

# Kansas Fish and Game

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### Winter Clumsy Time

Winter is a clumsy time for most outdoorsmen. It is a restless time when thinking about fall's good hunts does not take the edge off the desire for spring and fishing again.

There is a way to beat this. Try something new and different to you. For instance, try crow shooting or covote hunting. Perhaps you haven't coon hunted in years. Make the acquaintance of some regular coon hunters and go out with them a few times.

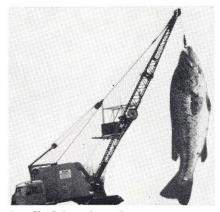
If your taste turns to fishing, remember that some of the best strings of fish are taken in the dead

of winter. If you prepare properly for the trip, winter fishing will not be a simple matter of shivering on the bank somewhere.

How about photography? Although game will not be too plentiful at this time of year, cover is at a minimum and taking photos of wildlife is much easier. In this manner, you can continue to hunt long after seasons have closed.

Of course there are the traditional winter pastimes of cleaning and working with your outdoor equipment. This is an excellent way to spend some of those dreary Saturdays. But if you are like me, all that cleaning and care leads to thoughts such as represented by the picture above. When this happens, fishing fever rises sharply and the only cure seems to be a trek to the nearest woods or stream.

So don't just sit home and suffer. Get outside and enjoy this outdoors Bob Todd.



Small fish taken last summer as remembered during winter.

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#### **Game Protectors**

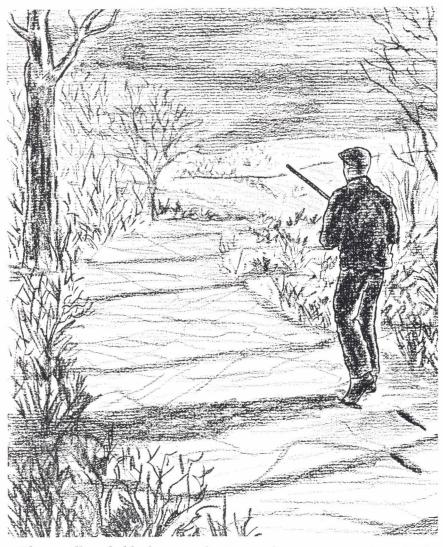
# A Search for Answers

### Summary of Small Game Investigations And Why Kansas Is Conducting Them

#### By JIM NORMAN Small Game Section

Men return to fields and woods again each fall in search of small game. This is quite evident. The reasons for this annual migration of sportsmen may include anything from a desire to witness once more the beauty of an autumn landscape to the practicality of putting meat on the table. The fact remains that over 200,-000 Kansans go afield each year to hunt their favorite small-game species. In 1961 nearly 180 thousand persons hunted pheasant, quail or prairie chicken in Kansas. These are the three major species of upland game birds hunted in this state.

A review of prospects for future years indicates an increase in the



There will probably be more hunters and more time to hunt in the future. Changing land use will also affect hunting and wildlife.



number of hunters and the average hunter will have more leisure time for hunting. This certainly suggests a substantial increase in hunting pressure is to be expected.

Fortunately, wild game is a renewable resource. It is capable of reproducing itself year after year to the extent that an annual crop can safely be harvested. If this were not true our game would have vanished long ago. The amount of game that can be harvested each year does have an upper limit, however.

During the period of unrestricted market hunting it became obvious that game could be over-harvested. But even with the strictest of harvest regulations and closed seasons, some game populations continued to dwindle. Lumbering, clearing, draining of wetland, grazing and increased acreages of cultivated land have all had far reaching effects, both good and bad, on the abundance and distribution of game during the past century. It is quite probable that present year to year changes in the Agricultural Conservation Program, alterations of crop acreage allotments, newer methods of crop cultivation, harvest, weed and pest control figure significantly in determining the amount of game that can be harvested safely.

The Commission is aware of the problems of establishing regulations which allow harvest of game surpluses in a way that will provide maximum recreation to hunters without jeopardy to the resource and, of providing an effective plan of game management to be incorporated in existing or proposed land use programs for the purpose of making game more plentiful.

The proper procedure is to study all important sides of a problem and use what is learned to take the necessary action as quickly as possible. This is exactly what the Commission is doing at the present time.

Of primary concern are the major upland game birds; prairie chicken, bobwhite quail and pheasant. A detailed study of the distribution and abundance of these species is already nearing completion. The results of this study are preliminary to investigation of the habitats occupied by these game birds in Kansas. The habitat study will be well under way this year.

Additional surveys are being initiated to provide reliable records of the ups and downs of abundance, reproduction success, and mortality over a period of several years. The trends shown by these surveys will be compared with observed changes in land use patterns and weather conditions to detect cause-effect relationships between the game population and the environment it occupies.



Banding is one of the main tools used in a study of survival rates of pen raised birds which are used for restocking purposes.

#### PROCEDURES USED

The first and most important phase of research includes a review of game literature and careful planning of the job ahead. By reviewing literature we learn of the successes and failures of game biologists working in other states. This gives us a decided advantage in drafting a successful program of investigation to attain our particular objectives.

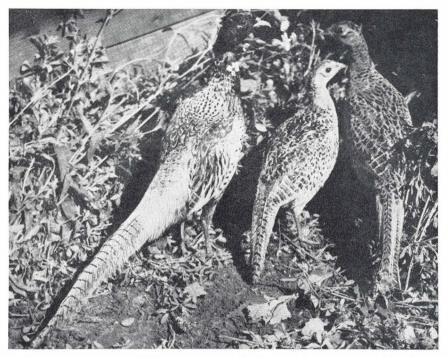
There are four times each year when it is important to know the status of our game bird populations: spring, summer, fall and winter.

The spring survey is an inventory of the breeding population. Prairie chickens are located and counted on their booming grounds. Prairie chicken, quail and pheasant are counted by rural mail carriers who co-operate during a four-day survey period. Pheasants are also censused by early morning counts during the peak of their breeding activity.

The summer survey is an investigation of reproduction success and pre-season abundance. Mail carriers again co-operate by taking game counts during a four-day period. Bobwhite abundance is checked by counts of whistling males. Game protectors and biologists take brood counts which indicate peaks of nesting and hatching activity as well as reproduction success and relative abundance. Analysis of the previous years' harvest data and the spring and summer inventories are used to recommend season regulations for a sensible harvest during the coming fall.

The fall survey yields hunter success information, and provides a second check on the reproduction success shown by the summer survey. Hunter bag-checks supply most of this data. The checks are made in the field and at check points along key access routes by game protectors and biologists during the open seasons.

The winter survey is a postseason inventory. The data from



The summer survey delves into reproduction and pre-season abundance of such small game as these young pheasants. The information gained is used in drawing up recommendations for seasons.

this investigation is used to calculate the total harvest and to reevaluate the success of the hunting season and the effectiveness of the seasons' regulations. During this period hunters are contacted to obtain harvest data supplemental to fall bag-checks; mail carriers again make their four-day game counts; and, game division personnel record their post-season observations of game to aid in the analysis of the post-season survey.

