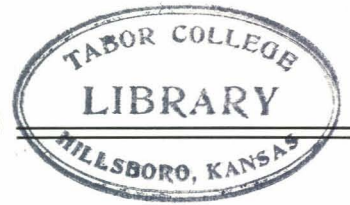


# KANSAS

# FISH AND GAME



VOL. XI

APRIL, 1954

No. 4



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# KANSAS FISH AND GAME

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## “Little Balkans” Boasts Five State Parks, State Forest, Quail Farm and Fine Strip Pit Fishing Lakes

(EDITOR'S NOTE: This article is the first in a series on the recreational assets to be found in various sections of the state. The story was written following a picture-taking tour through Southeast Kansas early in February. For purposes of this article, Southeast Kansas is the area bordered roughly by a clockwise line curving from Sedan to Eureka to Burlington to Garnett and on to the Kansas-Missouri state line.)

Heavy industrialization and a hilly, wooded terrain have combined to give Southeast Kansas a unique character in recreational development.

Nowhere else in the state can you find old strip mining pits converted into clear, gemlike fishing lakes surrounded by high banks heavily overgrown with trees and shrubbery.

No other section of the state boasts the forests and the particular brand of natural scenic beauty that Southeast Kansas possesses.

Spring arrives earliest in Southeast Kansas and no other section has a longer outdoor season. The southeastern corner, only a few hundred feet above sea level, drops away toward the south.

Many hunting and fishing areas have been developed throughout the hilly and sometimes rocky terrain of the “Little Balkans.” The extensive recreational development work of the Kansas Forestry, Fish and Game Commission has come about through two requisites held by the area, a concentration of population and the practicability of the construction work. In locating new parks, lakes and other projects, the commission gives consideration to these two factors, along with costs of the construction work and whether other such facilities are available.

Within the Southeast Kansas area are four well-established state parks, all heavily patronized, Woodson County, Neosho County, Crawford County No. 1 and Crawford County No. 2. A new 105-acre state lake was completed last fall in Montgomery county, but it is not yet filled with water.

The state also owns several strip pit areas, aside from those in Crawford County Park No. 1, and is



The state's valuable forest of walnut trees was pruned this spring to promote continued good growth. In the top picture a tree trimmer operates a power saw to remove large trees of other varieties. Below the workman uses hand tools.

co-operating in the development into public fishing lakes of some of those owned by the coal companies. These have resulted from the strip coal mining operations in which a giant steam shovel lifts back a deep layer of the earth's crust to take a vein of coal below. Some of the more recently mined areas still have barren spoil banks, but the older areas have been rehabilitated by the planting of trees and shrubs and the management of the water for fishing.

The state forest, consisting of 3,700 acres of walnut trees, is located in Crawford and Cherokee counties. Planted by the Civilian Conservation Corps about twenty years ago, the trees are showing an unusually good growth. To maintain this healthy condition, tree trimmers went over the entire area this spring pruning branches and removing other trees which were taking moisture and sunlight. The walnut trees will be worth an estimated one to two million dollars when they reach full growth in about twenty years. They will provide an excellent picnic area within five or six years.

One of the state quail farms occupies part of the forest land. Thousands of bobwhite quail are raised each year in the trim "quail factory" layout, and are released each fall to supplement Kansas' natural supply.

At the northeastern edge of this Southeast Kansas area, the state plans the development of a wildlife refuge, similar to the Cheyenne Bottoms refuge in



This view shows many of the buildings of the Pittsburg quail hatchery. The brooder houses are in the foreground and the holding pens in the background.

Central Kansas, but not as large. It will utilize about 10,000 acres along the Marais des Cygnes river primarily to provide a resting and nesting place for migratory waterfowl in eastern Kansas. It also will be a hunting, fishing and recreational area.

A federal flood control project, Fall River reservoir, southeast of Eureka, is a big item in the recrea-

tion picture. A dam of impressive dimensions has been built to impound one of the largest bodies of water in Kansas. It is used extensively for boating and fishing. Attractive picnic spots and winding roadways around the lake bring thousands of visitors each year.

State park acreage in the area totals 1,947 acres with 586 in state lakes. Individual parks and lakes are listed this way: Woodson County, 445 acres in park, 179 in lake; Neosho, 216 park, 92 lake; Crawford I, 418 park, 60 lake; Crawford II, 460 park, 150 lake; Montgomery, 408 park, 105 lake.

*Neosho County State Park*—This pleasant wooded park provides many picnic and overnight camping spots. Picnic tables and stoves are scattered through groves of trees. A big stone shelterhouse with fireplace filling one end has been built at a convenient central location.

Brood ponds near the main lake are the home for fingerling fish brought from the state's fish hatcheries until they are big enough for stocking the main lake.



Wooded hillsides with interesting pathways through them rim the Woodson County State Lake. This picture was taken from a picnic area.



This picnic spot is nestled in a grove of trees at Neosho County State Park. Tables, ovens and a shelterhouse are provided for visitors.



Fall River dam, a federal flood control project, has been developed into a scenic area for camping, picnicking, fishing and boating. It is located in southeastern Greenwood county.



This view of the dock and shoreline of Neosho County State Park was taken under a cloudy sky in early spring. Fishing and boating are major sports at this lake.



Brood ponds such as these at Neosho County State Park are used at the state lakes for fingerling fish brought from the state's fish hatcheries until they are big enough for stocking in the main lakes.



Buffalo and elk are kept in a large enclosure at Crawford County State Park No. 1. The animals usually congregate around the feeding station, above, and are easily seen from the roadway.

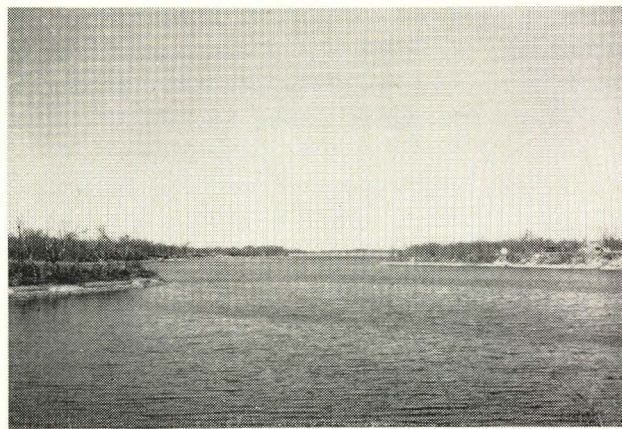
A superintendent, Wayne Piggott, and Mrs. Piggott live on the grounds. The park may be reached from U. S. Highway 59 or State Highway 57.

*Woodson County State Park*—Excellent fishing and boating conditions characterize this state lake. Several springs are to be found on the premises near shaded picnic areas. A road winds through the wooded hillsides around the lake. Brood ponds have been built here also to facilitate stocking of the big lake. The dam is ornamented with a stone balustrade. A stone stairway leads from the roadway on the dam to the paths through the small ponds. Quarters for Superintendent A. M. Sprigg and Mrs. Sprigg are provided on the grounds. The park is accessible from U. S. Highway 54 or U. S. Highway 75.

*Crawford County State Park No. 1*—Rehabilitated strip pit lakes at their best can be found at this park. Deep, indented lakes appear at almost every turn in a walk through this ruggedly beautiful country. Well-worn trails reveal that fishermen have dis-



Here is strip pit coal mining in actual operation. Many of the lakes of southeast Kansas have been formed from pits such as these. They gradually fill with water through seepage and surface runoff and trees and other vegetation grow on the high banks.



Many private cabins may be seen in the background in this picture of Crawford County State Lake No. 2 (Farlington), taken from the shelterhouse bluff.

covered bass, crappie and channel catfish are plentiful in the lakes.

Several buffalo and elk are on exhibit for visitors. They usually are congregated around the hay-feeding station near a fence on the roadway, although they have been given a large area in which to roam.

Many picnic spots are provided throughout the park. Boating and swimming are other popular recreational pursuits. The park may be reached by following State Highway K-7 four miles north of Pittsburg. Bill Gregory is superintendent for both the Crawford County State Parks.

*Crawford County State Park No. 2*—Several small coves contribute to the interest in fishing at Crawford County State Park No. 2. Boating also is a popular sport.

A shelterhouse and other picnicking areas are provided for visitors. Many private cabins with attractive boat docks have been built at this lake. Fishing interest did not diminish at this lake during the winter. A heated fishing dock with padded benches, radio and a refreshment stand was installed for the year-round fisherman. The dock is built on empty metal barrels and can be moved if the fishing slows in one spot.

A federal fish hatchery is built on one part of the park grounds. Water for the hatchery ponds is drawn from the Crawford County State Lake No. 2. An exhibition pond stocked with several kinds of fish has been built for the public and the fish house and grounds are open to visitors. The park is located a mile north and a mile east of Farlington, off State Highway K-7.

Each common toad is said to be worth at least \$7.50 annually to farmers because of the harmful insects it eats.

## Boys Find Fun and Money in Trapping

Two young Pratt outdoorsmen, like others all over the state, have discovered the fun and challenge—and sometimes profit—in trapping.

Teddy DeVoss and Roger Clinesmith, both 18, ran a set of traps in the Ninnescah river valley this winter for the third season. They have found that books can give you the “general idea” of trapping, but that “you learn most of it by experience.”

Both boys always have liked hunting and fishing and consider trapping another branch of outdoors sport. They became interested in it while they were juniors in high school. With all the fervor of new converts, they arose between 3 and 4 a. m. on cold winter mornings during the season to run their traps. That first year, when they “didn’t know anything about it,” they caught forty muskrats. They have never had adult help, but have learned trapping methods by practice. They have set about thirty traps each year.

Their take last year was between forty and fifty muskrats and one mink. This year it is down considerably. They took only fifteen muskrats, one coon and one mink. They have found the muskrat population lower this year and the mink population up. They consider mink trapping a little beyond their skill at present, except for an occasional catch.

Drought conditions are believed to be at least partially responsible for the decrease in the muskrat population.

Another young trapper, Bob Henderson of Wichita, also is making trapping pay off. As a junior at Fort Hays State College, he is helping pay his college expenses by trapping, is gaining experience for a career in the wildlife service, is getting college credit in zoology and is preparing a paper for presentation before the Kansas Academy of Science at its meeting in Hays April 30.

Henderson is luckier than most would-be trappers who are thwarted by the state ban on beaver trapping. He is in the employ of the Kansas Forestry, Fish and Game commission and is permitted to trap where landowners have complained of beaver damage. He also has worked for the commission at the Pratt headquarters for several summers.

Henderson and a fellow student are studying the feeding habits of beavers, opening the stomach of each animal they trap to examine its contents. Breeding habits and reproduction also are being studied.

Professor Edwin P. Martin of the zoology faculty at Fort Hays State, who is directing the research, said no one has ever published a paper on the habits of the

beaver in Western Kansas, although many have been done on beaver in the mountain states.

Martin had this to say about the research: “I do not believe any amount of study can bring enough beaver to Kansas to have wide-open trapping seasons, but study and management may permit us to harvest a carefully regulated crop each year.”

By the end of January, Henderson had trapped nearly fifty beavers, for which he received approximately \$7 apiece from the state.

He began trapping the end of November when the fur became prime, and trapped until early spring. Henderson traps only where the game warden sends him after farmers have reported damage from the animals. This damage may take the form of denuding the banks of streams and thus accelerating erosion or interfering with drainage or of shutting off farm water by building dams across ponds.

Fur prices generally were depressed this year, from the raw skins through the retail level. Blame for this condition was placed on the lack of volume movement of the finished goods, Russian monopoly of the eastern Europe market, and the emphasis on mink in the retail market to the detriment of other furs. The lower prices were in turn a factor in the light catch reported in Kansas this year.

Although the money rewards in trapping were not as great as in previous years, other values retained their importance. Young trappers learn the habits and ways of wildlife and become self-reliant in taking care of the traps and in outwitting the animals. They assume the responsibility of taking care of the furs and of marketing them.

