore.

Oneida Lake—Cleveland, Bernhard Bay, Lakeport are concentration spots until colder weather, then fish scatter. Many reefs offer good fishing Oct. 1 to freeze-up. June-bug spinners with minnows, nightwalkers. Plugs good at night. Liveries at Constantia, Bernhard Bay, Sylvan Beach, Lakeport, Brewerton, Cleveland.

Canandaigua Lake—Woodville, Vine Valley. Fair fishing to third week in October with June-bug spinners baited with minnows, nightwalkers. Lang and Richardson liveries at Woodville; Robeson's at Vine Valley, Mace and Waldorf at Canandaigua end of lake.

Susquehanna, Delaware Rivers — See data under "Smallmouth Bass". Minnows, plugs and streamer flies are usually most productive.

Black Lake—Generally good in all areas until freeze-up. June-bug spinners baited with minnows, nightwalkers; plugs. Many liveries between Hammond and Edwardsville, north side of lake.

Sacandaga—See detailed article Page 16.

Lake Champlain—Same general waters listed under "Smallmouth Bass". June-bug spinners with minnows or nightwalkers best bet, and season productive through mid-November.

Northern Pike

Sacandaga—See detailed article Page 16.

Saranac Area—Big Tupper, Simon's Pond, and Weller and Round Ponds off Middle Saranac Lake, mid-September to freeze-up. Union Falls on Saranac River normally good. Plugging best.

Cayuga Lake—Fair fishing in Barge Canal channel north end of lake, and along west shore in vicinity of Canoga. Some fishing in lake inlet at Ithaca. Plugs and spoons. Numerous liveries.

Lake Champlain—King's Bay, September to freeze-up. Trolling best bet.

St. Lawrence—Many bays and back waters produce fair to good pike fishing through late October-early November in vicinity of Massena, Clayton, Waddington and Thousand Islands Bridge. Plugging productive, also bait fishing with chub and small perch.

Largemouth Bass

Lake George—Upper end of Northwest Bay, west shore; Dunham's Bay at foot of lake, and Dunham's Bay inlet, through to close of season Oct. 31. Plugging, bugging, most productive. Numerous liveries both areas.

Chautauqua Lake—Bemus Bay to close of season Oct. 15. Plugs, minnows.

Sacandaga Reservoir—Mayfield islands, old river channel above Northville Bridge, through November. Minnows, plugs. See Sacandaga article, Page 16.

As we pointed out earlier, these are the more popular spots for the species indicated. In addition New York has literally thousands of smaller and lesser known waters which are good producers. For information on them, consult the local Game Protector.

—Bob Bush.

From the digital collections of the New York State Library.

THE YELLOW LOTUS

By HOMER D. HOUSE, State Botanist

ONE of the rarest wild flowers in New York is the *yellow lotus* or *nelumbo*. Although it has been introduced at a few other places, such as Farley Point on Cayuga Lake, it is found as a wild plant in our State only at the head of Sodus Bay, in Wayne County.

The nelumbo is protected by law against vandalism. Its fate has been happier than that of many of our rare flowers, which are too often mere remnants of a more general distribution; the demands of modern agriculture destroyed most of their habitats. As a result, most of our rare wild flowers are now found in the more inaccessible swamps and bogs which have not been cleared, drained, or burned over.

But the nelumbo has always been easily accessible. In the days of excursion steamboats there was a wooden dock extending out through the colony of lotus to deep water, and later a State highway was built on a fill across the southern edge of the colony. Before the law came to their rescue many of the lotus were carried away to be planted elsewhere, and in former years quantities of the flowers were gathered for sale in Rochester. In spite of these vicissitudes the colony has survived, and it is hoped that with continued legal protection it may last indefinitely.

The great round leaves, often more than a foot across, stand two to five feet out of the water on long, stout, stalks. The pale sulfur-yellow flowers are five to ten inches broad, with many blunt concave petals. The seed pod, which resembles in shape the nozzle of a watering pot, is broadly conical, and embedded in the fleshy, flattened top of it are several seeds. The tuberous rhizomes (underground stems) resemble somewhat those of a sweet potato, but contain several longitudinal cavities instead of being solid.

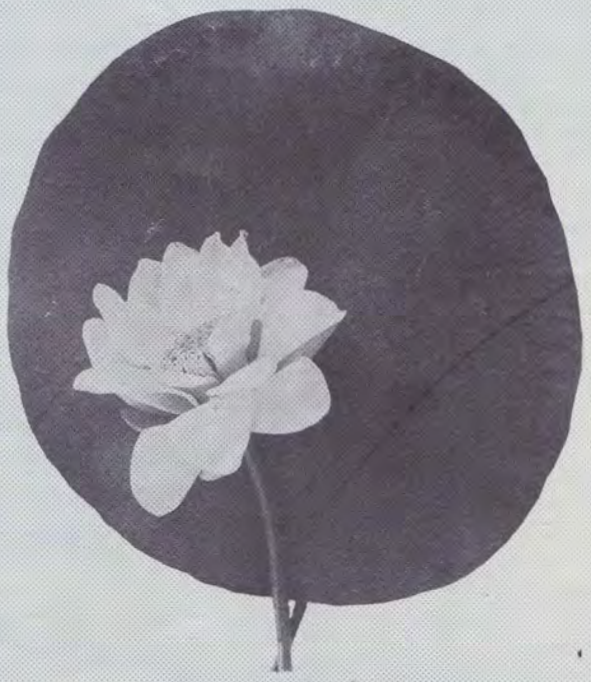
After boiling, these rhizomes make a palatable and nourishing food, and as such they were highly esteemed by the early Indian tribes along the south shore of Lake Ontario. In fact, it is quite possible that the yellow lotus may have been introduced at Sodus Bay by the Indians long before the advent of the first white settlers. In any case, the first botanist to call attention to the existence of the now famous colony seems to have been H. P. Sartwell, who was born in 1792.

The range of the yellow lotus is mainly around the Great Lakes, westward to Minnesota and Nebraska, and southward into the Mississippi Valley. There are also, however, scattered colonies as far east as Massachusetts and as far south as Florida—doubtless due to early introduction from its mid-continent habitat.

The yellow lotus opens up an interesting study in the origin of words. The plant was called *micompena* by the Illinois Indians, a name which was corrupted into *Wankapin* by the early settlers along the Great Lakes, where the plant used to be fairly abundant. The Ojibwa Indians called it *makopin*, while later white settlers gave it the name of *water-chinkapin*, possibly because the seeds resemble small chinkapin nuts.

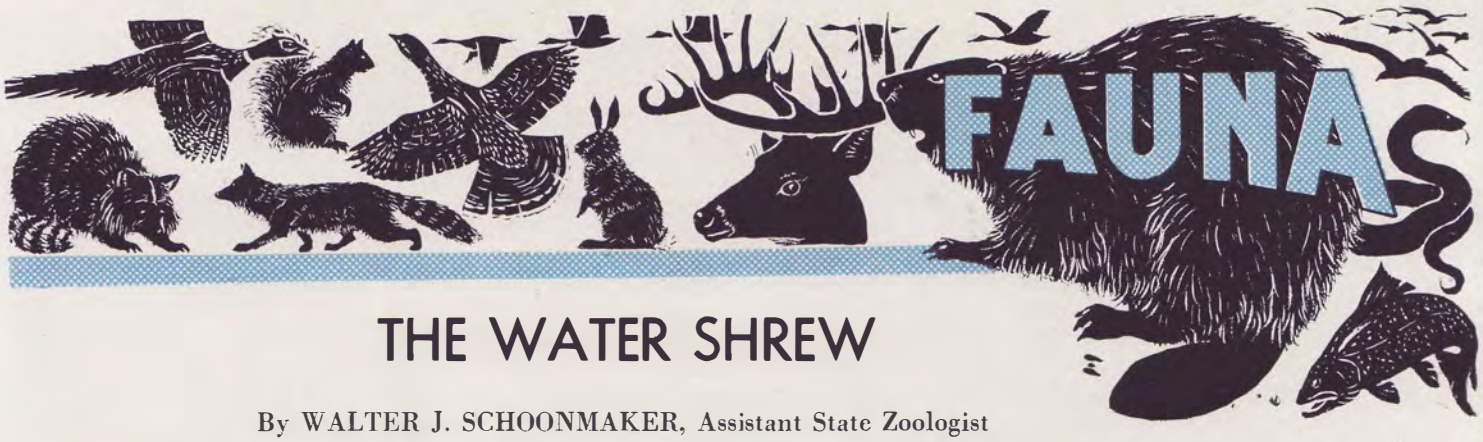
The name *lotus* is applied to a number of entirely unrelated plants. In legendary Greek history it was the fruit which served as the food of the Lotus-eaters, and which supposedly came from one of the jujube trees. Because the fruit, as well as the wine made from it, was supposed to induce a state of dreamy content and complete forgetfulness of home and friends, we have the present day usage of the term "lotus-eater."