#### About the Cover

The cover picture for this issue was drawn by Joyce Hartmann, wife of Bob Hartmann, fishery biologist in the southeast region of Kansas.

Joyce teaches school near Pittsburg and is now doing some free artwork for KANSAS FISH AND GAME in her spare time. The illustrations in this issue, other than photo's, are all hers.

Incidentally, Bob has a story in the center of the magazine entitled "February, Pipedreams and Fish." Our thanks to this couple for enhancing the magazine. The continued use of these surveys over a period of years provides valuable information on the changing status of our small-game populations and their reactions to a changing environment.

Also under study is the survival rate of birds raised on our game farms for restocking purposes. The season, location, numbers released per site, age of birds released and costs are all being considered in this study which includes extensive banding. The length of time these birds survive and whether or not they add significantly to our game resource is of particular interest in the stepped-up program of practical game management.

To be considered for future studies are more intensive investigations of nesting success, predation, behavior patterns, nutrition and diseases of small game. The information gained from these studies will enable the game department to meet its ultimate objectives of providing maximum hunting pleasure without endangering the small-game resource.

### Booklet Available

The excellent response to the series on principles of game management, distributed as News from Nilo releases, has prompted the authors John Madson and Ed Kozicky to issue the six articles in book form. The 25-page booklet, with illustrations by Bob Hines, contains: HUNTING REGULATIONS, PREDATOR CONTROL, GAME REF-UGES, STOCKING, HABITAT RESTORA-TION, GAME AND HABITAT ANALYSIS. Free copies of "Principles of Game Management" are available from the Conservation Department, Olin Mathieson Chemical Corporation. East Alton, Illinois.

#### Book Reviews, Notes

Land, People, and History. By Elizabeth S. Helfman. Illustrated. 272 pages. David McKay Company, Inc., Publishers, 119 West 40th Street, New York 18, N. Y. \$4.95.

Mrs. Helfman is presently Teaching Guide Editor of Newstime, a Scholastic magazine for the middle grades, and this book of hers might be described as a primer in "why soil conservation" for the background information of biology and economics teachers as well as others interested in the subject. It is an easily-understood series of lessons from history describing man's abuse of the land and its consequences. The fall of the Roman Empire, suggests the author, may be attributed to worn-out agricultural land.

The National Wildlife Federation has received word that "Silent Spring," Miss Rachel Carson's new book describing the dangers of the new chemical insecticides and other agricultural poisons, is now on the required reading list for ninth grade students in a Maryland school near Washington, D. C. Perhaps the next generation will have added respect for the killer chemicals.



From Point of Rocks, Coronado viewed the Cimarron Valley much as this photo does. However, Coronado viewed it in 1541. The camera saw this view in 1962, 421 years later. If Coronado viewed the valley today, he would see many changes. But then too, he would find the valley basically the same.

# The Purple Valley

#### By Bob Todd

In the southwest corner of Kansas, Morton County to be exact, there exists a small world markedly different from anything else in Kansas. It is the purple valley of the Cimarron River.

A century and a half ago, it was regarded as a desert. And perhaps, if we used 150 year old definitions, it should still be regarded as a desert. It is certainly different from the rest of Kansas.

But a desert is not a static land with no life or change. And neither is the valley of the Cimarron. It is a mysterious, odd, historic and productive finger of the great southwest which reaches into the southwest corner of Kansas.

It is hot there, and dry. But at times it is intensely cold and storms and flashfloods are not altogether out of the ordinary. The Cimarron lays as a barren, naked piece of hot sand in the valley floor at times. At other times it rampages down the valley with force enough to bend bridges, as can be noticed on the K-27 bridge north of Elkhart.

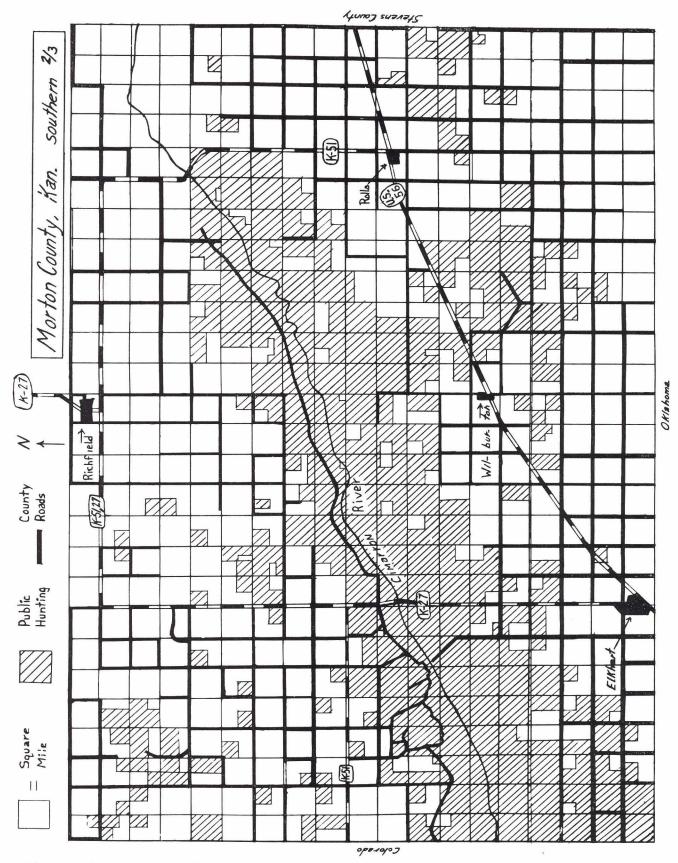
The valley floor to the casual observer is not unlike other valleys in west Kansas. However, its vegetation has subtle differences and wildlife is markedly different. Short grasses and various forbs and weeds predominate in the valley with sunflower and cottonwood standing out singly or in clumps.

Mule deer roam the valley as do a few wild turkey, scaled quail, lesser prairie chicken and porcupine. In addition, the valley contains the normal complement of bobwhites, pheasants, rabbits, coyotes, raccoon, bobcats and whitetailed deer. This was the historical ground of the antelope and buffalo, but they no longer occur.

On the south side of the river, the soil is sandy and subject to "blow-outs." Sandsage and grasses predominate the slopes and include the rare occurrence of the tree cactus in Kansas. Yucca plants also are found scattered into the flora with their green color in sharp contrast to the blue-purple of the sage. Bluestem, a brownish pink in fall, and various types of grama grasses are mixed in between the sage.

On the north side of the river the land is hard, like rock almost, but highly fertile. Sage does not grow so well on the north side, and bluestem, grama and buffalo grass predominate. The yucca are still present, though less abundant, lending bright green spots to the landscape.

Over all this land roam the game which inhabits the valley. Some spend most of their time in the sage, others in the hardland grasses and some seldom roam far from the valley floor. It all depends on their needs.



The map above shows land included in Cimarron National Grassland. Also shown are main roads. Many trails lead through the area also.

