

*The* OHIO  
**CONSERVATION  
BULLETIN**



WHITE BASS

AUGUST, 1951

Rx DR. STAFFAN'S  
**Cure for  
 Dog Days**



**CAMPING**

GO ON A CAMPING TRIP IN ONE OF OUR STATE PARKS—MANY HAVE FACILITIES FOR TENT OR TRAILER CAMPING—AND SEVERAL HAVE CABINS FOR RENT.

**GAME PROSPECTING**

IF A HUNTER—VISIT SOME OF OUR PUBLIC HUNTING GROUNDS—GET FAMILIAR WITH THE TERRAIN—HUNT OUT POSSIBLE GAME POCKETS AND NOTE FOR THE COMING HUNTING SEASONS.



**WOODCHUCK HUNTING**

WOODCHUCK SEASON IS NOW OPEN AND HUNTING THEM IS ONE OF THE FAVORITE PASTIMES FOR THE HUNTER. EARLY MORNING AND EVENING IS THE TIME TO BE LOOKING FOR THEM. EITHER A RIFLE OR SHOTGUN WILL DO THE JOB.

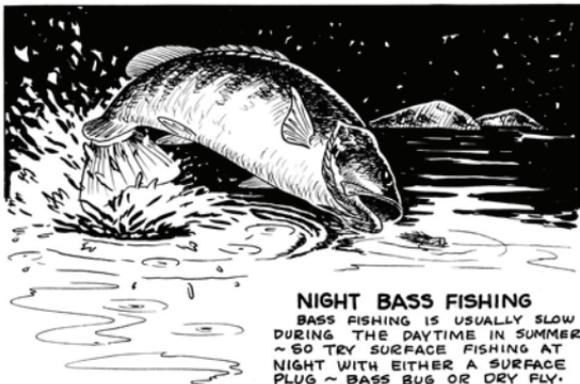
**IMPROVING FARMER-SPORTSMAN RELATIONSHIP**

VISIT THE FARMERS WHERE YOU PLAN TO HUNT AND GIVE THEM A HELPING HAND WITH SOME OF THEIR WORK—BUY EGGS—POULTRY OR FRUIT—SHOW AN APPRECIATION FOR YOUR OPPORTUNITY TO HUNT ON THEIR LAND.



TICK

THIS IS ALSO A GOOD TIME OF YEAR FOR THE VARIOUS PESTS—CHIGGERS—MOSQUITOS—TICKS AND FLIES OF ALL KINDS—TRY 6-12 FOR MOSQUITOS AND FLIES AND CHIGGERS—SULPHUR IS ALSO A GOOD CHEAP CHIGGER PREVENTIVE.



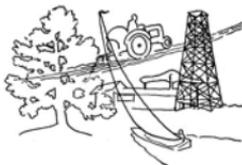
**NIGHT BASS FISHING**

BASS FISHING IS USUALLY SLOW DURING THE DAYTIME IN SUMMER—SO TRY SURFACE FISHING AT NIGHT WITH EITHER A SURFACE PLUG—BASS BUG OR DRY FLY—THE DARK NIGHTS SEEM TO BE MORE PRODUCTIVE.



# The OHIO CONSERVATION BULLETIN

Official Publication of The  
DIVISION OF WILDLIFE  
OHIO DEPARTMENT OF NATURAL  
RESOURCES



Parks—land and soil—geological survey  
wildlife—forestry—water—beach erosion.

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## TABLE OF CONTENTS

|                               |    |
|-------------------------------|----|
| Adventures in Editing         | 2  |
| The Soft Craw Question        | 4  |
| Oak Openings                  | 6  |
| Count Your Many Blessings     | 8  |
| Lake Erie at Night            | 10 |
| Lake Erie By Day              | 11 |
| Poor Man's Trout              | 12 |
| Farms With Farm Ponds         | 14 |
| Farm Ponds In Ohio            | 16 |
| Pymatuning Walleyes           | 18 |
| Nesting Woodys                | 20 |
| Terraqua Club                 | 21 |
| Men In The Field              | 22 |
| The Sand Sucker               | 23 |
| Survey Of The Pheasant Family | 24 |
| What Happens Now?             | 26 |
| Ohio's Conservation Clubs     | 28 |
| Cover Painting by Al Staffan  |    |
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## WHITE BASS

by Ed Kinney

The fellow who declares that white bass are pan fish, and not game fish, is in for an argument. Many an Ohio fisherman has returned home with an aching wrist after a day's tussle with these scrappy, delectable fish on the business end of a four-ounce fly rod or spinning rod.

This fresh-water cousin of the famous salt-water striped bass is more abundant in western Lake Erie, possibly, than anywhere else in the world. The white bass were probably numerous in Ohio's larger streams and lakes one hundred fifty years ago. They were reported to have been abundant in the Mahoning River around 1800. The reader can speculate as to the causes of their disappearance.

White bass spawn during the spring, and it is during this period that many are caught at Buckeye Lake and along the tributaries of Lake Erie. Minnows are the most common live bait used. Around the "Island Region" of western Lake Erie they are readily taken on small spinners, wet and dry flies, small plugs, and spinner combinations. A small spinner and short piece of pork rind have brought most consistent success.

The motto in western Lake Erie, when looking for a school of white bass, is, "Watch the birdie." Many fishermen carry binoculars to watch for feeding gulls and terns. The bass drive the Lake Erie emerald shiners to the surface where the birds feast on them. It is not uncommon to see an acre of water boiling with feeding white bass. Schools can be located almost any decent day from late June through September.

These sporty fish, which grow to eating size by September of the same year they are hatched, feed chiefly on minnows and small fish. They also eat crayfish and other small crustaceans, insects, and insect larvae. When they are feeding on mayfly nymphs or other insects or crustaceans which dwell on the lake bottom, they are difficult to locate. Trolling along the bottom, over reefs, is an excellent way to find the schools.

Although some white bass are fourteen to eighteen inches in length and weigh over two pounds, the more common size is from eight to twelve inches, with weight from a half-pound to a little over a pound.

Connoisseurs don't waste time when transferring white bass from lake to frying pan. In hot July weather they don't keep well unless they are frozen. The skin has a delicate, delicious flavor and should not be removed. When rolled in flour, salted, and browned in country butter, white bass make a breakfast that really starts the day right.

E. A. Joe Bauer's

## Adventures in Editing



Just one year ago the first Adventures in Editing appeared in this magazine. Incidentally, that also was this writer's first effort at compiling and preparing the Ohio Conservation Bulletin.

Possibly a year isn't sufficient time to reach any conclusions—but a more pleasant job than editing the Bulletin never existed. Each new issue has been a new adventure.

The past year was responsible for our meeting many of the finest citizens of the state—the sportsmen, the farmers, the conservationists. It has been possible to visit sportsmen's groups, schools, conservation projects,—and to become better acquainted with our own Department of Natural Resources field men.

We have read many manuscripts—we have seen many good wildlife photos—and we have tried to pass the best of these on to you. Many of you have written letters. Some were complimentary and others were critical. Generally, though, the contents were encouraging and they proved that most of you enjoy the Bulletin.

Editing the Bulletin is pleasant and interesting because each day presents new problems. There is a certain amount of proof-reading, pasting, and perspiring over a typewriter, but more often than not an activity far more absorbing demands attention.

It is necessary to spend much time in the field—in every corner of Ohio—and no trip is without interesting, and sometimes unusual, incidents. We have been able to disprove the theories of all those who believe that there is no good hunting and fishing in Ohio. In the southern Ohio hills we have seen sections that were alive with gray squirrels. On winding forest fire lanes we have seen grouse and deer. Returning from an evening's fishing in northeastern Ohio, it has been necessary to use a heavy foot on the brakes to avoid hitting a handsome buck on the highway.

In northwestern Ohio, and also on the Lake Erie Islands, we have seen flocks of pheasants so large that an accurate count was impossible. On one photographic mission in Wood County last winter, cameraman Walt Lauffer was so confused by the vast numbers of flushing birds that he didn't get a shot at any of them.

Memorable experiences have not been confined to the many species of wildlife that are found in Ohio. On a recent trip to Mosquito Creek Reservoir in Trumbull County, it was impossible to rent a boat. The concessionaires insisted that we use them free! They wanted us to sample their excellent fishing—and to pass the word to other Ohio anglers.

More than one time a farmer has neglected urgent chores to show us around his land and to assist us in obtaining photos and sketches. One Fayette County farmer spent the best part of an entire day helping us—just so that we could get pictures of a flushing bar in action on one of his mowers. You nimrods who plan to hunt in Fayette County will be pleased to know that many nesting pheasants were spared an early death by the cutting bar because of this farmer's interest in wildlife conservation.

Over in Jefferson County, the officers of the largest conservation group in Steubenville feted us so royally that it was almost embarrassing. In dozens of other

places we ate so generously of Ohio cooking that our waist measurement has increased from an average 34 to an ample 38. Make no mistake that Buckeye females are good cooks—and that includes everything from substantial country-style fare to good German and Italian cuisine.

Possibly you will get the impression that nothing more than a gallavantin' editor is necessary for you to receive the monthly edition of the Bulletin. Far—far from it! A whole lot of hard, unglamorous work goes into the Bulletin's make-up. Take the case of Velma Wade, for example. Velma is a veteran of Bulletin and public relations work. Without her, and we hope she doesn't read this, the job would be mighty difficult. Velma answers many of your letters, does most of the typing, keeps a file of all sportsmen's groups,—among many other painstaking tasks.

The Bulletin circulation staff contains a quartet of ladies whose noses are pretty close to the grindstone forty hours each week. Quite a fisherwoman is Joan McFarland who handles all the money. Another Joan, but this time a Farley, prepares a file card for each subscription you send. Mother of two servicemen in Japan, from a total of six children, is Peg Fadley who files all subscription cards. Newest member of the Bulletin family is Donna Buck, a pretty redhead who has no end of beaux around the office.

Number two Bulletin man is Business Manager Bill Kah. Bill is also the expert fisherman in the outfit. Actually it is no fun fishing with him because he always winds up with the heaviest stringer—he seems to know the fishes by their first names.

If you have ever wondered who writes the Men In The Field page, Randy Guthrie is your man. A good journalist and brand-new father, Randy is a favorite with the field men whose story he prepares each month. Randy also edits a Department paper, the Grapevine, and prepares all News Releases.

Recently we have had many compliments on our art work and on our colored covers. Although we admit to being partial, we must agree that young Al Staffan's work has added much to the magazine. Month after month we use plenty of Walt "Ace" Lauffer's photos—and few photographers have been in the business as long as this veteran of wildlife work.

By the way—if you want to see smiles on the faces of the members of the Bulletin family—don't let your subscription run out. You might even try sending us a few new customers. We promise that no one will be mad about it!

Sporting goods dealers, hardware dealers, barber shop owners, boat concessionaires, we believe we have a proposition that will interest you.

You can help us by writing subscriptions to the Ohio Conservation Bulletin in your place of business—and at the same time you can make a very decent profit.

Drop us a card or letter as soon as possible and we will tell you about our offer. You are under no obligation whatever, we are merely interested in spreading the conservation story through the Bulletin.



A familiar sight on an August afternoon afield is old Woody—variously known as a groundhog, woodchuck and whistlepig—according to where you live. An industrious digger of dens, Woody is a popular fellow with his many cousins in the cottontail clan. He builds homes for them, you see.

Woody is equally popular with the host of rifle bugs who hunt him both for sport and meat when the season is closed on other game. More and more of the firearms fellows each year find that Woody is a toothsome morsel on the table.

Ever try young woodchuck, roasting ears and cider?

Scientists and sportsmen alike  
have been baffled by

# THE "SOFT-CRAW" QUESTION

"How can I make a hard crawfish soft?" Ninety-nine times in a hundred that is the question people ask when you mention crawfish.

It seems that just when the bass fishing begins to get good, soft craws get scarce and in another couple of weeks they are off the market. By the middle of the summer, you would give anything for a soft craw to dangle in front of some lazy old bass and you can be sure the bait dealer would give anything to have a supply to sell you. The truth of the matter is that they are just plain hard to get in the summer time and no one has yet succeeded in commercially producing soft craws.

The thing that makes crawfish soft, of course, is the shedding of the old shell. In the immediate stage before the new shell hardens, the crawfish is in a soft fishable condition. Out in the stream, shedding usually occurs during the early morning hours and by noon the shell is hard again. The reason for this shedding is the fact that the animal is enclosed in a hard inelastic shell—a suit of armor, so as to speak.

by Rendell Rhoades

The crawfish is growing a little all of the time and this old armor gets rather tight in spots. It must feel about like your old suit after two Thanksgiving Day dinners. When this internal growth reaches a certain point, a new pliable shell forms under the old hard shell and in this stage the crawfish is known as a "peeler." Bait men notice that the body and tail colors are darker and the sides of the tail "give" a little when gentle pressure is applied with the thumb and index finger. If conditions are proper, a crawfish in this stage will peel in the matter of a day or so.

The shedding process is a great event in the life of the crawfish and it has no parallel in the rest of the animal kingdom. A crawfish in the peeler stage will spend the greater part of two nights lying in shallow water with the back exposed to the air.

On about the third night, the shell is sufficiently dry to crack from the internal pressure. The peeler then seeks the protection of a rock or other cover object and there goes through a series of movements that rips the carapace open for almost the full length along the back. The crawfish, usually on its side by this time, begins a squirming, wiggling motion that buckles the internal parts as they are pushed from the gaping old shell.

Even with most of the body exposed, the process is no more than started. The soft legs must be pulled from the old leg shells all the way down to the "toes". There are ten legs and ten delicate mouthparts to

work free with such care that not a single joint is lost. The huge claw must be pulled through the hollow of the tiny joints that attach the pincer to the body. Furthermore, this shedding process calls for the removal of the lining of the digestive tract. When the stomach loses its lining a set of molar-like teeth is removed and a new set grows in its place. No wonder the newly shed crawfish lies helpless beside its old shell for an hour or more. In time it rights itself, tries its new legs and darts away in reverse to enjoy its new, looser shell of clean, clear colors.

Crawfish that hatch in late spring leave the mother when they are less than a half inch long. Between mid-June and mid-August they shed from seven to twelve shells to accommodate the rapid growth of the first summer. After the last molt of the season, the larger males and females are sexually mature and they mate in the fall. It is not until the following spring that they shed again. Soon after the males emerge from their winter quarters they have a molt that compensates for some growth and changes them to a sexually inactive animal. The females lay their eggs and rear their young before they have their spring molt. It is during these sheddings that peelers and soft craws are available. Most adults live through the summer without shedding. About the middle of August, shedding begins again to accommodate for the summer's growth and prepare both sexes for the approaching mating season. This accounts for the availability of soft craws during the fall of the year.

This is a natural cycle followed year after year and generation after generation. Only occasionally do lost pincers, unusual growth and changes in water conditions induce extra out-of-season molts. It is upon these slight possibilities that the bait dealer hopes to capitalize and provide soft craws when you need them most. Literally dozens of ideas have been expressed on just how to make crawfish soft. Some are purely myth and others are based upon scientific fact; some work just enough to encourage their existence and others have the fundamentals to make them productive. The man who finds the key to the situation will serve the fisherman as gloriously as old Izaak Walton himself.

I have always been interested in suggested ways to make crawfish shed. A few interesting ones might be reviewed here and these, by no means, exhaust the field. Since molting is a function of growth, why not feed the crawfish heavily and actually "fatten" them out of their shells? This procedure works with young craws though it seems not to be worth the effort for older crawfish.

An old-timer once told me that he took 50 or more crawfish, put them in a burlap sack and staked the sack out flat on the grass. Several times during the day he tossed a bucket of water on the sack and each morning he removed a few soft craws. The sack simu-



*Cameraman Walt Lauffer caught this trio of crayfish shedding their shells in the bait tank of the Hilltop Sporting Goods Store, Columbus.*

lates the shallow water that the crayfish seeks to dry its shell.

One researcher discovered that by breaking off pincers, the crayfish could be forced to shed. The crayfish has remarkable powers of replacing lost parts and the development of new pincers and legs is accomplished by one or two complete sheddings. A fellow scientist checking the discovery discounts its importance at least as it might apply to the commercial soft craw business.