Our own yellow lotus—the nelumbo—is a rare and beautiful flower, blooming in mid-August. The sight of the great leaves and flowers waving in the breeze, or being whipped about in a gale off Lake Ontario, will delight the eye of every lover of nature.



One of New York's rarest flowers

From the digital collections of the New York State Library.



THE WATER SHREW

By WALTER J. SCHOONMAKER, Assistant State Zoologist

DID you ever see a water shrew? If you haven't you shouldn't feel too badly about it, because there are more than 12 million people in the State of New York and fewer than a dozen have ever seen one of these mammals. A mammal, you know, is more or less covered with hair, gives birth to living young and suckles the offspring like a cow, a dog, or even a whale.

The water shrew is a peculiar mammal. In a way it is like a cross between a mink and a muskrat. Its teeth are sharp for eating flesh, like those of the mink; its hind feet are partly webbed and fringed with stiff hairs for swimming, like the feet of the muskrat. Like the mink, it travels along the shores of pools and ponds and streams. Like the muskrat, it swims and dives and floats on the surface and creeps about on the bottom of the pool.

But—unlike either of these animals, the water shrew is tiny. It weighs about one-half of an ounce. Considering its size, it is not difficult to understand why the State's twelve million would not notice this shrew even if it were numerous. It is, however, extremely rare.

Up to the year 1900, only one water shrew was known to have been recorded in New York State. Three others were taken near Tupper Lake and in 1926, another specimen was trapped near North Elba. Later a single shrew was caught near Berlin. In 1934 and 1935, I captured six of these tiny mammals in the higher parts of Rensselaer County.

So far as I know, that's the total score. To date there have been only twelve water shrews recorded in New York State.

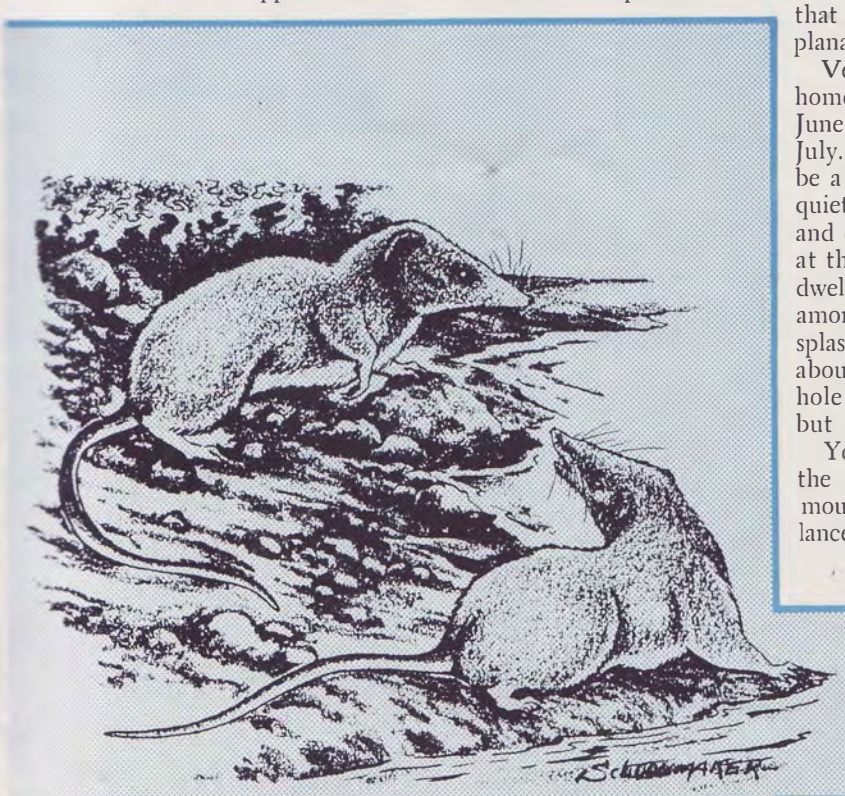
The fur of the water shrew is soft and dense, like that of a mole. Its color is very dark gray—almost black—with a slight frosty cast. The chin and throat are grayish white.

From the tip of its nose to the end of its tail, this shrew is only about six inches. The tail is two and three-quarter inches long, so that the small body is only three and one-quarter inches in length. The head tapers down to the thin, pointed nose typical of the shrew family.

The moose, which only a short time ago lived in this State, is a vegetarian, an eater of plants. So is the six-ton elephant for that matter. Yet the water shrew, tiny as it is, is a flesh-eater, feeding mainly on insects, worms and nymphs. Bill Hamilton (who wrote "Those Little Mammals" in the June-July issue of the *Conservationist*) examined the stomach contents of 13 of these shrews that had been taken in Maine, Nova Scotia, New Hampshire and Massachusetts. He reported that all had eaten insects and that three contained nymphs of stoneflies, mayflies and planarians.

Very little is known about the mating activities and the home life of this shrew. Mating occurs in late May or early June and the young are born at the end of June or early in July. I have no more information on this subject, but I can be a bit more definite about its habitat. I've seen it along quiet stretches of small streams where slender willows bend and damp moss overhangs narrow beaches. I've seen it also at the edge of small rushing streams where the brook trout dwells. Here in the dense shade it nervously scurries about among the moss-covered rocks, enters tiny rocky caves, splashes across the surface, then dives under and swims about. Suddenly it disappears into its burrow—a small round hole about one inch in diameter. This is near the water but not under the surface.

You who hunt the deer know the deer-runs or trails, and the farmer knows the well-defined runs of the meadow mouse. But the water shrew has no such trails. It's a free lancer and goes where it pleases.



One of New York's rarest mammals

From the digital collections of the New York State Library.

"SUPER-TIGER"

In the June-July issue of the *Conservationist*, as well as in the current Fish and Game Law Syllabus, we stated that the record for Chautauqua "Tiger" muskalonge was a fish caught last year by Daniel Horne, of Mayville. It weighed 42 lbs., 8 ozs.

This is still the record for a Chautauqua musky taken by angling. But we recently received a letter from a Major Auguste Bartholdi Peterson, of Sanford, Florida, stating that he recalled seeing a fish—"along about the beginning of the century"—hanging in front of Lovejoy's Market in Jamestown and marked at 55 lbs. "It was," wrote Major Peterson, "the object of much admiration and interest."

Investigation reveals that Major Peterson's memory was good. In 1904 Mr. A. A. Walker, of Jamestown, took a 52-lb. musky that had in its stomach another musky, the remnants of which weighed 16 lbs.

But Mr. Walker was operating through the ice. With a spear.

SOUND ADVICE

"The next time the Game Warden asks to see your license, hand it to him with a smile. It shows you are a paid up member of the Outdoor Sportsmen. It is something to be proud of. That license dollar is an investment you make for better hunting and fishing. You own an interest in the Conservation Department. Help protect that interest.

"If you see a fellow taking more than his share or taking it illegally, speak to him—explain to him he is spoiling his own sport as well as yours. Ask him to help make better hunting and fishing. It might do some good.

"If he continues to break the law, bring it up at your club meeting. . . . From then on it is up to the club and the Conservation Department, and we are sure they will not let you down."—From the Essex County Sportsman Club News, July 1947.

ALBINO TROUT

On the afternoon of June 22 Joseph Martin brought into his home town of Watkins Glen a 22-inch lake trout such as none of the local residents had ever seen before. He had caught it in Seneca Lake, near Himrod, using a spoon and an invisible line. The trout was a pure albino.

