KANSAS FISH AND GAME

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Feed 'em and Save 'em

With winter upon us and spring still in the offing, this is the period of "bread lines" for wildlife in many areas of the country. The practice of feeding wildlife during critical periods of heavy snows and extreme cold has become well established in some sections and undoubtedly has saved a considerable portion of the breeding stock. These programs are particularly important when an icy crust prevents access to natural food supplies. Grain for winter feeding programs is expensive and continued emergencies strain the resources of sportsmen's organizations who are forced to operate on a limited budget. Many of these organizations are urging housekeepers to co-operate by saving scraps of bread and suet.

In addition to the uncertainty of supply, winter feeding programs are usually handicapped to some extent by the prevalence of predators. It does not take hungry predators long to discover that feeding stations provide banquets for them, too—in warm flesh and bone instead of grain. Wildlife management practices have made much progress in recent years, and it has become generally accepted that wildlife habitat improvement programs are of much greater, and far more lasting, value than emergency feeding activities. And usually they are less expensive. In sections where the natural food is buried under a heavy blanket of ice-crusted snow for periods of considerable length, winter feeding programs are extremely important for well-fed game can survive great hardships. But carefully planned planting programs provide natural food when it is needed most and can mean the very survival of game in more areas than some realize.

If the value of habitat improvement programs would be more fully recognized by the sportsmen's organizations of Kansas, less winter feeding activity would be needed. The Fish and Game Commission cannot do the job alone. Members of various clubs should have no difficulty in interesting farmers and landowners in their vicinity, and get permission to plant multiflora rose, sericea lespedeza, or other assorted planting stock along fences, field borders, odd corners, gullies, etc.

Part of the money gathered for a winter-feeding program could be used in the purchase of seed, plants and cuttings and the work done by club members working in teams or individually during the spring and summer. Such practices would not only be beneficial to wildlife but undoubtedly would create much good will with the farmer and landowner.

The Kansas Forestry, Fish and Game Commission, through its habitat improvement program, will provide interested individuals, or groups with planting stock.

Hunters From Twenty-nine States Enjoy Kansas Hunting

While Kansas does not have big game hunting to interest hunters from other states, it is interesting to note that during the year ending June 30, 1952, hunters from twenty-nine states bought nonresident licenses to enjoy Kansas upland game bird hunting.

A check of hunting license sales reveals that hunters were here from the following states: Oklahoma, Mississippi, Arkansas, Indiana, New York, Michigan, Kentucky, Texas, California, Iowa, Virginia, Wyoming, Pennsylvania, North Carolina, Florida, Missouri, Illinois, Colorado, Tennessee, Nebraska, Ohio, Georgia, Connecticut, New Mexico, Wisconsin, West Virginia, Minnesota, Louisiana, and Rhode Island.

These out-state hunters contributed $40,970.75 by purchasing 2,514 licenses.

Cover Descriptions

Pictured on this month's front cover is an oriental immigrant that has become one of the most numerous and most popular game birds in Kansas. This excellent shot of a Chinese ringneck cock pheasant taken in the wild is through the courtesy of Ebb Warren, Colorado Game and Fish Department. The picture on the back cover is from a water color by J. Luther Hanson of Greenleaf. It is entitled "Coming In" and pictures the "relaxed" flight of the ducks as they come in to alight on the water.

Woodson County State Lake

By Roy Schoonover, Fisheries Biologist

Woodson County State Lake, which has been undergoing several phases of improvement work during the past three and one-half years, is again open for fishing.

During this period of time, the lake was drained and the fish population removed; then the lake bed was planted with legumes for the purpose of increasing its fertility and to aid in reducing the turbidity of the water. When the lake had refilled sufficiently to support a new fish population, fingerlings of the common warm water game and pan species were introduced. These fish have made rapid growth since they were stocked, and a good percentage of them are now of catchable size.

This reclamation work has all been completed, and the Forestry, Fish and Game Commission has reopened the lake to public fishing.

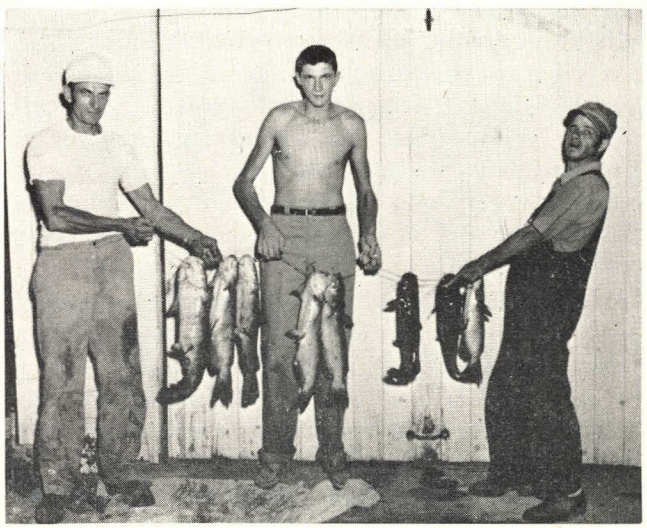
Woodson County State Lake, commonly known as Lake Fegan, is located approximately five miles east of Toronto, Kan. The lake has a water area of 180 acres and is included in the state park having a total acreage of 445 acres. This park area ranks high among our state parks in regard to scenic beauty. Much of the lower two-thirds of the lake is surrounded by wooded hills and slopes. These wooded areas are covered with blackjack, post, and scrub oak. Toward the upper end of the lake these timbered areas give way to low hills and gently sloping prairie where the vegetative cover is big bluestem and other tall grasses typical of the flint-hill country to the west. This region is underlaid with sandstone and sandy shales which have become exposed along the lake shore because of constant wave action which has eroded away the soil covering them.

The Woodson County State Park and lake areas were acquired and established in 1933. The lake was created through the construction of an earth-fill dam across the head of the valley, between the oak-covered ridges paralleling it. The clearing of the site and construction of the dam were projects completed by the Civilian Conservation Corps.

As soon as the newly completed lake had accumulated sufficient water, largemouth bass, channel catfish, black and white crappies, drum, bluegills, flathead catfish, bullheads, ring perch, and warmouth bass were stocked. The lake was first opened to fishing on May 30, 1938, at which time the water level still lacked about seven feet of being up to spillway level. According to A. M. Sprigg, park superintendent, the lake became full to spillway level for the first time about July 15, 1938.

For several years following this grand opening, fishing was excellent and the lake was fished heavily. The water was very clear. Anglers who fished the lake during that period report that aquatic vegetation (Ceratophyllum sp., Chara and other species) flourished in all areas where the water did not exceed five or six feet in depth.

This lake, as would be expected, followed the same pattern and went through the same cycle as other lakes of its type. When first stocked, the fish population was made up of fish of various species of nearly uniform size, in small enough numbers that the carrying capacity of the lake was placed under no strain in supplying them with an abundance of food and living space. In addition, the ratio of the most desirable fish (bass, channel catfish), to the pan fishes (crappies, bluegills, etc.), was high. As a result, all fish grew rapidly and angling success was greatly above normal. Under these conditions, fishing was at its best for several years following the opening of the lake, and then began a gradual decline as the lake became older. A number of factors can be cited as having contributed to cause this downward trend in anglers' catches. Probably the first to show an influence was "heavy fishing pressure," which in many instances was highly selective for a few desirable species, namely, channel catfish and bass. Beginning with "opening day," Lake Fegan provided fishing privileges for hundreds of anglers each week through several fishing seasons. To illustrate, on the first day which fishing was permitted, it was estimated that 11,000 people visited the lake. If only two-thirds of these people fished, it would mean that there were forty anglers for each surface acre of water. Such intensive angling in these smaller lakes, especially where there is an inclination



A nice string of channel catfish. They were caught by E. R. Kind and Fred Mau, of Herington, while fishing near Enterprise.

on the part of fishermen to throw all small pan fish back to "grow bigger," will make heavy inroads on the supply of larger desirable fish and at the same time allow the build-up of a huge number of sunfish, crappies, and other species, of a size too small to be worth keeping. In Woodson County State Lake, crappies, drum, longear sunfish, and gizzard shad became so numerous after a few favorable spawning years, that overcrowding and a shortage of food were responsible for such slow growth that three- and four-year old fish were considered hardly large enough to take home.

Even without this selective fishing which removed bass, channel, and larger fish of other species, there is a natural tendency for the pan fish (crappies, sunfish, etc.), to multiply much more rapidly than the more highly desired game fish. The reason being, that pan fish generally spawn when younger, at a smaller size, and produce eggs in much greater numbers than do bass and channel catfish.

In addition to these two factors, heavy selective fishing and the tendency for crappies, sunfishes, drum, etc., to multiply rapidly, a third condition arose to contribute to the causes for the gradual decline in fishing success in Lake Fegan. This was the gradual increase in turbidity of the water, which along with the siltation resulting from it, lowered the reproductive success of desirable game fish, reduced the quantity of food available for the fish population, and at the same time favored an increase in numbers of shad and slow-growing crappies and drum.

The lake became muddy because of the erosion which was constantly taking place in the watershed above the lake, and from the "cutting away" of the steep clay banks along certain areas of the shore line caused by wave action during periods of high wind. For several years after the lake was opened, the water remained relatively clear, and became slightly turbid only after heavy rainfall. As the age of the lake increased, it took a longer time for the water to clear after rains had fallen. Reports indicate that the lake continued to clear until 1948. During heavy rainfall in the spring of 1948, the lake became turbid and failed to completely clear thereafter.

Fishing success had been on the decline in the lake, and as a means of obtaining information regarding this problem, the Forestry, Fish and Game Commission conducted studies during the summer and fall of 1948. These studies, under the direction of Dr. Ted F. Andrews, Biology Department, Emporia State Teachers College, were designed to secure information concerning water temperatures, water chemistry, aquatic plant and animal life available as fish food, and representative sampling of the fish population for use in determining the abundance of the various species of fish, age and growth rate.