Termites can live thirty years or more.



Roger Clinesmith, left, and Teddy DeVoss of Pratt proudly display part of their catch during the trapping season this year. The young men ran thirty traps in the Ninnescah river valley.

## What Do Fish Like?

Like the little girl asked her mother, as they stood on the dock watching a party of anglers take off in a boat, "Gosh, Mommy, do the fish like all that beer?"

The question of "what do fish like" plagues all anglers. Not only "what do fish like" but also "what do they like at various seasons of the year." Here Heddon's Research Department offers some suggestions based on a few lifetimes of actual study.

Let's take the spring season, since it is now with us. Most fish are just beginning to feel those urges to move, spawn, eat and forage around. Insects and hatches will come later. As water temperatures warm, the fishes become more active.

Some of the best catches of big fish are made in the spring, but here is one thing to bear in mind. After a long, cold winter the body processes of a fish are mighty slow and you should fish a lure the very same way—mighty slow.

Some lures operate at a slow speed, some don't. One of the best is a deep-diving river runt which wiggles fast at a slow rate of retrieve. If this tends to snag on the bottom, then use a weedless spoon, with pork strip, and fish it slowly, very slowly, bumping the bottom.

In the deeper holes, especially those with sharp drop-offs, lures with a lead head and spinner, like the saint spinner, bring excellent results. These go right down to the bottom, working all the way, and knock on the front door of Mr. Bass.

Colors don't seem to matter so long as the fish can see your lure. However, when in doubt, use yellow. This produces in all sections of the nation, in all seasons. Southern fishermen sum it up very nicely when they say, "Any color is good, just so it's yellow."

Three interesting booklets, each on a type of fishing, have been published by the Shakespeare company from the firm's television series, "Let's Go Fishin'." Titles of the booklets give a hint as to their contents. The booklet on bait casting is entitled "How to Hook, Hold and Handle the Big Ones"; on spin fishing it is "How to Outfish That Good Old Cane Pole"; and fly fishing "No Limit—on Fun." Each booklet also lists the equipment available for that type of fishing from the Shakespeare company.

Several new lures are being issued this year by the Creek Chub Bait Company, along with many tried and true models. One of the newest is the "Spoon-Tail," described as "murderous on bass and walleye." The lure combines the qualities of bait and spoon. It casts like a spoon with wriggling, flashing tail action, then sinks and runs deep on slow retrieve, but wiggles close to the surface if reeled fast.

The Fred Arbogast Company says there are two ways to design a fishing lure. One way is to make it attractive to the fisherman. The other way is to make it attractive to the fish. The Arbogast company believes the best way to make steady customers and friends is to market a line of baits that get a man something to carry home and eat for dinner. On this theory its catalog is filled with bright, attractive lures, accompanied by snapshots of fishermen with their prize catches.

Mirror finish lures are stressed again this year by the L and S Bait Company. The mirror surface is made to resemble the sides of a live minnow and cannot rub off. The company also has four new jointed lures with natural minnow action, the Pike Master, the Baby Cat, Bass-Master and Panfish-Master.

In spite of what the experts may say to the contrary, anybody can become a good fisherman—good enough to enjoy it. One reason for this is that fish do not know the difference between good fishermen and poor ones, and quite often they take lures offered them by rank novices.



New Commissioner for Third District: Ross Beach, Jr., well-known young sportsman and businessman of Hays is the new fish and game commissioner for the third district. He was appointed in January to a four-year term on the Forestry, Fish and Game Commission by Governor Arn to succeed David Ferguson of Colby. Beach is widely known in the state. He is vice-president of the Kansas Natural Gas Company; vice-president of Kansas Independent Oil and Gas Co., and is a director of the Kansas State Chamber of Commerce.





Kansas fishing scenes—Left, angling from a Ninescah river bridge east of Pratt; center, fishing in a strip pit lake at Crawford County State Park No. 1; right, a long cast at Cheyenne Bottoms, game refuge in Barton county.

## More Fish for More Anglers in Kansas

By ROY SCHOONOVER, Fisheries Biologist

Notable progress has been made in recent years in the field of fisheries management. This field of applied science aims at providing the best possible fishing for the longest possible time, a goal which has become increasingly important as the number of fishermen shoots upward.

Attention was initially centered around a broad policy of continuous restocking of hatchery-produced fish in all waters. However, after this practice of stocking all waters regardless of the fact that they already contained the species of fish being planted, had been carried out over a considerable period of years, it became obvious, in most instances, that fishing did not improve. This realization, of course, came about gradually, and among fisheries workers was a result of their observations and studies regarding how prolific most species of fish actually are.

Not only do fish spawn enormous numbers of eggs, but seining with small-mesh nets indicated to biologists that generally numbers of fry and fingerling fish found in most lakes were adequate to maintain good fishing populations, without additional stocking from fish hatcheries. The general public was even more difficult to convince that continuous stocking alone was not the solution to the problem of poor fishing.

Even today, many anglers honestly believe that the stocking of bass, bluegill, crappie, and channel catfish fry or fingerlings in the particular lake in which they are interested, is all that is needed to bring about unbelievable improvement in fishing—even though the lake already contains mature individuals of all these

species in its present fish population. What many people fail to realize is that these mature bass, crappies, and bluegills, with suitable habitat conditions, have the potential to produce many times more young of their kind than could be allotted for the lake from artificially produced stock from a hatchery.

With the knowledge that additional stocking of young fish would not bring about good fishing, investigators were compelled to search elsewhere for a solution to the problem.

General lake surveys were inaugurated for the purpose of collecting data to be used in comparing the characteristics of lakes affording good fishing with those in which fishing success had fallen off badly. Through these lake surveys, information was obtained on water temperatures, transparency, depth, surface area, quantity of dissolved oxygen in the water, carbonate content, and pH (degree of alkalinity or acidity) of the water. In addition, biological studies were made for the purpose of determining the extent of aquatic vegetation, available fish food organisms in the form of tiny plant and animal life drifting in the water, and immature insects living in the mud at the bottom of the lake.

One of the most important phases of such a survey is the study of the fish population. Through the use of various types of seines and nets, fish of different species are collected and length and weight measurements taken. Scale samples and spines of catfish are taken from a representative number for use in aging the fish for the final population analysis.

### Rate of Growth Important

By examining the scales or spine-sections with the aid of a microscope or projector, it is possible to determine the age of the fish from which they were removed. By calculating the average length and weight of each age group for each species, it can be learned whether the fish are growing very slowly, growing at an average rate for that particular section of the state, or are growing exceptionally fast. It is important to know the rate at which fish are growing in a lake because this factor goes far in indicating the general status of the fish population. For example, a slow growth rate for all fishes or for certain species would probably indicate an overcrowded condition in which the available fish food was insufficient to promote good growth. On the other hand, if the rate of growth is rapid, it generally shows that the fish are not overcrowded and that an abundance of food is available to them.

As the lake survey, described above, became a general practice and was used widely by biologists engaged in fisheries studies all over the United States, it became possible to group lakes according to their similarities. The characteristics of lakes providing excellent fishing were analyzed and compared to those lakes in which fishing was poor. A knowledge of how these two groups of lakes differed, made it possible to determine what was lacking in the poor fishing lakes, and then it became the biologist's task to devise methods of correcting these conditions so that good fishing could be restored.

Before going into a discussion of the various practices used in fish management work, it might be well to review some of the basic principles involved.

### Pond Like Tract of Land

In several respects, a body of water (a lake or pond) is much like a plot of land (a cultivated field or tract of pasture land). It is a well-known fact that two tracts of land of equal size, may differ greatly in their capacity to produce crops, due primarily to the soil of one field being of much higher fertility than the soil of the second field. The same is true of water areas, although few people realize it. One lake may be located on fertile soil, have clear water, and possess other physical and biological characteristics which make it rich in fish foods, so that it is capable of supporting an enormous fish population by weight. Another lake may have a basin composed of clay or sand, and receive water which drains an infertile watershed; or the lake may receive drainage from cultivated land which would cause the water to remain turbid throughout much of the summer growing season. In either instance, food production would be low and the result would be an infertile lake which could support only

a small fish population, in terms of pounds of fish per acre of water. Lakes of the latter type cannot be expected to produce beyond their capabilities, so the end result is that they will not be the excellent fishing lakes that highly productive lakes can be.

The productive capacity of a unit of land or a unit of water can be approached in another way. Just as the productivity of an acre of land can be expressed in bushels of wheat that it is capable of producing, the productivity of an acre of water can be expressed in pounds of fish that it will support. Thus, an acre of water will produce and support a certain poundage of fish, and this will not change much from one year to the next, as long as food production and kind and ratio of fish species remain the same.

The number of fish making up this specific poundage may change from year to year, because it would take many more small fish to equal this weight than it would of large fish. One of the objectives of any fish management plan is to control the fish population so that the number of individual fish can be kept small enough that adequate food and space will be available to grow a high proportion of the fish to desirable catching size.

### Different Types of Water

In still another way, a body of water can be compared to a tract of land. Land can be divided into types, depending upon the use to which it should be put in order to obtain the highest possible economic return. Thus, we have land which is used to grow agricultural crops, other land best suited for the grazing



Kansas river fishing also has its advantages. Here are Mrs. Ralph Johnson of Galva, Mrs. Marion Thompson and Mr. Thompson of Manhattan and Ralph Johnson of Galva with three catfish, weighing 23, 36 and four pounds, respectively, which they took last fall in one day's fishing from the Blue river north of Manhattan.

of livestock, and still other rocky, eroded, or otherwise barren areas, classed as wasteland. Similarly, we have several types of water, each of which provides conditions that are best adapted to its particular species or combination of species of fish. For example, some of the larger lakes in Kansas, such as Kanopolis, Cedar Bluffs, and Fall River reservoirs are being stocked experimentally with walleyes. Because of their larger size, wave-swept shore line over firm sand or gravel bottom, and presence of inflowing streams, these particular lakes most nearly provide the conditions best suited for the growth and reproduction of the walleye. This species is not available for stocking in other lakes over the state because those lakes do not possess the combination of conditions mentioned above, which is necessary if a favorable habitat is to be provided.

The majority of our lakes fall in a second group in which siltation is not a serious problem and the water is relatively clear most of the year. In this group, size of water area is not a limiting factor, and the lakes may vary from a few acres to several hundred acres in size. Farm ponds of an even smaller size would also come under this group. The lakes in this group provide conditions which are favorable for our common warm-water game and pan fishes, including largemouth bass, bluegill, black and white crappie, drum, channel catfish, and bullheads.

The third and last group of lakes is rather poor habitat for the more desirable species of warm-water fish just mentioned. Although lakes of this kind do provide periods of good fishing occasionally, they seldom meet the expectations of the people who fish them; consequently, they become a constant source of complaint and create a problem to fisheries management for which, in most instances, there is no practical solution. Often the big problem in conjunction with these lakes is soil erosion. Severe erosion in the watershed results in huge quantities of silt being carried into the lake by inflowing water. The heavier soil particles gradually settle out, smothering aquatic organisms and rendering the bottom unsuitable for fish-food production, not to mention the formation of mudflats, and the gradual filling in of the lake basin in general.