According to all accounts, the markings on the trout were typical of the ordinary laker except that no mottles appeared on the sides. The general coloration was a very light golden sheen over the whole fish, with a few bright red spots—looking like blood clots—showing through the skin on the head. The gills were almost colorless. The eyes were pink, and Assistant District Game Protector Harold Canfield, who examined the fish closely, reported that it had an unusually transparent and unreal appearance.

Martin's catch, and the letters of inquiry that resulted from it, provide us with an opportunity to make a few observations about albinism in fish.

There is a distinction between albinism and whiteness. For example, a snowshoe hare is a white animal, but its dark eye color shows at a glance that it is not a true albino. A white rabbit, commonly seen in pet stores at Easter, has pink eyes. This is the mark of a true albino. Albinism is a lack of normal pigment, and it is the color of the blood that gives the eye a distinctly pink appearance.

An albino lake trout is a very rare catch, for this abnormal variation in color occurs in only a small percentage of the hatch. Moreover, there is good reason to believe that wild environmental conditions are unfavorable to the survival of albino fish. As a 22-inch lake trout would probably be well over four years old, this one must have successfully defied trout traditions for a considerable time. Perhaps, in the deep water of Seneca Lake, this fish did not need the normal dark pigment that other trout have.

Where thousands—even millions—of trout are hatched, the occurrence of albino individuals is occasionally to be noted. Brook trout, landlocked salmon and lake trout can throw albino variants. By crossing with other albinos, a pure strain can be produced, and albino brook trout have been successfully reared. They appear normal in growth and vigor under hatching conditions, but their lack of pigment throws off the normal mechanism of protective color change. It has been reported that birds find them easy prey, even in hatching ponds. Without protection by man they would probably not last long.

Fish culturists, bending their efforts toward improvement of fishing, do not endeavor to breed albino fish. If, however, a few albinos turn up in a trough full of fry they may be reared along with the rest and may be planted. As to Joe Martin's albino lake trout, it is impossible to say definitely whether it started life as a wild fry or in a hatchery. If a planted fish, it may possibly have been put directly into Seneca Lake or may have run down Keuka outlet, which enters Seneca Lake.

About all that seems certain is that it will be a long time between bites if you fish only for albino trout.—John R. Greeley.

A WORD TO THE WISE

There's still a lot of vacation time left. You can enjoy yourself and go again next year if you exercise a little forethought. But, if you:

Take chances in the water;

Overload boats;

Canoe when you can't handle the craft or can't swim;

Pick any old plant with the idea that you're one of the few immune to poison ivy and sumac;

Take your sun in big doses;

Drink any old water;

Wear uncomfortable clothes and unsafe shoes;

Eat anything but wholesome food, anytime;

Don't bother to keep firearms, knives and dangerous tools out of reach of youngsters and others;

Drop cigarets, knock out pipes and leave campfires burning;

Play just as hard as you can—

If you do any of these things you may not be around to go again, or the memory of a vacation tragedy may cause you to stay at home.—R. B. Miller.

From the digital collections of the New York State Library.

BALMY BIRDS

Part I

The Catskill Mountain News recently carried a story which supports the theory that the ruffed grouse is always unpredictable, and sometimes nuts.

According to the story, Charles Todd, of Dry Brook, a man apparently well versed in natural lore, was walking through the woods one day last June when he came upon a cock partridge. The bird was drumming on a log.

Todd crouched low and began to make a chirping noise. The bird watched him suspiciously for a considerable time, but at length approached and jumped onto Todd's knee, where he resumed his drumming operations. Between rounds, Todd stroked the partridge's back.

The grouse eventually became bored and flew off into the woods.

Part II

A cock pheasant on the Western Turnpike Game Farm, near Albany, is at this writing attempting to prove what many of us have suspected all along—that the male of any species can do almost everything better than the female.

This particular pheasant has gone into the hatching and incubating business. Apparently disgusted by the inefficiency of the hens in his yard, he took over a clutch of 13 eggs, sat himself down on top of them, and refused to move until he had hatched out eight healthy chicks.

Attendants at the game farm concede that he makes a better-than-average mother, as he has already taught his children to take their Saturday dust baths. He likewise takes a motherly interest in all other aspects of proper rearing.

Although males of some of the more exotic species of pheasant have been known to become "broody", this is the first we've heard about a ringneck stepping out of line.

MORE BOBCATS

Judging by the number of reports received from our men in the field, bobcats—in both the Adirondacks and the Catskills—are more numerous than they used to be, at least in recent years.

Among the reports is one from George and Holton Seeley and Willard Hopkins, all Department Rangers. They were proceeding along the Northville-Lake Placid trail, near the town of Wells, when they encountered a large bobcat carrying in its mouth the hindquarters of a fawn. As the Rangers approached, the cat dropped its meat and disappeared into the woods.

HARDWOOD FOR PULP?

NEW YORK has always been a leader in the pulp and paper industry. Half a century ago we produced a third of the nation's wood pulp, and almost a quarter of its finished paper. Today, although we still lead in paper manufacture, our lead has been whittled down to a sliver. Our current pulp production is way down.

Most paper is made from wood pulp, and most wood pulp is made from the long-fibered softwoods—spruce, balsam, and hemlock. Until very recently the only hardwood that was used in any quantity was poplar, and that accounted for less than a fifth of the total consumption. (To a forester, a softwood is a coniferous tree, having needles for leaves. Hardwoods are the broadleaved trees that drop their foliage in winter. The names are meaningless as far as the quality of the wood is concerned.)

Our supply of softwoods has been shrinking fast, and year by year New York's great paper industry has become more and more dependent upon imports from New England, Canada, and Scandinavia. As our softwoods have been selectively removed from much of our forest land, their places in the new stands have been stolen by hardwoods, often of poor grade. Some of this wood is cut for fuel, but even in rural sections coal and oil are speedily replacing it. The result is that we have a mounting surplus of hardwood needing a market.

Early in 1946, the College of Forestry at Syracuse, with the cooperation of the principal paper companies operating in New York, embarked on a program of research on the pulping of hardwood. Enough of the technical problems have now been solved so that this material can be handled by special processes on a commercial scale. For some years one of our biggest mills has been using 20,000 cords of mixed hardwood—other than poplar—yearly. Another mill has just been converted to use hardwoods at the rate of 25,000 cords a year. But there are some real problems.

Spruce and balsam are so nearly alike that they can be logged, transported, stored, and used as one. But among the hardwoods we have at least 40 species of commercial value, varying widely in quality and in the handling required to convert them into pulp. As one eminent chemist has said: "We can make pulp out of any kind of hardwood. The problem is to handle successfully the mixture that comes into the yard."

Procurement poses another problem. Most hardwoods are both hard and heavy, and compared to softwoods it is more difficult to cut them down—and cut them up. As opposed to softwoods, they will not float when freshly cut or even when fairly dry, and so cannot be driven down the rivers. The number of ton-miles between the stump and the mill is roughly twice that for spruce.

Conifers usually have a straight central stem, with relatively small branches, whereas hardwoods tend to have more and bigger limbs, and less of a trunk. This means more work in cutting up, more small pieces, and more waste. In addition, conifers peel more easily than the average hardwood and have a peeling season of four months—as opposed to two months for hardwoods.

The fibres of hardwoods are short, and the pulps made from them are lacking in strength. But they are soft, absorbent, and opaque. While they cannot be used for newsprint or wrapping paper, they have a place in the manufacture of envelopes and toweling.

WHERE there is a market for hardwood as pulp, it is a dependable one. If cut for fuel instead of pulp, hardwood can often be worked down to smaller size than the minimum top diameter usually specified for pulp—four inches inside the bark—but this specification is as small as the chopper can economically go, regardless of his market. In addition, pulp mills will accept species that, in the bygone days when fuelwood was a flourishing business, would have degraded the woodpile.

We will soon be using hardwood for paper in considerable quantities. But at the outset the pulpwood will come from forests near the mills, first, because it won't stand much transportation, and second, because there is so much of it close to the mills. It must be admitted that even a sizeable increase in hardwood utilization will make no more than a dent in our supply. We have cull hardwood trees by the zillion, and our present forest practice grows them faster than they are cut down. Furthermore, the mills will continue to need a lot of softwoods.