Results of these studies indicated a general decline in fertility and food production, coupled with an overcrowded condition existing among crappies, drum, longear sunfish, and shad. Carp, which had been first observed in the lake in 1947, were increasing in numbers and could be expected to reproduce more successfully as the lake remained turbid over a longer period of time.

Because seining operations alone are generally inadequate as a means of reducing a fish population enough to bring about an increase in growth rate and to restore satisfactory fishing, the decision of the Commission was to drain Woodson County State Lake. Besides making it possible to remove all of the thousands of undersized fish, complete drainage would leave the lake bed exposed so that a cover of vegetation could be established to supply organic material which would increase the production of fish food in the lake after it had refilled.

This program of lake improvement got under way in October, 1948, when the drain valve was opened to begin releasing water. At that time, the lake was approximately three feet below spillway level; a condition which shortened the actual drainage time. At first, the lake fell very slowly, but as the surface acreage decreased, the drop in the water level became more rapid.

The lake continued to drain throughout the winter of 1948, and by April, 1949, was lowered to a level that made seining operations feasible. Removing the fish was a laborious task because of the deep layer of mud which had been deposited through siltation. Fish of all desirable species removed from the lake were returned to other lakes and streams in the area. After the greater proportion of the fish population had been rescued, the lake was lowered to the lowest possible

"One big beaver"—This one weighed fifty-five pounds and was caught by Bob Kohls of Herington, during the 1951-'52 trapping season. Adult beaver average about forty-five pounds each.

level. Then, in order to insure that all undesirable fish (carp and shad) were eliminated, the few remaining fish in the isolated pockets of water were killed with chemicals.

Representative samples of fish removed by seine were counted and weighed in an effort to determine the approximate total poundage of fish in the lake. A rough estimate of the total weight of fish in the lake and a breakdown by species is included.

Species	Number of fish	Total weight in pounds	Pounds/acre by species
Crappies	132,000	13,200	73.3
Drum	105,000	17,600	97.7
Largemouth bass	1,070	1,770	9.8
Channel catfish	1,869	3,383	18.8
Flathead catfish	167	424	2.3
Bluegills	26,400	880	4.8
Longear sunfish	48,830	1,678	9.3
Gizzard shad	30,420	3,846	21.3
Carp	764	2,292	12.7
Green sunfish	2,750	205	1.1
Warmouth bass	825	103	.5
Black bullheads	380	142	.7
Redhorse (Moxostoma sp.),	24	.....	.....
Ring perch (yellow perch),	1	.....	.....
Spotted sucker	1	.....	.....
Totals	350,501	45,523	252.3

This table indicates that approximately sixty-seven percent of the fish population, by weight, was made up of crappies and drum. The average size of both species was below what is generally considered satisfactory keeping size. In regard to game fish, largemouth bass made up 3.8 percent of the population by weight, while channel catfish were about 7.4 percent of the total.

The second phase of lake improvement work also began during the spring of 1949 when the exposed lake bed was planted with sweet clover and Korean lespedeza. Excellent stands of both legumes became established during the summer. A luxurious growth of "weeds" and other natural vegetation also covered the basin, and provided additional organic matter to be flooded when the lake refilled. The summer and fall of 1949 were periods during which no heavy precipitation occurred and much of the lake bed remained dry and became covered with a dense stand of sweet clover, lespedeza, and weeds again during the spring of 1950.

By July 1, the lake had filled sufficiently to permit restocking with fish. Fish were delivered during July, August and October of 1950, and included largemouth bass, channel catfish, bluegills, rock bass, crappies, and bullheads.

As the lake gradually filled, the water received added enrichment from the vegetation being submerged. The young fish have grown rapidly since this introduction and population checks indicate that a good percentage are considerably above legal size.

The lake has remained clear since refilling, and aquatic vegetation has reappeared. Most fish in the lake had a successful spawning season in 1952, and a new year-class of desirable species is growing up to replace the originally stocked fish which will be removed as the 1953 fishing season gets under way.

The Crow—America's Unrecognized Game Bird?

More extensive crow shooting as a sport could well replace the roost bombing which is practiced in some states, in the opinion of Dr. E. E. Good, a member of the Ohio Co-operative Wildlife Research Unit who recently completed a study of the economic status and life history of this controversial bird. The crow is favorably distributed in relation to hunting pressure, and prejudice is the major factor that prevents its more widespread use as a game bird. The crow is alert and not only offers a challenge to the hunter's wing-shooting ability, but its flesh is rewardingly palatable.

The crow, says Doctor Good, must be judged beneficial or harmful to man's interests on a local basis, for its food habits vary widely with the locality, the season, and the availability of the food. Crow predations on waterfowl may be especially serious at times in some areas, but its influence on upland game birds is much less. A bulk of their insect diet was found to consist of crop-destroying beetles, caterpillars and grasshoppers. Crow control, according to Doctor Good, must always remain a local endeavor since the birds return year after year to the same locality. Because they are migratory to a degree, little effect upon summer populations can be expected from roost bombings carried out in winter. Hunting during the nesting season, when crow predation and crop damage is most serious, is the most effective means of ending local complaints of damage and can provide fine off-season sport to hunters.

Sportsman's Creed

I will buy my hunting and fishing licenses.
I will abide by the fish and game laws of the state.
I will protect wild life and thus by my example induce other to do the same.
I will respect the farmer's property and will not hunt or fish thereon without permission.
I will be a 100 percent sportsman in a community of sportsmen.
I will do my best to kill a pest.

—Illinois Conservationist.

Why Waste Pheasants?

By HAROLD M. SWOPE, Game Technician,
Colorado Game and Fish Commission

(EDITOR'S NOTE—The following is an article that appeared in a recent issue of the Colorado Conservation magazine concerning pheasant management by adjusting length of seasons to insure an adequate harvest of the cock birds. Since there was some discussion of the longer season that Kansas had this year, this article will show that other states are also extending their seasons for the same reason that Kansas extended its own pheasant season. Namely, to adequately harvest the cock birds so that the ratio of cocks to hens would not be needlessly high; to reduce sportsmen transgressions of hunting courtesies, since there would be a more comfortable period of hunting; to allow sportsmen more choice of hunting dates. Since conditions in Colorado are so similar to those in Kansas, we feel this story should be of great interest to Kansas sportsmen.)

Aldo Leopold, a well-known champion of our wildlife resources, defines game management as the art of making land produce sustained annual crops of wild game for recreational use. The art of making land produce wildlife crops may be compared to the science of making land produce agricultural crops. The farmer seldom leaves a bumper crop to perish in the field. Such practices are frowned upon as inexcusable waste, yet we annually leave an unharvested pheasant crop in the field. Who then reaps the Colorado pheasant harvest? That's a question the Game and Fish Department has worked hard to answer.

Game bird surveys in Colorado, directed at answering this question, have concentrated primarily on four studies. They are: (1) sex ratio; (2) population trend; (3) brood production, and (4) hunter success. Here are the facts:

SEX RATIO: The pheasant is a polygamous species. Numerous studies have made it clear that a sex ratio of five hens to one cock is highly satisfactory. Further study has shown that one cock can, and will, successfully breed all hens within an area accessible to him during the breeding season. To our knowledge, a cock pheasant population has never been reduced to such a point by hunting pressure that hens were left unbred the following spring.

Kansans enjoyed a ten-day pheasant season last fall and the longer season did not jeopardize future hunting.
—Photo courtesy of Ebb Warren, Colorado Game and Fish Commission.

What is the significance of this sex ratio? Why is the sex ratio important?

Every stockman knows that a given unit of land has a potentiality to support a limited number of animals. This potentiality depends upon a number of things such as the condition of the range, type of stock, season of the year, and is called the carrying capacity of the land. When the pasture has been stocked to a point above which the land is not capable of supporting the animals, the saturation point has been reached.

Pheasant range also has a carrying capacity and a saturation point. These fluctuate considerably depending upon the available cover, food, water and the severity of the elements, but the fact remains that pheasant range does have a saturation point.

The rancher has tools at his disposal to prevent oversaturation. He may supplement feed, remove the stock to other pastures, or harvest the surplus. But aside from the development of cover plantings, which is a slow, costly process, we have only one management tool by which to regulate the "stock" on pheasant range. That is the hunting season. If we fail to harvest our crop during the hunting season, nature takes it upon herself to see that the saturation point is not exceeded.

What has this to do with the sex ratio?

When nature steps into the harvest she is no respecter of sex. If we are to bring more hens through the critical winter period we must harvest more of our cock surplus. It is obvious that increasing the number of hens we bring through the winter will increase the spring breeding potential, thereby producing more cocks for the fall harvest.

If there is any doubt that we are not harvesting our cock pheasant population, a look at the post-season sex ratio counts in northeastern Colorado during the past two years should dispel them.

Year	No. of pheasants	No. of cocks per 100 hens
1950	4,478	70
1951	3,375	96

With present land use drastically curtailing the carrying capacity of the land, we are retaining cocks at the expense of our hens. Unfortunately, cocks do not lay eggs.

Population Trend: Pheasant population trends have shown a steady, gradual increase since the blizzard of 1949, but the increase has been slow compared to the potentialities of the pheasant. The increase has shown signs of tapering off during the past year, an indication that the saturation point is being approached under present land use. Clean, intensive farming foreshadows a decrease in future pheasant populations. The sportsman's concern for the birds killed during the hunting season has been misplaced. He does, however, have a very real and essential reason to be concerned with the relentless decrease in pheasant habitat.

Brood Production: No single phase of the pheasant yearly cycle is more important to the hunting season than brood production. A meager pheasant population may be tripled or quadrupled into an impressive number in a few short months. It is the number of young per brood that largely determines the harvest available to the hunter. For this reason close checks are kept on brood sizes and unsuccessful hens. A hen shot by the hunter cannot bring off a brood for the next harvest.