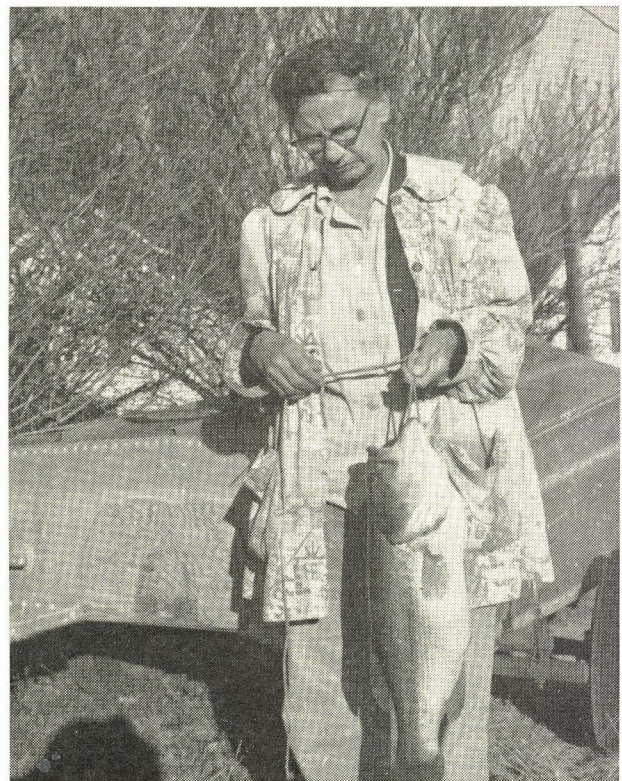
#### Problem Child Lake

Since the fine soil particles remain suspended, and additional siltation is occurring constantly, the water in these lakes remains muddy almost the year around. As was mentioned before, this kind of habitat will not promote the growth and reproduction of such sight-feeding species as bass and bluegill. Crappie, drum, and bullhead will live in this type of environment, but they tend to overpopulate, and make such slow growth because of a scarcity of food, that few get large enough

to warrant anglers spending much time fishing for them.

Because the more popular game and pan fishes, due to their habitat requirements, are unable to maintain satisfactory numbers in these turbid lakes, other types of fish better adapted to living under these conditions, are favored and as a result multiply rapidly and soon dominate the scene. In this group are those species classified as food fish and the most common are carp, smallmouth buffalo, and occasionally carp suckers. Often associated with these species is the hickory or gizzard shad which is classed as a forage fish because its young are important as a food for predatory fish.

A lake of the kind just described is always a problem child, and the Forestry, Fish and Game Commission frequently gets requests to have a survey conducted by Commission biologists to determine what improvement measures would create better fishing. If such a lake is not too badly silted, some degree of improvement in fishing conditions may be attained through the intensive use of soil conservation measures which will halt erosion on the drainage area adjacent to the lake. After this project has become effective in reducing the quantity of soil particles being carried into the lake, a drainage program resulting in the elimination of the entire fish population should follow. The next step would be to grow a dense crop of vegetation in



Fishing at Cedar Bluff reservoir in Trego county was highly productive for Mrs. Edgar Overstreet of Ellis this fall. She landed this 7 $\frac{3}{4}$ -pound bass November 28.

the lake basin, to be flooded as the lake is refilled. As this vegetation decomposes, chemical reactions take place which aid further in causing silt particles to precipitate out, leaving the water clear. Such treatment may clear the lake water, so that several years of good fishing will prevail. In many lakes of this kind, such thorough treatment as just described, is often impractical and the possibilities for improved fishing are almost nonexistent.

In summary, such a project, to be successful must (1) eliminate or drastically reduce the transportation of silt into the lake through a system of effective watershed treatment measures, (2) remove the entire fish population and insure that the less desirable carp and buffalo cannot reinfest the lake when it is refilled, and (3) establish vegetation in the lake basin to improve the water fertility and to aid in reducing turbidity.

Several commonly used fisheries management practices have been discussed in the above paragraphs. The term "fisheries management" is the application of this group of practices in an effort to control a body of water in such a way that it will provide satisfactory fishing for the longest possible time.

After a study has been made of lake conditions, the data which was collected must be analyzed and conclusions drawn. It is upon the results of such a survey that recommendations for the inauguration of various management practices are based. The techniques chosen are those which are the most applicable for correcting the particular problem which is responsible for poor fishing in the lake in question.

It should be pointed out that any one management technique will not be a cure-all for any and all problems which may exist in the "ordinary-run" of lakes. The application of a certain technique may correct the



Three Girard fishermen are pictured with nice strings of crappie taken in November from Marsh's heated fishing dock at the Crawford County State Lake No. 2 (Farlington).

trouble and bring about an improvement in fishing under certain conditions in one lake, but it cannot be accepted as a sure solution to all problems, or even similar problems in other lakes. For example, the removal of a large number of undersized crappies may reduce the fish population sufficiently in one lake to promote an increased growth-rate which would lead to better fishing; however, this same technique applied to another problem-lake would not necessarily restore satisfactory angling.

(EDITOR'S NOTE: In the July issue, Mr. Schoonover will discuss some of the more valuable techniques used in fisheries management in Kansas.)

## Cover Picture

This month's front cover picture shows the young walnut stands on the spoil banks of one of the strip-mine lakes in Crawford county. This scene is typical of the 3,700 acres owned and under the supervision of the Forestry, Fish and Game Commission in Crawford and Cherokee counties. Under good management being applied to the area, these trees will produce valuable walnut timber for the future.

## Easy To Be a Good Skipper

If you know your right from your left, you can be a good small boat skipper, says the Outboard Boating Club of America.

While pilots of large power boats must memorize many rules, know navigation, compass reading, and weather forecasting, small boat skippers can do very well if familiar with five basic regulations—all based on right and left sense of direction.

So, memorize these outboard rules:

1. When two boats approach nearly head on, keep to the right.
2. In narrow channels, keep to the right.
3. Yield the right of way to the man on your right.
4. When overtaking another boat, it's your responsibility to avoid a collision. The boat being overtaken has the right of way.
5. Yield the right of way to a boat under sail or oars.

These rules are so simple that there is no reason for them to be violated, but if another reason is needed the club gave that, too: There are federal laws, and violators are subject to a \$50 fine and are personally responsible for all damage resulting from the violation.

Squirrels, like muskrats, are members of the rodent group.



More than 500 acres of new fishing waters in various parts of the state will be available to fishermen when present plans of the Kansas Forestry, Fish and Game Commission are carried out. And, at no cost to the Kansas taxpayer.

Aware of the ever increasing angling pressure, the Commission wisely accumulated revenues from the sale of hunting and fishing licenses to build these new fishing lakes. Last year, with more than \$1,500,000 having been accumulated for lake-building purposes, the long-range program of expansion was started. The program called for the letting to contract of ten new lakes during the fiscal year ending June 30, 1954. Contracts for eight new lakes, totaling 529 acres, have already been let and two additional sites—one in Barber county and one in Kingman county—will be contracted for before the closing date. The commission has also authorized further engineering studies of two additional lake sites in Chase and Franklin counties.

All of the lakes are scheduled for completion in 1954, with at least four of them to be completed by June 30. Although present drouth conditions may delay the filling with water of some of the lakes, it is hoped that all will be ready to open to public fishing by 1956.

In the matter of selecting the new lake sites, the Commission was necessarily guided and governed by such factors as costs, area population, presence or lack of similar facilities, the application of soil conservation practices, and other developmental practicabilities as well.

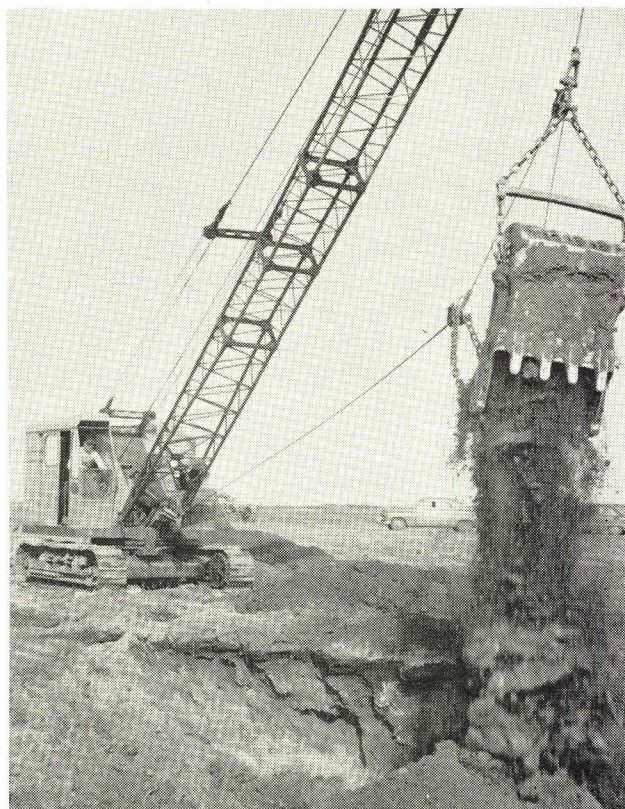
In addition to the new fishing lakes, the Commission is also acquiring approximately 10,000 acres of land along the Marais des Cygnes river in eastern Kansas for development to give that area of the state additional fishing waters and migratory waterfowl opportunities, which they do not now have. The commission has already acquired approximately 4,000 acres

in the area, has completed preliminary engineering studies, and is in the process of acquiring the other 6,000 acres needed to assure the success of the project. Additional work is also planned for the Cheyenne Bottoms in Barton county to assure that area of a more permanent water supply and increase fishing and hunting possibilities of that project.

The Commission does not intend to stop its lake building program at twelve. It sees no reason why, with hunting and fishing license sales remaining normal and with funds accruing to the state from the Dingell-Johnson Sport Fisheries Act, it cannot start at least one or two new lakes each year after the first twelve are completed.

That sportsmen may have a better idea of the new lakes under construction, a brief résumé of each follows:

**MONTGOMERY COUNTY STATE LAKE:** This new lake is located on Coal creek, approximately 4½ miles south-east of Independence, midway between that city and Coffeyville. A 1,100-foot long dam, 40 feet high, will impound a lake of 105 surface acres. Work on this project was completed last winter and the lake is



Dirt for Grant County Lake: An employee of the Wassenberg Construction company of Seneca, which is building the new 43-acre state lake in Grant county, operates a huge crane filling in a ditch near the dam of the lake. Construction is set to be completed by May 1. — Photo courtesy Thayne Smith, Garden City Telegram.

slowly filling with water. There are 408.5 acres in the park area.

**BROWN COUNTY STATE LAKE:** This lake, located  $7\frac{1}{2}$  miles east and one mile south of Hiawatha, just off U. S. Highway 36, promises to be one of the most attractive of all state lakes. The lake will be entirely spring fed. Strong, unfailing springs within the park area are expected to keep the new lake full of cold, clear water, providing excellent fishing. A 1,000-foot long earth-fill dam will impound a lake of sixty surface acres. Work on this lake site was completed in December and observers report more than fifteen acres already covered with water. There are 188.8 acres in the park area.

**COWLEY COUNTY STATE LAKE:** One of the best fishing spots in the state is expected to be developed by the impoundment of eighty acres of water in Cowley county. The lake site is located in a deep canyon on Panther creek, thirteen miles northeast of Arkansas City, within a stone's throw of U. S. Highway 166. An earth-fill dam 900 feet long and fifty-two feet high will provide a lake with a maximum depth of forty-two feet. Work on clearing the land and initial steps for the dam already have started. There are 197 acres in the park area.

**GRANT COUNTY STATE LAKE:** This lake is located on the north fork of the Cimarron river, one mile east and one mile south of Ulysses, just off U. S. Highway 160. An earth-fill dam will provide a lake of forty-three acres at a maximum depth of twelve feet. Construction work on this lake is scheduled to be completed by May 1. There are 224 acres in the park area.

**LOGAN COUNTY STATE LAKE:** This lake will give residents of northwest Kansas fine fishing opportunities. The lake site is four miles northwest of Russell Springs, located on a tributary of the Smoky Hill river. A sodded earth and concrete dam 1,000-foot long, with a maximum height of forty-two feet, will impound a

lake of sixty acres. Maximum depth of the lake will be twenty-seven feet. Work on this lake is scheduled to be completed in May. There are 270.8 acres in the park area.