But the hardwood-for-pulp program has a future. By developing it we can make use of a resource that we have in abundance, and at the same time help to solve a tough problem in forest management—that of utilizing our surplus of poor hardwood. —DAVE COOK

From the digital collections of the New York State Library.

Department Activities

DO YOU KNOW YOUR LAWS?

Most adults are prone to think of the .22 rifle as an American institution the use of which is the inalienable right of every youngster in the land, regardless of age or circumstance. But before you get one for Junior, make sure you know that:

1. It is unlawful for a minor between the ages of 14 and 16 to use a .22 or any other firearm (or long bow) for hunting unless he is in the company of parent or guardian licensed to hunt or in the company of a licensed hunter, at least 21 years old, who has a permit to accompany the boy signed by his parent or guardian. And the boy himself must be licensed.
2. Said license must be bought in the presence of parent or guardian and countersigned by same.
3. The daily bag limit of game taken by adult and minor must not exceed the legal limit for one hunter.
4. A minor so licensed may not take deer or bear.
5. It is unlawful for a minor to use or possess a revolver or pistol afield for the taking of wildlife.
6. Under no circumstances may he hunt in Westchester County, or on Long Island, with any rifle.

SPLIT SEASON ON WATERFOWL

In an all-out effort to stem the decline in duck populations, sharply curtailed waterfowl regulations have been established by the Federal Government, and duck hunters all over the nation are tightening their belts—hoping for better days another year. New York will have a split season. The first period will run from October 21 to November 1, and the second from December 2 to 13, all dates inclusive. A State-wide daily limit of four ducks (and four geese, not more than one of which may be a Canada goose) has been announced.

By action of the Legislature, New York's waterfowl regulations must be identical with those established by the Federal Government. Although there was a general impression that the states would be allowed to set their own seasons, actually the choices offered them by the Fish and Wildlife Service were extremely limited. Possible opening and closing dates and the length of shooting periods were definitely prescribed, and no separate zoning within the states was permitted.

As a result, the choice between the 12-day split seasons and a 30-day continuous season was no choice at all for New York, where migration peaks are as far apart geographically as they are on the calendar. Thirteen other states with comparable early and late hunting conditions – including Maine, New Hampshire, Maryland, Delaware, California, Oregon and Texas—were likewise obliged to choose a split season.

When it came to the selection of the particular 12-day periods, primary consideration was given to the results of the Department's aerial duck surveys, conducted at regular intervals in the fall of 1946. These showed that the peak of the migration in up-state New York, except in the Finger Lakes region, was reached in the period from October 21 to November 29. The peak was reached in the Finger Lakes area in early December, and information from Long Island revealed that waterfowl populations built up equally late in that section.

CORRECTION—As a subtitle to the article on forest pests which appeared in the June-July issue of the *Conservationist*, we stated that insects run second only to fire as a forest menace. This was the editor's idea and Bill Foss, who wrote the article, had nothing to do with the subtitle.

This was too bad. No sooner had the magazine appeared than Mr. Foss barged into the office flourishing a copy of it. Insects and disease, he said, do a lot more damage to forests than fires—in an average year, at least.

Mr. Foss knows what he's talking about. But even he didn't catch our mistake in swapping the labels on the male and female gypsy moths.

GROUSE NESTS — District Game Manager Ben Bradley, whose headquarters are in Syracuse, has reason to believe that Mother Nature is doing her best to increase the grouse population in his district.

Bradley reports that early in June John Litts, president of the Oneida County Federation of Sportsmen, checked three grouse nests that had been found in Oneida County. Two of the nests had 20 eggs each, while the third had 21.

This is good going. The State average for the first clutch of eggs laid by grouse is 11½; if the hen lays a second time in the same season, the average clutch is seven. Of the 2,011 nests examined during this Department's Grouse Investigation, (1930-42), three were found with 18 eggs, three with 19, two with 22, and one with 24. The largest authenticated clutch laid by a single bird, however, was 19 eggs. It was pretty well established that clutches larger than this were the work of two birds sharing the same nest.

P. S.—Pheasants sometimes lay their eggs in a grouse nest.

ADDITIONAL PROTECTION — In the April-May issue of the *Conservationist*, under the heading of "Do You Know Your Laws?", we explained how *Additional Protection* can be granted to certain species of fish and game in certain areas of this State. Since publishing this information, such protection has been granted in two instances. Here's what happened:

A closed season on mink and muskrat in Richmond County has been declared for 1947, '48, and '49. This action was taken as a result of a hearing held on May 9 at St. George, Staten Island, on the petition of Edward L. Vulture and others. The order became effective July 1 of this year.

A second order was published as the result of a hearing held at Hudson, also on May 9. This order, which does not become effective until July 1, 1948, fixes at 15 the number of perch, bullheads, strawberry bass, sunfish and white bass—either all of one species or partly of each—which may be taken from Kinderhook Lake and Wild's Pond, in Columbia County.

From the digital collections of the New York State Library.

GAME BIRD SEASONS

The decision by the Conservation Department on upland game bird seasons in New York for the coming fall, to be announced September 3, will climax the most comprehensive check yet made on pheasant and grouse abundance in this State. This year, for the first time, the sportsmen of New York were provided with an opportunity to participate in this important job by contributing their opinions and observations at public hearings, as well as through their regional representatives on the fish and game Advisory Committee.

In arriving at a decision on open seasons, the first step consisted of the spring surveys of pheasant and grouse populations conducted by the Bureau of Fish and Wildlife Investigations and by the Bureau of Game. Independently, these two surveys inventoried the breeding stock on hand in the coverts at the start of the nesting season.

Then came the extremely important early summer pheasant and grouse surveys, showing the success of broods. Put simply, that's the crop of the year. Again each Bureau made independent surveys of the two species. Normally, this would have put all the necessary information from the field men into the Department's hands. However, owing to the late season which delayed haying and harvesting, another quick check was being made as we went to press. Final reports and recommendations, based on analysis of all the findings, were then to be submitted.

In all these surveys, a great team—made up of the Department's Game Managers, Game Research Investigators and Game Protectors, assisted generously by 1,500 farmer-cooperators, members of game clubs and special individuals chosen for particular ability to check effectively certain areas—participated from start to finish.

The first public hearing was held August 13 in Rochester for the western half of New York. The hearing on August 14 at Albany was for the eastern half of the State. Next on the schedule came the meeting of the statewide Advisory Committee, with the problem of pheasant and grouse seasons the primary order of business for its consideration.

All of these careful preparations and labors culminated August 27 in the official action of the Department upon the seasons. Preparation of the orders to be filed with the Secretary of State, copies of which must go to the County Clerks of each of the 62 counties, and of the detailed instructions for the Department's law enforcement officers, took up the interval between August 27 and September 3.

Reports from District Foresters

DISTRICT 1

About 15 to 18 service calls have been processed each month for the period January to July, and the majority of these have called for timber marking or for estimating the farm woodlot. Right now the office has a backlog of 69 service requests to handle. 39 cooperators, owning a total of 2,800 acres, have signed under the Forest Practice Act. The largest single owner to sign controls 600 acres of forest land.

Postwar projects have been underway since last July, and now employ about 100 men in Otsego and some 60 men in Schoharie County. Emphasis has been on pruning and thinning forest plantations, and improvement of volunteer stands of hardwood. Over 1,000 acres in each type of work have been completed to date, together with the planting of 750,000 trees. About 50,000 feet of logs have been sold as well as some white and red pine thinning products, which will be used in the manufacture of boxes.

White pine blister rust crews, working in all counties of the district, approximate 20 men. Acquisition of fishing rights on the West Branch of the Delaware is underway.

R. M. HICK

DISTRICT 2

Applications for assistance under the Forest Practice Act are beginning to snowball, what with requests from the Soil Conservation District and the Farm Bureau rolling in. There is already a backlog of more than two months' work to do.

Postwar work in the district is moving along at about the same pace, with 140 to 150 men on the payrolls. The crews are more stabilized than they were a year ago, when the turnover was nearly 100% per month. Weeding out the misfits, and the fact that jobs are no longer so plentiful, are having their effect.