Considerable time during the past few years has been spent investigating hail damage to pheasant reproduction. It is true that hail is capable of inflicting severe damage on young pheasants. Some damage, however, has been vastly overrated. The comment is often heard that "nothing could have lived through that hail." A number of these "total losses" have been examined, using a dog to locate dead birds. In nearly all cases, numerous "dickey-birds" have been found, but comparatively few pheasants. When pheasant losses occurred they were consistently confined to small concentrated areas where the storm reached its full intensity. Subsequent brood counts in a hail damaged area are the crucial measure by which damage to pheasants may be evaluated.

Hunter Success: The average hunter evaluates the entire pheasant season by his own success. Too often in the past we have tried to justify the hunting season by hunter success. Thus, if success was poor, it seemed to verify the wisdom of a short season. No consideration was given to the hunting qualities of the pheasant and to changing land use. Actually, poor hunting success today emphasizes the need for more hunting pressure.

That statement requires explanation.

Every pheasant hunter will agree that the quarry tends to concentrate in patches of cover along borrow pits, fence rows and corners, draws, and weed patches. It is this very cover that holds the birds and makes it possible for the hunter to get within gun range. The high price of farm lands has changed the entire picture. Land long abandoned to weeds has ben profitably cultivated. Fence rows have been pulled out to provide more planting area. Crops are often planted to the road edges eliminating borrow pits. Burning, spraying, mowing and other weed control measures have found widespread use. The blizzard of 1949 reduced the pheasant population in eastern Colorado and intensive farming has cut populations.

Coincident with these developments the indomitable pheasant was forced into the vast tableland acreages of wheat and corn. He has adapted himself to this habitat. The knee-high wheat stubble provides cover with a built-in food supply of combine-shattered grain.

With the exception of a few scattered timber claims and draws, the hunter has no small patches of cover to hold his birds for him, but must pursue them over 640-acre stubble fields or into the sagebrush pastures. It is for this reason that a high hunter success ratio cannot be expected. It is partially for this reason that a long hunting season cannot injure our pheasant population.

Following are hunter success figures collected in northeastern Colorado during the past five open seasons on pheasants.

Year	Number of hunters checked	Length of season, days	Birds per hunter attempt
1947.....	3,008	14	1.09
1948.....	4,289	14	1.26
1949.....	1,211	3	.94
1950.....	353	3	1.12
1951.....	538	5	1.10

The usual reaction of the hunter to these success figures is to insist that the kill was much higher in 1947 and 1948 compared to the post-blizzard years. These figures were collected and recorded in the field by department personnel and are not subject to the vagaries of memory. Perhaps it is true that opening and second-day kills today do not come up to pre-blizzard levels; however, the tough hunting during the ensuing days of a longer season tends to equalize the average kill regardless of hunting pressure or bird numbers. Every pheasant hunter knows that the great majority of the birds are bagged during the first few days of the season. Long seasons, therefore, give you, the hunter, the opportunity to pick your week ends and choose your weather. Long seasons on cocks only do not jeopardize a pheasant population. In fact, the few additional birds that are taken may give the birds an assist through the winter months.

It is past the time when Colorado sportsmen should realize that by asking for restricted pheasant seasons they are only depriving themselves of hunting opportunities. They may actually be doing the birds a disservice—good, but misguided, intentions.

Mother nature is one of our greatest assets. She deserves the best in every respect, but in the future let's help her reap the pheasant harvest.

Look to the future of hunting, as well as the present. Be a sportsman, and ask the farmer first.

"How to Shoot" Cartoon Book

Young or old, if you are both a cartoon fan and a sportsman, a cartoon booklet now available should prove interesting reading.

Containing twelve pages of colored cartoons, illustrating many interesting phases of shooting, a little booklet entitled "How to Shoot" is now offered free by the Advertising Division of Remington Arms Company, Inc., Bridgeport, Conn.

Directed particularly to boys and girls, "How to Shoot" pictures safety methods, shooting positions, how to align sights, how to make targets and describes various games and contests which can be easily organized and conducted among small or large groups. Full instructions are given for the building of safe indoor and outdoor rifle ranges.

Copies can be obtained by writing Advertising Division, Remington Arms Company, Inc., Bridgeport, Conn.

Quail Must Compete With Ants for Food

In the course of experimental feeding of quail in Florida last year, wildlife biologists of the Fish and Wildlife Service discovered that ants were competing with the quail for nutritional seeds. Closer studies revealed that the average colony of ants consumed enough seeds daily to feed eight to ten quail.

Surprisingly enough, the small ruddy duck lays the largest eggs of all wild ducks.

These Ellis hunters scored "double" during the pheasant season. They not only got their limit of pheasants one day but bagged five big Canadian geese, while hunting in the vicinity of Cedar Bluff reservoir in Trego County. The hunters are Henry Switzer, Edgar Overstreet and Fritz Fuller.

Who Is a Sportsman?

By Ed Johnson

The term, "sportsman," often is stretched to cover some peculiar characters. This forthright anaylsis rules out a lot of counterfeits.

The editors of this magazine asked me to write my definitions of a sportsman.

Not all educated persons are intelligent nor are all hunters and fishermen sportsmen. However, I believe the comparative percentages are higher for educated persons being intelligent than hunters and fishermen being sportsmen.

While not a dictionary definition, I believe a sportsman is a man who obeys, without compromising, the laws of nature, the game and fish laws, and decencies of human behavior. I often read where an outdoorsman is described as a "real," "true," or "good" sportsman. Frankly, I believe a man is either a sportsman or he is not, and there are no comparative degrees of a sportsman.

Certainly, various sportsmen distinguish themselves for notable accomplishments or by setting examples, but sincerity is the common bond. Too many people these days have an elastic definition of a sportsman that is largely tailored for the person or situation.

It is a curious fact that often the worst vandal is a skilled hunter or an exceptional angler. His enthusiasm and greed overshadows the precepts of character or fair play, which we like to call sportsmanship.

I know of a hunter in a mountain county of West Virginia who is a skilled woodsman and a remarkable shot. It is common knowledge too that he kills wild turkeys, grouse and squirrels out of season, and is reported to be a chronic deer-spotlighter. Yet I once attended a sportsmen's meeting in his locality and he was affectionately introduced as a "real" sportsman.

A few springs ago I was trout fishing with an official of a sportsmen's club. He was fishing the pool below when I saw that he had hooked a nice fish and was carefully playing it on his surging flyrod. I hurried down where I could watch my acquaintance land the fish. Finally he netted a beautiful smallmouth bass, which was illegal to keep, and he calmly dropped it in his creel. Although I was not trying to be "noble," I asked, "you're not going to keep that bass?" I was so stubborn in my argument that he finally released the fish. This man was popularly regarded as an "outstanding" sportsman and was elected an officer in his club.

In the last two deer seasons I have noticed in the Conservation Commission's list of prosecutions that two of the convicted violators were either past or current presidents of sportsmen's clubs. Of course, these examples are exceptions but it serves to point out how loosely the definition of sportsman is used. As you are more likely to find Christians in a church, the percentages are good for finding sportsmen in a sportsman's club.

Simple human nature give the definition of a sportsman its most serious challenge. How many anglers would release a five-pound bass when caught out of season when no one was around? How many hunters would lower their guns if they flushed an illegal ringneck far back in the country or would hold their fire if a flock of geese flew low, even though it were unlawful?

There are men—doctors, lawyers, churchmen, farmers and others—who are recognized as outstanding citizens yet who will not hesitate to hunt squirrels in September when they are cutting on hickory and are easy to kill. Yet they will justify or excuse themselves by saying "the law came in too late" or "other people are hunting and I might as well get mine while the getting's good." But these people would be highly insulted if you accused them of not being sportsmen.

Sportsmen are of many personalities and are being present in every segment of our society. They are crusaders, zealots, dignified, critics, or meek, but *sportsmen are characteristically honest with their sport and its government.*

A man may violently disagree with game and fish laws for their administration, but a sportsman obeys them. A sportsman is, above all, courteous and respectful of the rights of others along the stream or in the field.

Of all the best attributes of a sportsman, none overshadows tolerance for the rights and opinions of others. Honest disagreements founded the nation and it is the lubricant of the conservation movement.

A sportsman is a man who has a vision of tomorrow today, with a genuine sense of fairness and honesty to others and himself.—*Wisconsin Conservation Bulletin.*

They Are Your Laws

Conservation laws are not designed by the state to deprive people of their right to hunt and fish. These regulations are merely rules necessary to the management of our game and fish supply for the benefit of the sportsman.

Every violation of the game laws and regulations is an infringement upon personal rights of the violator and others.

Co-operate with your state and federal conservation departments and help to spread the message of sportsmanship to all who engage in the sports.—*Mississippi Conservationist.*

St. Marys Sportsmen Form Fish and Game Association

Sportsmen in and around St. Marys got together in October and organized the St. Marys Sportsman's Club. Ralph Haug was elected president; Dr. D. E. Murphy, vice-president, and Ralph Struble, secretary-treasurer.

Some interesting features of the club's bylaws were: Any person who holds a current hunting, fishing or trapping license issued by the state of Kansas may apply for membership by signing an application for such purpose and receiving the signed recommendation of three members in good standing; violation of any game law, abuse or carelessness of farm property or any other violation of the rules of good sportsmanship may cause a member's suspension from the club. Yearly dues were set at $2. About fifty sportsmen joined the club at the initial meeting.

Lake Wabaunsee Sport Group Incorporated

A new sportsmen's association known as the Lake Wabaunsee Sportsmen's Association, Inc., was incorporated in October by the office of the secretary of state at Topeka. The association was organized for the purpose of conserving fish and wildlife, with special emphasis on improving fishing and other recreational facilities at Lake Wabaunsee near Eskridge.

Incorporators included D. W. Fuller, J. H. Armstrong, William C. Link, all of Topeka; C. J. Wentz, Wamego; W. F. Farrell, Manhattan; M. W. Archer, Emporia, and R. H. Burnett, Salina. Former Governor Walter Huxman is president of the organization.

Most of the early spring song of birds is by way of announcing their claim on certain nesting areas.