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This area was first seen by the white man Coronado in 1541. In 1821 the Santa Fe trail cut its path across the region from Dodge City on into the southwest. This stretch of the trail was known as the Cimarron cutoff. The trail was used for some 50 years and the ruts and scars from the wagon wheels are still to be seen in the earth.

This was the route by which the first overland commerce was established with the Spanish-American settlements of the southwest.

In the 1880's the land was settled. First by the cattleman and later by the farmer. But the land is mysterious and the settlers could not comprehend and understand it. They overgrazed and farmed poorly and in the 1930's, the dirty thirties, the region was part of the dust bowl.

The dry, fine sands of the south side of the river teamed up with the whitish layer of dust on the hardlands to the north to form great clouds which were dust storms. From here the blight of the great drought spread, complicated and more devastating by man's lack of understanding of the soil from which comes all life.

What is the land like now? What will it be like in the future? Is the land really so bad as the dust bowl indicated? Or does it just need understanding from man? Can man study it and find a way to live harmoniously with it, or will the land and man suffer again from an agonizing dust bowl?

During the dirty thirties, the Resettlement Administration of the federal government purchased large blocks of the dust bowl lands. The Soil Conservation Service was the first administrator of the lands and initiated programs to restore native grasses and stabilize the soil. In 1954, the U. S. Forest Service took over administration of the lands. They have continued to work with the land in an effort to restore it.



The Santa Fe Trail still exists along the valley of the Cimarron. It looks somewhat like a giant grass waterway along the north slope of the valley. On the hillside in the background, three paths of the trail can be seen.

At the same time, however, they have been interested in three other aspects of the area. They are interested in permitting agriculture and grazing where it does not jeopardize the stability of the soil.

They are interested in the historic nature of the area and are working to preserve that which can be preserved. And they are interested, almost jointly with the historical aspects, with the recreational potential of the area.

At the present time, there are 106,000 acres under the control of the Forest Service, mainly in the Cimarron Valley. Grazing is permitted on some of the lands and oil production is also permitted.

Signs have been and are to be erected pointing out historical landmarks and the old trail. Camping is permitted and each summer at least a few people travel or hike the old trail, camping out as the pioneers did.

Wildlife and hunting is a major prospect for recreational use of the area. At the present time, wildlife is abundant, but is not available to the hunter due to the dispersion of the game. The entire area is open to public hunting, but the valley slopes are hard to walk and the game very elusive in the sagebrush lands. Pools along the River have been created in two areas by the Forestry, Fish and Game Commission in an effort to attract waterfowl and provide fishing.

At present, hunters use the valley floor successfully to hunt scaled and bobwhite quail as well as rabbits, pheasants and other small game.

The future of wildlife hunting on the area seems to be tied to finding ways and means to increase the game and concentrate it during hunting seasons.

A plan already underway, cooperatively between the Forestry, Fish and Game Commission and the Forest Service, calls for building 20 experimental exclosures. These will be four acre plots in which trees, shrubs, food and nesting cover will be planted.



Pictured here are two "strange for Kansas" inhabitants of the Cimarron Valley. Above is a porcupine, gentle, but well protected. To the right is a tree cactus, estimated at more than 100 years old.

In addition, plans are being considered to drag dead brush from the river bottom up onto the valley slopes to provide escape and loafing cover.

Water is being used with the installation of gallinacious guzzlers; a covered, concrete water basin which has been successful in other areas.

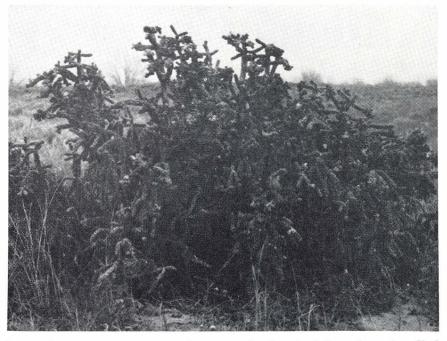
Work is in progress on these plans at this time and planting of the exclosures is planned for this spring. All these are designed to concentrate game and make it available to the hunter.

Although the area has abundant wildlife, it cannot be adequately harvested by hunters unless efforts are made to concentrate the game.

Also on the list of planned work for the area is a project to release 25 wild trapped turkeys in an effort to establish this species. Although a couple turkeys were sighted this past year, they are probably migrates from Colorado or Oklahoma and would establish themselves only slowly, if at all.

This is the area with the largest number of lesser prairie chickens in Kansas and work is planned to determine their habits and needs so that they might be increased. A season on these lessers is not in the immediate future, but may be a possibility.

In addition to game animals, species such as the porcupine, kit



fox and magpie, to name only a few, are residents or migrates through the area. Bald eagles normally winter in the area as do other species which are seldom found in other parts of the state.

So what of the area, its future, its past? It appears the old will remain, the historic scars of the Santa Fe trail, Point of Rocks and other marks upon the earth.

Agriculture and industry will flourish, provided waste and misuse are not mistaken for progress. The dust bowl may once again become a name for the Cimarron Valley, but it will not be so severe on lands which have been handled wisely and cautiously.

The buffalo cannot return to roam freely on the sand and hardlands, but other wildlife will be encouraged and provide benefits to man in the form of appreciation and in the ancient and historic art of hunting.

Step into, if you will, a dream of some years yet to come. Years when today's man can walk the route of the pioneers, scout the river valley for miles from Point of Rocks as did Coronado and hunt the same game his ancestors hunted.



The Resettlement Administration purchased this land during the dirty thirties. The Soil Conservation Service was the first to promote a program of restoration of the soil. And now, the U. S. Forest Service continues to preserve the "desert" sod.

# Kansas Rabbits

The rabbits of Kansas are probably the most important game animals in the state. They are hunted by nearly every hunter at one time or another and are preyed upon by a great variety of birds and land animals.

Yet they survive and flourish. This is perhaps the most interesting and astounding fact about rabbits. But from a hunter's viewpoint, a fast target moving through the grass is the definition of a rabbit.

As a food source, rabbits provide tasty meat which can be prepared like chicken or cooked into a variety of fancy dishes.

#### SPECIES—DISTRIBUTION

There are three true species of rabbits in Kansas. These are the eastern cottontail, desert cottontail and swamp rabbit. All three look much the same with white fur underneath and brown fur on the back. All three have a short tail with white on the underside.

It takes a trained biologist to tell a desert from an eastern cottontail. However, the swamp rabbit is somewhat larger and darker than the cottontails and can be distinguished by an experienced hunter.

The eastern cottontail is common state-wide, but generally is found only along stream valleys in the western one-third of the state. The desert cottontail is found only in the west and is confined largely to shortgrass areas above the floor of stream valleys. Swamp rabbits are found only in southeast Kansas along the Neosho River and its tributaries.

The jack rabbits (they are hares, not rabbits) are found mainly in the western part of Kansas, but one species occurs in the eastern part occasionally. The black-tailed jack



Eastern Cottontail.

rabbit is the common Kansas jack, but the white-tailed species occurs occasionally in the northwestern counties.

#### HABITAT

Cottontails and swamp rabbits must have dense, heavy stands of cover in which to survive. However, the jack rabbit, and to some extent, the desert cottontail, need less cover and actually prefer to be in the open where they can see a great distance.