We are attempting to obtain some good records of what the woodlots and plantations are like after our operations have been completed, so that the fellow coming along in the future will have a good foundation for his management plans. The lack of this sort of information in the C.C.C. days demonstrated the need for this work.

Land acquisition has picked up somewhat. This is largely because farmers are now cutting down on farming operations expanded during the war years, when they found they were able to squeeze a few dollars out of submarginal lands because of high prices.

C. E. BAKER

DISTRICT 3

The first forest plantation established under the enlarged reforestation program, at Scott, Cortland County, is receiving its initial thinning by a crew of about 25 local workmen. Four-foot bolts of red pine are being salvaged from the thinning work in an 18-year-old plantation, and it is believed that a suitable local market has been found for this material. The bolts run 4 to 7 inches in diameter at the small end and will probably be sawed into inch boards.

About 60,000 board feet of hardwood sawlogs have been salvaged from improvement work in natural woodland near Chenango and this material is being offered for sale to the highest bidder. This work was done by an additional crew of about 25 postwar workmen.

Local sportsmen make extensive use of the 30 Reforestation Areas in the district during hunting season, particularly during the open season on deer. We would like to find some way to discourage trigger-happy hunters from using our metal "Reforestation Area" signs as targets.

J. D. KENNEDY

DISTRICT 4

The Forest Practice Act has gotten off to a good start in this district. Cooperators have been signed up in Allegany, Livingston, Ontario and Steuben counties. They have shown a genuine interest in the management of their forest properties under the standards adopted.

On July 11th, a field trip was held for the District 4 Forest Practice Board. The trip covered various phases of forestry practices on State forest lands in Livingston and Allegany counties. In Livingston County, where a postwar crew has been working since last year, the field trip inspected thinning and pruning work in plantations, improvement cuttings in natural hardwoods, waterhole maintenance, fireline construction, and recent reforestation.

In Allegany County, the trip included an inspection of the Jersey Hill Fire Tower and also a visit to Palmer Pond. Palmer Pond is a small pond of 5 acres constructed during the C.C.C. days, where a forest arboretum has been established and where various species of trees and shrubs, not native to the locality, have been planted.

I. S. BOWLBY

DISTRICT 5

Although there are no new developments under the Forest Practice Act, requests for service keep coming in from various sources. The District Board met in Ellicottville on June 6th. After the regular meeting, several wood-using industries in the vicinity were visited.

The ground work has been laid for the acquisition of fishing rights on Little Conewango Creek in Cattaraugus County, and some contracts have been secured. Similar work is also being done on Ischua Creek near Franklinville. The acquisition of fishing rights on these streams will make a valuable addition to the fishing grounds in western New York.

H. E. DOBBINS

DISTRICT 6

Activities under the Forest Practice Act are gradually becoming routine. Most owners who have desired and obtained assistance are deeply interested in the program, and a total of 31,000 acres has been placed under management.

Although most farm woodlot owners would like to make improvement cuttings, the problem of markets for off-grade material slows down their efforts. Last fall a good market existed, but during the winter operational problems at the mills put a complete stop to cordwood purchases. It is believed, however, that with the coming of fall, difficulties will be worked out.

The seasonal let-down in the log market is felt in this district. All the major mills have a huge inventory of logs and are not buying at this time. The few logs sold are being graded, and only No. 1 logs are bringing a decent price.

Since most of the woodlots in this area have been cut and cut again, the log products are generally poor. What we need is an outlet for by-products of improvement cuttings.

G. M. POWELL

From the digital collections of the New York State Library.

DISTRICT 7

Trespass, both timber and cattle, has been noticed in more than the normal number of cases in this district, especially on Reforestation Areas. This is probably due to two factors: (1) Lack of sufficient personnel during war years to properly control trespass; and (2), lack of materials and manpower to keep fences in repair.

A radio transmitter and receiver have been installed in the fire tower on Cat Mountain to aid the ranger force in fire control and other emergency activities. Work goes forward on the construction of a new observer's cabin on Catamount Mountain, on reconstruction of telephone lines and on repairs to foot trails and camps.

Large numbers of fishermen and campers have flocked to the Cranberry Lake area this season. The Oswegatchie River and nearby trout waters have been subjected to heavy pressure since the fishing season opened this spring, but despite the large number of people in the woods, forest fires have been at a minimum.

C. A. PETTY

DISTRICT 8

In this district, which by the way has had its share of high water, black flies and mosquitoes, after a record 7 ft. snowfall on the level, we have been developing our work under the postwar program and Forest Practice Act in the counties of Herkimer, Oneida and Montgomery. The postwar program has apparently filled a long-standing need, for we are receiving many applications for this type of service.

This spring we engaged in the planting of 628,000 trees in postwar projects in the town of Charleston, Montgomery County, and in the towns of Boonville and Florence in Oneida County. We have switched from our winter work on Reforestation Areas to road construction on State lands, in order that we may be able to reach our more inaccessible areas this coming winter and so insure year-round employment for the men.

One of the interesting sites on which we plan building a road is that over Penn Mountain, located in the town of Steuben. This is land originally granted to Baron Von Steuben by the American Congress in recognition of his services as drillmaster in the Revolutionary Army.

A. J. WOODFORD

DISTRICT 9

Forest District No. 9, comprising Clinton, Essex and Franklin counties, services a variety of timberland owners cooperating under the New York State Forest Practice Act, with a variety of purposes in forest management. All, however, have the single objective of keeping their woodlands vigorous and productive.

Assistance can be obtained from the Department Forester by the farmer in the Champlain or St. Lawrence River Valley who wishes to manage a sugar bush, grow a stand of trees for saw logs, fuel wood, and an occasional axe handle; or by the owner in the Adirondack Mountains whose management and cutting practices must take into consideration health, recreation and wildlife values as well. Owners of over 30,000 acres under management include farmers, inn keepers, hunting clubs, hotel companies, and business men of the small mountain towns who are interested in a growing forest.

The demand for pulpwood is great, with prices good, and it is a great temptation to woodland owners to sell their immature stands for this product. It takes a bit of talking to convince them that it is not good business.

W. E. PETTY

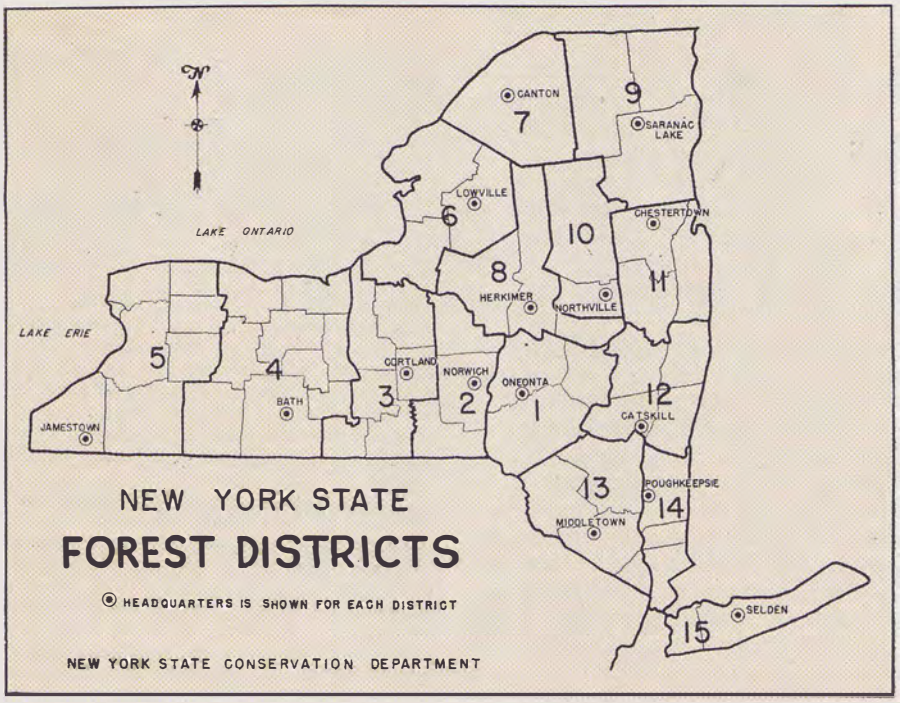
DISTRICT 10

In this district, 35 cooperators have signed up under the Forest Practice Act with an aggregate of over 8,000 acres. These parcels range from 8 to 2,500 acres in size and vary widely in type.