They got their limit.—These six Moundridge hunters enjoyed good hunting during the one-day prairie chicken season. Hunting near Cassoday, in Butler county, each had his limit of two chickens before noon. In the group are: back row, Richard Wedel, Lee Krehbiel, Bill Kaufman, Ross Mathews. Front row, Junior Flickner and Darrel Kaufman.—*Photo courtesy Moundridge Journal.*

Nature's Balance Is A Complex Business

(Editor's note: This article was taken from Farmers' Bulletin No. 2035, issued by the Soil Conservation Service, U. S. Department of Agriculture.)

By WALLACE L. ANDERSON
Drawings by Felix Summers

Every farm is a complex living community based on the soil. Working with the soil, and dependent on it, are plants and animals that convert nutrients, moisture, and sunshine into food and fibre for man. It is a successful community only if all the living things in it are working for the benefit of the whole community.

If there are not enough grasses in the community, the soil loses its ability to take up and hold moisture. It may become eroded and lose its power to produce corn for hogs. If there are not enough earthworms, the same thing can happen. If there are not enough squirrels, there will be fewer acorns planted and in time there will be fewer oaks. If there are not enough cottontail rabbits —one of whose functions is to feed foxes—foxes may look to the farmer's poultry for food.

On the other hand, if there are too few foxes to eat meadow mice, there may be so many meadow mice that there will be less alfalfa for dairy cows. If there are not enough songbirds, there may be too many destructive insects, resulting in a shortage of grain for beef cattle.

But there must be useful insects to pollinate alfalfa, red clover, and sweet clover, else these legumes will not produce seed.

Thus we see that a successful farm community must have an abundance of useful wildlife and a low number of harmful kinds. It must have what is called a favorable biologic balance.

A system of farming that supports a family well without depleting basic resources has a favorable biologic balance. Conversely, farming that depletes the soil and results in plagues of insects, weeds, and crop diseases has an unfavorable biologic balance.

You may be surprised at the wildlife population living on a well-managed farm. Studies made on Ohio farms having soil conservation plans in effect tell the story. On a 100-acre farm with about one-third of the fence rows in woody cover, fifteen acres in protected woods, twenty-five acres in good pasture, and sixty acres in a four-year rotation with two years of meadow, the useful wildlife population was estimated to be:

Several million beneficial insects, mostly destroyers of other insects and some that help to pollinate fruits and legumes. More than 400 beneficial birds, of forty different kinds. More than 1,000 beneficial small mammals, many of which are effective insect destroyers.

Also present on well-managed farms in various parts of the country are the adapted game birds and animals —quail, pheasants, rabbits, squirrels, and on some farms, ducks and deer—to offer sport and food for you and your friends.

Fur-bearing animals like mink, muskrats, raccoons, skunks and opossums provide recreation and cash income for you and your family. These valuable animals occur in greatest numbers on farms that use the land wisely and provide places for them to live.

Colorful, energetic songbirds add much to the enjoyment of rural life through their music and their movements. Who doesn't enjoy the songs of the meadowlark and mockingbird—or the sight of robins busily feeding their young?

Bumblebees, leaf-cutting bees, syrphid flies, and more wild insects, formerly much more abundant than they are now, once helped farmers to produce legume seed yields four times as high as those obtained today. Their numbers can be increased through good management.

Largemouth bass, bluegills, channel catfish, crappie supply fun and food for farm families fortunate enough to have a farm pond. Many farm ponds produce from 150 to 250 pounds of fresh fish per acre each year.

Wildlife Requirements

While no two kinds of wildlife have exactly the same requirements for living, all kinds need food, cover and water.

To be really useful, food must be plentiful and close to cover that will furnish protection from enemies and weather. And it must be available in the seasons when it is usually scarce.

On most farm land in the United States there is enough food from late spring to fall. Insects, wild fruits, weed seeds, waste grain, nuts, or green plants are available. The critical season is winter. There are no insects. Many wild fruits are gone. Snow and ice may cover waste grain. Early spring is often just as critical as winter.

In the south, planting perennial food-producing plants close to good cover is the best way to be sure you have enough wildlife food throughout the year. In the north, you can extend cover plantings close to natural food sources or leave unharvested a part of the grain crop close to good cover.

Most kinds of wildlife need several kinds of cover. Cover must conceal nests and young, provide shade from the hot sun and shelter from chilling rains. It

must allow escape from enemies and it must protect against snow, sleet, cold, and wind in winter.

Good management of cover can be boiled down to three essentials—unburned, ungrazed, unmowed grass for nesting; dense or thorny shrubs for protection from predators and for nesting; and, in the north, clumps of evergreens for winter protection. All three kinds of cover should be close together and close to available food supplies.

Wildlife obtains water from three sources: Surface water, food that contains lots of water, and dew. In the east, upland wildlife can survive on succulent foods and dew. Surface water is a necessity for all wildlife in the arid west, as it is everywhere for water-loving species like ducks, muskrats, and mink.

In the accompanying diagram, the factors that hold down wildlife populations are shown as hurdles over which the birds hatched in one spring must fly if they are to survive to the next spring.

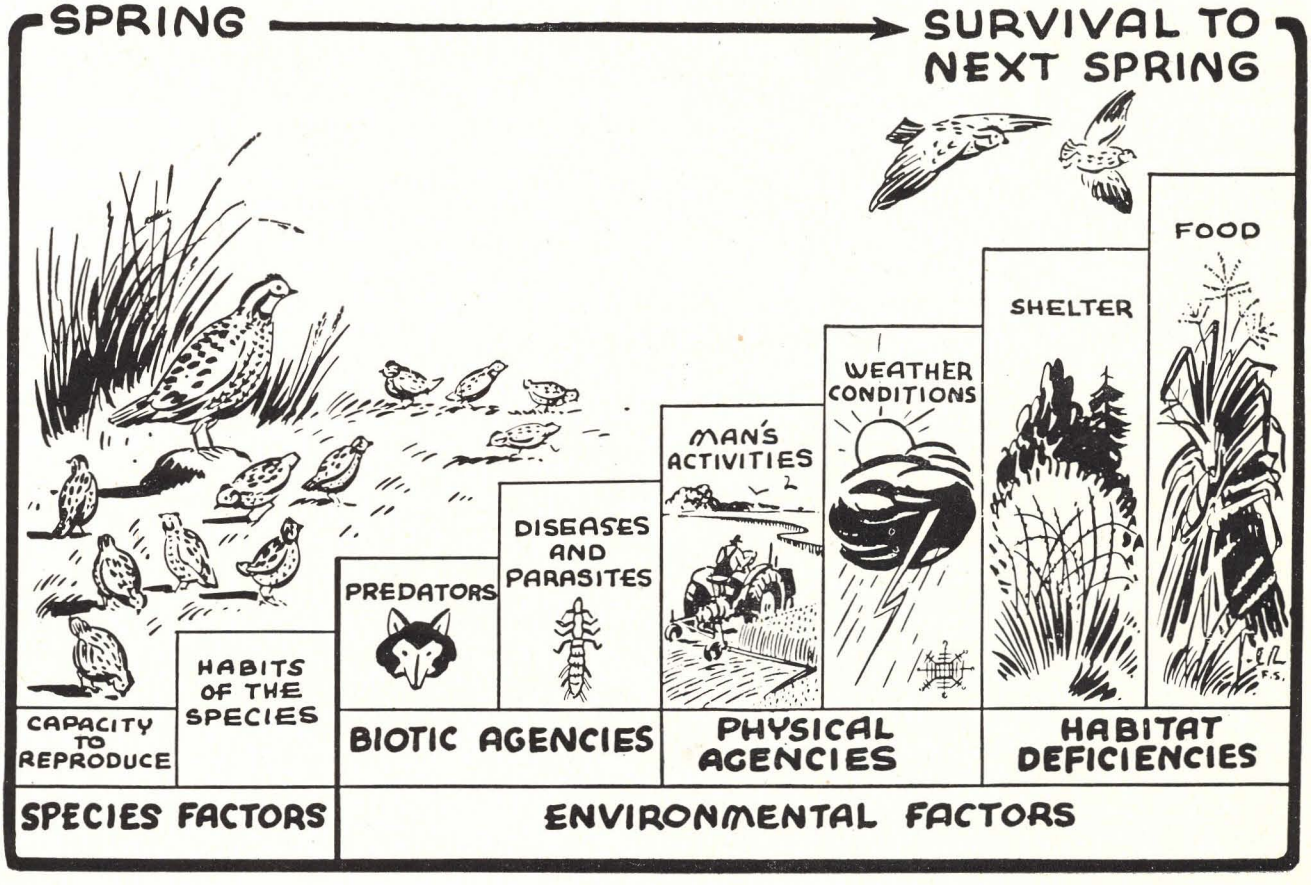
Only a few of these limiting factors can be controlled by man. The species factors are unchangeable, as is the weather. The effects of predators may be modified somewhat, but with uncertain results. Little can be done about diseases and parasites. Some of man's activities, such as time of plowing, could be changed; others, such as time of mowing meadows, cannot be altered very much. Success in managing land to produce useful wildlife lies in improving the amount, quality, and distribution of food, cover and water.

Managing Land to Meet Wildlife Requirements

Land primarily suited for use as cropland, pasture, and woodland produces wildlife as a secondary crop. In addition, there is land on every farm that can and should be used to produce useful wildlife as a primary crop—it is wildlife land. Small areas of wildlife land well distributed over the farm, when coupled with proper use and management of other land, make the whole farm an efficient unit for the production of crops, including wildlife.

Cropland management practices helpful to useful wildlife include:

1. Crop rotations that included grass-legume meadow.
2. Liming and fertilizing.
3. Strip cropping.
4. Use of cover crops.
5. Stubble-mulch tillage.
6. Delaying mowing of watercourses and headlands until after grain harvest.
7. Spring plowing.



8. Leaving one-eighth to one-quarter acre of grain standing next to good cover.
9. Spreading manure near cover in winter.