Cottontails nest in shallow dugouts in the grass of haymeadows or pastures. Jack rabbits do not nest. The young are able to travel almost immediately after birth.

Foods for jack rabbits and cottontails consist mainly of grasses and other green plants. However, in times of critical food shortages, they may turn to agricultural crops and tree bark.

#### LIFE HISTORY

To understand how rabbits can flourish in spite of heavy pressure from predators as well as man, one need only look at their reproductive capacities.

The eastern cottontail generally begins nesting in early spring and may have as many as 7 young per litter. Nesting continues throughout the summer and a single female may have as many as five or six litters in a season. Furthermore, it is not uncommon for young born in the spring to bring off a litter of their own before the summer is spent.

Thus, if conditions were perfect, a pair could build a population of as many as 50 rabbits by fall. In short, we would be overrun with rabbits. For this reason, it is necessary that predation, either by man or animal, continue to be heavy on rabbits.

#### MANAGEMENT

Although rabbits have the capacity to reproduce rapidly, they cannot if suitable habitat is not present. Grassy cover is needed for nesting and heavy cover is needed for escape from predators. Food supplies are generally abundant where nesting and escape cover are present.

Burning grasslands in spring and clearing and burning brush, where unnecessary, should be discouraged.

Regulations for hunting rabbits can be liberal. Like all game, a certain percentage are excess each year and can be harvested by hunting.

# Kansas Tree Squirrels

Tree squirrels have been important game animals in Kansas since pioneer days, probably ranking second only to the cottontail rabbit in popularity.

Although game birds are currently bearing the brunt of increased hunting pressure, the bushy tails are still hunted extensively in eastern sections of the state.

Squirrel hunting, either by stalk method or by sitting and waiting, is an enjoyable sport. Generally the squirrel hunter is a solitary figure blending into the forest as he sits beneath a den tree or a silent shadow slipping from tree to tree, always looking.

Although the meat of tree squirrels is tasty, the hunter's greatest enjoyment probably comes from just being in the woods.

#### SPECIES

Kansas has three species of tree squirrel. The fox squirrel is most abundant and occurs almost statewide. Although this species was originally found only in the eastern half, in past decades it has followed the advance of trees up the river valleys of western Kansas.

The gray squirrel is found in the eastern part of the state exclusively, and must have an oak-hickory forest in which to live. It is not as abundant as the fox squirrel, but figures into the annual harvest just the same.

A third species of tree squirrel is the flying squirrel. This species is found only in the eastern part of the state and is too small to be of any importance to hunters. However, it is a pleasant and interesting inhabitant of Kansas.

#### LIFE HISTORY

Squirrels normally bear young twice a year, with peak nesting occurring in late winter and midsummer. The fox squirrel has 2-4 young per litter, the gray, 3-6 per litter and the flying squirrel averages about 4 per litter, The mature fox squirrel is covered with reddish fur with grayish tips to the hair. Gray squirrels are gray on the underside but generally have a brown tinge to their gray back. Flying squirrels can be identified by the fold of skin between their front and back legs on each side and by the flattened tail.

The diet of squirrels is largely gleaned from the forest. Gray squirrels eat nuts, tree buds, some insects and occasionally grain or bark. Fox squirrels eat the same as grays, but expand their diet to include more grain and will eat osage orange fruit during the winter.

#### HABITAT

All three species are tree inhabitants. However, the fox squirrel spends a great deal of time on the ground searching for food. The fox squirrel is less agile in a tree and sometimes runs for cover rather than climb a tree.

The gray squirrel spends most of its time in trees and therefore must have trees which provide plenty of preferred foods, such as oak and hickory. This species is very agile and is seen jumping from treetop to treetop in his travels.

The flying squirrel does not really

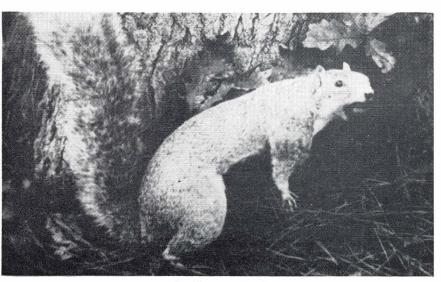
fly. Instead, on occasion it uses the folded skin between its front and hind legs to glide from tree to tree or to the ground. This species is primarily a night time animal and is seldom seen during the day.

#### MANAGEMENT

The squirrel's requirement for preferred foods is probably the most important current need. This is particularly true of the gray squirrel which has a more limited diet than the fox squirrel. Providing this food supply is largely a matter of leaving forested land alone. Grazing of woodlots definitely reduces food supplies and burning is even more harmful as well as dangerous.

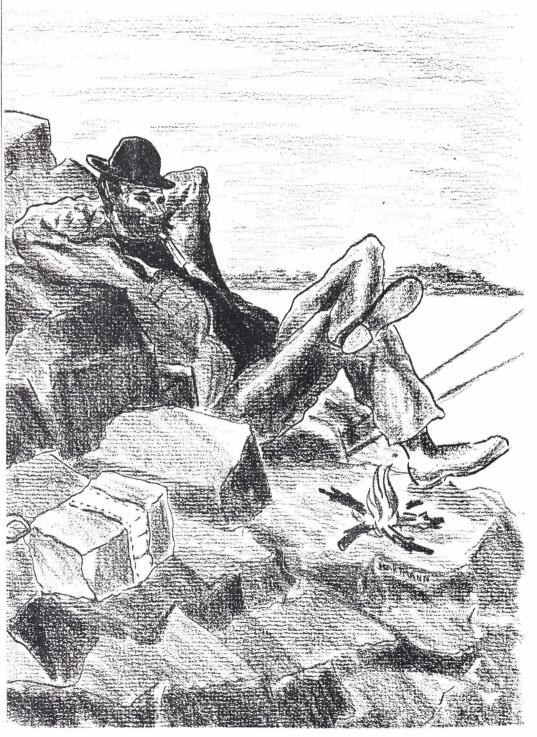
In managed forests, where no den trees are left, squirrels can be managed by providing artificial dens, much like bird houses. The fox squirrel can survive even without den sites by using old leaf nests constructed the summer before.

Hunting seasons for squirrels should come between the major nesting seasons, either in the fall or late spring. When hunting pressure is heavy, or when populations are low, it is generally wise to open only one of the two possible hunting seasons.



The Fox Squirrel.

# February, PIPEDREAMS and Fish



Fred Biggs. He's one fellow who fills his February pipedreams.

#### By BOB HARTMANN Fisheries Biologist

February is a month of more of the same—long, cold nights, frost, ice, snow and wind. Lots of cloudy days with some occasional sun. This is a time when most of us fishermen have pipedream-visions of a jumping bass or fighting cat being played in the warm summer's sun. But let me tell you of a fellow I know who fills his pipedreams in February's ice and snow.