The growth and development of the crayfish are governed by a set of internal glands, similar in several respects to the ductless glands of the human body. If we knew more about the interrelationship of these organs in the crayfish we might be able to solve this elusive problem. It is a well-known fact that lime makes the shell hard and if we could keep the crayfish from getting or depositing lime in its shell we might have permanently soft crayfish.

For the fisherman who collects his own supply of bait, the best time to collect the soft craws is in early morning, or better still you can collect peelers the day before. Put them in shallow tanks and after they shed place them in moss. They should be in a cool place so sneak them into the bottom of the refrigerator while your wife isn't looking. In the cool soft state, they do not crawl around—not very much anyway. In moss in the refrigerator, the hardening process is slowed down and they remain in a "paper-shell" condition for a week or ten days.

There are natural paper-shell crayfish in some of the slow warm ditches in northwestern Ohio. The Mud Crawfish and the Red Crawfish seem to be slow to form shells and fast growing populations have a large percentage of poorly-shelled individuals. Perhaps these could be used by local fishermen and these species might be the starting point for experimental work on soft craws.

## GASTROLITHS IN CRAYFISH

by Rendell Rhoades

Several pieces of correspondence have come to me recently inquiring about the small white "seed-like" objects found in fish stomachs. These little discs are composed of a lime-like material and are about an eighth to three-eighths of an inch in diameter. On one side they are convex and on the other side they are concave with the pit filled with a scale of brownish material. It is a popular belief that these objects may be the seeds of plants, gravel, or bones of other fishes. Actually, they are the "gastroliths" of crayfish. That may sound like a "sixty-four dollar" word so an explanation is in order. "Gastro" is a Greek word meaning stomach and "lithos" is another Greek word meaning stone. Thus, it literally means "stomach-stone".

To go into a little more detail, these stomach-stones are formed in the inner lining of the stomach of the crayfish from 10 to 30 days before molting. Their function is not definitely known though at one time it was thought that they stored lime for the formation of the new shell. We have found that nearly 90% of the gastroliths are lost in the shedding process and the lime and phosphate could not possibly be used again. Hundreds of these cast off stones cover the bottoms of the bait dealers shedding tanks.

These stones have been regarded in the past as having mysterious medical powers. The doctors of the Middle Ages supposedly made their medicines more potent with the addition of such hard-to-get ingredients as ground panther's claws, lizard's teeth, and crab's eyes. The crab's eyes were really the gastroliths of the crayfish and lobster. We moderns laugh these things off as just a lot of hooey. We prefer to stake our claims for health on milligrams of thiamine, niacin, and riboflavin.

It is only natural to find gastroliths of crayfish in the stomachs of channel catfish, bass and other game fishes. As we learned, these stones occur most commonly in "peeler" crayfish, a stage at which the crayfish is very tempting to foraging fishes. There is a pair of gastroliths in each peeler crayfish and the number in the stomach of a fish will give you some idea of the number of crayfish it has eaten during the past few hours.

There are several other parts of the crayfish commonly found in the stomachs of fishes. One often sees claws and parts of the shell. If you will examine the stomach contents closely you may find a number of tiny teeth, less than a quarter of an inch long, and shaped just like human molars. These are the crayfish's teeth that resist the digestive juices in the fish's stomach.

The crayfish does not chew its food until it reaches the stomach and there several of these little molar-like teeth grind it into a pulp. The only teeth a crayfish has is in its stomach. Just think of the poor crayfish if it had to "see its dentist twice a year". Fortunately, Nature took care of that for the crayfish and it gets a new set of teeth every time it sheds its shell.

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# Oak Openings and Ohio's Lost Sand Dunes

by Marilyn Shearer

Lucas County in Northwestern Ohio owns one of Ohio's most unusual spots of natural beauty, the Oak Openings Park.

Oak Openings, as yet known to few who have not lived in this section of Ohio, is fast becoming a popular area for campers, picnickers, and wildlife lovers. The park, developed as a wildlife conservation and public recreational area, is one of seven parks under the management of the Toledo Metropolitan Park System.

Thousands of persons visit the park each year. Its location just a few miles southwest of Toledo makes it particularly inviting to residents there, who in little more than an hour, can leave the city far behind and find themselves resting on the quiet lake shore or hiking through the woods.

It is also a favorite spot for campers. Camping groups return to the park year after year, finding new trails to explore and new experiences awaiting them each time they invade the estimated 3000 acres of land in the park.

If you plan to visit the park, here, briefly, is what you would find.

Leaving State Route 64, you travel a side road for a short distance and then turn off into a grove of pine trees, the beginning of the park. Following this lane for a quarter of a mile leads you to the main park area where there is a lake, shelterhouse, cabins, and the main picnic area.

On your arrival here you will be greeted by Mallard ducks, Canada geese, Snow geese, Blue geese, and a pair of imported European Mute Swans. Occasionally other species are also present. Most of these birds are tame enough to eat from a person's hand—if you stand quietly and entice them with a little corn or scraps from your picnic table. Campers find them excellent alarm clocks for rising early in the morning.

The area around the main lake is cleared and kept well trimmed. However, you need not walk far to reach one of the many trails that will lead you to the back woods area of the park. It is strolling through

these trails that you can best enjoy the natural beauties of the park.

The park itself lies within a larger region known as Ohio's Oak Openings. This territory is approximately 130 square miles, 25 miles long and 5 miles wide with the park located approximately in the heart of this area. This larger Oak Openings lies two thirds in Lucas County and one third in Henry County and Fulton County.

The boundaries of this region were formed quite naturally. The land and the growth upon it, as found by the early settlers, are the result of the Wisconsin glacier which moved from Labrador across Ohio some 55,000 years ago. Plants and trees in this section of the country were destroyed by the glacier and the glacial lake that left the region stripped of the fine top soil which is found on all sides of Oak Openings today.

The glacier deposited large quantities of quartzite, granite, and other metamorphic rocks carried from the Canadian highlands where Lake Huron and Lake Superior are today. Some sand and clay were carried long with the rocks. This, in addition to the grinding of the rocks against each other under the pressure of the glacier and the beating of the waves and currents of the glacial lake, formed the large deposits of sand.

The receding of the glacier left an area of sandy knolls and clay soil with several small lakes. Wind swept the sand into dunes. Through the years, prairies covered with shrubs and tall grass developed in the low lands between the dunes. Oak trees were the only deciduous trees to return to the area at first. Some aspen, sumac, willow, maple, and dogwood trees are also found, but are not naturally plentiful.

It is undoubtedly this abundance of oak trees and the absence of others that gave the region its name, the Oak Openings of Ohio. It is first known to have appeared in print as far back as 1873 in the **Ohio Geological Survey**, Volume 1, and is believed to have originated with the first settlers who found the land very largely open sand dunes with only oak trees, a few shrubs, and tall grass in prairie lands.

Settlers were attracted to the land because it was clear. But lacking the improved agricultural methods of today, they could not make a living from the poor crops produced by the clay and sandy soil and many moved on to the richer soil on the outskirts of the Oak Openings.

Although unsuitable to farming, the area has become a sanctuary for many plants that thrive in sandy soil which is unusual for this section of the country. It is also a sanctuary for many birds and species of wildlife. It was for this reason that interest was taken to acquire the territory as a park and conservation area.

Development of the Oak Openings Park was begun



in 1929 when requests from many persons, ornithologists, botanists, and nature lovers of Ohio, persuaded the Toledo Metropolitan Park Board to acquire some of the Oak Openings territory to preserve its rare natural development. Five types of habitat are found in Oak Openings: prairie, forest, thicket, bog, and dune.

The initial tract of land was purchased in 1929 and contained 69 acres. It was named Springbrook Park. It was not until seven years later, in 1936, that more land was purchased. Several tracts have been bought from time to time, until nearly 3000 acres have been set aside for the park area, comprising nearly all of the land intended to be included in the park, now known as Oak Openings Park.

In 1939 picnic tables were constructed in the park and it was opened as a picnic area for the public.

During 1940 and 1941 Works Project Administration workers were assigned to the area and did much to build up the park. A stone shelterhouse, three stone cabins, several outdoor stone fireplaces, more picnic tables, and a playground area were constructed around the main lake. Drainage ditches, bridges, dams, and waterfalls were also constructed as part of the conservation project.

It has always been the policy of the Toledo Metropolitan Park Board to preserve its park areas as much as possible in their primitive state. Outside of the clearings for the picnic area, they have done little to the woods sections except to blaze foot trails and fire lanes.

Although pines, spruces, cedars, and other coniferous trees generally thrive in a sandy soil, not one coniferous tree is known to have been found in the original growth of Oak Openings. Since then, many acres of pine trees of several varieties, and several varieties of native hardwoods have been planted as part of the reforestation project of the park board.

Since the growth of the woods, the number of birds that nest annually in that area has increased. It is an ornithologists paradise, for the ducks and geese, whose wings are clipped each year so they will remain in the park and nest, to the many spring warblers, cardinals, robins, song sparrows, and indigo buntings with their cheery songs and flashy colors that line the woodland trails.

In the winter the ducks, geese, and swans are penned in a smaller area where they are protected and can be easily fed.

The area attracts a larger variety of birds because of the variety of habitat found there. Many birds rarely found in other sections of Northwestern Ohio may be found in the Openings.

The trails of the park have been planned to show the hiker the natural beauties of the park, the variety of land conditions, and the many species of flowers, ferns, grasses, sedges, and trees that are found in the different areas.

At present there are eight trails varying in length from 1½ miles to 3 miles. All of the trails begin near the shelterhouse. The hiker who does not know the trails or does not have a map of the trails should be careful not to go too far alone. Many seasoned campers have taken the long way home by turning wrong where trails cross.

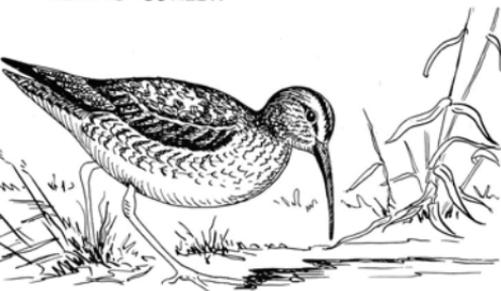
Small shelters have also been built along the trails for resting places and for sudden rainy spells.

Ridge trail in the south region of the park passes through the best wildflower prairie, while Fern trail follows in a wide circle along one of the runs that goes through the park. The Dunes trail is a pretty one for scenic beauty. It passes through a forest sec-

(Continued on Page 32)



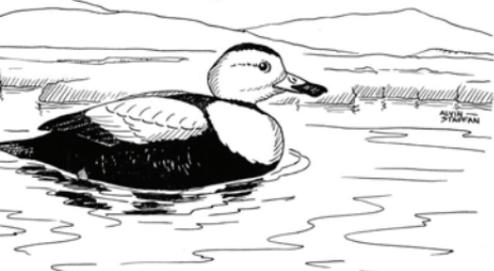
ESKIMO CURLEW



PASSENGER PIGEON



HEATH HEN



LABRADOR DUCK

# COUNT YOUR

The day was perfect. There had been a cold rain and wind blowing for twenty four hours, and duck hunters were on the move along the Mississippi Flyway.

Charlie Clarke and his boy Jim had driven out from the city last evening, and were now in their blind before daylight. As the beating rain shut out the world, it was easy for Charlie to think of the many times he had waited in a similar blind straining his eyes and ears searching the sky for ducks. He could vividly remember the first time his father had taken him along on a shoot, it was a day like this and it seemed to him there were ducks everywhere.

At this point his reverie was broken, for six blacks were approaching their decoys. They both got ready, properly timed their shots, and watched two ducks hit water for the last time.

Later, as they headed home with one duck short of the limit, Charlie again thought of the day he shot his first duck. Jim was still excited with the success they had that day. Charlie broke the silence, "I wish you could have hunted in the old days. There were really ducks then, why the first day I went hunting we gave away twice as many as we shot today. It sure is a shame, but duck shooting has practically been ruined." Jim spoke up, "Gee, I wish you wouldn't look at it that way Dad, I've had a terrific time today".

Suddenly it hit Charlie, the boy was right. They had seen ducks, quite a few, and had shot some. They'd had a day afield, forgotten their worries a few moments, and the companionship between father and son was worth a lot. Charlie said, "Come to think of it son, I've had a terrific time too". And as a smile lighted his face, Charlie knew that Jim would always remember his first duck hunt.

Variations of this little story have been enacted thousands of times, but not always with a happy ending. **Too often sportsmen of today become discouraged when they don't find the fish and game they've heard about, or knew as a boy.**

All of us at one time or another have wondered what it would be like to have lived when wildlife was really plentiful, when waterfowl and passenger pigeons darkened the skies, when there were bison as far as you could see, when the heath hen was so plentiful that laws were passed in eastern cities to the effect that you could not serve them to servants more than three times a week. The golden age for the hunter and fisherman! With conditions such as these gone forever, you might well ask what else is there to do but become discouraged.

It is granted that there are game species such as: the passenger pigeon, Eskimo curlew, Labrador duck,

*Although these four birds are no longer included in hunter's bags, other game species are more numerous than they were before North America was settled.*

# MANY BLESSINGS—one by one

by Rod Cochran

and heath hen that are extinct. And some others that probably will never be hunted legally again, namely: bison, whooping cranes, and swans. Upon closer examination of this group, we see that it is for the most part peculiarly susceptible to extinction. This is to say that the habits of the animals themselves make them unable to live with man. The date the last passenger pigeon died is not important, its doom was sealed with the landing of Columbus. The members of this group have a great deal in common. They traveled together in great flocks or herds making them easily vulnerable to persecution by man, and they usually had a weak link in their life histories. Using the passenger pigeon again, they nested in a relatively small area of virgin forest in the midwest, today this land grows corn. Even if there were some of these birds left, they probably could not find a suitable nesting place and would, therefore, become extinct. For comparison take the passenger pigeon's first cousin, the mourning dove. This bird does not migrate in great flocks that can be persecuted, and has a wide nesting range, consequently it exists as a game species.

The second group of animals are the ones that have decreased but are still hunted, and includes most of our big game, waterfowl, and some of our upland game. They have suffered from civilization, but with wise use and management they will always afford sport. Waterfowl being typical, we will use them for an example. Drainage, pollution, and unscrupulous hunting practices all had their part in cutting down the waterfowl population. Fortunately the birds were widespread enough in their range and diversified in their habits, so they all were not affected by one body blow. Of course, the big bag limits are gone, but I have yet to find the person who really wants to do a little duck shooting and who cannot do it.

Our third group of game animals is made up of species that have increased since pioneer days. Not commonly realized, the cottontail rabbit, which absorbs more hunting pressure than any other single animal in Ohio, is one of these. The fox squirrel is another. Surprisingly enough, the white-tail deer is more common than it was originally. And the range of the bobwhite was greatly increased by the white man. These are known as "forest edge" species, and as man cut into the vast tracts of virgin forest more edge and brushy areas were made available to the animals. It is difficult for some people to realize there are game species that have defied the traditional idea that, as hunting pressure increases, the game will decrease. That this old adage is untrue certainly supports the theory of habitat restoration that is becoming prevalent today. In this case man's activities on the land aided these wildlife species instead of depleting them. It was simply a case of game becoming abundant as more and more suitable habitat was provided. It must be kept in mind, however, that what has happened up to the present is not proof that these animals will continue to increase.

Our last group consists of wildlife that has been transplanted. That is, breeders being imported from another continent, then artificially propagated and released. The notable example in the United States is the ring-necked pheasant, although there are others. Here an outsider fills a space the prairie chicken could not hold, that of squeezing itself in between man's crops. This practice still holds promise of increasing our game supply, and continuing research may turn up some more suitable species. These experiments must be carefully controlled, however, because of the ever present danger of importing a pest or a deadly disease.

With this brief sketch of our different types of wildlife, and a little history of how they have fared, let's do some comparing before we draw our conclusions. The comparison is to be made between hunting conditions during the golden age of wildlife, and hunting conditions of today. First we must realize that the pioneers and early settlers had a different conception of wildlife than we do. To them it meant food and clothing, and big kills were necessary to tide them through the winter. Then too, they had to protect themselves. Recall from county histories how farmers had to band together and organize hunts to protect their corn fields from squirrels. Or the housewife that kept a lighted candle at the window and a flintlock in readiness to keep the howling wolves away from a precious cow while her husband was on an overnight trip. I think they would give us a different slant about the advantages of living in a primeval wilderness.