Practices harmful to wildlife include burning, clean fall plowing, early mowing of watercourses and headlands, and indiscriminate use of insecticides and weed killers.

PASTURE LAND management practices helpful to useful wildlife:

1. Grazing within the carrying capacity of the pasture.
2. Liming and fertilizing.
3. Reseeding and renovating.

Practices harmful to wildlife include burning, grazing too heavily, and complete clean mowing early in the season.

WOODLAND management practices useful to wildlife include:

1. Protection from fire and grazing.
2. Selective cutting in small woodlands.
3. Leaving two den trees per acre when cutting timber.
4. Piling brush near the edge of the woods.
5. Leaving fallen hollow logs.
6. Clear-cutting of small areas in large woodlands.

Harmful practices are burning, grazing, clear-cutting of large areas, and cutting out all den trees.

WILDLIFE LAND consists of areas usually small, that cannot be used economically to produce other crops but that are well adapted to the production of useful wildlife. Eight kinds of wildlife land are especially important. They are: Drainage-ditch banks, fence rows, hedges, marshes, "odd areas," ponds and pond areas, shelter belts and windbreaks, stream banks, and field borders.

Reports Good Fishing At Cedar Bluff Reservoir

Edgar Overstreet, ardent sportsman at Ellis, reported in November that fishing was getting good at Cedar Bluff reservoir in Trego county and should be A-1 by spring.

Mr. Overstreet keeps pretty accurate tab on all the good fishing and hunting in that area. He reported that pheasants were still plentiful out that way despite the ten-day season. In fact, he says, "Was out the other night to Cedar Bluff Dam and saw more pheasants than before season opened."

Fishermen would do well to keep Cedar Bluff reservoir in mind when planning some fishing next spring and summer.

Midwest Brittany Club Field Trial at Newton

The Midwest Regional Brittany Club held their annual fall field trial this year at Newton, Kan., on November 1, 2 and 3. A two-day meet was originally planned but a large number of entries necessitated running the meet an additional day. All told, there were ninety-one entries from several different states for the meet.

Drouth conditions made it difficult for good bird work and the large number of rabbits in the area added to the chagrin of the dog handlers. However, the Newton field trial was the first at which more than one professional handler has run dogs. Jess Hayslip, Lee Holman, Tom Cox and Bill Kull were there with their strings of Brittany spaniels, which added to the good competition.

Judging was ably handled by Bucky Harris and C. E. Allen, of El Dorado, Kan. Live quail for the event were furnished by the Kansas Forestry, Fish and Game Commission.

Top dog in the open all-age stake was Meadowink Buzz, owned by Wm. Yant of Murraysville, Pa., and handled by Tom Cox. The winner of the Derby Stake was Tat's Hellou De Britt, owned and handled by S. D. Campbell of Fort Riley, Kan.

The Brittany spaniel is one of the oldest bird dog breeds in existence. They have bird hunting blood from both the pointer and setter in their veins. Originating in Spain, for the past 150 years they have been bred up to their present high field and bench qualities in Brittany, a province of France.

In the early 1930's a pair of Brittanies were brought to the United States and displayed at a hotel in New

Winners of first three places in Open Puppy Stake at Midwest Regional Brittany Field Trials. Left to right, they are: Bret Le Mirabeau, owned by Capt. R. B. Spangler of Fort Riley, handled by S. D. Campbell; second, Victoria De Evanston, owned by Diane Oltman, North Kansas City, Mo., and handled by Louis Oltman; third, Cap, owned by Harold Goerz, Newton, and handled by Clarence Springfield.

York City. At first, pointer and setter prejudiced sportsmen weren't having any of the pointing spaniel. Within ten years though the American Brittany Club was organized as interest grew, especially among hunters who had little room for keeping a dog and those wanting a good worker that would stay fairly close to the gun. The orange-and-white colored spaniels filled the bill. At present the Brittany holds 56th place in percentage of registration by the American Kennel Club.

Here are the winners in the four stakes at the Newton trial:

AMATEUR HANDLERS' STAKE: First, Jeffrey of Agard, owned and handled by LeRoy Magnuson of Salina; second, Solomon Valley Nikki, owned and handled by Ray Olson, Glasco; third, Rusty's Freckles Flirt, owned and handled by E. N. Kelly of Kansas City; fourth, Duchess De Cornouaille, owned by Mrs. Gordon Offenbacker of Buffalo, Kan., handled by Roy Mannen.

PUPPY STAKE: First, Bret Le Mirabeau, owned by Capt. R. B. Spangler of Fort Riley, handled by S. D. Campbell; second, Victoria De Evanston, owned by Diane Oltman of North Kansas City, Mo., handled by Louis Oltman; third, Cap, owned by Harold Goerz of Newton, handled by Clarence Springfield; fourth, Patsy, owned and handled by H. Dean Paustian.

DERBY STAKE: First, Tat's Hellou De Britt, owned and handled by S. D. Campbell of Fort Riley; second, Miste De Klemanor, owned by Walter Kleeman of Springfield, Ohio, handled by Tom Cox; third, Tennessee Zelda, owned by S. Allen Truex, Jackson, Tenn., handled by Bill Kull; fourth, Holman's Yankee Traveler, owned by D. F. Olund of Skokie, Ill., handler, Lee Holman.

OPEN ALL-AGE STAKE: First, Meadowink Buzz, owned by Wm. Yant of Murraysville, Pa., handled by Tom Cox; second, Tudor's Yankee Boy, owned by Mike Burnham of Bogue, handled by Bill Kull; third, Jeffrey Mac Eochaidh, owned and handled by Roscoe Kimerling of Humboldt; fourth, Tat's Hellou De Britt, owned and handled by S. D. Campbell of Fort Riley.

Beautiful trophies with Brittany figures on top were awarded the first two places in each stake, and rosette ribbons to the first four places.

Good Decoy

A live cat makes an excellent crow decoy. Put a collar and six feet of fishing cord on the cat and picket it in the open near your crow blind. After a little practice with your crow call, you will get some fine shooting if there are any crows in the country.

News of Sportsmen's Clubs

Herington Sportsman's Club Again Active

The Herington Sportsman's Club, which has been more or less inactive for a number of years, was reorganized during the past summer and is again actively promoting better hunting, fishing and other sportsmen's activities in that community. Vern Deatrick is the new president of the club. Other officers include: J. W. Shipe, vice-president; James Doyle, secretary; J. T. Seifert, treasurer.

Leavenworth Association Elects New Officers

The Leavenworth County Fish and Game Development Association has elected the following officers for the 1952-'53 year: Herman Forge, Sr., president; Floyd Honeycutt, vice-president; Biringer Miller, treasurer; Jim Kelsey, secretary. J. J. "Jerry" Boling is past president of the association.

Fish hatcheries a la the ancient Chinese were novel things. A hen's egg was emptied of its contents and filled with the spawn of fish and sealed. The eggs were then incubated by a hen for several days. The embryos were then placed in pans of water, kept warmed and fed appropriate food until they reached a stocking size.—*Missouri Conservation Newsletter.*

The top four dogs in the Amateur Handler's Stake at the Midwest Regional Brittany Field Trials held at Newton in November. Left to right, they are: Jeffrey of Agard, first-place winner, owned and handled by LeRoy Magnuson of Salina; second, Solomon Valley Nikki, owned and handled by Ray Olson, Glasco; third, Rusty's Freckles Flirt, owned and handled by E. N. Kelly, Kansas City; fourth, Duchess De Cornouaille, owned by Mrs. Gordon Offenbacker, Buffalo, Kan.

Put Your Outboard in Top Shape for Spring

Conditioning an outboard motor for spring and summer use is an easy task, since there are only a few simple points of maintenance. Most motors will operate after winter storage with no more attention than fresh fuel in the tank, but to add years of easy-starting performance to the life of any outboard, it is best not to neglect a thorough routine spring conditioning.

Flush out the fuel system and clean the carburetor. If any old oil or sediment has started a gum deposit, it may be removed with alcohol. Take out the old spark plugs, clean and adjust them, or buy new plugs of the make and model specified by the manufacturer. While they are out, any oil that was placed in the cylinders for winter storage can be removed by grounding the spark plug wires on any part of the motor and pulling the starter cord several times.

Start at the top of the motor and tighten all the bolts and studs that might work loose during the season, especially the flywheel nut, propeller nut, and fuel lines. The flywheel nut can be pulled tight by placing an open-end wrench on it and striking it sharply with a hammer. To tighten the propeller without snapping the shear pin, grasp it firmly with one hand and tighten the nut solidly with a wrench. Never use pliers on soft copper fuel line connections—case them fairly tight with a wrench.

Examine the propeller for dents and uneven places. If the nicks are not serious, file them smooth. If it is bent or damaged badly, either take it to a marine service station for restoration, or get a replacement part from your dealer.

The magneto should be checked now if there was any indication of trouble last season. This is a job for your dealer's repair shop, since he has equipment that will measure the output of the magneto. Breaker points can be cleaned, adjusted, or replaced at the same time.

Money and Gas Don't Mix

Michael Comella works at a filling station in Memphis, Tenn. Recently a sportsman drove into the station and asked him to help get the money out of his gas tank.

Comella blinked with surprise, removed the tank, drained it—and dumped out a pile of coins that totaled up to $107.

The sportsman grinned happily. "My mother," he explained, "likes to drop change in the tank when she buys gas."

Outdoor Notes

By Joe Austell Small

Black Cat Turns White

James W. Wright had a jet black Persian cat. Old Tab was always giving trouble trying to get at the canary. One day, while the cat was figuring out a new approach, the bird cage fell, striking the floor with a loud clatter and rolling around noisily. The frightened cat ducked for cover. Old Tab disappeared for over twenty-four hours. When he finally showed again, there was a white ring around his neck. Wright says that the ring has spread now until only the cat's tail remains black. Some scare!

Diving Ducks

Hunters are surprised many times when wounded mallards and other ducks and geese known to be nondiving breeds, escape under water in a neat power dive.