Envision yourself approaching a lake on a clear, crisp February day. Patches of the last snow remain here and there. The day promises to be one of those "occasionals" with precious hours of warmth that preview things to come. The lake is still partly covered with ice. But next to the dam, exposed to the south and away from the chill north wind the water is open, almost inviting a swim. This is where you'll meet him: Fred Biggs.

Fred's a hulk of a man, six feet three, two hundred ten. Dressed in oil-splotched, tattered and worn blue denim bib overalls with jacket to match, he sits soaking up warmth from the February sun, riprap and his small hastily made hand fire. Unshaven face, frayed stogy, old black derby, and size thirteen hightops complete his attire.

Fred's an oil lease pumper. In the morning he checks his rigs and if everything's running OK the rest of the day he's free to enjoy his favorite winter pastime: channel cat fishing under the ice.

His equipment is two spinning rods, reels and an old leather pouch. From the pouch he takes a pint Mason jar and when uncapped it adds to the aromas of clean crisp air and burning twigs the unmistakable stench of sponge

bait. Next from the pouch comes two quarter size pieces of red rubber sponge. When properly impaled on hooks, these are in turn dipped with the aid of a forked stick snapped from a willow sprout growing near the corner of the dam, into the jar of stench. As with all sponge bait fishermen, Fred has his own secret blend. It includes all of the standard ingredients of shad guts, mellowed cheese, and turkey blood plus that extra special 'evil stew' which contains all of the important unmentionables. Four months well heeled in the back yard turnip patch makes his vintage the best.

Fred soaks the sponges evenly, and giving a powerful swing, he casts each bait, well weighted, onto the edge of the ice. By carefully dragging them off he places the baits in just the right spots. Each rod is propped by a rock and the lines reeled taut, tips bowed very slightly. Then Fred settles back to wandering thoughts and an enjoyable watch among the rocks.

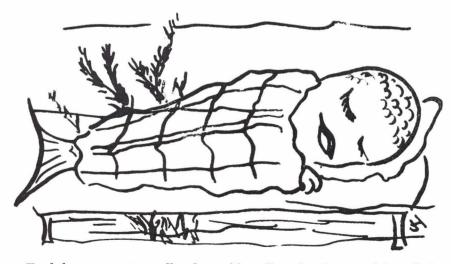
Fred's thoughts have a habit of wandering. Mostly they are thoughts about fish—what they do and how they act. Fred's not a technical man with book learning and the like, yet he's done some reading and spent lots of time fishing and watching and he's pretty well acquainted with the ways of

fish. He thinks of how rewarding it is, the sight of a sponge bait fisherman getting his first strike.

He knows that most fish are now schooled in deep holes, their movements slowed, and feeding all but stopped. He has read that this is the time of the year when growth of the fins', spines and scales forms narrow rings by which the fish can be aged. He can imagine an old channel cat all sluggish and cold lazying along with nothing to do.

Just then Fred is jolted from his thoughts. The reel sings and the rod tip dips. Fred grabs the rod as the tip dips lower, sets the hook hard causing his heels to dig in and the rod to bend double. The run and the fight may not be long but there is more than enough for the excitement to build. In short order the sleek blue channel cat is brought twisting and splashing to shore and after stringing and staking it at the water's edge, Fred rebaits and is back to his thoughts.

That cat while lazying along had picked up a pungent whiff of the bait with his keen sensory cells and was immediately shocked to life. He had oriented himself to the source of the electrifying odor and raced to pick up the tidbit. That was this cat's undoing, and Fred hoped, that of a few of his friends.



Fred knows most smaller bass, bluegill and other sunfish will be schooled and inactive at this time of year, but a few tackle busters will be around and can be tempted to strike.



The cold certainly bothers the fish. The channels just laze along the bottom. But given a pungent whiff of sponge bait the fish's sensory cells will shock it to life.

Now I don't mean to give you the impression that Fred is only a sponge bait and channel man because he isn't. Nothing could be further from the truth. In a week or so when more of the ice is gone you will find Fred out on the lake in his skiff, back to the wind, after that lunker bass he missed last summer. Fred is aware that most of the smaller bass, bluegill and other sunfishes will still be schooled in the depths, under logs or rocks, and inactive. But he also knows that there will be a few of the big tackle busters around, and if tempted just right they can be brought to the pan. For the job Fred will use a jig and eel or maybe a spoon and rind working it in slow, short hops along the bottom, so slow that the slightest disturbance of the lure will telegraph a fish's interest.

Crappie, too, interest Fred Biggs. He likes to jiggle a homemade doll fly into a sunken brush pile or an old tree top where the big crappie have collected for a cold weather session. The most effective way Fred has found is to lower a jig or minnow all the way to the bottom first, then with slow short jerks bring the bait up. He has found

(Turn to page 22)

# **Rooks County State Lake**

Eighteenth of A Series on

## The State Lakes of Kansas

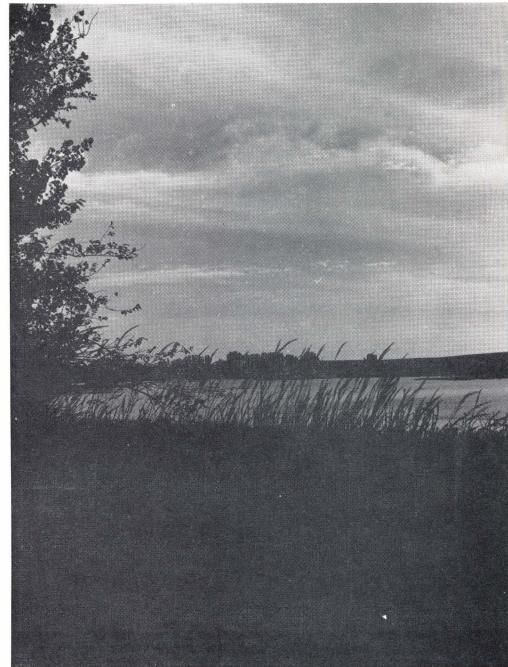
#### By George Valyer

Weather frontal systems are now quite familiar to most citizens of the United States. The popularity of TV weather programs has accomplished this in a relatively short time. Most Kansas residents are also now aware of the fact that not all cold fronts moving into the state produce rain. Some result in merely a shift of wind and a big blow. Such was the case upon my first visit to Rooks County State Lake.

The weather had been hot and dry for over a week when I headed my car in a northwesternly direction from Pratt. The temperatures in the upper 90's were not unusual for the month of July but a dry southwest wind seared the countryside. Cooler weather would be welcomed but a rain would be a blessing.

As I left Hays and was traveling north, high cloudiness to the northwest foretold the approach of a weather change. The gusty wind had shifted to the north by the time I left Plainville and, by the time I reached the lake, it was whipping the water into a spray.

Most of us like to think of water as being quiet and peaceful but Rooks County State Lake certainly did not fit that description that day. Large waves cresting white on top were pounding the south shore. Only the extreme southern portion of the lake was relatively calm where the twisting shoreline and trees provided some measure of wind protection.



Dark wind-swept waters were the order of the day when this photo was taken. Rooks County State Lake certainly did not look like a fisherman's dream that day.