Later market hunters came into the picture. To them wildlife was a business, and oftentimes not an easy one. In their day and age everybody thought wildlife was limitless, and they simply were supplying a commodity that was in demand. It took plenty of know-how, endless hours, and a lot of work. It was their job, and they probably griped about it, as we do ours today. It was at this time that "sportsmen" also made large kills. They were not dependent upon their game for food, nor was it their business. They hunted for sport, as we do today. To many people killing more ducks than a man can carry is not sport, but here again they thought the supply was limitless.

Today we cannot hope to kill large numbers of game animals. But with vastly improved means of transportation, we have more diversified hunting and fishing. With little time and expense a man can enjoy upland gunning, waterfowl shooting, and big game hunting, and be successful in them all whether he lives in Maine or California. Or a fisherman living in the midwest can go after great northern and muskies, or take a crack at deep sea fishing during his vacation. This is something the old timers couldn't do.

Another facet of our modern day living, is the leisure time it provides. More people have time to go hunting and fishing than ever before in history. Game management technicians are worried about the

(Continued on Page 32)



## come to lake erie

# by NIGHT

On almost any warm midsummer night you can find the Jones family taking their ease under the stars, listening to a ball game or enjoying themselves as only those can do when at peace with the world.

Dad, sockless and shirtless, is enjoying a cool glass of his favorite beverage. Mother is happily relaxed with her brood about her at the end of a normally trying day. The kids are unusually quiet and intent with their own devices.

What is so unusual about this little domestic scene? You can witness its duplication in thousands of backyards across Ohio on any suitable summer evening. But the unusual feature of this particular setting is that the entire family is happily engaged in America's favorite outdoor sport, fishing. The locale is all Ohio's backyard—Lake Erie.

by *Cliff Morrow*

All summer long across the length and breadth of Lake Erie, when weather permits, transient villages of small craft of every description and size spring up around favorite fishing grounds. Lanterns go over the side, tackle is broken out and the night fishermen once again are out in force. Favorite spots are those places where fish are likely to congregate. There is no secret about these spots for the bobbing gas lanterns are a dead giveaway and there are always a few with an inquisitive turn of mind who must investigate any lone boat, just on the chance that that is the party who has discovered the most popular piscatorial night club.

But be that as it may, night fishermen are a friendly lot and an intrusion is seldom resented. River mouths, bars, reefs and hidden stone piles harbor the largest concentrations of boats—while occasionally a school

of fish is located in open water and a small city will be founded on that spot.

No purist is the night fisherman. His equipment will run the gamut of rods from cane poles to trolling rods, but almost without exceptions his terminal tackle will consist of a sizeable chunk of lead and a couple of hooks well decorated with minnows or garden hackle.

Except for the boat, the gasoline lantern is the most important single piece of equipment.

An ingenious theory has been proven and therein lies the secret of night fishing's frequent successes. It seems that the bright white light of the lanterns is a hypnotic attraction for the lake's myriads of shiners, the diminutive bait fish that supports hordes of larger and more palatable species. The flashing, dancing, school of minnows collected by the light in turn provides an irresistible free lunch bar for all hungry finny denizens of the lake. A fast scoop of a long handled dip net provides the angler with a liberal supply of bait, and what is more important is the fact that it is the bait that the fish are feeding on at that moment. The minnows are transferred to one of two tubs partially filled with lake water. The other tub is for the expected catch.

If the action reaches anticipation, it will be much too fast to string any of the catch. Hooks are baited and lowered through the school of shiners to the bottom and then raised just far enough so the motion of the boat doesn't cause the lead to bump the bottom. If the lake is particularly calm the fisherman may resort to "jigging" in order to make his bait more attractive. However, Nature, usually in the form of gentle swells, takes care of this important bit of technique. All the angler needs to do generally, is to remain on the alert for the strike of his intended quarry.

(Continued on Page 32)

When it comes to fishing, Lake Erie needs no introduction, but a few personal observations may prove interesting to people who wish to fish something other than the usually less productive inland bodies of water—all due respect to five gentlemen who may have a different opinion. (Ed. Note: The author is chiding his fellow fish management supervisors in Ohio.)

Yes, sir, with all the commercial fishing, pollution, siltation, carp, hook and line fishing etc. Lake Erie is really going to pot. Just the other day, June 3 to be exact, I made a tour of the islands out of Sandusky to check hook and line fishing. In a mile-square area just north of Kelley's Island in the vicinity of Gull Reef, there were an estimated one hundred boats trolling at the same time. In checking them, I found numerous catches of walleyes numbering fifty to seventy-five and more per boat with four fishermen aboard. These fish ranged up to seven pounds and better, yet commercial fishing in that same area is producing a bumper harvest, too.

For those who like to cast, one person caught twenty walleyes in shallow water at the same place in sixtyninutes of fishing, with a ten-cent spinner baited with worms.

In Sandusky Bay the commercial drag seiners are making excellent white bass catches and at the same time the annual white bass run up the Sandusky River at Fremont was not only the heaviest, but the longest in years. It's quite obvious that no one participant

is taking all that is being harvested by any manner or means.

As for black bass fishing, the below pictured smallmouths and rock-bass were taken by two fishermen in a short period of casting artificial bait on the reef between Gibraltar Island and the Franz-Stone Laboratory on South Bass Island.

For anyone to spend some time up here on Lake Erie and see the tremendous production of fish that is being harvested annually, and to be able to go out and catch an unlimited number of both game and commercial species of fish at any time on a hook and line, it is difficult to believe that we are rapidly nearing the time whereby the last Lake Erie fish will be hung over the mantelpiece.

The main species to be taken by hook and line are carp, walleyes, channel catfish, sheepshead, white bass, yellow perch, and smallmouth black bass. For personal enjoyment I like to go out in the evening and land a big carp or two. The last one took twenty-eight minutes to land on a ten-pound test line. The only trouble is that it usually doesn't stay light long enough to boat more than one and still get back home before dark.

Regardless of the varied answers and opinions of "experts" there is plenty of atmosphere to be enjoyed up here, so come on in, the fishin's fine! It doesn't matter much what kind of fish you prefer—if Lake Erie has them, you can catch them and there are still more than enough fish to go around.

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## and by DAY

by Bob Cummins



# POOR MAN'S TROUT

by George Robey

(Publisher, *Ackerman's Sportsman's Guide*)

Twenty-two years ago the people of eastern Ohio decided to do something about the floods that menaced their homes and businesses, and swept the rich soil of their farms in muddy torrents to the Gulf of Mexico. And so, a public service project grew from the minds and determination of men into the great Muskingum Conservancy District. It is Ohio's greatest gift to sportsmen.

The ten clear lakes increased the inland water area of the state by 50 per cent. Some 365 miles of shoreline are now used by the public in a fishing, hunting and general recreational melange worth \$800,000 annually, according to National Park authorities.

Boat docks on the ten lakes operate to capacity in the best fishing months, supplying boats, bait, motors, lunches and other accommodations to an avid public whose anglers increase by the thousands each year.

We learned the reason for this annual increase in fishing enthusiasts in June this year. As if by a given signal the fish began biting in early June. Never, in all my travels as a professional fisherman have I seen as many fish moving, and spawning and cavorting as there were to be seen this year in the brush-filled bays and shrub-lined shores of Muskingum Lakes.

But the fish wouldn't bite. Not until that signal was given by nature. It seemed as if some departed and benevolent disciple of Izaak Walton, gifted with some power of divinity, suddenly touched his magic wand to the landscape and created a paradise for the angler.

Actually, something of this sort has been done by the Muskingum Conservancy District. In the world's foremost demonstration of basic and recreative conservation, the first requisite of good fishing was provided in the form of the ten lakes of water. But an even more important requisite to good fishing is clear and pure water. The District has or is providing this in the form of reforested hillsides about the lakes and in contour plowing and strip cropping which are modern and valuable methods of farming. Not only is erosion and siltation reduced by these methods but the remaining soil is enriched, producing in turn an enrichment of the lakes themselves. For any lake, situated in fertile lands properly drained, is a better lake from the fishermen's standpoint.

These are improvements in a once impoverished land that can be seen by the thou-

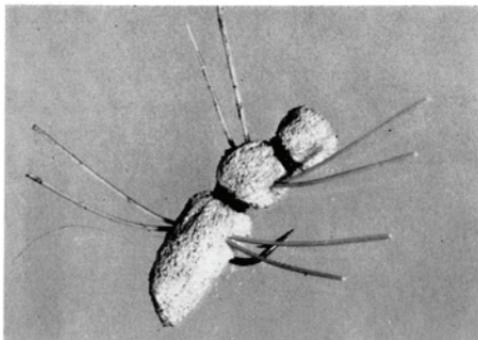


On light tackle bluegills can put a bend in the rod that would reduce many a trout to shame.

A few handfuls of bluegills like this will soon add up to a tasty mess of fish that might have remained in the lake had the fisherman not used some of the tricks described in this article.



Using one of these spiders on light fly fishing equipment is deadly—according to author George Robey who has fished all over North America. These spiders can easily be made at home by following the simple instructions in this article. Bait is twelve times actual size.



sands of visitors who journey to the Muskingum Lakes each year. Fisherman who know and understand the values of conservation realize that the seasonal fishing at the Muskingum Lakes owes its continued excellence to these factors.

Unfortunately the abundance of fish produced by these methods is not always apparent to the fisherman. There are times when the fish will not bite. And at such times it is difficult to convince the family in a boat that the idle poles in their hands are not a waste of time and that the lake is devoid of fish and needs restocking.

Fish management agents for the Wildlife Division can very easily convince that family in the boat that their poor luck is not the result of fish scarcity. Test nets set at that point would come up with a surprising number of fish, one of the most prevalent of which would be the blue-gill. There would be crappies, catfish, bass and walleyes, since the latter species have been stocked recently in most of the lakes. But all but the bluegill would be temperamental species, difficult if not impossible to catch at certain seasons of the year, before or after that magic wand is touched to the scene at spawning time in the spring.

But the little bluegill, the solid and dependable citizen of our fresh lakes, can nearly always be depended upon to save a fishing trip from complete failure. The important point is that, in fishing for bluegills, a variety of other species can be caught at a time when they would scorn more common and obvious methods to trick them into the skillet.

Have you ever fished trout with a fly rod? If you have you know there are two conditions which render futile the effort to snare these beauties from their haunts. One is high, roily water. The other is low, clear water. But once the condition is right, with water neither too roily nor too clear, there is not a great deal of difference between trout and bluegills. What the bluegill lacks in size he makes up in accommodation because he is usually ready to take the right lure that is well and delicately placed on his dinner table. And he will give a good account of himself both in swift, spiraling tactics to dogged persistence in staying as far away from his captor as possible for as long a time as possible. Once his travels from the end of the line, to live net, to the skillet, to the table to home are complete, he will also not be found lacking in rich, tasty flavor.

For this reason we have dubbed the bluegill, "Poor Man's Trout". For he can be taken easiest on a fly

rod and small feathered or rubber-legged lure; and the sport of taking him on a fly rod, light enough to compensate his size, is to be compared with the fascination of fly-rod-ding for trout.

By what method can the bluegill be taken almost any time of day or season? And why, in the process of catching him, can we expect to catch bass, crappies and many other species as well? The answer to the first question lies in the proper construction and use of the rubber spider. The second question is answered by the fact that bass, crappies and most other common species vary their diet by taking insects and the rubber spider is a lure resembling a great variety of insects upon which all fish feed.

Fish will literally catch themselves on the rubber spider when it is properly made and used at a time when the fish are feeding best. At other times this little lure, presented with the skill and finesse that comes gradually as you use it with growing confidence, will take bluegills when they will refuse all other baits.

There is not a rubber spider on the market that is properly made. The body of the spider should be a piece of sponge rubber with small pores, cut into a round, worm-like shape, about  $\frac{1}{8}$ -inch in diameter and  $\frac{3}{4}$ -inch long. This should be shoved on over the point of No. 10 hook, bringing the barb of the hook out through the body of the spider about  $\frac{1}{4}$ -inch from the end. This leaves a quarter-inch tail extending beyond the curve of the hook.

A small darning needle should be used to sew two thin strands of rubber diagonally through the spider, starting first on one side just back of the head and bring the strands out a quarter inch from the end of the tail. The same operation should be carried out on the opposite side of the body so that you end up with four rubber legs extending diagonally forward beyond the head, and four extending in the same fashion beyond the tip of the tail. About one inch is the right length for these legs.

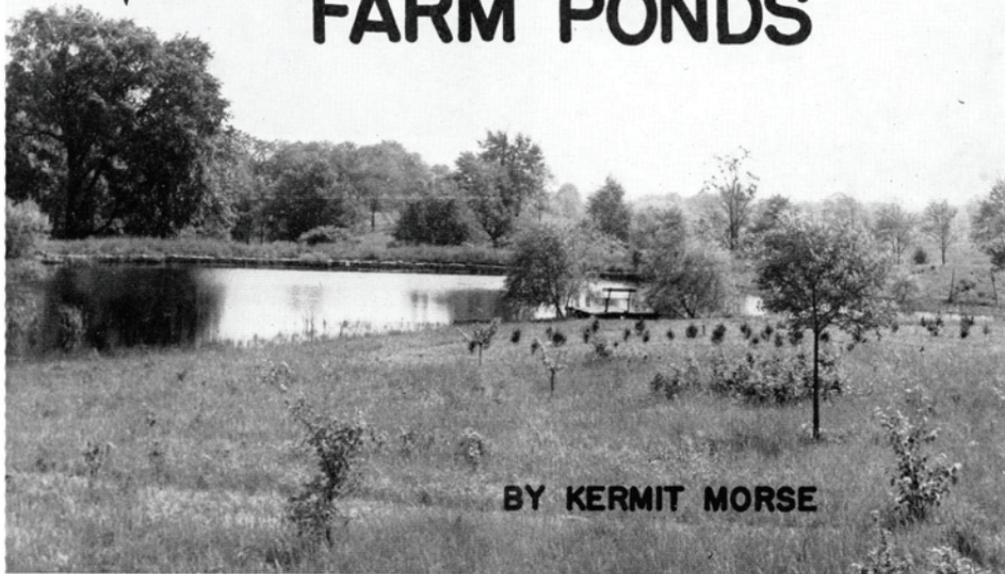
Between the head and the first forward group of legs, several turns of very fine copper wire should be made. Pull it tight as you would in wrapping a fly with thread. This will create a head section and the beginning of a middle section.

Next take several turns of the wire around the body between the two groups of legs. This will complete the middle body section and create a tail section, giving you a wasp-like or ant-like lure. The sponge

(Continued on Page 32)

# Farms

WITH  
FARM PONDS



BY KERMIT MORSE

*E. C. Stein farm pond, Delaware County. This pond was built in autumn of 1944 through the cooperation of the Ohio Division of Wildlife. It has .67 surface acres of water with approximately 3 acres of land around the pond planted to trees and shrubs to benefit wildlife and to add to the attractiveness of the area.*

If properly managed, the farm pond has unlimited value to its owner. It will furnish water for his livestock and it serves as fire insurance for farm buildings. The list of recreational activities it provides is long—hunting, fishing, boating, swimming, ice skating, nature study—and no one can deny its therapeutic value for a tired worker after a hot summer's day.

"Wow—I wish I had a pond like that" was the consensus of many of those on a recent Division of Wildlife inspection trip of the E. C. Stein farm pond in Delaware County. One or two of the group said they planned to duplicate the Stein pond which, incidentally, is now six years old.

In 1942, the Division of Conservation and Natural Resources, now the Ohio Division of Wildlife, inaugurated a Farm Pond Development program, co-

operating with interested landowners in developing farm ponds on their farms. Approximately 200 ponds were built before the project was terminated in 1947. Soil Conservation Districts became active in this type of development and it was agreed that we discontinue the actual building of the dams and devote our efforts to developing the areas around the ponds for wildlife after the ponds were constructed.