The answer to this puzzle was given recently by Chas. E. Gillham, noted explorer and biologist. The mallard, Gillham said, is known as a puddle, or tipper, duck. Others in this group of shallow water feeders include pintails, gadwalls, teal and shovelers.

During their youth, as well as during their adult moulting season, the nondiving breeds are expert divers. Once they reach maturity, however, they will not dive except when wounded. A healthy adult mallard would starve to death in places where all of his feed is submerged a few feet under water. Yet, their juvenile diving ability never deserts these so-called nondivers, Gillham pointed out, and enables them to escape their enemies when rendered flightless during moulting season or when wounded.

Geese have little inclination to dive. However, during their moulting season, all geese and their young are expert divers. Swans can dive to extreme depths when pursued by an enemy.

Instances have been recorded of the Squaw duck diving to almost fantastic depths. Gill nets in the Great Lakes, set in water 180 feet deep for lake trout, have been brought to the surface with Squaw ducks in them. Years ago, when wildfowl were numerous, a witness reported that between five and seven thousand Squaw ducks were taken in nets in one haul. Imagine catching ducks by the ton in one haul. Among the diving ducks, which will dive at any time, are redheads, canvasbacks, and scaups.

Tough Old Bat

British scientists say the bat is practically immune to poison. A living specimen of the noctule, a British bat, had a drop of prussic acid placed on its tongue and was some time dying. In the meantime, its parasites, with which all bats are much afflicted, dropped off—dead from its poisoned blood.

The Horn Business

The number of points on a deer's horns has little or nothing to do with its age. The animal's health, food supply and other factors determine how big its horns are to be during any year of its life. Thus often old bucks grow spikes while some young ones have been known to strut forth with 78-prong antlers!

Turtle Talk

They're a nuisance to everybody, yet few know how to rid a pond, lake, or even a good-sized creek of turtles. Put out floating set-lines. Attach a thin copper wire to an air-tight can or bottle. Cut it long enough so that it will reach within a few inches of the bottom. Attach a strong hook, baited with fish or meat, to the end of the wire, then set the can afloat. Even big turtles can't break the wire—a feat they can accomplish easily when it is attached to anything solid.

Sticker Tape

Prickly pear, or any other small, hard-to-get-hold-of cactus stickers can be easily removed with adhesive tape. Press a piece of tape firmly over the tiny thorn then remove. The stickers will come off with the tape.

Aftermath of fish salvage operation.—A net full of fish that were salvaged from Pete Shrag's pond, near Moundridge. Normally the pond covered between sixty-five and seventy acres, but the continued dry weather and lack of rainfall caused the pond to go nearly dry. Sportsmen took time out to salvage the fish. Hundreds of bass, crappie, bluegill and catfish were rescued and moved to deeper water. Such salvage operations were common over Kansas this past summer and fall.—*Photo courtesy of Moundridge Journal.*

Emporia Sportsmen Sponsor Worthy 4-H Club Projects

Lyon county, through the efforts of the Neosho Valley Hunting and Fishing Club of Emporia, is the first county in the state to instigate a program of wildlife conservation for preserving wildlife and improving cover facilities through work of 4-H club members.

Each year the Neosho Valley Club offers $200 to $300 in cash prizes to the 4-H clubs of the county whose work along those lines are adjudged the best.

Approximately 400 persons attended this year's annual awards meeting which was held in Emporia in November. Bob Britton, president of the Neosho Valley Club, presented the awards, which totaled more than $200 in cash for the winning clubs, in addition to ribbons.

Blue ribbons were presented to 4-H club members from five clubs; red ribbons went to members from five other clubs, while white ribbons were presented members of two clubs. One of the top winners in this year's awards was the Rinker 4-H Club.

During the past year these club members planted 650 cedar trees, 3,250 multiflora roses, and 72 pounds of sericea lespedeza, in addition to working on pond improvements and other projects in Lyon county. The club members not only made the plantings but saw to it that all plantings had good care. The Kansas Forestry, Fish and Game Commission co-operated closely with the 4-H clubs and the Neosho Valley Hunting and Fishing Club in the project by furnishing planting stock and helping plan the work.

According to Bob Britton, this Neosho Valley Club activity is paying handsome dividends; creates a lot of interest among 4-H members, and is helping farmer-sportsman relationships in that county.

If any other sportsman's club in the state is interested in this activity, a letter to Bob Britton at Emporia will bring you the details.

Those Who Come After

Those who come after us, our children and our children's children; what are they going to find? Will it be a nation at peace, a nation of free men and women, a country full of opportunities and a country full of beauty?

A nation is only as strong as the natural resources within the nation. The answer is up to you. True, we have our state and federal conservation agencies for the propagation of our natural resources, but that is not enough. It isn't nearly enough.

The work of but a handful of men cannot hope to equal that of thousands upon thousands of Americans all working towards a mutual goal. That goal is making a better out of doors.

If each one of us would do his share it would make the burden easier for all, but, unfortunately, such is not the case. There are among us the envious, the lawless, the greedy and the lustful ones. However, this class of people are definitely in the minority.

The average American citizen is conservation minded. He knows only too well what happens when he disregards the laws of nature and makes no attempt to replace what he takes from her.

How can we help? What can we do? There are thousands of little things we can do to help preserve and replenish our natural resources. Plant trees to replace those that have died or been cut down. Use farming methods which have proven themselves to prevent soil erosion. Use land wisely. Don't waste our water, our petroleum and our coal. Co-operate with your local and state soil conservation and fish and game conservation groups. Help provide food and cover for our song, insectivorous and game birds.

Nature will not provide, she cannot provide, all you want, but she can, and does, provide all your wants. Take what you need, take what is yours, and leave the rest for those who will come after.—*South Dakota Conservation Digest.*

Short Snorts

The male moth will often starve to death from grief when his mate is caught in a trap.

The western horned owl prefers skunks as food. It has also been known to carry off night-prowling housecats.

An ostrich egg weighs about three pounds and holds approximately as much as a dozen and one-half chicken eggs.

Fresh water clams spend the first part of their lives as parasites of fishes.

ARRESTS—AUGUST, 1952

Name and address	*Offense*	*Date of offense*	*Fine*
Ralph Billman; Hill City	No fishing license	8-10-52	$5.00
Tom M. Brenton; Hill City	No fishing license	8-10-52	5.00
John H. Charles; Kansas City Mo.	No fishing license	8- 9-52	5.00
L. G. Dunlap; St. Joseph, Mo.	No fishing license	8- 7-52	5.00
Raymond L. Emerson; Oberlin	No fishing license	8-27-52	10.00

Name and address	*Offense*	*Date of offense*	*Fine*
Herbert Fahrenholtz; Sylvia	No fishing license	8-21-52	5.00
Joseph Gulley; Kansas City	No fishing license	7-26-52	5.00
Joseph Johnson; Kansas City, Mo.	No fishing license	8-24-52	5.00
Lee P. Johnson; Kansas City, Mo.	No fishing license	8- 9-52	5.00
Leo F. Kerwin; Topeka	No fishing license	6-26-52	5.00
James Lee; Kansas City	No fishing license	8-23-52	5.00
Gilbert Merritt; Kansas City	No fishing license	8- 2-52	5.00
Geo. Alvis Moore; Chase	No fishing license	8-24-52	10.00
Lewis Murray; Scott City	No fishing license	8-27-52	10.00
Arty Nixon; Abilene	No fishing license	8-18-52	5.00
Thomas J. Ramsey; Topeka	No fishing license	8-23-52	5.00
Allen Reece; Kansas City, Mo.	No fishing license	8- 9-52	5.00
Joe Ritchey; Kansas City	No fishing license	8-23-52	5.00
Howard Senkevech; Kansas City, Mo.	No fishing license	8-23-52	5.00
Edward F. Snodgrass; Holdenville, Okla	No fishing license	8-18-52	5.00
Frank Stone; Junction City	No fishing license	8- 6-52	5.00
John O. Turner; Kansas City, Mo.	No fishing license	8-24-52	5.00
Theodore Van Hecke; Chicago, Ill.	No fishing license	8-17-52	5.00
Mose Williams; Kansas City, Mo.	No fishing license	8- 9-52	5.00
H. W. Zimmerman; Topeka	No fishing license	8-30-52	10.00
Richard Wiles; Kansas City, Mo.	No fishing license; no Wyandotte county park permit	8- 9-52	5.50
Robert Tuttle; Kansas City, Mo.	No fishing license; no Wyandotte county park permit	8- 2-52	5.50
Milton W. Poole; Salina	Handfishing; no license	8- 3-52	30.00
Clifford M. Stout; Hutchinson	Handfishing; no license	8- 3-52	30.00
Paul W. Stark; Hutchinson	Handfishing; no license	8- 3-52	30.00
Jack R. Stout; Salina	Handfishing; no license	8- 3-52	30.00
Aaron J. Simmons; Chase	Handfishing	8-24-52	30.00
Irving D. Hines; Winfield (90 days in jail, but was placed on two years parole)	Dynamiting fish	7-24-52	50.00
Gordon Brooks; Leoti	Exceed daily limit on bullfrogs	8- 3-52	10.00
Dwight Smith; Leoti	Exceed daily limit on bullfrogs	8- 3-52	10.00
Jesse V. Smith; Leoti	Exceed daily limit on bullfrogs	8- 3-52	10.00
Austin E. Harless; Leavenworth	Operating more than one trotline	8- 3-52	10.00
Cora Simmons; Chase	Possession of short channel cats	8- 3-52	5.00
Joe Simmons; Chase	Possession of short channel cats	8- 3-52	5.00
L. D. Simmons; Salina	Possession of short channel cats	8-12-52	5.00
Orville Frame; Moran	Possession of illegal seine	8- 5-52	1.00
Marcelino Ortego; Kansas City	Illegal fishing method (dip net)	8-31-52	10.00
Albert Biermann; Wichita	No hunting license	8-23-52	15.00
Robert Biermann; Wichita	No hunting license	8-23-52	15.00
Ivan Cox; Liberal	No hunting license	8-11-52	5.00
C. A. Gallaway; Liberal	No hunting license	8-27-52	10.00
James Green; Garden City	No hunting license	8- 8-52	20.00
Ernest Jones; Friend	No hunting license	8- 8-52	20.00
F. M. Pike; Liberal	No hunting license	8-27-52	10.00
Dr. W. J. Biermann; Wichita	No hunting license; killing doves in closed season	8-23-52	50.00
Dr. E. G. Stolz; Wichita	No hunting license; killing doves in closed season	8-23-52	50.00
Geo. E. Horchork; La Crosse	Shooting from auto and roadway; no hunting license; attempt to take game out of season	8- 6-52	20.00
Gary Lee St. John; La Crosse	Shooting from auto and roadway; no hunting license; attempt to take game out of season	8- 6-52	20.00
Joe Classi; Brewster	No hunting license; shooting pheasant in closed season	8-20-52	15.00
Curtis Green; Garden City	No hunting license; shooting pheasant in closed season	8- 8-52	45.00
Gordon Rayl; Hutchinson	Trespassing	8-18-52	5.00
Raymond A. Gower; Topeka	Unplugged gun used in taking migratory waterfowl	10-21-51	25.00
Eugene E. Southall; Topeka	Possession of firearms at state park; assault on private citizen	7- 5-52	125.00