It was my plan to take pictures and try the fishing, but who would want to look at photos of a lake being blown all over the countryside. Besides, the light conditions were poor due to the cloudiness. A few drops of rain mingled with the dust. It seemed useless to try the fishing but it might be worth a try if I could find a spot where the wind wouldn't blow the bait out of the water.

Stranger things have happened, but even in all that wind, the fish were hitting. Several large bluegill were hooked and released that afternoon and one bass of about a pound took my grasshopper offering. The pictures would have to wait until a later date. Fishing at Rooks County State Lake can be classed generally as being good. The water is clear except during times of heavy rains and the fertility is satisfactory for the proper growth of the fish population.

Spillway damage at this lake has occurred at least twice since the lake was built in 1934. The first damage occurred in 1940 after an exceptionally heavy rain in the watershed. In 1958 additional repairs were needed and it was decided to lower the lake for the work. Along with the needed repairs it was decided that the fish population should also be completely removed in order that rehabilitation could be complete. This was accomplished in the spring of '58 and the lake was restocked in the fall of that year. The reopening of the lake to fishing occurred on November 1, 1960. The present fish population is composed of the usual species, channel catfish, crappie, largemouth bass and bluegill. The bluegill run especially large from this lake, some up to eight inches long. The bass are also doing well with the reported catch of a four and one-half pound specimen. Channels have not been taken in great numbers but they appear to be making satisfactory growth.

Known locally as "Stockton Lake," due to its proximity to this town, Rooks County State Lake has been a popular recreation spot for many years. In recent years it has been overshadowed by Webster Reservoir which is located only a few miles west. Nevertheless, there are still many persons in north-central Kansas who like to fish the smaller bodies of water and you can find these people at Stockton lake on almost any summer day. Although this lake has no resident caretaker, the grounds are well maintained by Earl Richardson who is caretaker of the Forestry, Fish and Game administered Webster Reservoir. The usual facilties are to be found including picnic tables, grills, a native stone shelter house and sanitary units. Camping is permitted at this location just as it is at other state lakes.

Rooks County State Lake was begun in 1935 as a project of the Kansas Emergency Relief Committee. The land, 333 acres, was donated to the Kansas Forestry, Fish and Game Commission by the citizens of Rooks County along with enough materials to complete the dam. After an initial failure to establish the lake, the KERC turned the project over to the Works Progress Administration, a federal agency born in the depression days of the 30's. This agency completed the dam and spillway.



Heavy rains resulted in this damage to the spillway apron in the year 1940. Such occurrences pose a problem of constant maintenance at the State Lakes in Kansas.



A young visitor to Rooks County State Lake peers intently at the water. I wonder if he would like to fish or splash?

In 1943, the lake area was made available to the U.S. Army for the training and maneuvering of troops. The use by the military left the area in a less desirable condition than was to be expected and considerable improvements were made to the roads and other facilities following the second World War. In 1951 a new stone shelterhouse was erected on the east shore of the lake and numerous trees and shrubs were planted. The latest major maintenance effort was in the fall and winter of 1960 when trees and brush were

cleared from the dam and spillway area.

My last trip to Rooks County State Lake was in marked contrast to the first. A light breeze rippled the water surface and the coolness of fall blanketed the surrounding hills. A swirl in the water next to the shore marked a feeding bass. A flock of teel basked lazily at the upper end of the lake. Unfortunately, I had only time enough to snap a few pictures and be on my way for a meeting. The fishing, this time, would have to wait for another day.

#### Can Costs Man

According to the National Wildlife Federation, a Red Wing, Minn., man in the habit of tossing beer cans out the window of his car was ordered to pick up the beer cans and other debris from both sides of U. S. Highway 10 for a distance of 7½ miles or forfeit \$75. Pierce County Court Judge Paul A. Magdanz fined the litterbug \$100 on possession of opened beer in a moving car and \$25 for depositing debris on a public highway and ordered that \$75 of the fine be refunded when the violator had satisfactorily cleaned up the road,

## Fish and Game's

# Law Enforcement Division

A Kansas game protector is the law enforcement officer of the Kansas Forestry, Fish and Game Commission. He is responsible for the enforcement of state fish and game laws, state boating laws and Commission regulations. In addition, these men are required to perform many other duties.

Game protectors are strategically located throughout the state and take part in nearly all activities of the Commission's over-all program. There is extensive personal contact with schools, landowners, civic and sportsmen groups, and the general public.

Responsibilities of the game protector include co-operation with other state agencies and with other divisions of the Commission. This includes gathering data for fish and game surveys as outlined by technical personnel, assisting in fishery restoration programs, investigating and reporting water pollution for the State Board of Health and assisting and participating in conservation education by distribution of publications, talks, movies and slide-lectures.

To perform the many duties delegated to them, the work-day usually exceeds the regular eight hour day enjoyed by many. These long hours require good physical condition since the work is mostly out-of-doors.

#### WHY IS ENFORCEMENT NECESSARY?

Fish and game laws are necessary to provide equal opportunity for all to enjoy their favorite outdoor sport whether it is hunting, fishing or both. Wildlife is a renewable resource owned by the public. Fish and game laws regulating the harvest of the annual surplus of wildlife which would be lost whether hunted or not, offers sport for everyone. Without these regulations only a few would benefit.



Checking on duck migrations or observing a suspected violator? The game protector may be doing both. While his chief responsibility is law enforcement, many other tasks are part of his job. Gathering duck migration data for game division is one of these tasks.

The Kansas Forestry, Fish and Game Commission is supported primarily by the sale of hunting and fishing licenses. Therefore, laws concerning license requirements must be enforced or the Commission's program would come to a halt.

In the interest of public safety, for the person engaged in the sport and the effect of his actions on others, certain safety regulations must also be enforced.

#### HOW ENFORCEMENT WORKS

A game protector attempts to

discourage violations in his everyday contacts with the public and through various meetings with groups. The purpose of the laws, the reasons why they should be obeyed and must be enforced, is explained. When individuals insist upon violating fish and game laws, he must detect, apprehend and arrest the individual. The money from fines paid by violators goes into the school fund of the county in which the violation occurred.

The law enforcement division has divided the state into supervisory

regions, with a supervisor over the game protectors in each region. The Chief of Law Enforcement Division is at the Pratt headquarters. The game protectors have an assigned district which they normally patrol alone. When difficulty in detection or apprehension is present, the game protector may call in other game protectors to work with him for a time.

Having an assigned district enables a game protector to become thoroughly familiar with his area. In this way he can anticipate violations by knowing the habits of violators and the particular area where violations are more likely to occur.

#### OTHER DUTIES

Although the primary responsibility of game protectors is enforcement, they are responsible for work in other phases of the over-all program of the Commission. While discouraging violations by speaking at meetings, they further the information-education program of the Commission.

The game protector frequently assists the game or fish division in gathering survey data or in actual work of fish and game management. It is through the game protector that much information is gathered regarding game populations.

#### TRAINING

When a game protector is hired, he is first sent to the Commission's attorney for a thorough study of the law, its reasons, history and methods.