In late summer of 1944, Mr. Stein heard about this

cooperative farm pond development program and immediately got in touch with the Wildlife Division. I well remember the day that the two of us wandered over his farm in search of a suitable pond site. He had been dreaming of a lake on his farm and immediately took me to a site in a large pasture field, near the farm buildings. He was confident that this was the place for his future lake.

After carefully studying the location I had to convince Mr. Stein that this was not a good location for a fair pond. The drainage area was too large and it would cost him too much to build the dam and construct a spillway for the surplus water. Heavy rains would flush out his pond and it would be difficult to properly manage the pond for fish and wildlife.

After realizing that it would not be practical to develop this pond site, Mr. Stein took me to another location, a smaller ravine winding its way to the one we just inspected. Here we found the drainage area was favorable because it was much smaller in size, but the land use in this drainage area consisted primarily of farm land where row crops every 3 to 4 years would create a siltation problem and it would eventually silt in and become a marshy area. By this time, Mr. Stein was about ready to give up, believing that he did not have a suitable pond location.

Still confident, however, I suggested that we continue our journey over his farm. Looking over a knoll, I asked, "What do you think of a pond located in that ravine, a small draw with a small drainage area?" For a time, Stein was not certain that there would be enough water to fill the pond. Immediately a careful survey of the area was made that convinced Mr. Stein that he could have a farm pond on the last site. The pond was built in 1945.

The point that I am trying to reach is that a beautiful and useful farm pond built 6 years ago was located in a 4.5 acre permanent bluegrass drainage area. The pond has a surface area of .67 acres and a maximum depth of 8 feet. Heavy rains do not affect the pond and the permanent cover on the drainage area eliminates any siltation and pollution of the pond. After the pond was built, approximately 4 acres surrounding the water area was fenced from livestock and trees and shrubs were planted to benefit wildlife and to beautify the area.

On that June inspection day, 1951, we observed abundant fish life, a male largemouth bass guarding a spring spawn of approximately 10,000 fry, a 7-inch bluegill lying on a spawning bed along the water's edge, a wood duck box that was erected in the pond two years ago and that hatched out a brood of 9 wood ducks last summer. It was too early on this trip to examine the box to see what use is being made of the nest box this year. The clumps of pine, dogwood and rows of Multiflora rose surrounding the area are providing food and cover for upland game (rabbits, quail, etc.) that frequents the area.

In conclusion, areas having a permanent supply of water support more species and numbers of wildlife than similar areas without available water. Farm ponds especially benefit migratory and upland game, non-game birds and fur-bearing animals. The production of fish in these ponds also provides recreation and food. How can we better provide fishing and hunting at home than by building a farm pond and developing the area surrounding the pond for wildlife?

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See the farm pond picture feature on pages 16 and 17.

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Many species of waterfowl visit Ohio farm ponds in their annual migrations. Occasionally some of them nest near the ponds—others spend the entire winter on small rural impoundments. Although no records of nesting here exist, the lesser scaup is a very frequent visitor. Maslowski - Goodpaster photo.





hn Mager farm pond, Delaware County. A .63 acre pond built in 1947 through operation of the Ohio Division of Wildlife. A 10 acre wildlife area was de- d surrounding the pond. Note the wood duck nest box erected on a post in ter. A brood of wood duck was reared on this pond last year. Also a muskrat was built near the shore line among the cattails.



is .85 acre pond (not visible in the picture) was built on the Webb and t farm, Morrow County. Note the water tank located below the dam which iding a supply of pure, cool water for their livestock. Livestock are not ed within the pond area.



▲ A platform built out into the po  
U. S. Soil Conservation Service Photo.

Fishing must be good in this far  
fry on the job.

## FARM PO here and th

◀ Charles England farm pond, Morrow Coun  
1944 through the cooperation of the Division of  
by this pond was once a part of a closely gras

Waiting for that bass or bluegill to bite. T  
due to land use and drainage from farm buildi





nd makes a very good place for swimming.

n pond—at least from the number of small

## PONDS

ere in ohio

ty. This .67 acre pond was built in  
Wildlife. The wildlife area created  
ed pasture field.

This is not a desirable drainage area  
ngs.



A bad example, this farm pond was built primarily for a water supply for livestock but is providing an undesirable supply of water. It will soon be silted in due to livestock being permitted to wade in the pond.



Occasionally ducks, such as this pair of mallard drakes will spend an entire winter on an Ohio farm pond. Ponds also furnish many hours of healthful recreation in the form of ice skating for farm youths and their city friends. Bauer photo.





# In Fishing Circles

## PYMATUNING WALLEYES

by Danny Armbruster

If you are a walleye fisherman, it isn't necessary for you to travel far into the North country to enjoy this sport.

Pymatuning Lake on the Ohio-Pennsylvania border produces some of the finest walleye fishing to be found anywhere. The season on bass and walleyes opens on July 1st, and the test net surveys conducted by our fish management section indicate a good walleye population for the season.

An extensive survey and study of the walleyes in Pymatuning Lake was planned by the fish management section of the Ohio Division of Wildlife and it was felt that the information obtained so far should be passed on to the fisherman. The work on the lake started in March, 1951, and the purpose of this program was to obtain as much information as possible on walleyes for use in future management of this species. The work was based on population counts, movements, reproduction, harvest (by creel census), growth rates and food studies.

Equipment used in this survey includes three fourteen-foot fyke nets to determine the adult fish population and movements. Seines are to be used to check along the shoreline to determine the small fish and the hatch of the year. Water temperatures have been taken each day of the survey to determine the importance of temperatures on the movements of this species. Along with this, all adult walleyes caught in the nets have been tagged. This tag is metal and is placed on the jaw or gill cover of the fish. It is very important that the tag number is reported by fishermen. When submitting the tag number, be sure to enclose the size and the location where the fish was caught. The numbers can be sent to the following places: Fish Management Section, Ohio Division of Wildlife, 1500 Dublin Road, Columbus—Daniel C. Armbruster, Fish Management Supervisor, Ravenna, or if reporting the number at Pymatuning Lake, Mr. Jay Eastlake, Parks Manager, Pymatuning State Park, Andover. Your cooperation in reporting the tag numbers will determine the success of part of this survey.

Test nets were operated from March 6 to 9, April 17 to 21 and May 1 to 5. A total of 35,156 fish were caught at a rate of 44 per hour. The highest rate per hour was from March 6 to 9, with 137.6 fish caught per hour.

Three hundred and eighty-three walleyes were taken in the nets for the three periods, and only two

were re-caught. This gives good indication that there is an excellent population in this lake, which range in length from 8 to 31 inches. It was noted that 58 per cent of the walleyes taken in the net that was set from the causeway in April were from 8 to 10 inches. However, during the test net surveys, night observations were made with flood lights, but no spawning activity was found. The large area to be checked creates the problem of just where to check. Male walleyes were depositing milt when handled from March 6 to April 29 at which time only a small amount of milt would flow from the males. The females started to deposit eggs on April 18 very freely when handled. Several females were caught on May 1, and from the appearance of these fish there was indication that spawning had ended.

The ratio of males to females was as high as 13 to 1 in March and later in April this dropped down to 7 males to 1 female. Studies of walleyes in other states has shown the male walleyes will move into the spawning area much earlier than females. The water temperature during spawning season ranged from 40 to 56 degrees, and the transparency from 3½ feet to 4½ feet. This also created a problem in checking spawning activity.

Fourteen species of fish were taken in the nets, and carp made up the greater percent of the total fish caught, with a length range from 9 to 28½ inches. Carp were caught in the greatest numbers in March, but dropped down to a low of five percent in one net in May. The reason for the large catch of this species was due to the early spring migration.

The Channel Catfish was the next species caught in number. A total of 3,029 were taken in the nets, with the month of May being the time the greater number were taken, and ranged in length from 7½ to 29 inches. On May 3, fourteen large catfish were taken in one net from 20 to 29 inches. This net was set near Birche's Landing and from fifty to a hundred feet off shore.

White Crappies ranged from 9 to 15½ inches, with an average length of 12 inches. The greater number of this species was caught in the north end of the lake. It is interesting to note that this species has maintained this large size for several years, and offered sport in fishing in Pymatuning Lake early in the spring.

Bluegills in this lake are large average size, even though this is not considered a bluegill lake. For the angler that enjoys this type of fishing there is a good population. The best areas are in the northern part of the lake and some of the more secluded bays throughout the lake.

Yellow Perch appeared in the greatest number in the net that was set along the causeway in April, and ranged in length from 7½ to 14 inches with seventy-seven percent of the ones caught being over 11½ inches.

Largemouth Bass were caught in the greatest numbers in the northern part of the lake and from lengths of 10 to 15 inches. In this area there are large stumps, logs and brush, making it a very suitable area for this species.

Bullheads were taken in all nets throughout the lake, and from lengths of 6 to 12½ inches. This fish can be caught very readily by still fishing in most any part of the lake with worms. Those who do not yearn to fish for walleyes, can indulge in a little bullhead fishin'.

Suckers, mullets, shiners and goldfish were also taken in the net during March, April and May. In making night observations for walleyes, suckers and mullets were observed migrating up the small incoming streams of the lake. Just a little tip on fishing for these fish. Early in the spring fish at the mouth of the incoming streams and your success should be good.

There are possibly as many ways to catch walleyes as there are pills, but here are a few tips that might help the angler who is just starting to get the fever. In the heat of the day, fish the deep area with slow-moving bait, such as the flatfish or june-bug spinner with night-crawler, minnow pork chunk attached to the hook. It would be a good idea to weight your bait for deep fishing. At night, it should be good in the shallow area of the lake, from depths of 6 to 12 feet and along drop-offs or stumps. Good baits to use are river runts, flatfish, lazy-ikes, spoons with pork and spinners. From the causeway that crosses the lake, there are great numbers of walleyes taken on large minnows during the night or day.

This survey on walleyes will continue throughout the fishing seasons and the public is invited to watch these operations at any time.

Good luck on your fishing trip to Pymatuning Lake.



Bulletin business manager Bill Kah with a nice stringer of bigmouths taken while fishing the stumps at Mosquito Creek Reservoir, Trumbull County. Chances are that north-eastern Ohio anglers are missing a good bet if they do not give Mosquito a whirl.



The left photo gives some idea of the daily catch in a Pymatuning test net. In the right photo, fish management personnel hold three large walleyes from the nets. These are tagged and released. If you catch a tagged fish, return it to this office as soon as possible. It will give us information that will help to improve your fishing.



## NESTING WOODYDS

By Rod Cochran

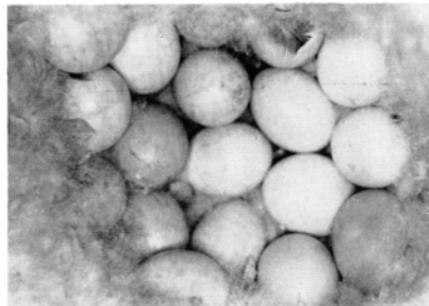
Ohio Sportsmen have noted the appearance of large boxes, staked out along the wooded shores of their favorite lakes and ponds, with much interest. When it is discovered they are wood duck nesting boxes erected by the Ohio Division of Wildlife, or some interested conservationist, their next question usually is: "Do ducks use the boxes?" If erected at suitable sites, it has been found that these artificial dens are utilized to a high degree here in Ohio.

Wood ducks originally nested in hollow trees, but many years of timber cutting have removed most of the natural nesting sites. The use of artificial nest boxes holds much promise of increasing the number of these small, but beautiful ducks.



Here is a battery of boxes. This experiment is to find out how close the ducks will nest, and if a nesting colony can be established. This is the first season for the "battery", and ducks were incubating in the first and third boxes, and in the single box, when this picture was taken.

Here is a large clutch of eggs discolored by incubation. The wood chips can be seen mixed with the down surrounding them. Although some are almost buried, see if you can't find 18 eggs.



This box is about 8 feet above the water, and the stake is made of two steel fence posts bolted together. It is easily seen that inspecting the boxes is oftentimes a hard job.

Here is the desired result of the nest boxes. Baby wood ducks about the size of your thumb! The duckling pictured above is about 2 days old, and is ready to run, swim, and catch insects.





# The Terraquas Club

—ARTHUR R. HARPER—



August days find the Terraquas still scattered far and wide but there are always enough of them with jobs at home to provide a quorum for a little get-together. So, on this Sunday afternoon, Mr. Strong and his wife gathered up three Terraquas for a little excursion that was to satisfy some curiosity. It all started from a newspaper article which told about a farmer named Miller who was really giving his farm some high grade conservation treatment and they wanted to see what was going on.

As is usual with enthusiasts, Mr. Miller was glad to see them. He offered to conduct them over the farm, to make sure they saw all his pet projects. Restoration of those sloping fields was a difficult task and there was still enough untreated land to show how bad it had been.

"My grandfather and my father farmed these fields before me," explained Mr. Miller. "They had good crops and made a good living but I had nubbins for corn, ragweed for pastures and the well down there at the house went dry every summer. I waked up. You see, this land doesn't gully and it is hard to see that the soil washes away,

but sheet erosion is just as bad and a lot more sneaky than gullies."

First he had divided the sloping fields into strips that ran around the hill on the contour. He had also plowed out a number of trenches that also ran around the hill. These checked the downward rush of the water so it sank into the ground. Just below each of these trenches, ranker and greener growth showed the benefit of increased moisture. The strips of red clover were so fine that Miller offered an explanation.

"I used to be a corn farmer but learned my lesson. I've limed these fields and switched to legumes. I fill my barns with hay. I have a good ground cover to stop soil wash and, when rotation calls for plowing these strips, I have a fine lot of 'green manure' to plow under. He wanted them to see that his woodland was dense with young seedlings. "I don't have to graze my cattle in the woods. I've got plenty of hay and, for green pasture, I can convert one of these strips into a pasture with a strand of electric fence. You should have seen the jump our butter-fat record made when we changed our plan."

He took them across the woodland

and grinned with satisfaction when the Terraquas counted eight kinds of birds and jumped three rabbits. He took them past his farm pond where he stopped to glean a grasshopper from the grass, which he tossed into the water. There was a swirl of water, a flash of fins and the grasshopper was gone. The Terraquas believed him when he said he had fish whenever the notation for a fish dinner struck him.

Then they went out into a part of the farm which had not yet been treated. Here the clay soil was yellow and even the ragweeds looked discouraged. Much of the surface was bare of any green growth and it was here that the queer plants shown in our picture were found. They were beautiful little structures, looking for all the world like miniature Japanese temples. Mr. Short called them Fringed Cladonia, a species of lichen but Mr. Miller couldn't see anything pretty about them.

"They are bad news to me," he said, "because they mean poor soil." And he was right. One of the serious problems that every plant must face is competition from other plants. In good soil, low growing plants are crowded and shaded out and lichens are found growing on rock ledges or on barren soil.

Mr. Strong called attention to the fact they were more grey than green and went on to say: "It really is incorrect to call a lichen a plant for it is really two plants growing in partnership—an algae and a fungus. The Algae are delicate plants requiring much moisture and it doesn't take much sustained heat of the sun to dry them out and kill them. Now, a fungus cannot manufacture its own food like the algae do but it can live on the dead portions of the algae. So the fungus grew around and over the algal growth and gets its food. But at the same time, it shades and shelters the delicate algae and so each makes it possible for the other to live. This kind of partnership living is called symbiosis and there are many other examples of such partnerships in both the animal and plant worlds.

"Just wait until I get my lime and clover program going on this field and I'll bust up their partnership", grinned Mr. Miller.

Back in the winter, Mr. Strong had told the biology class that every plant responds to its environment. This is so true that plants may be used as indicators of environmental conditions. The Terraquas looked at the little Japanese temple that are called "Fringed Cladonia" and remembered that day in class.

"Ain't it a fact?" they murmured and looked back into the verdant strips of clover.

## OHIO MOVED WEST

Ohio was a northeastern state only until last July 1, after which it became a northcentral state, for wildlife administration purposes, at least, under a reshuffling of regional lines by the U. S. Fish and Wildlife Service. Federal wildlife activities in the state from that date on will be administered from Minneapolis rather than from Boston, according to the Wildlife Management Institute.

The move is a logical one since the Buckeye State has more in common with Indiana, Michigan, and similar agricultural states than it does with the more heavily wooded states to the east.