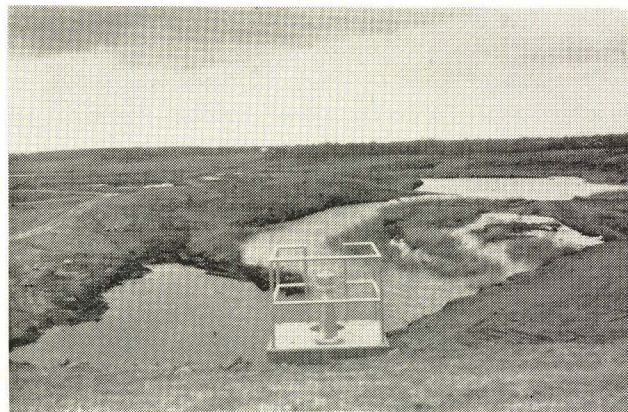
**JEWELL COUNTY STATE LAKE:** This new sixty-acre lake is located six miles south and four miles west of Mankato. An earth-fill type of dam 1,080 feet long will impound water at a maximum depth of thirty-five feet. Located in rolling hills, it will be an attractive site and the lake should provide excellent fishing. There are 165 acres in the park area.

**McPHERSON COUNTY STATE LAKE:** This lake will be located in the rugged, rolling hills of the Maxwell Game Preserve, seven miles north and  $2\frac{1}{2}$  miles west of Canton. The lake will be entirely enclosed by property now owned by the state. The site of the proposed dam is on a tributary of Gypsum creek, known locally as Battle creek. An earthfill dam and concrete spillway 750 feet long will impound a lake of approximately forty-three surface acres. Maximum depth of the lake will be thirty-two feet. Over-all length of the lake will be approximately one mile.

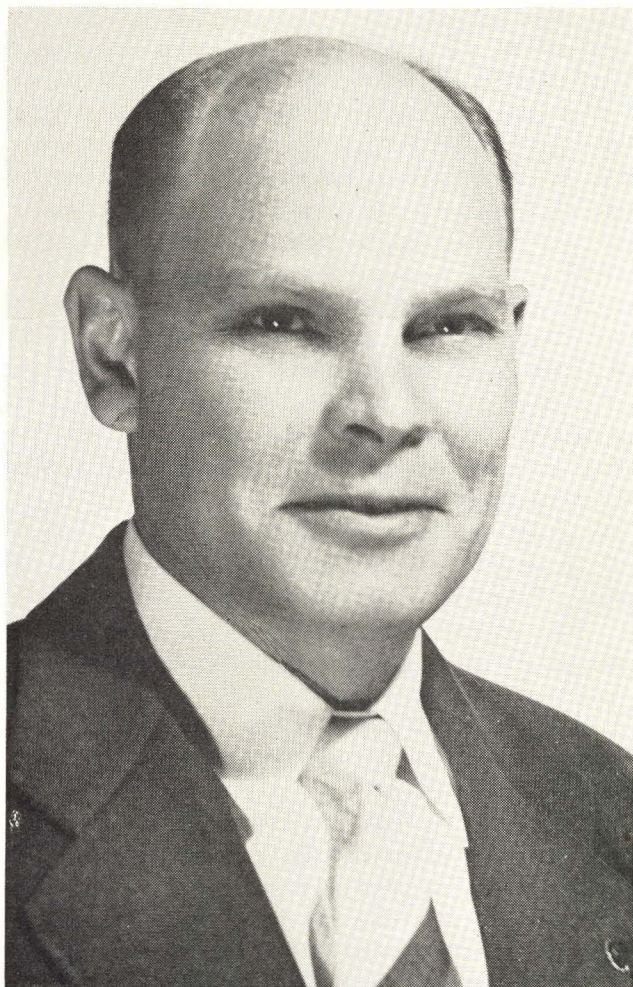
**POTTAWATOMIE COUNTY STATE LAKE:** Another of the more attractive new lakes is the Pottawatomie County State Lake, which is being built in a deep valley of a tributary of the Blue river, just four miles from Manhattan. The lake will be constructed on land given to the state by Dr. and Mrs. R. L. Fredrich of Manhattan. A dam 1,500 feet long and forty-seven feet high will impound a lake of seventy-five acres. Maximum depth of the lake will be forty feet. This lake was let to contract on March 26.

Dr. and Mrs. Fredrich's gift included 217 acres of land which will provide a scenic park and lake area with high bluffs and some timber.

The proposed Barber county lake site is at the north edge of Medicine Lodge. Location of the Kingman county lake will be near Zenda.



Montgomery County Fishing Lake—The residents of Independence, Coffeyville and near-by towns will soon be enjoying fishing in the Montgomery County State Lake, which was completed last fall. The photo to the left shows part of the spillway and dam construction. As seen to the right, the Montgomery county lake is filling with water and will be stocked as soon as sufficient water is impounded. It should offer good fishing by 1956.



New Commission Member—Hugh Miller, prominent Olathe jeweler and sportsman, was appointed in January to a four-year term on the Kansas Forestry, Fish and Game Commission by Governor Arn. Mr. Miller succeeds Mr. Charles Hassig of Kansas City, who had been a member of the commission since 1941. Mr. Miller has been active in hunting and fishing circles since moving to Kansas. Well-known throughout the Middle West for his gunsmith work, Miller served with the U. S. Forestry Service in Idaho from 1927 to 1946.

## Spin Fishing Booklet Offered by Du Pont

A handy pocket-sized booklet on spin fishing is being offered to fishermen by the Du Pont Company. The booklet contains forty-eight pages of basic information on this exciting and fast growing form of fishing.

In addition to tips and kinks by recognized authorities in the field of spinning, the booklet incorporates a section on knots for fishermen and how to tie them, information on the proper selection of spinning lures, and a "question and answer" section covering many phases of spinning in fresh and salt water. Illustrations throughout add clarity to the text.

Copies of the booklet are available at no cost from the Polychemicals Department, E. I. du Pont de Nemours & Co., Inc., Wilmington 98, Delaware.

## Safe Fishing Is Sane

The "don'ts" of fishing are as important as the techniques, but too many fishermen pay little heed. Here are a few important rules for safety, as found in an article by Jim Chapralis, which appeared in the November issue of the *Fisherman Magazine*:

*Don't Stand Up in a Boat.* Learn to cast from a sitting position and to do all of your fishing while sitting in a boat.

*Don't Fish From Slippery Rocks or Logs.* Avoid the slippery ones if you must step on rocks and logs. Move about slowly and always look before you step.

*Don't Wade Streams Carelessly.* Always be sure that you have enough backing on your reel to cope with the sprints of fish, but, in any case, don't chase them downstream.

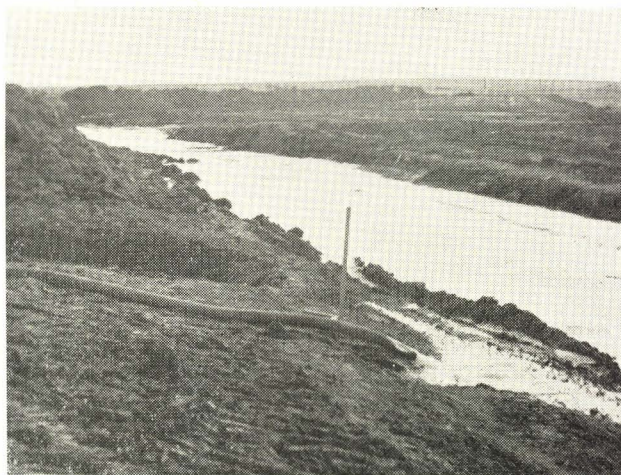
*Don't Land Fish Carelessly.* Always be careful of a hooked fish. One flip and the hook may be in your finger, or the fish may even "bite" you.

*Don't Side-Cast Near Another Person.* Overhead is the only safe way to cast when another person is near.

*Don't Wander Off Into Strange Waters.* If you don't know the waters, hire a guide; it's his job to know them. Darkness blots out familiar landmarks, so don't stay out after dark unless you are sure you can get back.

These are just a few of the rules of safety for fishing, but if they are observed, a fishing trip can be a pleasurable experience and not a tragedy.

According to experiments, bees recognize honey-yielding flowers first by color and secondly by scent.



Grant County Lake Site—Waters of the north fork of the Cimarron river, southeast of Ulysses will soon be impounded by the earth-fill dam now being constructed, to form the Grant County State Lake. The south end of the dam is shown in this picture. Water coming from the hose in foreground is being pumped from a trench dug earlier for drainage purposes.—Photo courtesy Thayne Smith, Garden City Telegram.

## Outdoor Notes

By JOE AUSTELL SMALL

### Why Dogs Chase Cars

There is a reason for everything under the sun—even for dogs chasing cars. Silly or not, the how-come of your pooch dashing out and giving chase to the whirring, sometimes fatal, wheels of an automobile or motorcycle is grounded on an instinct as old as the canine breed itself.

Way back—so far that any estimate would be a guess—the ancestors of our present-day dogs crouched beside a trail leading to the community waterhole to wait and watch for his dinner on the hoof. When it came by, usually at a high gallop, Grandad Fido either hot-footed it after the fleeing animal, caught up with his quick lunch counter and thereby satisfied a hungry belly, or did without until the next suitable traffic passed to water. Habit, they say, is a great master. That goes for dogs as well as humans.

### All-purpose Emergency Kit

Disaster strikes when least expected. Don't go outdoors without this kit.

If your camp gets lost and you have to stay in the woods overnight, if you forget, lose or break a necessary article, fall in the lake, or need simple first-aid treatment, this handy kit will help put things right. Everything fits into a regular-sized tobacco tin that can be carried easily in your hip pocket.

In the kit put: Two of your favorite cigarettes wrapped in cellophane; package of paper matches; a 1 inch long screw-capped perfume vial of iodine; one vial of burn and blister ointment; one strip of gauze bandage; two aspirin tablets; six inches of waterproof adhesive tape for first-aid or mending broken articles; one sharp razor blade; two 30-30, or six .22 calibre cartridges (or to fit your gun); one fishing line rigged with hook and sinker; one screw-capped perfume vial of powdered instant coffee, or finely powdered tea, and another of mixed salt and pepper; two feet of fine picture wire for mending broken articles, or to attach to the fishing line to make a rabbit snare; one tiny vial of carbide to start a fire in the rain; two small safety pins, and a needle and thread. Won't go in a regular-sized tobacco tin? Try it!

Now let's imagine you are compelled to camp out unexpectedly. You can kill meat (if you have your rifle and have run out of cartridges) with the extra ammunition in the kit, or snare small game with the line and wire; you can catch fish, start a fire for cooking and warmth in any weather with the matches and carbide; you can salt and pepper your meat, make a cup of coffee or tea in the tobacco tin, and then enjoy a smoke afterwards.

With the kit you can also sew on a button or pin up your pants, patch up a broken gunstock or fishing rod, give first-aid treatment to minor wounds, or tape and wire an emergency stick splint to a broken bone.

I fasten the .22 cartridges inside the lid of the tin with adhesive tape where they are handy. When the tin is packed, seal the lid with adhesive tape and the contents will stay dry.

It isn't much trouble once you get the kit prepared. Keep it with you at all times while you are outdoors—it may save your life some day. . . .



Thousands of ducks are winging their way through Kansas this spring en route to nesting grounds in Canada. Many of them are stopping at Kansas lakes and ponds for resting and feeding. This duck picture was taken at Kingman County State Park.



## At Last It's Here!

A light boat that you can stick in the trunk of your car and head out for the lake, that is. How many times out have you wished for a boat so light, so short, and so easy to handle that you could chuck 'er in the car and take that quick trip without spending half the time messing with a boat!

The Vio Holda "LITTLE MARVEL" is just that. Eight feet long, it weighs only thirty-nine pounds. With three seats, there is a surprising amount of room for so short a boat. She's aluminum, of course—welded, rigidized aluminum. The design is what makes her so light. Pressed in ribs, tubular rail—the boat has what most of the much bigger ones have, and it blazed sure has something none of them have—shortness and lightness to the extent that you have never seen before!