A survey is being made of all saw mills and wood-using industries in the district. When the survey is completed a visit will be made to all cooperators, and to those who have lands from which they desire to market materials. Management plans will be prepared immediately.

A Soil Conservation District is being formed in Fulton County. When the organization is completed the Forest Practice Board will work in close cooperation with the new district, so as to enable cooperators in both programs to receive the maximum of benefits.

M. C. FISK



DISTRICT 11

Eradication crews are now scouting white pine areas for blister rust. Plenty of old infection has been noticed, but no new outbreaks have been discovered except in isolated spots in cut-over areas. The disease is definitely under control, and by checking for currants and gooseberries once in 5-7 years, control can be maintained.

Crews have finished airplane and ground spraying of gypsy moth infestations with DDT solutions, and are now engaged in a male moth-trapping program, a new feature of which is placing traps in solid woodlands.

Many campers were turned away from campsites over the Fourth of July holiday. Two additional campsite caretakers have been assigned to Lake George Islands to assist campers, and the Rogers Rock Campsite is now open.

S. M. FARMER

DISTRICT 12

Headquarters for this district will be transferred from Albany to Catskill in the near future. The office will be located in the Catskill National Bank Building, at the corner of Main and Bridge streets.

This transfer is being made in order to improve the service for private woodland owners. This change will also reduce the amount of travel required in administering 64,000 acres of Forest Preserve, two public campsites, and 41 miles of Catskill trails, all of which are in Greene County.

The aircraft spraying program for the control of gypsy moth has been completed in this district. An area of approximately 30,000 acres was sprayed by two State planes and two Federal planes using a solution of DDT.

All counties have appointed members to the District Forest Practice Board. The District 12 Board recently drew up its forest practice standards which will be submitted to the State Board for approval at its next meeting.

C. P. FATZINGER

DISTRICT 13

The woodland service program under the Forest Practice Act in this district operates under as varied forest conditions as are found in any district of the State. In the Catskill Mountain area, you will find the northern hardwood type of forest, with beech, birch, maple and hemlock predominating. In the southeastern section, at lower elevations, are found the southern types of forest, with oaks, hickories and tulip poplar forming the greater part of the woodlots. There is a transition zone where the northern and southern types intermingle, and in a small woodlot you may find all the species common to each type. Practically every commercial species of tree native to New York will be found in some part of the district.

F. E. JADWIN

DISTRICT 14

Forestry can serve a useful purpose even at the very edge of a great city. In the natural development of lands from farm fields and woodlands to city homes and apartment houses, the question arises as to how to treat woodlands for residential use.

Many of the trees growing in a natural wooded area are not suitable for shade trees due to their height. When other trees are removed from around them they stand out exposed to wind storms and are a potential menace to nearby homes and buildings. The trained forester can mark such trees for removal for timber use, leaving the shorter stocky trees for shade.

I have had occasion to mark several woodlands where real estate developments were about to take place. With both the buyer and seller of timber present, we were able to salvage many thousands of board feet of valuable lumber.

The Conservation Department can oftentimes step out from the real woods and go to the city to lend a hand in conservation of timber, just ahead of the bulldozers and steam shovels.

(District 15 is at present operating only as a Fire District.)

H. G. STRAIT

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Letters to the Editor

WRITE SOON

Your editors, in one respect at least, are just like other people: they like to get mail.

They also feel that since this is your magazine, it is only fair to provide you with space to say what you think of it—space to criticize, blast, commend, or inquire. Such letters as are of general interest will be published just as they come in—as many as we can find room to print.

So write soon. The address is: Editor of the *Conservationist*, Conservation Department, Albany 7, New York.

CLUB AT WORK

Gentlemen: The Corning Fish and Game Club has for the second time in three years arranged for repairs in the lower sections of Cold Brook, the inlet to Keuka Lake at Hammondsport. In both cases, the rainbow (spawning) run would have been impossible due to the fact that flood waters during previous summers had broken the natural dyking on the flats with the result that the stream ended in neighboring fields, and there was no connection between the upper stream and Keuka Lake.

R. M. McMullin, Secretary
Corning Fish and Game Club

● *Nice work.—Editor*

FISHERMAN'S WIDOW

To Vic Skiff: Editor of "The Care and Feeding of Fishermen". Very cleverly put; being married to one I could fully appreciate the article and must say it covered all the angles....

Strictly off the record, we all like to see the boys have a good time at a clean wholesome sport. It too has its advantages in getting these household masters of ours out from under foot. Thus the housework goes at better speed; and they always pick up rod, reel, and all the necessary equipment and fly out the back door at spring cleaning.

"A Fisherman's Widow", Wellsville

TROUBLED WATERS

Dear Sirs; I'll toss in a few questions that have had me wondering of late.

The first one (probably an old saw to you by now) is whether or not the stocking of various species of forage minnows would be practical in lakes where bass are found. I've never known of bass having much trouble in the reproduction line but have noticed that in lakes where bass should be fairly abundant they were decidedly scarce (or considerably smarter than in the other lakes I've fished). Such lakes usually seemed quite lean on minnows too. In this line, how would flatheads and suckers work out?

The second question: How do bass fare when in competition with pickerel in a small lake (about 30 acres) that has sections ideally suited to either one species or the other? I refer to smallmouth bass in this case.

The third question is about crappies. Is this species a benefit or a curse in bass waters? I have come to look upon them as number one candidates for a couple cases of dynamite but to date have confined myself to fly-fishing for a few eating specimens just in case I prove wrong in my judgment of them. It has always seemed to me that they grow too large and in too big a hurry to provide much food for bass, and at the same time they consume much of the food that could be put to good advantage on the inside of a bass. A few of my favorite lakes that have been stocked with crappies seem to be on the downhill as far as bass go; and I wondered if the crappies were the cause of it.

Frank Freese, Jr., Schenectady

● *(1.) In view of the fact that surveys have shown minnows to be present in virtually all bass lakes, and that even the best types of forage minnows fail to increase against the predatory pressure of overcrowded bass, the cure of a stunted bass situation just by stocking minnows is far from easy. Experiments in this line in New York and other states have indicated that minnow stocking, in such conditions, is usually a waste of time and money. If combined with fish population control, to remove excess bass, minnow stocking might work, but in many instances there is always a good seed stock of suitable forage minnows which will soon build up if or when the fish population conditions become favorable. You can have minnows thick in bass waters if proper balance is maintained.*

(2.) Introduction of bass in pickerel lakes has, in several recorded instances, been followed by a drop in pickerel production. Bass and pickerel are direct competitors. There are instances, however, where they strike a balance, and both persist in the same lake. A moderate number of good sized pickerel is to be regarded as a favorable condition in many instances because these predatory fish help keep down overcrowding of perch, sunfish, rock bass or bass.

(3.) While they may exist in favorable balance, too often the crappies take over a lake rather completely, interfering with production of bass. We have many instances of crappies becoming a nuisance through competition with other fish while giving little sport themselves. At times they bite well but often develop feeding habits that are unfavorable to hook-and-line fishing. In bass waters they are more often a curse than a benefit.

In conclusion let us remark that it is a wise fisherman who avoids too much mixing of drinks, or mixing of fish. Results are not always bad but are somewhat hazardous and unpredictable. —John R. Greeley

WHAT PRICE NO. 1?

Dear Sir: I wrote Mr. C. Romilly of Niagara Falls for price on Vol. I, No. 1 (*Conservationist*). He quoted prices of $5.00 for No. 1 and $2.50 on No. 2. I wrote him that "in maybe 100 years those magazines would be worth that money to collectors." I offered him 50 cents each for those numbers. Have not had a reply from him since.

He stated that at the Buffalo Sportsmen's Show, he heard your Mr. Clayton B. Seagears say that "copy No. 1 was now worth $5.00." Where does Mr. Seagears get that stuff? Is he following the present trend in boosting the prices of everything way above their value? A trend which will shortly bring about a crash, and ruin to dealers in all commodities. Two stores closed out here recently.