With the Men  
**In The Field**




**ROY HOOKER**

There are many behind the scenes Men-In-The-Field, whose work, although extremely vital to the Wildlife Division's efforts to improve hunting and fishing in the Buckeye state, is more or less hidden under the proverbial bushel basket. By the very nature of their work they receive very little publicity for it or about it, and as individuals they very rarely reach print.

They wear no uniforms, enjoy little or no glamour in their work, and sometimes have to wait years to see any satisfactory results in their work. That it is valuable, however, no one will dispute. Their efforts have proved time and again to be the answer to a wildlife problem.

One of these men is Roy Hooker, who at present holds the title of 56-D project leader in the Division of Wildlife.

To many of you this will mean little or nothing. But to others, particularly hunters, it could mean more game, more places to hunt and, as a result, better hunting in the state of Ohio.

The numeral-letter combination 56-D is a federal abbreviation for a combined federal-state project to improve game habitat and cover through cooperation between the Wildlife Division, the farmer and the Soil Conserva-

tion Districts. Actually, it is named the Co-operative Farm-Game Habitat Development Project.

What it does and what Roy does is just this. He and four assistants work directly with the Soil Conservation District's farm planners, primarily to inject a wildlife program into what would be exclusively agricultural program for the benefit of the propagation and protection of wildlife.

This is accomplished by planting living fences, development and planting of odd areas which are not suitable for agricultural uses, protection of woodlots and farm border management for game. Under this plan the farmer is compensated somewhat in leaving some land and cover for wildlife, which in the long run will help the hunter.

Uninteresting to you? Perhaps. But certainly not to Roy Hooker. One look at his record of just four and half years in the Division and already a project leader of a state wide project, and you know Roy had to be doing a bang-up job. And a good job demands interest. It also demands results.

Roy was born and raised in Coshocton county, and attended Coshocton and Warsaw high schools. He was graduated from the latter school in 1938.

He entered Ohio State university in



A super Bulletin salesman—and a mighty swell fellow—is Earl Goff, Division of Parks foreman at Mosquito Creek Reservoir in Trumbull County.

Many new readers have been introduced to the Conservation Bulletin by this genial gentleman who is popular with all the visitors he meets in the Mosquito Creek area. "Plan a trip to the park here at Mosquito," Goff urges. "The park is still very new and we do not have too many facilities, but future plans call for improvements that will make it one of the state's best recreational areas."

Very active in the Grange and numerous other civic affairs, Goff lives with his wife and daughter in Cortland.

1938 and attended until 1941 when he answered the call to the colors. His service time carried him through nearly five years in the U. S. Navy, much of it spent on a Navy supply ship in the South Pacific.

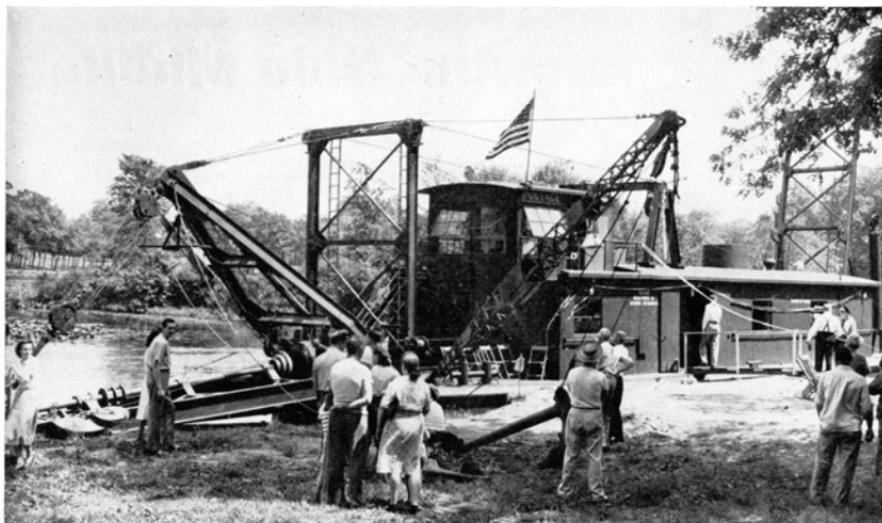
Upon his discharge in 1946 he again entered OSU, graduating with a Bachelor of Science in Agriculture. He specialized in Wildlife-conservation work and as a result, in 1947 came to the Wildlife Division and worked with the Wildlife Research Unit.

Following this he was appointed game management agent in Wildlife District No. 5, and then assigned to federal aid project 49-D. In June 1950 he assumed his present duties.

The project which he now heads has expanded in three years from small operations in only four counties to 37 counties and it is hoped to include all 88 by 1952.

Hooker and his wife live on Martin road, R. R. No. 2, Worthington.

**SUBSCRIBE TO THE BULLETIN  
 FOR A FRIEND**



# MEET THE *Sand Sucker*

A project of the Ohio Division  
of Parks

In recent years much of the surface area of sections of the Portage Lakes has become so filled with sediment and growth that public use was not possible. As a result, a dredge was purchased by the Ohio Division of Parks—at a cost of about \$200,000—to cut new channels in the lake.

All the earth that is being removed from the lake bottoms will be used to create new public parking, picnicking, and recreation areas. The 12 inch dredge, or “sand sucker,” was placed in operation immediately after the dedication ceremonies on June 3. The dredge will pump 4580 gallons of water per minute—and will dig and move 163 cubic yards of solid material per hour. The solid material can be moved for a distance of one-half mile,—equal to a large dump truck load of dirt every minute and a half.

Sponsored by the Portage Lakes Improvement Association, the dedication featured a number of distinguished speakers, including: A. W. Marion, Director Department of Natural Resources; Anna O’Neal,



former chairman of the House Finance Committee; former Representative Smith of Summit County; Carl Miller of the Parks Division, and Harry Johnson, who compiled the specifications and assisted in designing the dredge.



# Knowing Ohio Wildlife

BY The OHIO WILDLIFE RESEARCH UNIT  
O. S. U. COLUMBUS

The Ohio Wildlife Division — The Wildlife Management Institute  
The Ohio State University and The U.S. Fish & Wildlife Service cooperating

## A Survey of the Pheasant Family

by Eugene Knoder

On a beautiful autumn morning we are apt to hear the phrase, "Let's go pheasant hunting."

If the speaker is an American, the bird in question would be the English Ringneck pheasant, or possibly the Ruffed Grouse. But let us look at a few other scenes in different parts of the world.

These same words coming from a Tibetan would mean he was going to set snares for Blood pheasants, Tragopans, Monal or Eared pheasants. If they were spoken by an Indian, he would soon be off to the hills looking for Cheer, Koklass, Kaleege or Junglefowl. A Dyak in Borneo would soon be off to his daily routine of trapping and snaring Argus, Firebacks, White-tails and Peacock pheasants. A Chinaman with a treasured old shotgun would expect to be shooting Ring-necks, Golden, Amherst or Reeves' pheasants. The same story could be told for Japan, Manchuria, Burma or Indo-China, but let's stop here and see what some of these strange sounding names mean.

There are approximately 150 different kinds of pheasants living in the world today. With the exception of the Congo Peafowl (Africa), they were limited to the continent of Asia before being introduced into other countries. They vary from tropical forms which inhabit hot, humid jungles to hardy northern species which range up to 16,000 feet in the mountains. Size may vary from the 14 oz. Blood pheasant to the 11 pound Peafowl.

Although there are far too many kinds to deal with here, I will attempt to give a brief resumé of the 16 different groups (general).

The Blood, Tragopan, Monal, Eared and Ruffed pheasants are found at high elevations throughout the Himalayas and the rugged mountains of western, central and northern China. The Blood pheasants, so named for the beautiful crimson breast, are found only at elevations of 8,000 to 16,000 feet. They are small (weight 1 lb.), dainty birds somewhat analogous to our mountain ptarmigan in habits. Due to their unwary nature, they make poor game birds, although the Tibetans consistently trap them for food.

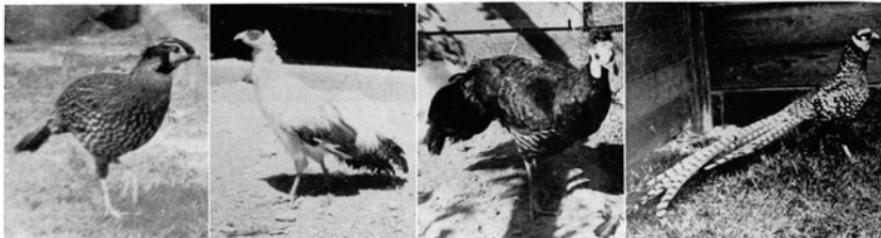
The Tragopans (Fig. 1) live at lower elevations than the Blood pheasants, ranging from 5,000 to 10,000 feet. They are medium sized pheasants (weight  $3\frac{1}{2}$  to  $4\frac{1}{2}$  lbs.), mostly crimson in coloration with round white spots distributed over the body. In areas where they are hunted they become very wary and hide in bamboo and rhododendron thickets. A strange feature of these pheasants is their habit of nesting either on the ground or in trees. No account of the Tragopans would be complete without a description of their courtship which is one of the most spectacular in the bird world. The cock possesses a large pouch beneath the chin and two fleshy horns on the back of the neck. The pouch is usually bright red, green or blue or a combination of these colors. The horns are a remarkable fairy blue. The courtship begins with a side display, somewhat after the manner of chickens. The climax is reached when the cock rushes up to the hen and bows forward, his head almost touching

Fig. 1. Temminck's Tragopan pheasant cock. Photo by author.

Fig. 2. White eared pheasant cock. Photo by author.

Fig. 3. Malayan crested Fireback pheasant cock. Photo by author.

Fig. 4. Reeves' pheasant cock. Reprinted from Modern Game Breeding by permission of the editor, J. Allen Gardy.



the ground. At the same time the wings are spread and the body feathers are fluffed, the two horns and the crest are erected and the pouch is shot forth to its full length of 5 or 6 inches. The whole body is vibrated rapidly, giving a weird appearance to the display. The cock suddenly folds up and begins feeding.

The Monalor Impeyan pheasants are another group of high mountain birds. They are found in forests of deodar, oak, chestnut and rhododendron. The cocks are probably the most beautiful iridescent birds in the world, the plumage resembling that of a hummingbird. They have been exterminated in parts of their range, due both to shooting for sport and, formerly, as an article in the millinery trade. The Monals are large birds (weight 5 to 7 lbs.), but they fly extremely fast and have been hunted relentlessly.

The Eared pheasants, of which three are known, the Blue eared, Brown eared or Manchurian, and the White eared (Fig. 2). They are large (weight 6 to 8 lbs.), heavy-bodied, slow flying birds. They inhabit the high mountains of China and Tibet in scrub forests of oak, pine, cedar and birch. They are the only pheasants where the cock and the hen have the same colored plumage. In 1873 three Brown eared pheasants were imported from China to France and today there are about 200 of these birds in captivity, all descendants of the original 3 birds.

The Ruffed pheasants, consisting of two species, the Golden and the Amherst, are small (weight 1 to 1½ lbs.), weak flying birds of central China and eastern Tibet. As far as gaudy coloration is concerned, they are the most resplendent of the pheasants. Almost every zoo keeps a few of these to brighten a dark pen. I released a few of these one spring at my home and had a good chance to observe their flight at different times. The wings are rounded, much like a grouse, but their flight is slow and laborious compared with that of a ringneck. They are excellent runners and skulk through underbrush with ease. Hunters report that they are "soft" birds, easy to kill, and fly only a little bit above the vegetation, thus offering poor shots.

The tropical pheasants consist of 7 groups, the Kaleeges and Firebacks, Junglefowl, Peacock pheasants, Argus, Ocellated, Peafowl and the African peafowl.

The Kaleeges and Firebacks (Fig. 3) are found in heavy forests and tropical jungles respectively. They occupy northern India, Burma, Indo-China, southern China, Malaya, Sumatra, Hainan and Borneo. The various Kaleeges are often hunted and offer good sport, but the Firebacks are found only in impenetrable thickets of second growth and in the tropical rain forest where conditions for hunting are far from ideal.

The Junglefowl, the ancestor of our domestic chickens, are found throughout India, Burma, Ceylon and Java. They are wild, wary birds and much valued as a game bird. They are about the size of a large bantam, complete with comb and wattles. The red and black bantams look so much like the Red Junglefowl that it takes an expert to tell them apart.

The Peacock pheasants, not to be confused with the Peafowl or Peacock, are the smallest of the pheasants. The adult hen weighs only about 14 oz. They are mostly tropical birds, very shy and elusive, and resemble somewhat the peafowl in that they have a large tail covered with round, metallic green circles—the "eyes" of the peacock's train.

The Argus and Ocellated pheasants are extremely large, tropical birds. The cocks may reach 6 or 7 feet in length of which 4 or 5 feet is tail. Almost nothing is known of their habits, for they are wary and inhabit dense jungle. They are distributed throughout Malaya, Sumatra and Borneo.

Everyone is familiar with the peafowl or peacock as it is usually called, but few people think of it as being a pheasant. The Blue or Indian peafowl is the largest of the pheasants (weight 11 lbs.), and is the one commonly seen at zoological parks. It is an extremely versatile bird, withstanding the 120° F. heat of the Indian summer or the -10° F. of a North American winter. The Green or Javan peafowl, a strictly tropical bird, is less known by most people. It is slightly smaller than the Blue. Several varieties have arisen in captivity which have bred true—the White, Black-shouldered, Pied and Spaulding's. The Blue is protected in India due to religious beliefs, but the Green is often shot and trapped. They inhabit thick jungles.

The African peafowl is a small, aberrant form recently discovered in the Belgian Congo. Little is known of its habits except that it inhabits the tropical forests.

The last group of pheasants which I would like to mention, the Ringnecks, Long-tailed, Cheer and the Koklass pheasants are all excellent game birds.

The Ringnecks are widely distributed in an almost unbroken chain from the Black Sea to the Pacific coast of China, a distance of approximately 5,000 miles. Within this space they occupy almost every conceivable habitat, from swamps, desert oases, plains, rice paddies, forests and mountains up to 10,000 feet. It is not surprising that this species is found in some 34 well marked geographical races. In western Asia the typical bird is the Blackneck, a form which lacks the white neck ring. Incidentally, many of the forms of ringnecks do not have ringed necks, although they are still ringnecks! In northern China, a typical ringneck is the Mongolian, a dark maroon bird with conspicuous whitish-gray patches on the wings. In the mountains of southwestern China, Stone's ringneck is found in hardwood and evergreen forests and open grass lands on the mountain sides up to 10,000 feet. In the interior of China, the vast central basin is frequented by the Chinese ringneck. The Ringnecks are the only pheasants that habitually live in flat, open, agricultural country.

Many are the glowing accounts written by enthusiastic sportsmen concerning the Koklass and Cheer pheasants. Many consider them second to none as a game bird. They flush readily with a dog and are extremely fast fliers. Both the Cheer and the Koklass are mountain birds, living at altitudes of 4,000 to 10,000 feet in forests of chestnut, oak and yew. In winter they descend to the lower altitudes and return higher in Spring where they breed.

The Long-tailed pheasants are also excellent game birds, the most notable being the Reeves' (Fig. 4). It inhabits the low mountains of central China. The tail is much longer than that of the ringneck, but in weight it is only about a pound heavier. Other members of this group are the Copper pheasants of Japan, which are valued game birds for the Japanese who owns a gun. Elliott's pheasant of southeastern China, the Mikado pheasant of Formosa, and the Barred-back pheasants of Burma are little known, mountainous birds of this group. Meager reports indicate that they are valued as game birds because of their strong, swift flight.

The possibility now arises as to whether some of these birds could be introduced into the United States in areas not inhabited by the ringneck pheasant, notably wooded, hilly country. I believe that I can show briefly why most of them would not be successful.

(Continued on Page 31)

# WHAT HAPPENS NOW?

by Dr. Charles A. Dambach

Legislative action of great importance to Ohio sportsmen was enacted by this 99th Ohio General Assembly which adjourned in mid-June.