You would be surprised how seaworthy this little boat is. Styrofoam flotation blocks are under the center and stern seats for added safety.

There is a nine foot model and a twelve foot model with the same strength, durability, handle ability, and lightness. If you want in on the boat news of the year, drop a card to Vio Holda Mfg. Co., Box 915, Dept. 5, Topeka, Kansas, for a free folder.

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## Hot Tip

The Navajo Indians are perhaps the only race in the world to completely and permanently solve what is sometimes called the mother-in-law problem. They have done this by the simple procedure of never permitting the mother-in-law and the son-in-law to meet or speak to each other.

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## Short Snorts

A queer lizard is the Gila monster found in the Arizona desert. The strange creature stores up food in its tail. Putting away for a rainy day is good logic—but those days come so seldom in the desert!

The strangest stream in America is Lost river in Warren county, Kentucky. It is only slightly over 200-yards in length and more than half as deep as it is long.

A pessimist is a sportsman who, when he has a choice of two evils, chooses both.

Mud-dauber wasps build many-celled mud tubes in which spiders, paralyzed by the female wasp's sting, are stored. In each cell one wasp egg is laid and, after hatching, the larva feeds upon the paralyzed victims.

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The ferret is a domesticated race of polecat.

## Night Life of a Bigmouth

Like other individuals whose big mouths get them into trouble, the largemouth bass prowls after dark. It is a known fact among old timers that the average weight of each bass taken at night is much greater than the daytime average.

There are some very logical reasons for this. To begin with, a really big bass got that way because it was smarter than many of its smaller brethren who wound up on a stringer, or in the stomach of a bigger, smarter bass.

Being smarter, it knows trouble is brewing when it sees a man wading or bouncing around in a boat, so, when the daytime traffic is heavy, Mister Bass doesn't feed until night when things quiet down.

About the time most ordinary fishermen are leaving the lake, the veteran bass fishermen are just going out with any of the time-proven surface lures. And it's just short of amazing how these after-dark casters develop a sense of accuracy that allows them to drop a plug against the shore when they can't even see their companion at the opposite end of the boat. It's done through a keen sense of timing—and, of course, experience.

And here is where most night fishermen miss the boat and the bass. . . . They don't wait long enough after their plug hits the water before starting their retrieve because they are in too much of a hurry to make another cast.

Your plunker might land fifty feet from Mister Bass. Give him a minute or two (and that's a long time when you're waiting) to swim to where he heard it fall. Now, that he has located its general area and is waiting for additional noise so he can pinpoint his target, don't move that plug so violently it scares him. Do it gently and tantalizingly, like a creature injured and struggling toward shore.

When you hear a noise like sixteen sticks of dynamite, set the hooks hard and head Mr. Bass toward open water, then play him out. Don't ever horse a lively bass into your boat, either day or night, for a hefty bass flopping around with a face full of treble hooks is a first-class menace.

Play it out, grab it by the lower jaw and lift it into the boat. Then use pliers and flashlight, two indispensable tools for night fishing.

Big bass are where you find them and you'll find more of them after dark if you'll just give them time to come to the supper table.

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A female fly lays its first batch of eggs in less than a week after it is hatched.

## News of Sportsmen's Clubs

### Youngsters Form New Rod and Gun Club at Louisville

Boys of Louisville and vicinity have organized a new club called the Louisville Rod and Gun Club Juniors. The new club, sponsored by the senior Louisville Rod and Gun Club, already has more than twenty members, aged ten to sixteen years.

At their first meeting, the Juniors elected Randall Hupe, president; Norman Roudybush, vice-president; Gary Weixelman, secretary-treasurer. Chosen as club sponsors were Keith Blankley, president of the senior club, and Guy Roudybush.

The boys are enthusiastic about the new organization and have many sound ideas for conservation of fish and game. They have several worth-while projects planned and are already at work to carry them through. Roy McKinsey, state game protector, and Max Stone, state game management supervisor, as well as members of the senior club are lending every assistance possible to the new club.

### Anderson County Sportsmen Enjoy Annual Game Supper

The Anderson County Fish and Game Association held its second annual wild game supper at Garnett in January, with more than 340 in attendance.

After eating their fill of coon and beaver and all the trimmings, everyone enjoyed a program put on by Ira Stockebrand of Independence. He put on one of his famous casting demonstrations and then showed pictures of his latest safari into the wilds of Canada.

Walter Buchhols of Garnett, is the new president of the Anderson county association. Other new officers of the club include: L. J. Henderson, first vice-president; Arden West, second vice-president; Judd Watt, secretary; Floyd Powell, treasurer. Two new directors elected were Alfred Sigler of Richmond, and Leo Herman of Westphalia.

### Glenn Rhoades Heads Aliceville Sportsmen

Mr. Glenn Rhoades was installed January 11, as the new president of the Aliceville Sportsman's Association in Coffey county. The Aliceville club is one of the newer clubs in the state but an active one.

### John Fruit New President of Miami County Sportsmen

John Fruit of Antioch was elected president of the Miami County Sportsmen's Association, at its annual meeting held in December. Wallace Hamm, of Paola, was elected vice-president, and Woodrow Winkler and W. H. Barker, both of Paola, were re-elected treasurer and secretary. The Association held its annual game dinner preceding the election of officers. A potluck dinner with all kinds of game making up the main dish was served to more than 200 sportsmen and families from Miami, Wyandotte, Johnson and Linn counties.

### Sportsmen of Five-county Area Form Association

Sportsmen of Stanton, Morton, Stevens, Haskell and Grant counties got together in February to form the Southwest Sportsmen's Association. Jack Reid of Ulysses, was named president; Ray Bennett of Elkhart, vice-president; Ralph Mendenhall of Ulysses, secretary-treasurer. Named to a Board of Directors were: Lee Nordling of Johnson, Woodrow Shaw of Hugoton, Floyd Breeding of Rolla, E. H. Leslie of Satanta, John Alford, Moody Liles and Roy Hilton of Ulysses.

The new association is an organization of as many persons of the five-county area as wish to have a hand in the development of the new state lake and park now being constructed on the north fork of the Cimarron river near Ulysses, by the Kansas Forestry, Fish and Game Commission. Dues were set at \$1 per year, with the idea of enlisting members, rather than money, who will work with the fish and game commission in development of the area-wide recreational facilities, when the lake is completed.



This clubhouse was built by the members of the Leavenworth County Fish and Game Development Association. It contains a large open fireplace, a television set and quarters for the caretaker. It is located at the association's Happy Hollow lake.—Photo by John H. Johnston, III.

**KNOW YOUR FRIEND--THE GAME PROTECTOR**



Joe Concannon

JOE CONCANNON has earned his unofficial title of "dean of the game protectors" by his long service in that branch of the Kansas Forestry, Fish and Game commission. His career extends from July 30, 1906, when D. W. Travis, then state fish and game warden, appointed him a deputy fish and game warden. The official notice of his first appointment is carefully preserved by Joe, along with others through the years signed by L. L. Dyche, Bert Doze, Alva Clapp, Guy Jossierand and Dave Leahy, directors, and Henry Allen and Ben Paulen, governors.

Joe was born in Leavenworth county. One of the most notable trends in his long law enforcement career is the change in the wildlife conservation attitude of the public. As Kansans have watched wildlife disappearing, they have become more co-operative with conservation aims and less defiant of the law, Joe believes. Joe is a roving game protector working with other members of the group as he is needed.

He and his wife live near Lansing. They have five



Ralph Junger

sons, a daughter and fourteen grandchildren. The sons are Paul of Tampa, Fla., with the U. S. immigration department; James and Joseph, Jr., lieutenants at the U. S. penitentiary, Leavenworth; Lloyd, farm boss No. 2 at Lansing state prison; and Dave, who farms near Leavenworth. His daughter, Mrs. Homer Cory, lives near her parents.

RALPH JUNGER, 29, has been with the Forestry, Fish and Game commission since September, 1950. He works in Finney and Haskell counties, in which, he claims, "there is the best hunting in the state," and takes care of the buffalo herd at the Finney County Game Preserve.

Junger's home town is Wichita. He was in the navy three years and was a gunner on a tanker in the Pacific twenty-one months. He was a mechanic before becoming a game protector. He and his wife, Joyce, and their two daughters, Susan Jane, 5, and Mary Margaret, 2, live in Garden City. For a hobby, Junger raises Weimaraner dogs.

Extremely hot weather is more detrimental to pheasant hatching than quail hatching. Quail eggs can tolerate higher temperatures.

Pheasants in the wild reach their heaviest weight of the year about December 1.

The crow is the wiliest of all the birds. In the olden times the crow was termed a bird of evil omen because of its black plumage.

With the help of the paddle-like hind toe, diving ducks can go down deep below the surface for food.

## Grass, Low Shrubs Give Value To Osage Orange Hedge

By MAX STONE,

District Game Management Supervisor

There will be no more hedgerow quail hunting in Kansas if the practices destroying their value as quail habitat are not stopped. Osage orange hedgerows long ago proved to be a valuable part of quail habitat and could always be depended upon to offer a good supply of birds for the hunter.

What are these harmful practices to which we refer? First, the grubbing out of many miles of hedgerow each year. Second, farming practices, many of which are done without realizing their effect on wildlife and for which there is no real need. Nothing can be done for those hedges grubbed out. However, much can be done to improve the value of those that are left.

As an osage orange hedge matures, its value for wildlife may decrease. Farming practices in which both indiscriminate burning and trimming of hedges have a part destroy in minutes all those valuable characteristics of quail habitat nature has taken so long to provide. This is particularly true of trimmed hedges and also of those that are located so as to permit clean cultivation close to the hedge. The large trunks of a mature hedge offer little cover for quail or any other wildlife.

The value of our large hedges is dependent upon the kind of weeds, grasses and brush which grow under it. The hedge itself serves merely to provide a place for other plants to grow. The smaller plants are of direct benefit to quail and other species of wildlife. Many hedges may be improved by cutting part way through on some of the branches and allowing the tops to touch the ground. This provides for the growth of weeds and grasses. Very often, the mere practice of not plowing within twelve to fifteen feet of a hedge is sufficient to increase its value to wildlife to a usable degree.



This roadside area has lost completely its value as cover for wildlife. The grass and weeds have been burned and the low branches of the trees removed.



This area might be rated as "medium" as wildlife cover. It contains only grass and annual weeds and has not developed to the point of supporting heavier, brushy cover.

Usually even a well-developed hedge habitat is not sufficient to sustain a population of birds the year 'round, and its location in relation to other types of cover is very important. A hedge located next to a field where row crops are grown is ideal. This situation may be improved by leaving a row or two of sorghum or corn crops standing next to such a hedge. When Mother Nature fails to establish this needed cover on her own hook, plantings can be made which will greatly assist in putting cover where it is needed.

The Forestry, Fish and Game Commission operates a nursery for the production of useful plants for habitat development and supplies plants and seeds to those persons furnishing the proper approved planting sites. Shrubs such as multiflora rose, native plum, choke-cherry and honeysuckle may be secured and used in the development of quail habitat. Some of the lespedezas are excellent food sources for quail and are available through the Commission at Pratt.



An ideal cover situation is represented by this tract seven miles north-east of Westmoreland. Besides the taller hedge there are plum thickets, then grasses and weeds.

## Suggestions for Pond Improvement

By ROY SCHOONOVER, Fisheries Biologist

Lake and pond owners should take advantage of the low-water condition existing over most of the state at the present time. Most people will probably be surprised to learn that this drop in water level due to drouth conditions does provide an opportunity for pond or lake development.

Many lakes, whether they are owned by a county, city, or individuals, have gone partially dry, and in some instances have gone completely dry. Ponds, with their smaller capacity and often less extensive drainage areas have been even more seriously affected.

Now is the opportune time to apply various improvement practices which can provide indirect benefit to fishing in ponds and lakes in future years. These would come under the general heading of habitat improvement, and include enlarging, deepening, the establishment of desilting basins, and the seeding of various agricultural crops on the exposed lake bottom.