Warren M. Robinson, Hoosick Falls

● *The fact remains that both Nos. 1 and 2 are collector's items, their price being whatever you can get them for. This Department, including Mr. Seagears, is fresh out of them.—Editor*

MISSING LEAN-TOS

Sirs: I wish you would ask Art Shorey what happened to the lean-to on Forked Lake at the Brandreth Lake Outlet and the lean-to on Eagle Island in Lower Saranac. They should have appeared on the map covering Canoes and Campsites (June-July *Conservationist*). but he does not seem to indicate them.

Not that it is very important to me at the moment, but I just thought I'd set the record straight.

H. C. Hauptman, New York City

● *The lean-to on Forked Lake was demolished several years ago because of old age, but it may be rebuilt if there is enough popular demand. The one on Eagle Island is still in good repair, and was left off the map through oversight.—A. T. Shorey.*

RECIPROCITY

Sirs: Please advise me if a man living in New York State, with a New York fishing license, can fish on the Pennsylvania side of the Delaware River.

C. M. Knapp, Spring Valley

● *New York State has reciprocity with Pennsylvania on any part of the Delaware River which forms the boundary between these two states. That means simply that a New Yorker, fishing on the Pennsylvania side of this river, will have his New York license honored by Pennsylvania authorities.—Editor*

OH DEAR!

Gentlemen: When the *Conservationist* was first announced, I sent in my dollar, but thought the magazine had never been published as I never received a copy until two days ago, when the June-July issue arrived with a renewal notice!

However, I'm a good sport and am enclosing my renewal. (Hope I get more than one issue for this buck).

Warren Matthews, Ridgefield, Conn.

● *A good sport indeed. We'll try to do better from now on.—Editor*

STICK TO YOUR OARS

Gentlemen: Would you please answer a much discussed question for me? If two men are in a boat—one is fishing, one is rowing—does the man who is rowing need a license to fish?

Marian Hulst, Poughkeepsie

● *No license required, provided the man who is rowing does that and nothing else. But if he baits a hook or nets a fish for his companion, he is assisting in taking a fish by angling and therefore requires a license.—Editor*

NEVER TOO YOUNG

Dear Sirs: I enclose one dollar for the New York State *Conservationist*. I am only nine years old, but my brother is eleven and he would like to read it too. My father would also like to read it.

Edward Ruestow, Clinton

From the digital collections of the New York State Library.

Out Of The Past

The Last Wolf in Orange County (1832)

"On the third day he doubled back, and was roused in view by the leading hounds from the same little swamp in which the five had harbored during the early winter. No man was near the hounds when he broke covert. But fat Tom, who had been detached from the party to bring up provisions from the village, was driving in his sleigh steadily along the road when the chorus of the hounds aroused him.

"Strange was the felon's fate. The first fence, after he had crossed the road, was full six feet in height, framed of huge split logs, piled so close together that, save between the topmost rails, a small dog even could have found no passage. Full at this opening the wolf dashed, as fresh, Tom said, as though he had not run a yard; but as he struggled through it, his efforts shook the top rails from the yokes, and the huge piece of timber pinned him completely.

"When I reached the hill's brow, all was over. Tom, puffing and panting like a grampus in shoal water, and with his foot upon the brindled monster's neck, was quaffing copious rapture from the neck of a quart bottle—once full, but now well nigh exhausted—of his appropriate and cherished beverage.

"Thus fell the last wolf on the Hills of Warwick."—Frank Forester, in "Warwick Woodlands".

IT SAYS HERE

Dear Editor: Probably the men who fish with me have already grabbed their pens gleefully to tell you how wrong you were in saying (Homespun Hackles, June-July issue) that Sparse Grey Hackle "probably has as much dry fly lore in his head as any other living American." I am proud of being the most ignorant, as well as the worst fisherman in the State and therefore hasten to ask you to correct this error. I know a number of people who have a great deal of fishing knowledge and skill but it is not contagious, as far as I am concerned.

Otherwise your article was admirable, and reminds me of some gossip that you may wish to add to it. For instance, Mesdames Darbee and Dette not only tie better flies than their husbands but a lot more of them, the husbands being addicted to going fishing. Furthermore, Mesdames Darbee, Dette and Greig are all trout and salmon fishermen out of this world and can knock the spots off their husbands in this respect, in spite of their lack of practice. I can't say about Madame Flick, never having met her.

All tiers are mad. Darbee and Dette make moths work for them eating the herl off peacock quill, and Darbee, who was a townsman and protege of John Burroughs, collects fungi and tries them out on his friends to see if they —the fungi—are edible.

Walt and Winnie Dette's first baby was born in the old River View Inn at four o'clock on Opening Day morning and we all kidded Walt about landing a seven-pound native on bait to start the season.

Flick flies are so hard to get that you have to be a friend of his before he will even turn you down. And I never use Darbee, Dette or Greig flies any more. They were so lifelike that I kept rising to them myself.

Sparse Grey Hackle

● *So S. G. H. claims to be the most ignorant as well as the worst fisherman. We are at variants with this statement.—Clayt Seagears*

MISS COLEMAN'S LETTER

Dear Editor: Unless I miss my guess, the letter of Edith Coleman's in your last issue will cause as much discussion as the flying saucers. Its contents could very easily start a revolution.

She would have it that everyone wishing to be a hunter or fisherman should go out and buy himself a hunting preserve and a river, similar to conditions in some countries which we in a free country frown upon. True, the life of the average farmer is no picnic, but also true is the fact that the city dweller in general has a job in the so-called slavery class. As far as the working end of it goes, it's a fifty-fifty proposition.

She states that the Conservation Department owes the farmer the whole show. The city dweller pays for a license that states he is entitled to his limited share of game which has been, to some extent, put there by previous buyers of these licenses. . . . She states that spending funds on hatcheries, game farms, etc., is spending money that should go to Law Enforcement. Maybe she has got a point there. Violations are going on every day and night, but don't forget that it's not only the city slicker that's getting the meat.

I would like to ask Edith Coleman if she really believes *all* sportsmen are "savages". Us fellows don't believe that *all* women are lousy drivers.

Art Baker, Niagara Falls

P. S. We don't seem to have farmer-hunter trouble around here. We have 750 of both, combined in our sportsmen's club (The LaSalle Sportsmen's Club, Inc.)

FORMING A CLUB

Dear Sir: The information and advice I am seeking pertains to the organization and operation of a good rod and gun club. I moved out here from New York City about five weeks ago. I had intentions of joining the local sportsmen's club, but soon found that no such organization existed here. However, I believe a good organization is needed and I know some of the boys around here are interested.

Now here is my problem. Although, as I mentioned, some of the boys are interested in forming a club, very few of them believe there are any real advantages in doing so. I realize, of course, that this is not so. I have tried my best to convince them, but must confess my knowledge is woefully inadequate to cope with the situation.

For example: They admit that vast inroads are being made on the local game supply by outsiders—gamehogs and poachers for the most part. However, they do not believe that even properly posted land will discourage this type of so-called hunter.

I am confident that with adequate and proper knowledge we will be able to organize a club and conduct it properly. I have always been interested in the conservation of our wildlife and this is my first chance to participate actively. Any help you can give me will be greatly appreciated.

Herbert Paust, Pine Bush

● *Organization of a club is simple. Take this from a long-time club member and secretary as gospel. Get together enough similarly interested persons. The meeting place is not important. An open lot will do, but congenial surroundings help foster kindred spirits. Choose a temporary chairman. Have him name a nominating committee, and a constitution and by-laws committee. Set a date for your next meeting. It's up to the committees in the interim to compile a slate of good leaders and a framework of rules.*

Election of officers takes place at your next meeting, as well as adoption of your constitution and by-laws. Make the whole thing simple. Then, when you've got the foundation of your house laid and your staff of carpenters chosen, you can go after members. What you build from then on depends on your leadership and membership. If you are unfamiliar with parliamentary procedure for your meetings, get your prexy a copy from any good bookstore. Or your committee could incorporate meeting procedure in your constitution and by-laws. However, avoid club room lawyers, if you can; they only gum up the works. Another thing to avoid in all organizations is lengthy meetings. Call them on time, start them on time, and make them short.