Time is spent at the headquarters office in Pratt, learning about the general routine of the Commission as well as the functions of other divisions such as fish and game.

The new protector is then assigned to work with experienced game protectors for a period of time to learn the various methods of detecting and apprehending violators.

In-service training is provided for all game protectors. This includes attending short sessions at the Pratt headquarters which provides information regarding enforcement procedures, new legislation, Commission policies, developments in fish and game management, public relations, first-aid and other topics. Other meetings, such as regional law enforcement meetings are frequently attended to help the game protector keep up with new developments.

#### QUALIFICATIONS

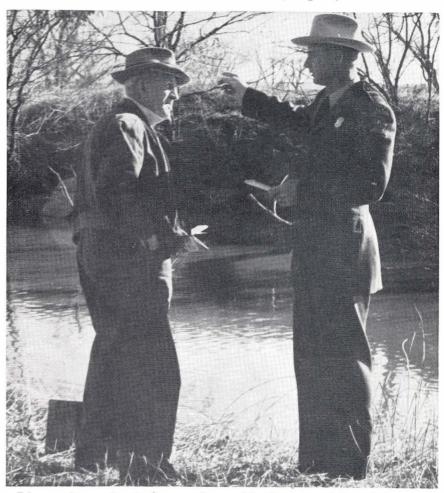
Since a game protector is considered on duty 24 hours per day, and since the work is frequently difficult, good physical condition is a prime requirement. Hiring of game protectors is limited to those between the ages of 25 and 45.

Currently a high school education is required, with work or experience in zoology or a related field a desired feature. However, higher education is desirable since the job becomes more complicated each year. Experience in law enforcement is also desirable, but not altogether necessary. Experience as a hunter and fisherman, however is a strong requirement. After all, a game protector is working for the sportsmen and must understand the needs, wants and problems of sportsmen.

#### GETTING A JOB

All positions with the Kansas Forestry, Fish and Game Commission are classified under State Civil Service. The Commission, in hiring new personnel, must obtain such men from an eligibility list assigned to this department.

Tests for the position of game protector are given at intervals to those interested in becoming eligible for consideration. Applications for taking tests should be made to the Personnel Division, State Department of Administration, 801 Harrison, Topeka, Kansas.



License inspection is frequently combined with public relations and information gathering work. Here, a game protector motions toward a fishing spot just over the hill where big ones are being taken.

FISH AND GAME

# A Glance Back

By "CURLEY" HOLTZ, From the Le Roy Reporter

I don't know whether the dates of the trapping seasons mean much to Kansas boys or not anymore. If there are any fur takers still plying that ancient and honorable profession hereabouts now, I don't know them, or at least I don't know of their trapping activities.

But time was, when the opening and closing of the trapping season were matters of prime importance to quite a few of my farmer boy and small town friends and to myself.

The arrival of the trapping supply catalogs and pelt price lists which, as I recall, occurred around October 1, was an eagerly awaited event and the offerings and prices were subjects for much comparison and considerable discussion amongst the trap line proprietors.

It is not meant to imply that any of us were 20th century junior Daniel Boones or Kit Carsons. So far as I know, none of my friends ever owned a pair of buckskin pants and the only coon skin cap around was a moth-eaten old chapeau which perennially turned up in high school theatricals.

However, a winter-time trap line of 15 or 20 "sets" was a highly useful by-product of growing up on the farm in the late 20's. None of us, I suppose, would have gone hungry without revenue from our traps. Neither was there any record of anyone being clothed in rags because the fur take that year was light.

But a prime muskrat skin would get you a dollar ten and a dollar ten would buy 22 five cent hamburgers or four movie tickets with a dime left over for two bags of pop corn.

Another more or less desirable trap-line dividend enjoyed by some was the fact that if you caught a skunk, and if you weren't overly fastidious in its handling, and if you sat up close to the jacketed old school room stove next day, you might just possibly be evicted from school for the day, which, in some quarters, was not considered an intolerable hardship.

### Tribute Given Game Protector

From the Syracuse Journal

Every hunter and fisher in Hamilton county, plus many others who neither hunt nor fish but knew Alvin Michel unprofessionally, were saddened this week by the news of his death. "Shorty" was liked and respected by everyone who knew him, and was a credit to his department. He was the kind of man that commanded obedience of the law through logic and friendship, not fear of penalties, and chances are there were fewer game law violations in his district than ever before because Shorty's friends would not let him down. They would not put their friend on the spot with law violations, knowing that he would do his duty regardless of friendship.

So Shorty was the friend of the hunters and fishers, not their warden. Ask him where the fish were biting, the birds most plentiful, or the bait to use, and Shorty had the answer. He wanted the sportsmen to be successful. His job was to help them, not persecute them, and to educate them, so that he would be sought for rather than dodged.

Shorty Michel was the kind of man that the game department needs in the field, and no doubt the type that the administration hopes all its games protectors will be.

### FROM THE NEWSPAPERS

Good public relations such as exemplified by Michel are the way that best co-operation between the law enforcement officer and the public can be obtained.

#### Editor's Note

Shorty Michel was serving Hamilton, Kearny and Stanton counties at the time of his death, from a heart attack, in October.

He began working for the Forestry, Fish and Game Commission in 1955 and was originally assigned to the three counties above and also Grant, Stevens and Morton counties.

His friends and fellow workers on the commission wish to thank the Syracuse Journal and other newspapers which helped him do his job and paid tribute at his passing.

#### **Biologist Drowns**

EUREKA, KAN. — The body of Allen R. Shultz, 23, who drowned while goose hunting here Saturday, was recovered about 9:30 o'clock yesterday morning from the Fall River Reservoir.

He was a deer biologist for the Fish and Game commission.

His body was found in about 8 feet of water where he had fallen through ice. His shotgun was beside the hole on the ice.

It was believed that he was trying to cross an inlet by walking across the ice. His body was about 30 feet from shore.

When Shultz did not return from hunting, his wife telephoned Jack McNalley, game warden, and he notified the Civil Air patrol. It was one of the patrol's planes that sighted the car and the hole in the ice. McNalley recovered the body by taking a boat onto the reservoir.

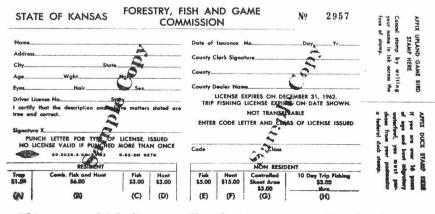
# SIGNS, SIGNS, SIGNS, SIGNS, SIGNS

# Of the Times

In the past year or so, fish and game signs of various types have been cropping up across Kansas. Some signs are yet to come, but are just around the corner.