Many of the smaller ponds would provide better fishing and would remain in proper balance for a longer period of time, if they were enlarged. Ponds of much less than one-half acre of water area will provide only limited fishing, and while the water level is down, many of them could be easily improved by lengthening or increasing the height of the dam.

Other ponds and small lakes have sufficient surface area, but the water is too shallow in various portions of the basin. The maximum depth of the water in an ideal pond located in the eastern third of the state should be at least eight feet. Farther west, ponds should be deeper, with a maximum depth of not less than eleven or twelve feet in the extreme western section. One of the common faults with some farm fish ponds and small lakes is that too large an area of the basin is extremely shallow. Ideal fish ponds have relatively clear water, and if this is over a shallow bottom, there is constant danger that aquatic plants will become so well established that they will "choke up" the pond leaving little if any open water. The plants most often causing trouble are coontail (*Ceratophyllum*), skunk moss (*Chara*), and various species of pondweed (*Potamogeton*), and are all referred to collectively as "moss" by pond owners. Dense mats of vegetation not only make fishing almost impossible, but encourage the stunting of various species of fish as well. Pond owners would do well to make plans to deepen shallow areas in ponds having extensive areas less than three feet in depth.

Silt dams constructed in the drainage ways immediately above the larger ponds and lakes may be beneficial in halting siltation. However, unless these are supplemented by other watershed treatment measures to reduce erosion, the sediment basin would soon be filled and the structure would lose its effectiveness.

During the present drouth period, the gradually receding water level exposes an ever-widening band of lake bottom. The planting of some kind of agricultural crop on these areas is recommended as a means of improving the general fertility of the lake or pond, to promote faster growth among fishes, and to aid in reducing turbidity of the water, should this be a problem.

Several crops can be used for this purpose, including oats, barley, sweet clover, sweet sudan, and sweet forage sorghum (cane). These crops have been selected because they grow rapidly and produce an abundance of foliage. It is important to select the crops which can be planted at the time of the year when the basin is exposed. For this reason, oats or other crops adapted for planting in early spring should be used. When ponds or lakes are low during late spring and summer, such crops as sweet sudan and cane would be most ideal, since they can be planted after May 15.

It is not often possible to get a good stand of any of these crops unless some sort of seedbed can be prepared. For this reason it is recommended that the ground be disked and then the crop seeded with a grain drill. This procedure loosens the soil and covers the seeds to insure better germination. In instances where the soil is too wet, or for other reasons, machinery cannot be used, it will be necessary to sow the seed by hand or with a hand seeder.

Livestock should not have access to a pond where crops have been planted. The crop would not only be grazed down, but some of the sorghums contain prussic acid which is poisonous to livestock.

If rainfall refills the pond before the seed germinates, or before much growth is made, the crop is lost and no benefit will be derived. However, if the crop has sufficient growing time to produce a dense stand and is then submerged, the water will receive considerable enrichment and the project would be well worth-while.

In trolling, more fish seem to be taken near the boat than far behind it. When two or more lines are trolled behind an outboard motor, the short line usually takes the most fish if other variables are equal. So, try trolling close behind the boat in the turbulent water thrown out by the propeller.—*The Fisherman Magazine*.

## Kansas Trapshooters Hold Midwinter Meet in Pratt

Approximately 200 participated in the annual midwinter championship shoot of the Kansas Trapshooters Association in Pratt during springlike weather early in February. They came from all parts of Kansas and Missouri, Nebraska, Texas, Oregon, Oklahoma and Montana as well.

The top over-all prize went to Si G. Darling, president of the Pratt Gun Club, and the runner-up prize to Miss Iva Pembridge, Phillipsburg rural school teacher and winner of several national trapshooters' honors. Darling scored 698 of the possible 800 targets during the three-day shoot. Miss Pembridge's score was 686.

Twenty-nine trophies were awarded during the shoot. Officials estimated that more than 53,000 targets and shells were used during the three days of shooting.

J. R. Johnston of Dodge City took top honors in the Handicap Championship class in a shoot-off with fourteen-year old Terry Mitchell, shoot junior champion. Both shooters turned in a 93 in the event. Mitchell took home the 18-21 yard trophy for the event and Howard Ulmer of Valley Center captured the 22-25 yard prize.

The other trophy winners:

Preliminary class singles—Class A, Iva Pembridge, Phillipsburg, 97; Class B, Bill West, Pratt, 96; Class C, G. W. Shaw, Hugoton, 94; Class D, William E. Forshee, Wichita, 92.

Class Doubles—Class A, Wayne Kennedy, Kimball, Neb., 88; Class B, Si Darling, Pratt, 88; Class C, Harvey Ohlson, Bartley, Neb., 75.

Preliminary Handicap—Winner, William Forshee, Wichita, 88; runner-up, Wade Pfof, Phillipsburg.

Class Singles Championship—high lady, Iva Pem-



Si Darling of Pratt, right, was over-all champion in the midwinter shoot of the Kansas Trapshooters Association in Pratt. He is being given the prize by Fred Razook of the Pratt club.



Here is Miss Iva Pembridge, Phillipsburg school teacher, who recently was named the nation's outstanding woman trapshooter. This picture was taken at the midwinter shoot of the Kansas Trapshooters Association in Pratt in February.

bridge, Phillipsburg, 182; Class A champion, Wilford Betzer, Coldwater, 184; Class A runner-up, Albert Williams, Marion, 184; Class B champion, A. M. Alexander, Russell, 183; Class B runner-up, Si Darling, Pratt, 176; Class C champion, Frank S. Harper, Clinton, Okla., 169; Class C runner-up, Vernon L. Epp, Fairview, Okla., 165; Class D champion, Guy Quillan, Dodge City, 161; Class D runner-up, Walter Weis, Fairview, Okla.

Class Doubles Championship—Class A, Wayne Kennedy, Kimball, Neb., 80; Class B, Howard Ulmer, Valley Center, 80; Class C, J. E. Boomhower, Hoisington, 63.

Open Singles Championship—champion, C. B. McDowall, Alma, Neb., 98; runner-up, George Stevenson, Wichita, 97; junior champion, Terry R. Mitchell, Clay Center, 91.

One rule can be stressed for maintaining worms in good shape: Keep 'em cool. In fact, worms seem to be able to endure low temperatures down to the freezing point. On the other hand, they cannot survive a temperature much above seventy-five degrees.—*The Fisherman Magazine.*

## *Kansas Claims 36,657 Farm Ponds*

Besides many large state, county and municipal lakes, the Kansas countryside is dotted with thousands of small stock ponds.

At last count by the Soil Conservation Service of the Department of Agriculture, they numbered 36,657. Many privately built ponds are not included in this list. Most of the ponds, although small in surface area, are stocked with fish and provide good "fishing holes" for the farmer's family and friends. All new such ponds that will support fish life are stocked by the State Forestry, Fish and Game Commission upon request of the landowner.

Fishing may be a secondary objective of the farm pond. They also are used as a water supply for farm livestock, as a water supply for fire control, water supply for limited irrigation, for recreation such as swimming, boating, ice skating and picnicking, as habitat for farm game and as a measure for erosion and flood control.

Nine requirements are listed by the fish and game commission for construction of a good multiple-purpose farm pond. They are: adequate but not too large a drainage area in permanent vegetation; adequate sodded spillway and dam; sufficient depth of water to prevent drying or winterkill; entire pond area fenced for protection of earth fill and water; drain pipe or water level regulator for draining pond; trickle tube for protection of sodded spillway; pipe to tank for watering livestock; stock of suitable fish; intensive fishing for all species of fish stocked.

Booklets on how to construct a farm pond are available from the fish and game commission to those asking for the information.

Butler county leads in the number of stockwater dams with 2,000, according to the SCS. Following are Montgomery county, 1,575; Elk, 1,500; Greenwood,



This farm pond on the Gus Cumberg ranch in Barber county is typical of many scattered over the Kansas countryside. The several ponds on the Cumberg property are used for fishing and for watering cattle.

1,382; Wilson, 1,264; Russell, 1,107; Woodson, 1,105; Lyon, 1,013; and Labette, 1,000.

The number of stockwater dams by counties:

Allen, 515; Anderson, 700; Atchison, 153; Barber, 651; Barton, 36; Bourbon, 671; Brown, 98; Chase, 431; Chautauqua, 812; Cherokee, 148; Cheyenne, 62; Clark, 452; Clay, 300; Cloud, 180; Coffey, 700; Comanche, 150; Cowley, 417; Crawford, 217; Decatur, 29; Dickinson, 103; Doniphan, 66; Douglas, 244; Edwards, 8; Ellis, 500; Ellsworth, 318; Finney, 75; Ford, 33; Franklin, 730; Geary, 453; Gove, 150; Graham, 341; Grant, 1; Gray, 0; Greeley, 7; Hamilton, 55; Harper, 46; Harvey, 83; Haskell, 4; Hodgeman, 52;

Jackson, 231; Jefferson, 330; Jewell, 584; Johnson, 714; Kearny, 24; Kingman, 31; Kiowa, 58; Lane, 75; Leavenworth, 242; Lincoln, 130; Linn, 500; Logan, 68; Marion, 149; Marshall, 825; McPherson, 227; Meade, 148; Miami, 730; Mitchell, 178;

Morris, 580; Morton, 6; Nemaha, 326; Neosho, 607; Ness, 373; Norton, 425; Osage, 686; Osborne, 786; Ottawa, 201; Pawnee, 7; Phillips, 753; Pottawatomie, 351; Pratt, 26; Rawlins, 86; Reno, 83; Republic, 58; Rice, 76; Riley, 232; Rooks, 650; Rush, 128;

Saline, 445; Scott, 15; Sedgwick, 550; Seward, 9; Shawnee, 273; Sheridan, 30; Sherman, 35; Smith, 800; Stafford, 110; Stanton, 10; Stevens, 1; Sumner, 259; Thomas, 17; Wabaunsee, 240; Trego, 219; Wallace, 40; Washington, 37; Wichita, 15; Wyandotte, 25.

## **How To Care for Your Fishing Tackle**

Many times more fishing tackle is ruined annually by lack of care than by use. Furthermore, one who will not take proper care of his tackle is in constant trouble; his casting reel will not cast far and backlashes continually; his fly line will not "shoot," to give reasonable distance; his dull, rusty hooks will not hook fish that he may have worked hours to find. Still, it is easy to keep tackle in such condition that it will give peak performance and last a long time.

The following applies principally to fresh-water tackle:

### **Rods**

There is no safer place for a bamboo rod than in a strong metal case, but rod and cloth bag must be bone dry before going into it; otherwise the rod soon would be ruined, though it might not break until next time one fishes with it. While a glass-plastic rod is not as subject to damage from moisture, its ferrules and guides will corrode if left in a tube with even a slight trace of moisture.

However, it is during winter storage that most rods, especially bamboo, go bad. In a great many cases, storing in a damp basement causes the trouble. Few basements are dry enough for storage of rods. A dry clothes closet is a good place, or perhaps the attic will do. A safe rule is—never store a rod where one would not store a good suit of clothes. Indeed, this holds for about all tackle.

A bamboo rod that is used much should have a fresh coat of varnish each season. The best way of varnishing is also the simplest; merely apply a light coat or two with tips of thumb and forefinger, using a tiny brush to work under the guides, if varnish is needed there.

An excellent plan is to give a rod of any material a fairly frequent coat of good floor or auto wax, which both preserves and keeps it looking good.

### Reels

The man who won't keep his casting reel sufficiently lubricated cannot possibly cast well; he will spend more time picking back-lashes than fishing. Any oil is better than none, but the extra cost of a first-class reel oil is a sound investment, for it will not only permit better casting but will lengthen the life of the reel.

Every hour or so is none too frequent to oil the level-wind mechanism. A few unaccountably poor casts should be recognized as a signal to reach for the oiler.