ARRESTS—SEPTEMBER, 1952

Name and address	*Offense*	*Date of offense*	*Fine*
Carmey Allen; Wichita	No hunting license	9- 1-52	$10.00
B. E. Ash; Ellinwood	No hunting license	9- 1-52	10.00
W. R. Burtt; Wichita	No hunting license	9- 1-52	10.00
Ed Connie; Wichita	No hunting license	9- 1-52	10.00
Dallas Ford; Wichita	No hunting license	9-14-52	20.00
Bill Hall; Wichita	No hunting license	9- 1-52	10.00
M. A. Hawkins; Wichita	No hunting license	9- 1-52	10.00
Roy Kreger; Dodge City	No hunting license	9-21-52	10.00
George W. Lyle; Topeka	No hunting license	9- 2-52	10.00
A. B. Roberts; Kansas City	No hunting license	9-28-52	5.00
George F. Sheldon; Salina	No hunting license	9- 6-52	5.00
C. L. Simpson; Kansas City	No hunting license	9-28-52	5.00
Mac M. Stevenson; Salina	No hunting license	9- 6-52	5.00
Jerry Wiggins; Goff	No hunting license	9-14-52	5.00
Vernon Wilson; Coffeyville	No hunting license	9-14-52	5.00
Quentin Winn; Dodge City	No hunting license	9-21-52	10.00
Edwin Wiseman; Englewood	No hunting license	9-18-52	5.00
Olen Carey; Forgan, Okla	No hunting license; killing four pheasants; shooting birds not on wing; shooting from auto	9- 9-52	230.00

Name and address	*Offense*	*Date of offense*	*Fine*
Quin Dale Landendale; Oklahoma City, Okla.	No hunting license; killing four pheasants; shooting birds not on wing; shooting from auto	9-11-52	250.00
Melvin J. Black; Wichita	No hunting license; killing pheasant in closed season	9- 1-52	20.00
John Dirks; Larned	No hunting license; killing pheasant in closed season	9-25-52	60.00
A. B. Burns; Plainville	Possess pheasant in closed season	9-13-52	100.00
Ralph Carey; Forgan, Okla.	Possess pheasant in closed season	9- 9-52	40.00
Elmer Harper; Esbon	Possess pheasant in closed season	9-12-52	50.00
Clyde Stevens; Jennings	Possess pheasant in closed season	9-20-52	10.00
Leonard A. Strauderman; Wichita	Killing game bird in closed season; shooting bird not on wing and from auto	8-31-52	30.00
Roy Mitchell; Harper	No hunting license; trespassing; shooting game birds out of season	9-18-52	50.00
Jay Moran; Harper	Shooting game birds out of season	9-18-52	15.00
Kenneth Richardson; Harper	No hunting license; shooting game birds out of season	9-18-52	25.00
Benjamin F. McDonald; Topeka	Possess quail in closed season	9-14-52	25.00
Claude Sprinkle; Stockton	No hunting license; shoot quail in closed season	9-11-52	110.00
Paul Burkhart; Topeka	Possess doves in closed season	8-30-52	25.00
Kenneth Ziegler; Topeka	Possess doves in closed season	8-30-52	25.00
Herman Bradhagen; Coffeyville	Shoot doves not on wing	9-14-52	10.00
B. A. Ash; Ellinwood	Taking doves with unplugged gun	9- 1-52	25.00
Norman Brammer; Topeka	Taking doves with unplugged gun	9-17-52	25.00
John B. Egy; Wichita	Taking doves with unplugged gun	9-21-52	25.00
Donald Rucker; Larned	Taking doves with unplugged gun	9- 4-52	25.00
Iva Scott; Wichita	Taking doves with unplugged gun	9- 1-52	25.00
Truman Tittsworth; Wichita	No hunting license; killing meadowlark	9-14-52	25.00
Billy Woolley; Dodge City	No hunting license; killing wild duck	9-14-52	20.00
Allen Thomas Breeden; Augusta	Trespassing	9- 8-52	10.00
Chester Fulks; Bonner Springs	Trespassing	9-21-52	25.00
Ruby Cannon; Topeka	No fishing license	9- 7-52	5.00
Howard DeMoure; Wichita	No fishing license	9- 1-52	5.00
Frank Diebolt; Salina	No fishing license	4-27-52	5.00
C. E. Dissenberger; Abilene	No fishing license	9- 3-52	5.00
George Dobkins; Abilene	No fishing license	9- 3-52	5.00
Clarence Horyna; Dundee	No fishing license	9- 1-52	5.00
Edward C. Horyna; Great Bend	No fishing license	9- 1-52	5.00
Earl James; Abilene	No fishing license	9- 1-52	5.00
Robert L. McAfee; Coffeyville	No fishing license	9-13-52	5.00
Albert L. Marshall; DeSoto	No fishing license	9-12-52	5.00
Ronald Mosher; Sterling	No fishing license	7-13-52	5.00
Harold E. Moyer; Wellsville	No fishing license	9-12-52	5.00
Lee J. Nicholson; Coffeyville	No fishing license	9-13-52	5.00
John W. Walker; Kansas City, Mo.	No fishing license	9-28-52	5.00
Roy Williams; Topeka	No fishing license	4- -52	5.00
B. W. Bennett; Winchester	No fishing license; possess short channel cats	8-30-52	15.00
E. A. Carlson; Mission	Possession of short channel cats	9- 1-52	5.00
S. B. Hicks; Great Bend	Possession of short channel cats	8-31-52	10.00
Leland W. Iron; McPherson	Possession of short channel cats	9- 8-52	5.00
O. P. Martin; Wichita	Possession of short channel cats	8-31-52	10.00
Fred P. Waddell; McPherson	Possession of short channel cats	8-11-52	5.00
Gary L. Corkins; Medora	Handfishing and shooting fish	9- 8-52	25.00
Lester P. Thouvenell; Hutchinson	Handfishing and shooting fish	9- 8-52	25.00
James E. Wiley; Independence	Handfishing and shooting fish	9- 8-52	25.00
D. D. Fugate; Hutchinson	Shooting fish	9-14-52	10.00
W. M. Kirkpatrick; Nickerson	Shooting fish	9-14-52	10.00
Virgil Lunte; Hutchinson	Shooting fish	9-14-52	10.00
E. F. Schuller; Hutchinson	Shooting fish	9-14-52	10.00
Gary Nikkelson; Randolph	Handfishing	9-12-52	10.00
John Davidson; Kansas City	Operate trotlines too close to dam	9-14-52	10.00
Don Comfort; Bennington	Operating lines too close to mouth of stream; operating too many lines,	9- 2-52	10.00
Carl Holman; Atchison	Possession of illegal seine and operating seine	9-16-52	25.00
Melvin Kogl; Herndon	Possession of illegal seine and operating seine	9-16-52	25.00
K. W. Long; Wathena	Possession of illegal seine and operating seine	9-16-52	25.00
R. A. Peters; Ashby, Neb.	Possession of illegal seine and operating seine	9-16-52	25.00
Thomas C. Currey; Emporia	Seining in State Lake	9- 6-52	5.00

ARRESTS—OCTOBER, 1952

Name and address	*Offense*	*Date of offense*	*Fine*
Robert K. Butler; Lawrence	No fishing license	10-11-52	$5.00
Dale White; Manhattan	No fishing license	9-28-52	5.00
Vernon White; Manhattan	No fishing license	9-28-52	5.00
Joe Buseman; Marysville	Operating more than one trotline	10- 3-52	10.00
Carl Pape; Marysville	Operating more than one trotline	10- 3-52	10.00
Fred Binggeli; Marysville	Operating more than one trotline	10- 3-52	10.00
Earl Fleeman; Dallas, Texas	Possession of illegal seine; transporting minnows out of the state	10- 2-52	20.00
Ralph J. Walker; Grand Prairie, Texas	Possession of illegal seine; transporting minnows out of the state	10- 2-52	110.00
V. E. Honn; Quinter	Operating illegal seine	10- 3-52	25.00
O. D. Winslow; Quinter	Operating illegal seine	10-12-52	25.00