Most important to you are the "Public Hunting" signs which have been appearing at new places as well as pointing out old areas. Neosho Waterfowl Area was opened this year as was Kingman County Game Management Area. Hunting areas on five federal This sign will be marking public hunting areas around the state. New areas will be the first to be marked with the new signs, but as the older hand made signs become worn, they will be replaced with these uniform, easily recognized signs.

reservoirs were re-marked. Work is progressing toward marking of public hunting areas in the southeast Kansas strip pits. Additional lands were opened at Cheyenne Bottoms, Marias Des Cygnes and Republic County Waterfowl Areas. Other public hunting signs are just over the hill, with Tuttle Creek,



This new multiple license will make it more convenient for the sportsman to purchase a license and will result in lower over-all costs to the Commission. These savings can then be turned into more direct benefits for the sportsman. more state lake land and other public areas being considered for public hunting areas.

Perhaps next in importance to you are the "Unmowed Wildlife Cover" signs which will be going up on sections of the state's highways.

The Forestry, Fish and Game Commission reached agreement with the State Highway Commission to leave at least some trial sections of roadsides unmowed as wildlife cover. These sections, needed badly in areas of intense agriculture, will provide vital nesting cover for game birds and animals. Some sections of highways in the state were left unmowed for this purpose last year and more will be left this year. Signs along the roadways will point out this achievement.

The new multiple license system should prove to be a benefit by providing licenses more conveniently to sportsmen and at a lower over-all cost to the Commission. The savings, in turn, can be used





The agreement reached between the Fish and Game Commission and the Kansas Highway Commission to leave unmowed wildlife cover along roadsides should help provide critical nesting cover for game in areas of intense agriculture. And it will add nesting and other cover to all areas where feasible. Signs will be erected soon to mark these areas.



This is the new car decal which will be used to mark all vehicles of the Commission in the future. It is expected that the new design will make the cars more recognizable to the public.

in a more direct way to benefit sportsmen.

In the future, the Commission plans to purchase all vehicles of the same color, a green. This green is matched by the new door decals to be used in the future. These decals will make fish and game vehicles more recognizable and should become a deterrent to violators.

Many arrested each year express opinions that they felt no game protector was in the vicinity, and therefore tried to get by with something. By making the cars more readily noticed, persons will be less tempted to violate the law simply because they feel they can get away with it.

Uniforms have not yet arrived, but in short order, game protectors will be wearing new uniforms. These will make these law enforcement personnel more recognizable and more alike in appearance. At present, a variety of uniforms are worn by game protectors. The new uniforms will make them more presentable at public meetings.

## Shawnee State Lake Opens



Crappie seemed to be the frosting on the cake during opening weekend of new Shawnee County State Lake. The lake, located 7 miles north and 2½ east of Silver Lake, opened for fishing the first time Saturday, December 1.

A large crowd was on hand early Saturday morning when the gates were opened. A count an hour and a half after opening showed 486 cars in the area and 61 boats on the water.

Crappie seemed to make up the bulk of the catch with the average size running about a half pound. Fishing was generally good on other species too with bullheads, long-ear sunfish and bluegill making up a good part of the catch.

Bass and channels were taken fairly regularly with the largest bass seen weighing in at better than 5 pounds. The largest channel seen was a little over 2 pounds.

Best luck seemed to be had by those fishing from boats, but good luck was also with most bank fishermen.

Sunday was rainy and the crowd was not so large. However, the fish continued to co-operate. At one time, 139 bank fishermen were counted.

According to game protectors who worked the area over the weekend, fishermen generally expressed pleasure in the area. However, as always with fisherman, some unlucky individuals wanted to know why there were no fish in the part of the lake they were fishing.

Shawnee County State Lake was completed in 1960. Its 135 acres of water were stocked that year and after the usual two years allowed for the fish to establish themselves, the lake was opened last Saturday.

Special regulations on the area include that creel limits on bass or channels or any combination of the two shall not exceed six. These regulations remain in effect until July 1, 1963.

February Pipedreams

#### (Continued from page 13)

that crappie strikes at this time of the year are very light and often hardly noticeable. Live minnows are good too but must be allowed to work at one depth after the school is found.

Fred likes to seine his minnows from a small stream located about a mile below the lake. He's found that the chubs form tight bunches and prefer the clear deeper holes of the stream. This makes them easy to locate and capture. These fish never seem to be sluggish and slow moving even though the stream and pool have ice cover.

Fred has noticed that the little rainbow colored darters that he takes during the spring and summer while seining for bait minnows at the tail or riffles hide themselves in the leaves and other debris along the edge of the same pools during the winter. Darters were a fish Fred didn't know existed until he took several this way one spring and checked their identity in a library book that his boy had brought home from school. Male darters are brightly colored during the early spring — this being their spawning season. As a matter of fact, they were so decorative that they had reminded Fred of some of the tropical fish he'd seen in a friend's aquarium.

Yes, Fred Biggs is inquisitive and observant when it comes to fish and fishing, and no doubt you as well as I can understand whythat is, if you too like to fish in February. By the way, did you notice that string of channel cat that he was dragging as he walked down the dam?

## Two Fish Records Set



Edwin C. Elrod, Wichita, with 3 pound, 10 ounce white bass.

Two more big fish records for Kansas were certified shortly after the last issue of Kansas FISH and GAME went to press. The new records are in the channel cat and white bass categories.

Edward S. Dailey, Gardner, took a 32 pound channel cat from Gardner City lake August 14 to pass the previous channel cat record established in 1958. The old record, a 26½ pounder, was taken by Frank Matyak, Topeka, from Shawnee County Lake. Matyak took his big channel in August also.

The new record was taken on trotline during the night with cut sunfish used for bait. The fish was 40½ inches in length.

Edwin C. Elrod, Wichita, landed a 3 pound 10 ounce white bass from Fall River Reservoir to surpass the record established only this summer. The previous record, a three pounder, was taken by C. L. Olson, Great Bend, from Cedar Bluff Reservoir earlier last summer.

Elrod took the new record at mid-day August 25 on an underwater lure. The fish measured 18 inches long.



Edward S. Dailey, Gardner, with 32 pound channel cat.

Existing records include: black crappie, 4 pounds, 10 ounces; white crappie, 3 pounds, 4 ounces; walleye, 10½ pounds; drum, 27 pounds; largemouth bass, 10 pounds, 1 ounce; bluegill, 2 pounds, 5 ounces; carp, 20½ pounds; bullhead, 4 pounds, 3½ ounces; green sunfish, 2 pounds, 2 ounces; flathead, 64½ pounds.

Other fish for which no records have been established include: warmouth bass, spotted bass, sturgeon, blue catfish, eel, spoonbill, gar.

If you catch a big fish, you can have it certified as a record if it qualifies. The rules for establishing a record catch are as follows. The fish must be taken by legal means in Kansas. Upon landing the fish should be measured for length and girth and weighed on scales legal for trade with at least two witnesses.

The fish should be photographed with the angler. Then write the Forestry, Fish and Game Commission, Pratt, for an entry blank. Fill out form completely and return to the Commission along with the photo. The fisherman will receive a letter of confirmation when his catch is certified as a Kansas record. A peculiar virtue of wildlife ethics is that the hunter usually has no gallery to applaud or dis' approve his conduct. Whatever his acts they are dictated by his own conscience rather than by a mob of onlookers. It is difficult to exaggerate the importance of this fact.

Aldo Leopold.

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