Most of the legislative needs of the Division of Wildlife, as presented in the January Conservation Bulletin, were provided by the 99th Ohio General Assembly. In addition, several independently sponsored measures of particular interest to sportsmen were enacted. A brief synopsis of the more important measures is presented here. The big question in many minds is what happens now that this needed legislation and potentially increased funds have been provided. We have been hard at work preparing plans in anticipation of this action. As a result, we will be ready to get underway as soon as the new legislation becomes law on and around September first. A general outline of our plans is presented here, following the review of legislation. Specific plans for each section of the Division will be presented in later issues as operational details are worked out.

The reader may recall, from my January article in the Bulletin on legislative needs of the Division, the recommendation that the hunting license fee be increased from one to two dollars. Not only was this increase granted but a similar increase in the fishing license fee was included to assure adequate funds for fish management and especially for the creation of new fishing lakes. A corresponding increase was also provided in commercial fishing license fees and the issuing agent's fee for fishing license was raised from ten to twenty-five cents.

Among other things, authority was granted for Ohio to participate in the Federal Aid to Fisheries Act which may bring from \$50,000 to \$100,000 annually into Ohio for fisheries work. Authority to grant easements and to sell products produced on properties owned by the Division was also provided. Existing laws were amended to give the Wildlife Council authority to regulate the importation into and out of the State of wildlife and the present law on scientific collecting permits was amended to limit their use to the calendar year in which they are issued.

The period during which shooting field trials may be conducted without permit from the Division was extended from September 1 to January 31 to September 1 to April 30. Regular employees of the Division when properly identified are to be granted authority to enter on private lands in the performance of their duties without danger of arrest for trespass. A previous section omitted in Senate Bill 13 of the 98th General Assembly was rewritten to give the Division the right to remove fish in any manner in the interest of improvement.

Efforts to strengthen pollution laws gained widespread attention during the legislative session. Chief interest centered on Senate Bill 62 sponsored by Senator Deddens of Cincinnati. Section 1415 of the wildlife section of the General Code was somewhat overshadowed by interest in this measure. Nonetheless, this section was modified so that it is now an offense not only to destroy wild animals by poisonous sub-

stances placed in any waters of the State—it is also an offense to destroy the habitat of wildlife in any waters.

Senator Deddens' bill seeks to "control, prevent, and abate pollution of streams, lakes, ponds, watercourses, wells, and other surface or underground waters of the State." It establishes a water pollution control board which has power among other things to:

"Develop programs for the prevention, control and abatement of new or existing pollution of the waters of the State;

"To advise, consult, and cooperate with other agencies of the State, the Federal government, other states and inter-state agencies, and with affected groups, political subdivisions, and industries in the furtherance of the purposes of this act;

"To encourage, participate in, or conduct studies, investigations, research, and demonstrations relating to water pollution and causes—;

"To issue, modify or revoke orders—(subject to certain provisions and limitations)—prohibiting or abating discharges of sewage, industrial wastes or other wastes into the waters of the State; requiring the construction of new disposal systems or any parts thereof or the modification, extension, or alteration of existing disposal systems—to prevent, control, or abate pollution—."

Another bill which aroused considerable interest authorizes the establishment in Ohio of commercial pheasant shooting preserves. Applicants are already being received for licenses to establish such preserves although the act does not become effective until September. The essential features of this legislation are that a license to operate a preserve may be issued upon payment of a \$100.00 fee to applicants who qualify by producing satisfactory evidence that they have adequate facilities for operating such a preserve and raise or purchase for liberation at least 500 pheasants to be liberated on the area between September first and March fifteen following. The birds of either sex so raised or liberated may be taken in any number by hunting during the above period. Safeguards are provided to assure that wild birds may not be taken but if accidentally shot that they are replaced with propagated stock. Other restrictions require an initial stocking of ten hen and two male birds per 100 acres of preserve, that birds killed on preserves must be properly tagged to establish where they were taken, and that preserves shall not exceed 500 acres in area and not more than one preserve may be established per county.

Restrictions on commercial fishing in Sandusky Bay were provided for in House Bill 655. The major provisions of this bill are that:

"On and after January 1, 1952, no person shall draw, set, place, locate or maintain any net or seine whatever except minnow net in that portion of Sandusky Bay or Lake Erie lying within the following described area: Starting at the northeast end of the Cedar Point jetty thence on a line drawn straight from the northeast end of the Cedar Point jetty to Shafer's dock on Marblehead; thence to the

western extremity of Johnson's island; thence to the loading dock of the Baltimore and Ohio railroad and back to the point of origin.

"It shall be unlawful for any person to set, place, locate or maintain in the Lake Erie fishing district of this state any trot line which is wholly or partly made of wire line or does not have a white buoy or other white marker attached at each end thereof.

"No person shall draw, set, place, locate or maintain any net whatever within one-fourth of a mile of any island or reef in Lake Erie, between the tenth day of May and the fifteenth day of October, both dates inclusive; and no person shall draw, set, place, locate or maintain any net whatever, except a seine, dip net or bar net, within one-fourth of a mile of the mainland bordering Lake Erie, between the fifteenth day of June and the fifteenth day of September, both dates inclusive. No seine or net of any kind except minnow net shall be placed, located, pulled or maintained in Sandusky bay from one hour after sunrise on Saturday until one hour before sunrise on the following Monday, or from one hour before sunset on the day before Memorial Day, Independence Day and Labor Day until one hour before sunrise on the day following Memorial, Independence and Labor Days; and no seine shall be set, placed, located, or maintained in Sandusky Bay during the nighttime from one hour after sunset until one hour before sunrise.

In addition, no nets are to be set in an area at the mouth of the bay which is to be designated by suitable markers installed by the Division.

Although certain other legislation affecting the Division was enacted it is not so important to our operation as those described above.

These measures will soon be law. We are already acting to put them into effect as promptly thereafter as possible. Program expansion made possible by license increases must of necessity await collection of these revenues. Nonetheless we have been and are planning carefully to assure that these funds are spent for the sole purpose of providing better fishing and hunting in Ohio.

These plans, based on discussion with field technicians and administrative personnel and with Wildlife Council approval consist essentially of the following:

1. Fulfillment of existing but deferred project obligations wherever feasible.
  2. Strengthening of our field staff to assure more effective enforcement and field operations.
  3. Modernizing enforcement equipment to increase efficiency and service to the public.
  4. Expansion of fishing and hunting facilities by land acquisition and development, new lake construction, stream management, pollution abatement and cooperative effort with other land management agencies.
  5. Increasing informational service to the public by preparation of appropriate maps, guides and publications.
- Detailed plans with respect to each of these areas will be described from time to time as specific projects are planned.

# COMMISSION FIRM ON LORAIN PARK

by A. W. Marion

Director, Ohio Dept. Natural Resources

and

L. W. Reese

Chairman, Natural Resources Commission

Recently outdoor Ohioans, and particularly those living near Lake Erie, have read a great deal on the controversy over the Lorain County Park. Formerly known as the Beaver Creek Park, it is located about four miles west of downtown Lorain.

The proposed Lorain County Park controversy started back in 1946. The 97th Ohio General Assembly provided an appropriation for two State recreational areas to be located on the shores of Lake Erie. As a result, negotiations were started to purchase about 600 acres in the vicinity of the mouth of Beaver Creek, Black River Township, Lorain County.

Negotiations by the Department of Public Works revealed that the price was far too excessive and condemnation proceedings on the land were initiated. A subsequent court trial set the value of one section of beach area of 23.3 acres (Wm. G. Schaeffer) at \$185,000. Figuring on that same evaluation basis, the entire area of 588 acres including 3,000 feet of beach would cost more than \$509,000—or more than the total amount remaining in the appropriation for a park east of Cleveland. This appropriation was not supplemented by the present legislature.

In 1948, House Bill 655 of the 98th Ohio General Assembly reappropriated the unencumbered balance appropriated by the previous General Assembly to the Ohio Division of Parks, Department of Natural Resources, for the purpose of providing for two recreational parks to be located, one east and one west of Cleveland, on the shores of Lake Erie. This unencumbered balance amounted to about \$640,000.

Meanwhile the condemnation suit decision was appealed on up to the Ohio Supreme Court. This highest body rendered a decision that the case should be returned to the Common Pleas Court of Lorain County for retrial. Before the trial (scheduled for June 19) could begin, the State of Ohio dropped the suit—deciding that the cost of acquisition and the cost of development and

maintenance of a park in that area would be far too excessive. As a result, a certain amount of opposition developed in the Lorain area.

Before the decision to abandon the idea of purchasing the Lorain County Park, several thorough investigations were made.

The Natural Resources Commission reviewed the possibility of this site as a state park and viewed the premises on the ground. As a result of their considered deliberations, they were unanimously agreed that the acquisition of this land should be abandoned by the state if at all possible because of the excessive costs that would be entailed in developing this area into a minimum park use site.

Upon studies and estimates made in 1949 and based on 1947 costs of the Highway Department, the cost of acquisition and development of this park site for the very minimum amount of use would entail an estimated \$2,500,000, and the desirable acquisition and development of this site for a state beach park would entail a cost in excess of \$3,300,000.

In addition, an Advisory Committee on State Parks, set up to study and recommend sites for State beach parks, decided that:

"After reviewing the facts as they now are, it is the opinion of the Committee that the State would not be justified in going forward with the acquisition of land sufficient in area to justify the establishment and construction of an adequate State Park at this site. While we regret the expense to which the State is now put and the further costs which will result in the abandonment of its present plan, it is our considered opinion that in the face of the facts, the State should abandon consideration of this site as a Lake Front Park.

"Committee reaches this conclusion with regret. Its members realize fully the great social asset to the people of the State through the establishment of additional adequate park facilities

along the lake front West of Cleveland, nor is the Committee unmindful of the great economic advantages which would flow from the establishment of such a park, but in consideration of the facts which have now developed, we present to you the conclusions previously stated in this matter."

To give Ohioans a better idea of the estimated cost for a finished State Park at Beaver Creek, East Harbor State Park (see the July issue, Ohio Conservation Bulletin) can be used as a comparison. The entire 1,248 acres of East Harbor were purchased for \$150,000. An additional amount was spent for beach houses, water supply, roads, shelter houses, dredging, fencing, and other improvements, to bring the total cost to \$209,594.

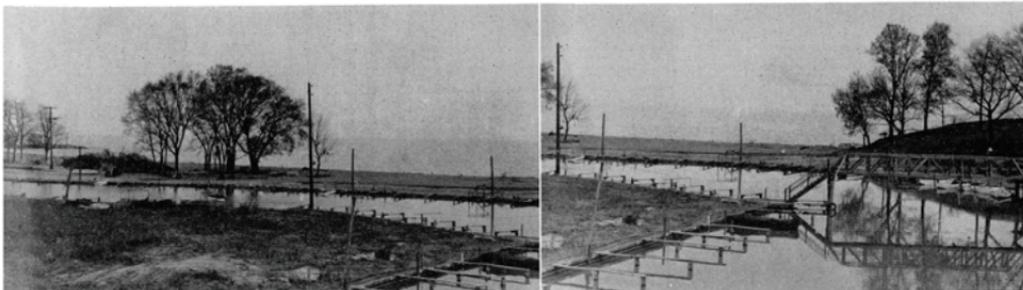
The reader must remember that the 588 acres in the Lorain county area would cost many, many times the East Harbor figure—and for only half the area, a bare minimum for public usage. Early in 1951, the United States Engineer Department estimated that it would cost three million dollars for erosion control work, alone, along the proposed strip of beach.

For further comparison, three miles of beach rated—as from good to excellent at Crane Creek, west of Port Clinton, cost the Ohio Division of Parks only \$130,000. The Mentor Headlands (Painesville Beach) area is three quarters of a mile long, contains more than 600 acres, and was purchased for a total cost of \$142,500.

At a special meeting just prior to the Supreme Court decision, the Natural Resources Commission again decided against purchase of the Lorain County Park—even though the Supreme Court should decide in the state's favor. They emphatically recommended abandoning the project.

In view of these statistics and figures, and considering the recommendations of the Natural Resources Commission and the Parks Advisory Committee, it is apparent that the purchase of the Lorain County Park could not be justified.

Views of the Lorain County Park. Photos made in 1948 by F. O. Kugel.





# Ohio Conservation Clubs

## FROM CLUBS SENDING IN 10 OR MORE SUBSCRIPTIONS IN JUNE

|   |     |  |             |
|---|-----|--|-------------|
| South-East Conservation Club, Columbus                  | 301 | Miamisburg Sportsmen's Club, Inc., Miamisburg  | 20          |
| Mingo Sportsman Club, Mingo Jet                         | 143 | Dayton Field Naturalists Club, Dayton          | 18          |
| Adams Conservation Club, Inc., Toledo                   | 136 | Guernsey Co. Fish and Game Assn., Cambridge    | 16          |
| Licking Co. Farmers and Sportsmen's Club, Inc., Newark  | 129 | Maynard Sportsmen's Club, Maynard              | 15          |
| Jefferson Co. Sportsmen and Farmers Assn., Steubenville | 119 | Ottawa Co. Conservation League, Inc., Genoa    | 15          |
| Lamson Rod and Gun Club, Cleveland                      | 82  | Muskingum Valley Fishermen's Assn., Zanesville | 14          |
| County Rod and Gun Club, New Philadelphia               | 74  | Lake Co. Rod and Gun Club, Painesville         | 13          |
| Ashtland Co. Wildlife Conservation League, Ashland      | 72  | McMahon Valley Sportsman Club, Glencoe         | 10          |
| Dr. John A. Roach Tri-Co. Outdoor League, Alliance      | 67  | West Branch Conservation Club, Grover Hill     | 10          |
| Four Co. Conservation League, Bellevue                  | 46  |  |             |
| Williams Co. Conservation League, Montpelier            | 25  | From Clubs sending in less than 10             | 129         |
|   |     | <b>TOTAL</b>                                   | <b>1446</b> |

### JEFFERSON COUNTY

The annual Sports Show sponsored by the Jefferson County Sportsmen and Farmers Assoc. and the Ohio Reclamation Assoc. started Saturday June 16, at 6 P. M. with a buffet style supper at the Sportsmen Park at Bloomingdale Ohio. After supper the campfire ceremony of the Brotherhood of the Jungle Cuck was held, directed by Ken Crawford and assisted by "Tenney" Jones, Ferd Bader and Buckley Simpson. Fourteen boys were inducted into the order: Gerald Moore, Brian Moore, Carl Bell, Clark Archer Jr., James Fisher, Mike Cauger, Joseph Keenan, Ronald Greig, Thomas Aird, Robert Winstel, Bruce Burkhead, John Nichols, Thomas Rickey and Eugene Nichols Jr.

Winner of the boys peg setting contest; Larry Pownall  
 Winners of the trap shooting contest: L. Kenworthy, H. Smith, K. Payne and H. Joly Jr.

After a picnic dinner-at 2 P. M. there was a diving exhibition by several members, a canoe demonstration by Mr. O'Brien and Mr. Glauser, a canoe battle between Ed. Orban and Eugene Nichols, a hand trap shooting exhibition by Gordon Yocum and a match H. Nester, Mrs. G. Yocum, G. Yocum Ed. Orban and Marshall Jack. Henry Joly and his two sons, Henry Jr. and Francis gave an archery exhibition.

The Club now has 675 members, most of whom are very active around the Park. This

Acquaintance With Nature", a very fitting title for the talk that followed. Up to Mr. Harper's visit we had speakers who were experts in fish and game management and his story of the plant life that feeds and shelters the fish and game completes the cycle.

Next meeting to be held on September 27, 1951 at the Y. M. C. A.

Clark Archer, Secretary

### ASHLAND COUNTY

The June meeting of the Ashland County Wildlife Conservation League was held at the league farm Thursday evening, June 14th. Members and their families, 250 in number, enjoyed a fish fry by A. E. Newcomer and his committee prior to the short business meeting. Following the business session the group joined in some group singing under the leadership of Harry Barrett, with Al Hoyer at the piano.

Chairman Paul Carl of the entertainment committee had a number of amateur acts on tap from among the membership, and prizes were awarded the competitors. Don Monnett copped first place with a vocal solo, Richard Carlson, second with his marimba's solo, and Evelyn and Virginia Phillips were in third place with a vocal duet. Judging for the contest was in the hands of Gene Faber, Milo Toomey and Les Shenberger. The judges judged the applause of the crowd to determine the winners.