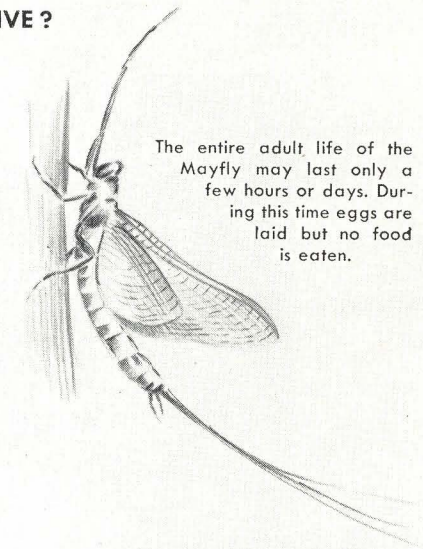
Name and address	*Offense*	*Date of offense*	*Fine*
Harvey Wire; Quinter	Operating illegal seine	10-23-52	25.00
Robert Long; Quinter	Operating illegal seine; no license	10- 3-52	25.00
Arthur Long; Quinter	Possession and operating of illegal seine	10- 3-52	50.00
Alfred Wauntland; Cherryvale	Operating more than eight bank lines	10- 9-52	10.00
Rev. Albert Ashley; Kansas City	Possession of short black bass	10-11-52	10.00
Rev. James A. Brown; Kansas City	Possession of short black bass	10- 4-52	10.00
William Miller; Atchison	Trespassing	9-17-52	5.00
Richard Garrison; Horace	No hunting license	10-26-52	10.00
J. W. Jones; Sunflower	No hunting license	10-12-52	5.00
Leslie Lauderback; Allen	No hunting license	10-19-52	5.00
Herman McCaslin; Tribune	No hunting license	10-26-52	10.00
Paul Sowers; Concordia	No hunting license	10-19-52	5.00
Elmer Spangenberg; Hudson	No hunting license	10-30-52	10.00
Wesley Sterling; Garden City	No hunting license	10-25-52	10.00
Richard Swindall; Garden City	No hunting license	10-25-52	10.00
Alva L. Whitney; Hays	No hunting license	10-28-52	10.00
Elmer Wilburn; Atchison	No hunting license	10- 5-52	5.00
M. J. Williamson; De Soto	No hunting license	10-12-52	5.00
G. D. Fudge; Ford	No hunting license; possession of pheasant in closed ceason	10- 5-52	60.00
R. C. Boyer; Wichita	Pursue pheasants from auto	10-29-52	10.00
Grady Kizzire; Wichita	Pursue pheasants from auto	10-29-52	10.00
C. Porter, Jr.; Wichita	Pursue pheasants from auto	10-29-52	10.00
W. Ray Waggoner; Kansas City	Shoot game birds in closed season; shoot hen pheasant; shoot from highway while in car	10-25-52	25.00
Gerald Blasche; Kansas City	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-26-52	10.00
Marvin Burke; Frankfort	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-25-52	25.00
Clarence Calvin; La Cygne	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-26-52	10.00
David Clement; Kansas City	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-26-52	10.00
L. C. Edwards; Amoret, Mo.	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-26-52	10.00
F. A. Fri, Jr.; La Cygne	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-26-52	10.00
Samuel C. Holt, Jr.; Hays	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-29-52	10.00
Robert Keys; Wichita	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-25-52	10.00
Mervin Klein, Hays	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-29-52	10.00
Harold L. Rast; Junction City	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-25-52	50.00
Ross Sparks; South Haven	Hunting pheasants in closed season (early hunting) before 9:00 a. m.,	10-25-52	10.00
Wm. French; Hutchinson	Hunt pheasants in closed season	10-19-52	50.00
Gail Griffith; Larned	Hunt pheasants in closed season	10-22-52	50.00
Francis Hagaman; Beloit	Hunt pheasants in closed season	10-18-52	50.00
Paul McElhany; Hutchinson	Hunt pheasants in closed season	10-19-52	50.00
Clarence Michaeles; Wakeeney	Hunt pheasants in closed season	10-23-52	25.00
Earl Todd; Hutchinson	Hunt pheasants in closed season	10-19-52	50.00
Elmer Brazzle; Louisville	Shooting hen pheasants	10-25-52	25.00
John L. Curtis; Buffalo	Shooting hen pheasants	10-26-52	66.67
Donald D. Hawley; Chanute	Shooting hen pheasants	10-26-52	66.66
G. D. McAhren; Byers	Shooting hen pheasants	10-25-52	50.00
Kenneth Mantle; Wamego	Shooting hen pheasants	10-25-52	25.00
Virgil Robinson; Nicodemus	Shooting hen pheasants	10-26-52	10.00
Ode Toon; Chanute	Shooting hen pheasants	10-26-52	66.67
L. A. Torrence; Independence	Shooting hen pheasants	10-25-52	25.00
Garrett Yonning; Louisville	Shooting hen pheasants	10-25-52	25.00
Alvin T. Allen; Wichita	Possess hen pheasants; removing heads and feet of pheasants	10-26-52	20.00
L. H. Kippenberger; Guymon, Okla.	Hunting and possession of quail; possession of hen pheasant	10-26-52	85.00
Orville McGuire; Johnson	Possession of quail in closed season	10-21-52	60.00
R. J. Maxfield; Garden City	Possession of quail in closed season	10-16-52	100.00
Gust H. Nelson; Garden City	Possession of quail in closed season	10-16-52	100.00
Herman O. Scott; Hugoton	Possession of quail in closed season	10-15-52	25.00
Donald Whitney; Wichita	Possession of quail in closed season	10-25-52	50.00
Walter Knitter, Jr.; Clay Center	Possession of quail in closed season; removing heads from pheasants	10-26-52	Dismissed
Cletus R. Siebold; Clay Center	Possession of quail in closed season; removing heads from pheasants	10-26-52	Dismissed
Bill J. Potenski; Clay Center	Possession of quail in closed season; shooting from auto; shooting quail not on wing; shooting from public road without permission of landowner	10-26-52	65.00
Bill Haley; Ulysses	Shooting game birds not on wing; shooting from auto; shooting from public road without permission	10-30-52	35.00
Leslie Leochner; Ludell	Shooting ducks after shooting hours	10-14-52	10.00
George Hafford; Coffeyville	Shoot ducks while not in flight	10-12-52	10.00
Ellis Mitchell; Murdock	Hunting pheasants and geese in closed season	10- 5-52	50.00
Virgil L. Mitchell; Kingman	Hunting pheasants and geese in closed season	10- 5-52	50.00
Wilham L. Gibson; Wichita	Hunting pheasants and geese in closed season; no hunting license	10- 5-52	60.00
Ronald Radfield; Murdock	Shooting goose in closed season; no hunting license	10- 5-52	35.00
Hoyt Lancaster; Satanta	Hunting geese after legal shooting hours	10-19-52	25.00
Eugene Able; Wichita	Exceed legal limit of birds	10-25-52	30.00
H. A. Vogt; Fulton	Shooting game birds while not on wing	10-25-52	10.00
Robert Looney; Dodge City	Shooting meadow lark	10- 5-52	5.00
Meredyth F. White; Emporia	Possess and shooting rifle in state park	10-13-52	5.00
Fred Albers; Minco, Okla.	Misrepresentation	10-24-52	25.00
Robert Dilworth; Dalhart, Tex.	Misrepresentation	10-24-52	20.00
Sam Eichman; Enid, Okla.	Misrepresentation	10-24-52	45.00
Mayo T. Root; Enid, Okla.	Misrepresentation	10-24-52	25.00
O. S. Weckel; Dalhart, Tex.	Misrepresentation	10-24-52	20.00

HOW LONG DO THEY LIVE?

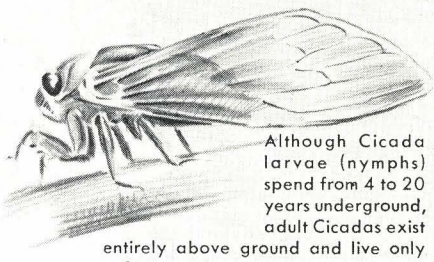
by

C. W. Schwartz

In the wild, few creatures, whether plant or animal, live to old age, although under the protected conditions of captivity, animals sometimes show a remarkable life span. Actually, only a few even attain maturity in the wild because of the severe struggle for existence. This turnover of living things is necessary to maintain the great cycle of life in which all creatures are dependent upon one another for food, either directly or indirectly.



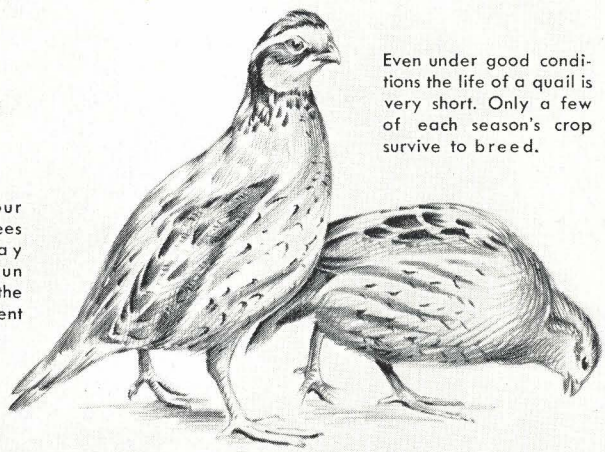
The entire adult life of the Mayfly may last only a few hours or days. During this time eggs are laid but no food is eaten.



Although Cicada larvae (nymphs) spend from 4 to 20 years underground, adult Cicadas exist entirely above ground and live only a few months.

Giant Sequoia trees of the Sierra Nevada range in California are considered the oldest living things on earth, some probably exceeding 3500 years of age. Regardless of this longevity, reproduction is slow. Only one seed germinates out of every million produced and most of the seedlings are eaten by wild animals.

Some of our large oak trees alive today may have begun their lives about the time this continent was discovered.



Even under good conditions the life of a quail is very short. Only a few of each season's crop survive to breed.

Giant Tortoises of the Gallapagos Islands are probably our oldest living animals, some surviving 250 years. Our Common Box Turtle, although dwarfed by the Giant Tortoise, sometimes lives a century.

Once they have attained sufficient size to make them less vulnerable to enemies, Largemouth Bass may live to 13 years of age.

Old age for a Meadow Mouse, an important link in the food chain of many animals, is from 10 to 16 months. Females may have young when only 45 days old and during their short life span produce 17 litters.

Courtesy Missouri Conservationist.

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