How often the end bearings need oil depends on make of reel and how worn these bearing are; usually, they should be oiled for each half day's fishing. If the end caps are removable, inspection will show how long oil is retained; if not, lack of smoothness in casting will again serve as a signal.

Once a day will generally serve to oil the drive shaft—through a hole in the crank nut, or by removing it.

The gears inside need periodic cleaning; how often depends on how much one fishes. The reel should be completely taken apart and internal parts scrubbed with an old toothbrush and kerosene or carbon tetrachloride—outdoors, where it is safe, gasoline may be used. Then, a light coating of grease should be applied to the gear teeth; petroleum jelly will serve, but it's better to use lubricant recommended by the maker of the reel.

In putting a reel back together for the first time, remember that if parts do not drop easily into place, something is being done wrong. Try another way; never use force, to cause damage.

Fly reels do not need as frequent lubrication as casting reels. However, their internal parts should

be occasionally inspected to see that they are not running dry which will cause unnecessary wear, and properly lubricated when necessary.

If the least trace of sand gets into a reel, it must be disassembled and cleaned immediately, or damage will be done rapidly. And if a level-wind reel seems to stick, this almost invariably means that the pawl (the little gadget running back and forth in the double-thread shaft) is worn and needs replacement. Do not force the handle, to do damage, but replace the pawl—an extra should always be carried, since this part, from its very nature, cannot have a long life.

### Lines

A silk casting line should be removed from the reel and thoroughly dried after each day's fishing, or it will soon weaken. It is best to dry a silk fly line each day too, since water may penetrate the small cracks in the finish. Nylon lines, not being subject to rot, do not need drying—but removing a nylon fly line when it is not in use will prevent its getting set into corkscrew spirals which make good fly casting impossible.

A fly line should be kept dressed with a good flotant—or paraffin wax will serve very well. This not only preserves the line but prevents its becoming "drowned," and trying to pick up a drowned line for the back cast may break a rod. Line dressing should never contain animal or vegetable matter which oxidizes and may ruin a line.

During storage, a line should always be removed from the reel and hung in rather large coils, in a cool spot.

### Miscellaneous

Hooks and other steel articles usually will not show much rust if stored during winter in a dry place. Still it is well to go over them with a greasy rag before putting them away.

In use, brass and copper spoons soon become so dull they lose part of their effectiveness. The simplest method of polishing them is with a little ball of fine steel wool, rubbing back and forth one way. To prevent corrosion during storage, they may be coated with clear nail polish—this may also be used on hooks and such, instead of grease.

Nylon leaders need little care, but one used too long shows some tendency to become brittle, though it may look perfect. So, since they are quite inexpensive, it is well to replace one before it causes loss of a good fish.

Flies and fly-tying materials seem to be the favorite food of moths. These should be carefully stored away with a liberal supply of moth-repellant crystals.



## ARRESTS—NOVEMBER, 1953

| <i>Name and address</i>                         | <i>Offense</i>   | <i>Date of offense</i> | <i>Fine</i> |
|---|--|------------------------|-------------|
| Eugene Bauer; Topeka                            | No hunting license   | 11- 1-53               | \$5.00      |
| Frank T. Buell; Edmond, Okla.                   | No hunting license   | 11- 9-53               | 25.00       |
| W. J. Chadwick; Vermillion                      | No hunting license   | 11-28-53               | 10.00       |
| Elmer T. Cobb; Vinland                          | No hunting license   | 10-25-53               | 5.00        |
| Jack Eagan; Arkansas City                       | No hunting license   | 11- 7-53               | 5.00        |
| James D. Ellis; Chandler, Okla.                 | No hunting license   | 11- 9-53               | 10.00       |
| Dale Grunder; Wichita                           | No hunting license   | 11- 1-53               | 15.00       |
| Robert Hefner; Topeka                           | No hunting license   | 11-22-53               | 25.00       |
| Frank Mabery; Fort Scott                        | No hunting license   | 11-24-53               | 5.00        |
| Clide Minshall; Norton                          | No hunting license   | 11-14-53               | 5.00        |
| Thomas Parrish; Arkansas City                   | No hunting license   | 11- 7-53               | 5.00        |
| Hubert Reed; Burlington, Okla.                  | No hunting license   | 11-30-53               | 25.00       |
| Henry E. Roberts; St. Joe, Mo.                  | No hunting license   | 10-31-53               | 20.00       |
| Dale Schurter; Burlington, Okla.                | No hunting license   | 11-29-53               | 15.00       |
| James A. Sieger; Okla.                          | No hunting license   | 11-11-53               | 15.00       |
| Charles L. White; Topeka                        | No hunting license   | 11- 1-53               | 5.00        |
| Floyd Ligon; Pittsburg                          | Shooting without permission of landowner; shooting pheasant in closed season | 11- 7-53               | 15.00       |
| Melvin Wilkerson; Pittsburg                     | Shooting without permission of landowner; shooting pheasant in closed season | 11- 7-53               | 15.00       |
| W. H. Martin; Russell<br>(Plus 10 days in jail) | Shooting from auto; shooting pheasant while not in flight                    | 11-10-53               | 25.00       |
| Eddie Lisk; Shawnee                             | No hunting license; possession of pheasant in closed season                  | 11- 1-53               | 125.00      |
| James Hotson; Lucien, Okla.                     | Shooting and possession of hen pheasant                                      | 11- 9-53               | 25.00       |
| K. G. Miller; Vici, Okla.                       | Shooting and possession of hen pheasant                                      | 11- 9-53               | 30.00       |
| Robert J. Reidel; Russell                       | Shooting and possession of hen pheasant                                      | 11- 9-53               | 65.00       |
| Melvin Hallock; Larned                          | Possess pheasant in closed season  | 11- 6-53               | 100.00      |
| Orris Shipmen; Florence                         | Possess pheasant in closed season  | 11- 1-53               | 25.00       |
| A. J. Caenen; Shawnee                           | Shooting pheasants in closed season (early shooting)                         | 11- 7-53               | 10.00       |
| George W. Leonard; El Dorado                    | Shooting pheasants in closed season (early shooting)                         | 11- 9-53               | 50.00       |
| Donald L. McClendon; Wichita                    | Shooting pheasants in closed season (early shooting)                         | 11- 8-53               | 25.00       |
| Roy J. Motley; Salina                           | Shooting pheasants in closed season (early shooting)                         | 11- 8-53               | 15.00       |
| James K. Needham; Wichita                       | Shooting pheasants in closed season (early shooting)                         | 11- 7-53               | 50.00       |
| Don Ryberg; Wichita                             | Shooting pheasants in closed season (early shooting)                         | 11- 8-53               | 25.00       |
| Ira Starkey; Topeka                             | Shooting pheasants in closed season (early shooting)                         | 11-14-53               | 46.75       |
| John Teegarden; Topeka                          | Shooting pheasants in closed season (early shooting)                         | 11-14-53               | 46.75       |
| Robert Stroble; Larned                          | Shoot at rabbit and pheasant from auto                                       | 11- 7-53               | 20.00       |
| Wayne Shultz; Larned                            | Hunt rabbits in closed season; shoot rabbits from auto; no hunting license   | 11- 6-53               | 25.00       |
| Newton B. Schuler; El Dorado                    | Shoot rabbits in closed season   | 11- 1-53               | 10.00       |
| Joseph Snell; Pittsburg                         | Shoot rabbits in closed season   | 11- 1-53               | 10.00       |
| Henry Fisher; Kansas City                       | Hunt rabbits in closed season (early and late shooting)                      | 11-14-53               | 10.00       |
| Fred Fox; Topeka                                | Hunt rabbits in closed season (early and late shooting)                      | 11-26-53               | 10.00       |
| Clyde Koehn; Larned                             | Hunt rabbits in closed season (early and late shooting)                      | 11- 8-53               | 10.00       |
| Arthur W. Bare; Topeka                          | Hunt rabbits after 4:00 p. m.; no hunting license                            | 11-26-53               | 15.00       |
| Robert E. Terhune; Topeka                       | Hunt rabbits after 4:00 p. m.; no hunting license                            | 11-26-53               | 15.00       |
| Virgil P. Martin; Columbus                      | No hunting license; no quail stamp   | 11-28-53               | 15.00       |
| Jessie Elrod; Moran                             | No hunting license; no quail stamp; possess quail out of season              | 11-15-53               | 20.00       |
| Bobbie Elrod; Moran                             | Hunting quail out of season  | 11-15-53               | Juvenile    |
| Jack Strunk; Moran                              | Hunting quail out of season  | 11-15-53               | Juvenile    |
| Gene Todd; Moran                                | Hunting quail out of season  | 11-15-53               | Juvenile    |
| M. B. Dorsey; Great Bend                        | Hunt on State Game Refuge  | 11-21-53               | 15.00       |
| Dennis Griffith; Wichita                        | Hunt on State Game Refuge  | 11- 1-53               | 25.00       |
| Tilford Hein; McPherson                         | Hunt on State Game Refuge  | 11-15-53               | 25.00       |
| Vernon Hein; McPherson                          | Hunt on State Game Refuge  | 11-15-53               | 25.00       |
| Floyd E. Rice; Wichita                          | Hunt on State Game Refuge  | 11-14-53               | 25.00       |
| Marvin L. Sherill; Wichita                      | Hunt on State Game Refuge  | 11- 1-53               | 25.00       |
| Jack Strouse; McPherson                         | Hunt on State Game Refuge  | 11-15-53               | 25.00       |
| Martin D. Fulton; Lakin                         | Exceed daily limit of ducks  | 11-19-53               | 25.00       |
| Franklin Basye; Joplin, Mo.                     | Misrepresentation  | 11-21-53               | 5.00        |
| Roy Lubbert; Evansville, Ind.                   | Misrepresentation  | 11-10-53               | 5.00        |
| G. W. Porter; Kansas City, Mo.                  | Misrepresentation  | 11-14-53               | 5.00        |
| W. E. Smith; Oklahoma City, Okla.               | Misrepresentation  | 11- 9-53               | 15.00       |
| Paul Stetinisch; Oklahoma City, Okla.           | Misrepresentation  | 11-10-53               | 5.00        |
| Jack Compton; Wichita                           | Discharge firearms in State Park   | 11-24-53               | 5.00        |