H. G. DOTSON

### CLERMONT COUNTY

Clermont Sportsmen Inc. held their regular meeting on June 23, 1951, with youths truly presiding. This meeting was mainly for the youth of our community being a father and son meeting. We sincerely believe that bringing educational as well as entertaining programs to these youngsters will make far better citizens of our fathers and mothers. The evening started with the pledge of allegiance to the flag followed by the minutes and financial report of the previous meeting. Edgar Anstaeht then gave us a brief report of the success of the last dance. The gravel for our parking area was delivered and some of the members turned out and spread the gravel and repaired the bridge spanning the river behind our clubhouse. Clarence Lyle gave us a report on what took place in Columbus on the annual meeting of farmer-sportsmen representatives on game laws, also a report on the Ohio forestry associations activities.

After our business meeting came the main part of our evening a most interesting and impressive speech made by our guest speaker Mr. A. W. Short. The speech that Mr. Short made was mainly directed at our youth, but it also impressed our fathers and mothers that attended this meeting. The evening then was climaxed by two films namely "Big Kitchen" and "American Railroads" which so vividly fit in with Mr. Short's speech.

Films were shown by Herbert Rogert, thus ending the meeting. We then indulged in the snack and refreshments that "Bud" Carter and his staff had prepared.

Herl Renschke, Pres.

### CUYAHOGA COUNTY

The Mt. Pleasant Rod & Gun Club sponsored their annual fishing trip to Put-in-Bay



The League of Ohio Sportsmen held their regular monthly meeting at the shelter house after the Jungle Cuck ceremony. Judge Ferd Bader of Cincinnati Ohio, President of the League, called the meeting to order at 10 P. M. with a reading of the minutes by Secretary "Tenney" Jones.

The Show started Sunday noon with a children's fishing contest for those 14 and under, with 18 contestants. Winners - Beverly Long - Most and biggest, Robert Burfield - . . . smallest, and Nancy Jack . . . first.

Winners of the amateur casting contest: Martin Koss - first, Robert Tempest . . . second, and Roy Burson . . . third.

Winners of the experts casting contest: Stanley Jarzabek - first, William Tempest . . . second, and Marshall Jack . . . third.

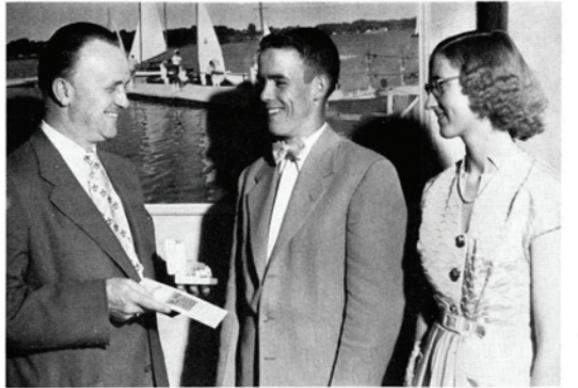
Winners of the boys foot race; Larry Pownall - first, George Pownall . . . second, and Fred Vandeborne . . . third

Winner of the girls foot race: Judie Smith  
 Winner of the girls musical chair; Jane Brown.

year the new playground equipment was installed, swings, seesaw, sliding board, monkey climb, maypole and etc., it is now one of the best equipped playgrounds in the County. Number one lake, Marion, was stocked in May with 750 pound of channel cat, some of them 24 inches long, and with the bass we have in number four lake makes for a lot of good fishing. The new rifle range has not yet been completed but will be soon, also a skeet shooting range has been picked to finish at the same time. New tables and lights in the picnic area have attracted many people, and all in all a record crowd has been in the Park almost every night.

At the club's last regular meeting a series of prizes was set up for the boys, 14 and under, who caught the biggest bass in the County. The prizes range from \$10.00 to \$10.00 and were donated by the members. The contest will close September 27, so that the prizes may be given at the regular meeting.

Mr. Arthur Harper, Ohio Field Naturalist, attended the last meeting as guest speaker. The title of his talk was "A Handshaking



### PLANT-A-TREE WINNERS

At the award luncheon sponsored by the Ohio Forestry Association at the Southern Hotel in Columbus, Monday winners in the association's Plant-A-Tree essay contest were given their prizes and heard their efforts lauded by Ohio Forestry Association officials, state officials and others who attended.

A \$25 gold watch was presented to Daryl Titus, Zanesfield, R.F.D. 1, a Rushsylvania high school student, first place; \$25 U. S. Savings bond to Dorothy A. Rau, Georgetown R.F.D., a Sardinia school student, second place winner and Principal C. W. Bushong, of the Rushsylvania schools, who as Titus' science teacher, was awarded a scholarship to the Ohio Conservation Labora-

tory. The awards were made by Robert J. Kinnard, Cleveland, executive secretary of the Ohio Reclamation Association, donors of the three prizes.

Arrangements were in charge of William Laybourn, executive secretary of the Ohio Forestry Association, with John Woodrow, a member of the executive committee serving as the master of ceremonies. Others participating were J. A. Meckstroth, editor of the Ohio State Journal, who with Arthur Harper, Ohio Department of Natural Resources, was a judge in the contest; A. W. Marion, Director of the Ohio Department of Natural Resources and R. B. Howard, editor of the Ohio Forestry Bulletin.

on May 26th and 27th, and due to poor weather conditions very few fish were caught, however the delicious supper that was served at Webster's Castle helped to offset the poor fishing.

At our last regular meeting a copy of a letter to be sent to the Senators and Representatives in our district urging them to support future anti-pollution Bills, was read to the membership by the Club's secretary and delegate to the O. C. C., George Ford. The membership was saddened by the death of one of its charter members, Mr. Charles Stoff, who passed away in May.

The wonderful film "Fishing for Fun" by Ben Hardisty was shown at the conclusion of our meeting, and was thoroughly enjoyed by the boys.

McClurg, Publicity Chairman

### CUYAHOGA COUNTY

It was a thrilling sight for the officers and trustees of the South Cuyahoga Sportsmen's Association to see a pair of deer on the hill overlooking the club house, looking in on the June 29 meeting.

Members are requested to turn out as usual every Sunday A. M. to beautify the grounds. The lake is just about completed and will be a beauty spot when landscaped and will provide fishing for our youngsters.

The casting team practices at Ridgewood Lake every Monday evening in preparation for the Greater Cleveland Casting League games which will be held at the different lakes of the participating teams. Many different wild game seed were planted this spring.

Harry Lowther, our past president, was Chairman of the Game Law discussion meeting of District No. 3 held at Twinsburg in the offices of Bert Cannell. Orville Loesch

### HAMILTON COUNTY

We wish to thank all the Sportsmen, Conservation groups, Garden Clubs, Veterans organizations and "Citizens" who rallied to support the Isaak Walton League of America, Inc. in its fight for the passage of the

Deddens Anti-Pollution Bill, Senate Bill #62, in the state of Ohio.

Thank you one and all, I remain, Clarence Doell, president, Joe J. Henshall Chapter, Isaak Walton League of America, Inc., 45 DeWitt St., Greenhills, Cincinnati, O.

### LOGAN COUNTY

Robert Lord, Bellefontaine sportsman, has been named to succeed Donald Fowler as president of the Logan County Fish and Game Association, which now boasts of 1200 members.

Mr. Fowler, who resigned, was elected earlier in the year, and will remain active in the organization.

Night traphooting is proving popular, and the second nocturnal event of the season drew nearly two score of runners who fired over the two illuminated traps.

Near completion of the 78-acre tract north of Bellefontaine, in addition to the clubhouse and which will house all of the kitchen equipment, as well as the pumping facilities of a new well.

Yielding fish from time to time now is the recently stocked two-acre lake on the site. Play-grounds near the picnic area are in the immediate picture for children.

A traphoot will highlight the outdoor program the afternoon of July 4, and a public fireworks display will cap the holiday.

Tom Hubbard

### SCIOTO COUNTY

As you have probably learned, the Scioto Conservation Club has the Pine Lodge which is beautifully located north of Hill road on the West Side.

We plan to make this Lodge along with its 84 acres of woods, picnic areas, small lake, target and trap range and recreational facilities available to civic and charitable organizations, under our sponsorship, on a non-profit basis.

This community has had dire need for such ideally located facilities and this is our opportunity to provide an idea location for several meetings, contests, outings, etc., that

interest all sportsmen as well as provide a sorely needed civic improvement.

We obtained the lease for one year for the sum of \$1.00 and considerations. The considerations are:

- (1) That the grounds which have become overgrown and cluttered through years of none use be cleared.
- (2) That we assume the expense of the electric power consumed on the premises.
- (3) That we replace needed window glass and those few sashes that are damaged beyond repair.
- (4) That we restore damaged outdoor fire works, picnic tables, etc.

Work is being well planned and started on each of the above and some material is available, however in order to complete this job it will require an active and paid up membership considerably larger than at present.

We are urging all interested persons to join and lapsed members who have not as yet renewed their membership to do so; we are also asking from all their active support in order that this project may be carried out successfully. The annual membership fee as you probably know is only one dollar (\$1.00) per year.

H. M. Redmon

### WAYNE COUNTY

A large group of Waltonians gathered at the Isaak Walton Memorial Forest 9 miles northwest of Wooster, on Monday evening, June 11th, for a burfuburger and fish fry. The affair was sponsored by the Wayne county chapter but there were Waltonians present from the Medina chapter and Walton State President Cecil Rhoads and State secretary Bert Brickner were over from Tiffin. Aside from the fish and Walton golf was the main diversion of the evening. A number of the trees are making it over the 120 acre tree farm which the Wayne county chapter purchased in 1944. They observed the trees, the trees are making in the various new plantings.

W. H. H. Wertz and Walter Frye were in charge of the burfuburger for the occasion and L. J. Alexander was the chef who brought praise from everyone.

George McClarran, Secy.

### HURON COUNTY

The regular monthly meeting of the Newark-Bronson Conservation League was held in their clubhouse on Old State Road at Newark, Ohio, on Monday, June 11th.

Meeting was called to order and presided over by our President, John Moore. The Treasurer, Stanley Betz, reported on bills paid and a balance on hand of \$700.00.

The members voted to furnish a quantity of rifle ammunition to the Junior Boy Scout Club, who meet every week to practice on our new rifle range. They are being instructed in the use of firearms by Kenneth Pickett.

The Main feature of the meeting was a display of over 300 specimens of wood, a part of the collection of one of our members, Earl J. McChrill, who gave us a forty-minute talk on "Forest Conservation", which was well received.

The League has a tract of eighteen acres which it plans to reforest with the help of the Ohio Forestry Association.

June 12th was reserved after the meeting, which adjourned to meet on July 5.

### THE MIAMI VALLEY SIXTH ANNUAL SUMMER BENCH SHOW

For Foxhounds  
HELD JUNE 16, 1951

On June 16th, the Miami Valley Foxhunters Association held their Sixth Annual Summer Bench Show for foxhounds, five miles northeast of Milford, Ohio, near Cincinnati, Ohio.

There were seven trophies and forty-four ribbons awarded at this show. Four states were represented: West Virginia, Kentucky, Indiana and Ohio. Mr. Roger Stone of Lexington, Ky., judged the show and received many compliments from the owners for his fine work.

### RESULTS

FEMALE PUPPIES UNDER SIX MONTHS:

1. Shesline Sagar (John Winn ex Bessline) owned by A. M. Stone, Indian Hill, Ohio.
2. Mable Bell (Big Riley ex Snow King) owned by Logan Goff, Norwood, Ohio.

Continued on next page

# PLAN TO ATTEND THE OHIO STATE FAIR AUGUST 24-AUGUST 31



## OHIO TRAPPERS MEET

The spring meeting of the Ohio Trappers was held June 24 at Mohican State Park, Loudonville, Ohio.

People who are interested in preserving Ohio's fur bearers and the making of good regulations and laws governing the same assembled from many parts of Ohio. The business meeting consisted of making recommendations for the coming season, election of delegates and election of officers for coming year. The following officers were elected: Jack McAllister, Ashland, Secretary and Treasurer; Tom Pike, Lisbon, President; Art Scott, Ashland, Vice President; Sheldon Colvin, Dennison, Editor; Dayton Parsons of the State of Ohio Division of Wildlife gave an interesting talk on some of the Division's programs and explained the system of selecting Game Protectors. He stated that the Division would add some more Game Protectors in the future. Mr. Parsons also gave some trap setting instructions which were enjoyed by all.

Much interest was shown in the pictures and details of the catching of a sheep killing coyote which had recently been trapped by Sheldon Colvin, expert trapper of Dennison. The coyote had killed about 70 sheep in Harrison County and had caused much concern to farmers in that area. This is the second time that Shell has been called on to trap stock killing coyotes. A few years ago he trapped 2 large coyotes that had been doing a lot of damage.

Much time was consumed in meeting old friends and talking over last season's happenings. A picnic dinner was enjoyed by all.

The next meeting will be held August 26, 1951 at Mohican State Park, Loudonville, Ohio. This is the eleventh annual fall picnic with prizes, entertainment for all.

## FIELD TRIALS—Continued

### MALE PUPPIES SIX MONTHS TO ONE YEAR

1. Howell B. (Champ Gay Heels ex Betty Gal) owned by Curt Kelley, Hamilton, Ohio.
2. Reynolds Ballot Boy (Ballot Boy ex Faulless) owned by Paul Reynolds, New Albany, Ind.
3. General Mac (Amos O. ex Ethel Raider) owned by Edwin Chance, Laurel, Indiana.
4. Suffle Hedge (ex Daisy) owned by Matt Gray, Camden, Ohio.

### FEMALE PUPPIES SIX MONTHS TO ONE YEAR

1. Slineline Starlight (John Winn ex Beslinger) owned by A. M. Stone, Indian Hill.
2. Reynolds Overtime 6th (Sundial Ballot ex Reynold Overtime 4th) Paul Reynolds, New Albany, Ind.
3. Cherokee Black Princess (Big Ben ex Lulu Belle) Taggart Valley Kennels, Clarksville, West Virginia.
4. Indiana Flapper (Amos O. ex Ethel Raider) owned by Edwin Chance, Laurel, Indiana.

### BEST PUPPY OF SHOW

- Howell B. (Champ Gay Heels ex Betty Gal) owned by Curt Kelley, Hamilton, Ohio.

### MALE DERBY

1. Gay John (Pluto ex Gay Nan) owned by Wm. Arnold, Oxford, Ohio.
2. Rudder (Gay Deputy Sensation ex Tru Lou) owned by Reggie Meyers, Lawrenceburg, Indiana.
3. Clara Ru Ringer (John Winn ex Clara Ru Bessliner) Clarence Ungethumb, Batavia, Ohio.
4. Lonnie Stone (John Winn ex Whiteside) Allen Oak Kennels, Hamilton, Ohio.

### FEMALE DERBY

1. ClaRu Trily (Gay Heather Sensation ex Francis Moore) Clarence Ungethumb, Batavia, Ohio.
2. Slineline Sharon (John Winn ex Whiteside) A. M. Stone, Indian Hill, Ohio.
3. Fairfield Lady (John Winn ex Whiteside) Sie Bolser, Hamilton, Ohio.
4. Tupman Sally Girl (Tris Crowe ex Sally Ann) J. Tupman.

### ALL AGE MALE

1. Deputy Gay Heels (Gay Deputy ex Fly-

- ing Venue) owned by Wm. Arnold, Oxford, Ohio.
2. Six Spot (Jack Kirby ex Shalimar) John Diekmeyer, Indian Hill, Ohio.
3. Gay Hunter (Airliner Masterman ex Hoosier Gal) John Diekmeyer, Indian Hill, Ohio.
4. Jay Hill Jeep (Troubadour ex Becky) John Dupree, Indian Hill, Ohio.

### ALL AGE FEMALE

1. Cherokee Lady (Parsons Storm ex Judy) Taggart Valley Kennels, Clarksville, West Va.
2. Tru-Girl (Gay Deputy ex Queen Riley) Allen Oak Kennels, Hamilton, Ohio.
3. Skeezie Hall (Big Sam ex Skeezie) Logan Goff, Norwood, Ohio.
4. Gleam Brooks (Sam Brooks ex Genius) Johnson Harris, Versailles, Ky.