Of course, you'll wonder about finances: Membership dues will carry you along in your organization's infancy, and you can start walking later by holding conservation education lectures, field days, clambakes, dinners and the countless other big affairs that give the exchequer a good shot in the arm. Don't bite off the big things in the early stages, but don't be timid either and squelch any enthusiastic ideas.

When you've got a good conservation program going, don't forget your public relations, especially your landowner-sportsman relationship. Nurture it. Affiliate with your county organization, or federation, which in turn is affiliated with the New York State Conservation Council. The chain is simply, but strongly, forged. You clear your local problems in your club, the clubs through the federation, and the federations through the State organization. Thus, the sportsmen's voice is a powerful one. If you're not altruistic, however, forget the whole thing.

When you reach maturity, it's a good idea to incorporate if you plan to hold property and undertake big events. A membership corporation is a healthy form of insurance.

Organized, you'll get the benefit of State and Federal fish for stocking, and State game for raising or distributing. Your State and Federal agencies and departments stand ready to be of assistance with innumerable services. Organized, you're a spearhead for conservation.

None but a well organized group can properly tackle any local problem, such as you outline in your letter. All the effort and pressure from above cannot solve some of these things. It's at the grass roots the real remedy begins. You're off on the right track. Good luck. If the Department can be of any further assistance, please feel free to call on us.—R. B. Miller

PHOTO CREDITS

Cover, 2d Cover, Pages 4, 5. . . . Clayt Seagears
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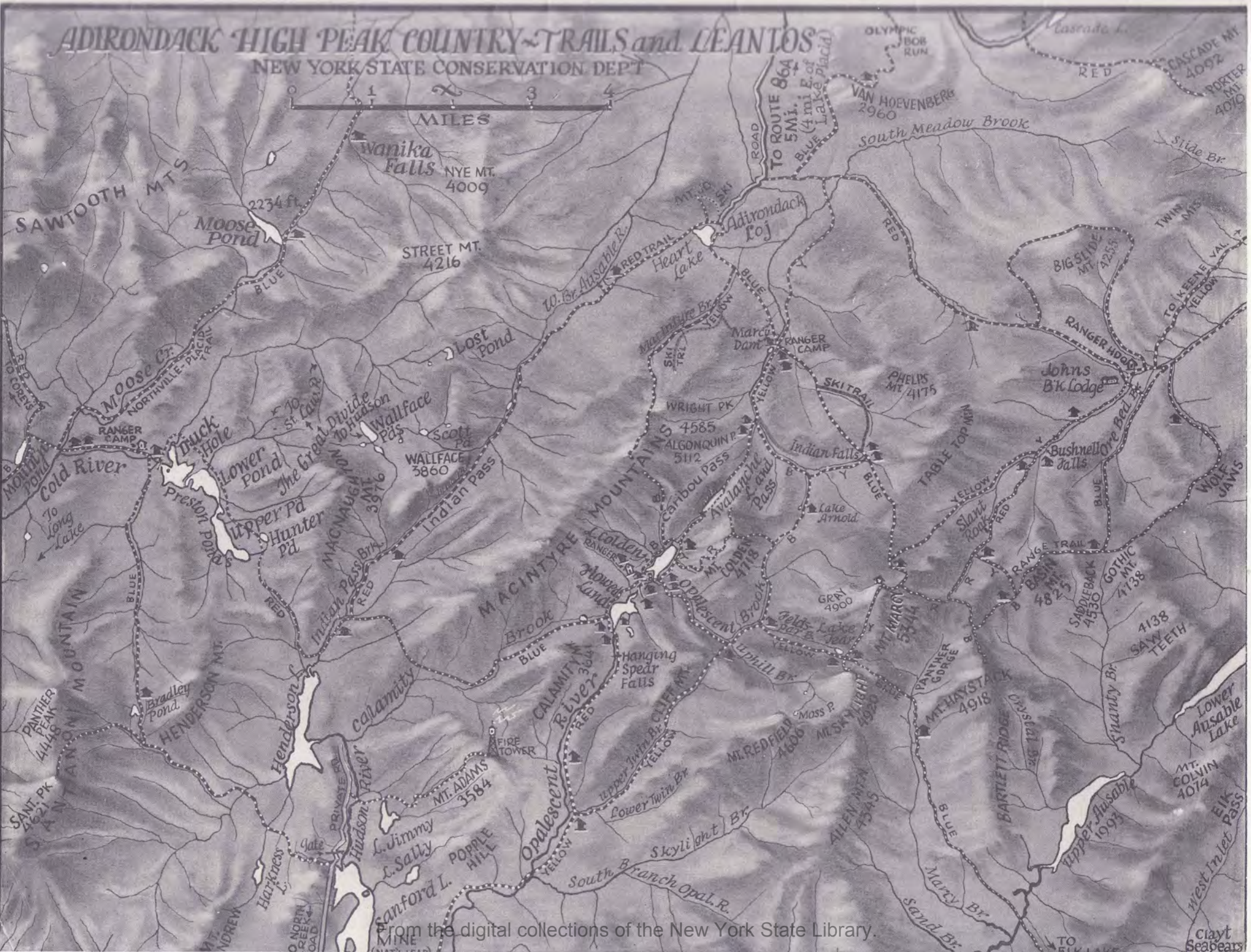

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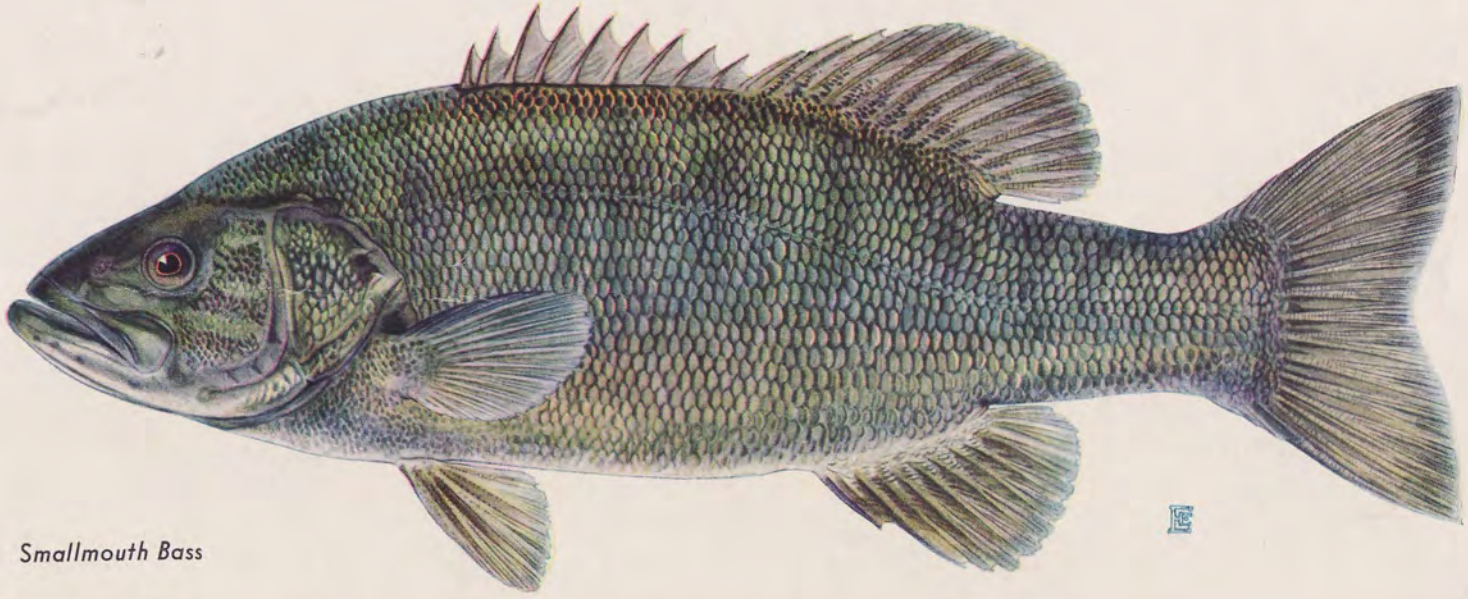
Largemouth Bass



Smallmouth Bass

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