## ARRESTS—DECEMBER, 1953

| <i>Name and address</i>     | <i>Offense</i>     | <i>Date of offense</i> | <i>Fine</i> |
|-----------------------------|--------------------|------------------------|-------------|
| F. M. Baldrige; Mission     | No hunting license | 12-27-53               | \$5.00      |
| LeRoy Brown; Leavenworth    | No hunting license | 12- 5-53               | 5.00        |
| W. F. Hanny; Hiawatha       | No hunting license | 11-29-53               | 10.00       |
| Glen K. Heston; Topeka      | No hunting license | 11-22-53               | 10.00       |
| Jesus Jaramillo; Topeka     | No hunting license | 11-22-53               | 10.00       |
| James King; Topeka          | No hunting license | 11-22-53               | 10.00       |
| Eelzie McHenry; Leavenworth | No hunting license | 12- 5-53               | 5.00        |

| <i>Name and address</i>                              | <i>Offense</i>   | <i>Date of offense</i> | <i>Fine</i> |
|--|--|------------------------|-------------|
| Charles Perkins; Atchison                            | No hunting license   | 11-26-53               | 5.00        |
| Jess Rogers; Kansas City, Mo.                        | No hunting license   | 12-13-53               | 20.00       |
| L. C. Van Gaasbeek; Atchison                         | No hunting license   | 11-21-53               | 5.00        |
| Albert Zishka; Effingham                             | No hunting license   | 11-26-53               | 5.00        |
| Jimmy E. Leonard; Wichita                            | No hunting license; killing rabbit in closed season                      | 12- 2-53               | 2.00        |
| Ralph V. Stokes; Wichita                             | No hunting license; killing rabbit in closed season                      | 12- 2-53               | 2.00        |
| Gerald E. Parker; Winfield                           | No hunting license; hunt squirrels in closed season                      | 12- 6-53               | 15.00       |
| Charles Berry; Atchison                              | Hunt rabbits in closed season  | 12- 9-53               | 10.00       |
| Walter Dillard; Kansas City                          | Hunt rabbits in closed season  | 12- 4-53               | 10.00       |
| Oliver Ellington; Sabetha                            | Hunt rabbits in closed season  | 11-27-53               | 10.00       |
| Charles Havens; Atchison                             | Hunt rabbits in closed season  | 12- 9-53               | 10.00       |
| Marion Soden; Robinson                               | Hunt rabbits in closed season  | 12-13-53               | 10.00       |
| Robert Strong; Kansas City                           | Hunt rabbits in closed season  | 12- 4-53               | 10.00       |
| Waymon Smith; Turner                                 | Hunt squirrel in closed season   | 12- 6-53               | 10.00       |
| F. A. Lininger; Oklahoma City, Okla.                 | No hunting license; shoot from highway; take rabbit in closed season     | 12- 9-53               | 20.00       |
| Jesse Stone; Leavenworth                             | Possess and kill pheasant in closed season                               | 12-24-53               | 10.00       |
| John Stone; Leavenworth                              | Possess and kill pheasant in closed season                               | 12-24-53               | 25.00       |
| Floyd R. Edwards; Salina                             | Late shooting  | 12-19-53               | 25.00       |
| Paul Hartwig; Wichita                                | Late shooting  | 12- 6-53               | 10.00       |
| Sam F. Johnson; Salina                               | Late shooting  | 12-19-53               | 25.00       |
| Marion Sims; Wichita                                 | Late shooting  | 12- 6-53               | 10.00       |
| Rev. G. W. Massey; Junction City                     | Kill duck not in flight  | 11- 4-53               | 25.00       |
| Oren Turck; Ellinwood                                | Exceed limit of game birds   | 12- 1-53               | 50.00       |
| Wm. Murray; Chapman                                  | No fishing license   | 11- -53                | 5.00        |
| J. H. Wall; Chapman                                  | No fishing license   | 11- -53                | 5.00        |
| John Finny; Winfield                                 | No trapping license  | 12- 7-53               | 10.00       |
| Clarence Lane; Topeka                                | Hunt and loiter on posted farm and refuse to leave when farmer requested | 11-26-53               | 17.00       |
| Karl Hudson; Pittsburg                               | Cutting limbs from trees in State Park                                   | 12-12-53               | 5.00        |
| Millard Johnson; Kansas City, Mo.                    | Misrepresentation  | 12-13-53               | 20.00       |
| Gordon Wood; Bridgeport, Neb.<br>(Alias Gordon Wolf) | Misrepresentation  | 11-27-53               | 15.00       |

## ARRESTS—JANUARY, 1954

| <i>Name and address</i>        | <i>Offense</i>                                     | <i>Date of offense</i> | <i>Fine</i> |
|--------------------------------|--|------------------------|-------------|
| Thomas W. Carey; Coffeyville   | No hunting license                                 | 1-24-54                | \$5.00      |
| Don Collins; Salina            | No hunting license                                 | 12- -53                | 10.00       |
| H. C. Fullner; Salina          | No hunting license                                 | 1-14-54                | 5.00        |
| Fred Koch; Salina              | No hunting license                                 | 1-12-54                | 5.00        |
| Joe D. Parker; Larned          | No hunting license                                 | 1-15-54                | 5.00        |
| Albert A. Sauer; Coffeyville   | No hunting license                                 | 1-24-54                | None        |
| Warren R. Phillips; Winfield   | No hunting license; take squirrel in closed season | 1-22-54                | 15.00       |
| Ralph Heintzelman; Leavenworth | Hunt squirrel in closed season                     | 1- 1-54                | 10.00       |
| Robert Hernandez; Newton       | Hunt squirrel in closed season                     | 1-12-54                | 10.00       |
| Kenneth Phillips; Winfield     | Hunt squirrel in closed season                     | 1-22-54                | 10.00       |
| Dr. Elpha E. Amend; Wichita    | Take ducks with unplugged shotgun                  | 11- 4-53               | 25.00       |
| Lawrence B. Jordan; Wichita    | Take ducks with unplugged shotgun                  | 11- 8-53               | 25.00       |
| Don M. Moore; Timken           | Take ducks with unplugged shotgun                  | 11- 6-53               | 25.00       |
| Albert Myers; Great Bend       | Take ducks with unplugged shotgun                  | 11- 7-53               | 25.00       |
| Frank Oshel; Holyrood          | Take ducks with unplugged shotgun                  | 10-24-53               | 25.00       |
| Clifford L. Schmidt; Timken    | Take ducks with unplugged shotgun                  | 11- 6-53               | 25.00       |
| Marvin L. Sherril; Wichita     | Take ducks with unplugged shotgun                  | 11- 1-53               | 25.00       |
| Kenneth Erich; Abilene         | Trespassing  | 12- -53                | 10.00       |
| John Rieck; Abilene            | Trespassing  | 12- -53                | 10.00       |
| John Sanders; Abilene          | Trespassing  | 12- -53                | 10.00       |
| Glen Neiswender; Topeka        | Snagging fish                                      | 1-29-54                | 10.00       |
| Charles E. Rator; Topeka       | Snagging fish                                      | 1-29-54                | 10.00       |
| W. W. Miller; Lawrence         | Ice fishing  | 1- 3-54                | 10.00       |

Worn hip boots can still serve useful purposes. Cut off the leaky feet, pull the leg portion over your hunting boots and they will keep your legs dry in wet underbrush or on rainy days. Slit open, the rubber will serve you for a dry seat when still hunting in damp weather or to drape over wet boat seats.

The old belief that a whale spouts water is a misconception. After making a dive, the whale comes to the surface and exhales through his nasal openings in the top of his head. This column of warm air immediately condenses to water vapor upon contact with the surrounding cool atmosphere.

Lobsters, which were once thought to do little ocean traveling, drift hundreds of miles as tiny spider-like lobsterlings before settling down to the sea bottom.

Fishes, as well as ships, use the Suez Canal. They travel back and forth between the Red Sea and the eastern Mediterranean.

## Out Fishin'

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A feller isn't thinkin' mean . . . out fishin'.  
His thoughts are mostly clean . . . out fishin'.  
    He doesn't knock his fellow men,  
    Or harbor any grudges then;  
A feller's at his finest when . . . out fishin'.

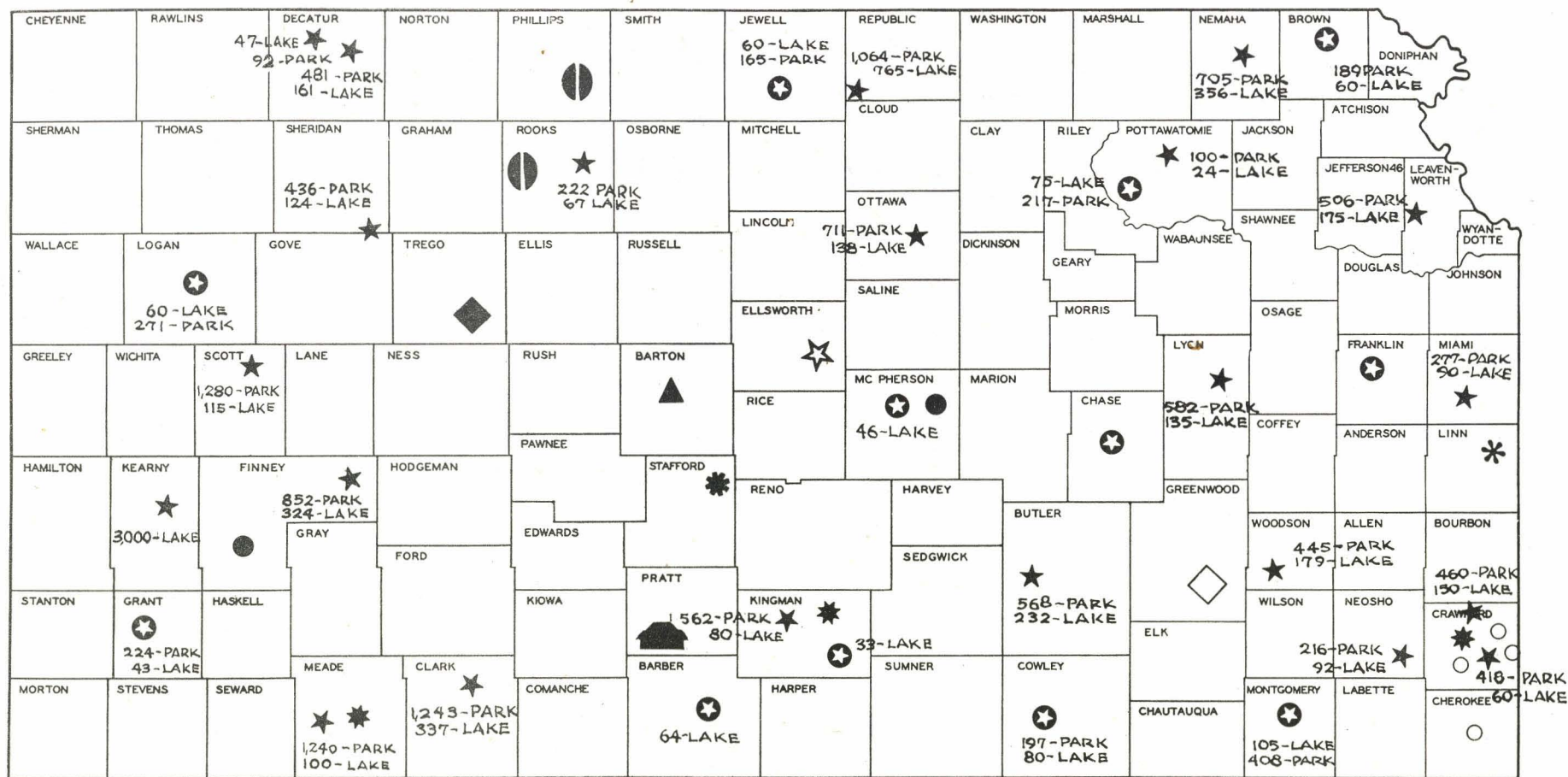
The rich are comrades to the poor . . . out fishin'.  
All brothers of a common lure . . . out fishin'.  
    The urchin with pin and string  
    Can chum with millionaire and king;  
Vain pride is a forgotten thing . . . out fishin'.

A feller gets a chance to dream . . . out fishin'.  
He learns the beauties of a stream . . . out fishin'.  
    An' he can wash his soul in air  
    That isn't foul with selfish care  
An' relish plain and simple fare . . . out fishin'.

A feller's glad to be a friend . . . out fishin'.  
A helpin' hand he'll always lend . . . out fishin'.  
    The brotherhood of rod and line  
    An' sky an' stream is always fine;  
Men come real close to God's design . . . out fishin'.

A feller isn't plotting schemes . . . out fishin'.  
He's only busy with his dreams . . . out fishin'.  
    His livery is a coat of tan,  
    His creed to do the best he can;  
A feller's always mostly man . . . out fishin'.

—*Harry Lee Burgess.*



- ★ existing lakes and parks, acreage indicated.
- ☆ new lake sites approved or under construction.
- ◐ federal impoundments under construction, Kirwin (Phillips county), Webster (Rooks county).
- ☆ Kanopolis reservoir.
- ◊ Fall River reservoir.
- game preserves.
- strip pit areas.
- ▲ Cheyenne Bottoms.
- ★ Game farms.
- ✱ Marais des Cygnes refuge.
- ✱ Salt Marsh refuge (Proposed by U. S. Fish and Wildlife Service).
- ◆ Cedar Bluff reservoir.
- Pratt headquarters, Forestry, Fish and Game Commission.