**FIELD TRIAL CLASS** (Any Hound that has placed 4th or better in any recognized F.T.D. trial)

1. Gay Heel Deputy (Gay Deputy ex Flying Venue) owned by Wm. Arnold, Oxford, Ohio.

### NATURAL CARRIAGE CLASS

1. Fairfield Lady (John Winn ex Whiteside) owned by Sie Bolser, Hamilton, Ohio.

### BEST PAIR

1. Sharon and Starlight, owned by A. M. Stone, Indian Hill, Ohio.

### BEST OF SHOW

- Cherokee Lady (Parsons Storm ex Judy) Taggart Valley Kennels, Clarksville, W. Va.

### BEST OPPOSITE SEX

- Deputy Gay Heels (Gay Deputy ex Flying Venue) Wm. Arnold, Oxford, Ohio.

Our Twentieth Annual Bench Show and Field Trials will be held November 1st, 2nd and 3rd, 1951. Bench Show, 7:00 p. m. Thursday, November 1st.

## LOOK HERE, KIDDIES!

History is repeating itself for the famous old Model 1873 lever action repeating rifle. It was disclosed today.

Although production of the model was discontinued in 1919 and the final cleanup of odds and ends was completed in 1924, it was not until last year that the veteran rifle returned to

a fame comparable to that of its youth. Then it became the star of a movie, was selected "Gun of the Year" and the rare "One of One Thousand" variety became the most sought after gun collectors' item.

Today the rifle is back in "production" again.

The Quaker Oats Company has selected a 5-inch solid miniature of the Model 1873 as a box-top premium offer for two of its cereals and millions of youngsters will become owners of diminutive versions of the rifle that many of their grandparents carried across the plains. The miniatures are dummies.

Old Winchester reports that many of the Model 1873 are still being used both in this country and abroad.

The 5-inch miniature Model 1873 was made from a genuine "One of One Thousand" rifle of this model owned by Robert Abels of New York City. Mr. Abels' rifle is regarded as one of the finest of the 33 "One of One Thousand" Model 1873s thus far discovered. Only 135 "One of One Thousands" were produced out of a total of 720,610 Model 1873s.

SEND THE BULLETIN TO A  
FARMER

## FREE FISHING FOR CHILDREN AT 1951 OHIO STATE FAIR

The Fish Management and Law Enforcement sections of the Division of Wildlife, Ohio Department of Natural Resources, will continue their very popular free fishing for children under 18 years of age at the south Twin Lake, on the Ohio State Fair Grounds, August 24 to 31.

Fishing will start at 1:00 p. m. on Friday and Sunday and continue at one-half hour intervals until 5:00 p. m. The rest of the week the fishing hours are from 8:30 a. m. to 12:00 noon and from 1:30 p. m. to 5:00 p. m.

The Division of Wildlife will furnish to each child, free of charge, a pole, line, cork, sinker, hook, and live bait. Each boy or girl catching one or more fish will receive a free stringer and the fish will be wrapped at the Fishing Booth, iced, and held until 5:30 p. m. to allow the kiddies to see the Fair.

This year, like 1950, the channel catfish and bullhead catfish will be confined to seven wire pens to make them more available to the youthful anglers. State Game Protectors and Boy Scouts will be on hand at all times to explain the details and to help the children bait their hook, string the fish, and assist in landing the big ones. The channel catfish will be large and broken poles are expected to be numerous.

During the 1940 State Fair 6,936 fish were released and the children caught 12% of the bluegills, 22% of the bullheads and 28% of the channel catfish. Since that time most of the fish stocked have consisted of channel catfish and bullheads. In 1946, 80 of the 88 counties of Ohio were represented in the free fishing contest and the first afternoon 885 fish were taken by 42 enthusiastic kids, or at the rate of five per minute. The weekly catch was over one fish per child and one and one-half fish per minute. 1949 was the poorest during the six years of fishing in 1940, 1941, 1946, 1947, 1948, and 1949, and less than one-half as many fish were taken during the seven days of the Fair as were recorded the first afternoon in 1946.

Last year was the best in seven years and 55 per cent of the fish were caught. This year it is hoped that the results will be as good as last year if the fish continue to cooperate. Benches will be provided for those who desire to see the children fish.

Most people are under the impression that an abundance of fish always means good fishing. However, fishing by children at the Ohio State Fair has shown the reverse. The first day with fewer fish, has been the best fishing. Also, when the fish have had a chance to rest, fishing improves. For instance, at noon when the contest opens there is usually good fishing. In the afternoon, after a rest during the lunch period, fishing improves and when fish are stocked fishing is temporarily improved.

As far as known, the concentration of 7,000 children fishing for one-half hour in one-sixth acre of water during a week's time is the highest in the State, but after the contest period the results show as many fish in the pond or more than children caught in a week, and over-fishing seems to be the exception in Ohio's ponds and lakes rather than the rule.

In a News Release dated May 12, 1941, Mr. E. W. Wickliff, Chief of the Fish Management Section, stated: "Test Nets at Buckeye Lake in 1930 and 1940 show that during the ten year interval all the hundreds of thousands of fish

stocked (with one exception) did not materially change the fish population and that fishermen at this lake are not depleting the brood stock of fish. What the lake needs is more fishermen or more effective lures at the right time to catch the fish."

Buckeye Lake was first opened to liberalized fishing in 1946. Isaac Walton sums up the situation as follows: "Fishing is an art—or at least it is an art to catch a fish." Thomas DeQuincy states: "Fishing is an unceasing expectation and a perpetual disappointment".

## BIG FLAMINGO COLONY LOCATED IN BAHAMAS

Some 7,500 American flamingos, probably the largest remaining concentration of these flame-colored birds, are living on an island in the Bahamas, according to reports from a National Audubon Society expedition to Great Inagua.

Robert P. Allen, research associate of the Society, has recently completed a survey of the flamingos on Great Inagua. Although his conservative estimate of the birds on this island is nearly twice what the population was believed to be, the National Audubon Society states that the overall numbers of flamingos in the West Indies has been seriously reduced. In many cases natives apparently have killed the birds for food, though the tameness of flamingos on Great Inagua indicates, says Mr. Allen, that they have not recently been molested there. The birds are concentrated over an area of 12 square miles.

After a wearying trip of many hours through mud and over coral rock, Mr. Allen describes his first reaction at seeing a huge flock of flamingos, in an article prepared for the July-August issue of Audubon Magazine: "Through the thin brush we could see a solid band of red. It shimmered and undulated in the warm air exactly like a long sheet of flame. The comparison is inescapable. With the movement of many wings and the raising and lowering of a thousand heads, one could imagine that this was a prairie fire, racing across the flat savannah as if completely unrestrained."

The National Audubon Society reports that both the Bahaman and Cuban governments demonstrate a growing interest in the welfare of their flamingo flocks. After the discovery of 3,000 flamingos in Yucatan last year, the Society arranged for warden protection of the birds through the cooperation of Senor Joaquin Roche of Merida, Yucatan.

Mr. Allen is continuing his search on the status of flamingos in the West Indies. Only rarely is a wild flamingo observed in the United States, though in Audubon's time they were often seen in south Florida.

## PHEASANT FAMILY—Continued

First, we could eliminate the tropical pheasants as unsuited to our climate. Next would be the high mountain forms; not only do we not have high mountains in Ohio, but the peculiar conditions existing in mountains that have a tropical climate at their base cannot be duplicated in the United States. The habits of the birds do not lend themselves to propagation for

various reasons. Among these are: 1) most species of pheasants do not mature until they are two years old (assume adult plumage and breed), 2) most species are monogamous (i. e., a cock will mate with only one hen), and 3) most of them are not prolific enough to maintain their numbers under heavy shooting. Several species lay only 2 eggs per clutch. The Kaleege and Ruffed pheasants are the most desirable game birds from the sportsman's point of view even if they could be propagated. The Cheer and Koklass are desirable game birds, but Koklass cannot be raised in captivity, even on a small scale, therefore seed stock could not be propagated. The Cheer breeds easily in captivity but is very susceptible to blackhead and would have to be raised on wire if kept in large numbers. It is extremely doubtful if Ohio has the proper habitat for these birds.

This leaves us with the Ringneck pheasants and the Long-tailed pheasants. Reeves' pheasant is probably the only one with a chance for success. The Copper pheasant cocks kill their hens in the breeding season when kept in pens, as does the Mikado cock. Elliot's are hesitant breeders in captivity and the price of seed stock would prohibit an experiment. Barred-back pheasants have never been imported alive.

The best success with the Reeves' pheasant has been in Scotland. These birds have done well in the rugged mountains where they were introduced in the latter part of the nineteenth century. In the United States, the Reeves' have been released in small numbers in California and Wisconsin, though I know of no report on their success or failure. As he was observed with a brood in Wisconsin. Caution should be exercised in introducing it into areas where the ringneck is established because the Reeves' cock is very pugnacious and is likely to drive the ringnecks out. (Beebe 1948, Sibley 1948). The male offspring of the cross between the Reeves' and the ringneck are fertile, but the females are sterile. A very undesirable situation might arise if their ranges overlapped. These are a few of the many factors which must be taken into consideration before an animal is placed in a new habitat. Classic examples of what may happen are the English sparrow and the Starling.

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### COUNT YOUR BLESSINGS—Cont.

steadily increasing hunting pressure. But when it is realized that providing recreation is wildlife's primary value, it seems to many people that our game populations are still holding up remarkably well.

The hunting and fishing equipment of today is a joy and pleasure to use. We often take this for granted, but when we look at some of the old guns and reels it makes us thankful that such superior equipment has been provided us at usually not exorbitant prices. The cleaner kills of today add much to the sport. And danger to the hunter from faulty firearms has been practically eliminated. If some of the early outdoorsmen could inspect our hunting, fishing, and camping equipment, they would probably admit they missed a lot in their day.

Much is said today about esthetic pleasure from wildlife, and many people approach the outdoors from this angle entirely. A good amateur ornithologist can find and identify so many birds it makes the average person doubt his truthfulness. A good share of these people watch mother nature at work in their back yards, or on short field trips. Everything from field mice up to whitetail deer can be observed. Improved automobiles and roads, and wide distribution of nature books and field guides have greatly enlarged the sport of observing and photographing wildlife. We are becoming more nature enlightened, and consequently more esthetic value is gained from it.

Lastly, the mechanized age is a help to wildlife technicians. On his shoulders of these people rests the responsibility of maintaining and increasing game populations, and they need every tool they can muster to aid them. The practice of road-side counts from automobiles is employed by many states as a census method. They have standardized procedures where crowing and whistling counts are made on pheasants and bobwhites. Aerial photographs provide valuable counts on big game, waterfowl, and muskrat houses. Airplanes are important in restocking fish and beavers in inaccessible places. Air transportation is often used to carry emergency food to big game concentrations. The fluoroscope is used to determine the presence of lead shot in live-trapped waterfowl. Modern medical procedures are utilized in nutritional studies. These are but a few of the ways our technicians have employed the advantages of our civilization to help an adequate wildlife supply.

We have just covered a lot of territory in a few paragraphs, which all adds up to this: **we have lost some game species from our hunting list, but we have kept most of them and have added some; and, if we have any other goal in hunting and fishing, besides a large bag limit, the sport as a whole has been improved.** It is only because of the farsightedness and hard work of interested conservationists that the wildlife picture can be painted as it is today, and we sportsmen should recognize this picture for what it actually is. Yes, it is high time we quit griping, and started to count our blessings. Believe me, they are many!

### OAK OPENINGS—Continued

tion and continues on, covering a great deal of the sandy region where rows and rows of pine trees have been planted and today stand some 12 feet in height.

A new trail, Moseley trail, in honor of the late Dr. Edwin L. Moseley, naturalist of Bowling Green, has been layed out. It is to be only a half mile long and is to circle through one of the most complete wildflower sections of the park.

Professor Moseley, for many years a teacher of science at Bowling Green State University, did much research in the Oak Openings area. He is one of the first to learn of its hidden treasures in the botanical world.

He began his study of the area in 1897 and in 1928 published his pamphlet "The Flora of the Oak Openings." From Professor Moseley's observations we learn that although the Oak Openings area composes only 1% of the area of Ohio, at that time it contained 61 species of plants that are found in only two or three of Ohio's 88 counties; and that more than 50 species of plants may be found in larger numbers in the openings than in the remaining area of the state.

Although much has already been done to provide drainage in the park, the park board has plans for creating a large artificial lake in the lowlands. This will put much of the land now used in the park under water, but will provide drainage for other areas now marsh lands and will increase the actual value of the park lands as a whole.

Oak Openings is filled with beauty during all four seasons of the year. In the spring the budding trees, the violets, the spring beauties, and other spring flora form an inspiring scene. The goslings and ducklings are also interesting to watch. In the summer, the lilacs and ferns spring forth and the sunflowers and flowering spurge add their bloom to the landscape. Various berry bushes are also abundant.

Autumn brings a blaze of color from the woods as the trees lose their leaves with the coming of cold weather and the asters and goldenrod bloom.

Only the pines, spruces, and cedars greet the winter with their green boughs, soon to be laden with snow. But, a winding lane, lined with towering snow covered pines is a beautiful sight.

This is Oak Openings Park, a haven for birds, wildlife, plants, and man alike—from the busy world.

### POOR MAN'S TROUT—Continued

rubber can be obtained at a variety of places where sponge rubber is used in the manufacture of hat-cleaning sponges, foam rubber cushions and rattle-reducers between the metal parts of automobile frames, etc. The copper wire can be obtained from electrical supply stores or from old loud speaker wire.

For best results the spider should sink slowly and a little practice and experimentation will enable you to make just the right number of turns around the spider to provide the correct weight.

The spider should be used on a nylon leader, six to nine feet long. Preferably, a tapered line should be used, but a level line will produce results under most conditions. The important

thing is the leader which should be tapered down to 3X at the tipset.

The spider should be allowed to sink slowly while a slow retrieve is begun by gathering the line in figure-eight on the left hand. Little, if any, rod action is necessary.

In another article I should like to explain in detail how to fish the rubber spider to get best results in middle and late summer, and fall when fish are inactive and difficult to catch.

### LAKE ERIE NIGHTS—Continued

If this is the night of nights, the action may be fast and furious from the start with fish being hauled in in an almost continuous stream by all members of the party. But more likely the anglers will be forced to nourish their souls on anticipation, for vary-long periods of time with only an occasional strike and fish boated.

Then, perhaps suddenly or perhaps in a rising crescendo, the fish are there and are caught with satisfying regularity. Then the action may stop as it started for there is no guarantee of action. The night fishermen have their fishless moments too, and many a party has returned to the dock fishless.

But success is frequent enough to keep many ardent anglers returning for more of the same. When large catches are taken, they usually are blue pike. The blues, although voracious feeders, are not noted for a tackle busting fight like their cousins the yellow perch. After the first wild rush at the prick of the hook, they follow the line of least resistance and allow themselves to be landed without fuss or furor. In justice to these two sub-species of the pike-perch or walleye family, it must be said the whims of the mill tackle used is much too heavy to permit much of a struggle.

While "blues" and "pickere" are the main dish of the lantern fisherman, spice and variety are added to his bill of fare by many other species depending on the whims of the Red Gods of angling. Perch, rock bass, black bass, channel catfish, rock bass, sheepshead, and even carp are occasionally found in the boat wells of successful fishermen. And there are enough tales of the "strike I had that I couldn't even turn and cost me twenty yards of good nylon and put a set in my rod" to add the mystery of the unknown to Lake Erie nights.

Late in the evening when thoughts of tomorrow's time clock begin to pace, the bobbing, water-born villages of lights shrink and disappear as the boats and their occupants return shoreward. On the trip in all hands except the skipper turn to the job cleaning the catch, liding up, and making everything shipshape.

Whether or not the favored team won or lost, whether or not the catch satisfied expectations, the party returns with that feeling of relaxation and satisfaction that only primeval pursuits bring. The following day's dinner brings an anticlimax to the whole adventure, for in the hands of a skillful cook the catch is the ridge pole of a truly magnificent edifice, a stomach-satisfying shore dinner, complete with heaps of plump green fried fish, mounds of snowy mashed potatoes, and ricks of steaming corn.

If you're interested I know a spot where, come August, the blues run big and plenty. It's just off ---.



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