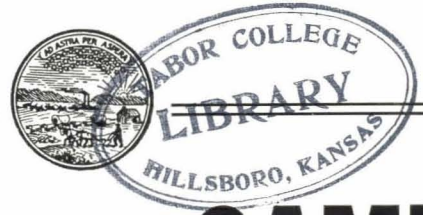


KANSAS FISH AND GAME



VOL. IX

OCTOBER, 1951

No. 2



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KANSAS FISH AND GAME

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Lee Larrabee Resigns From Fish and Game Commission

Lee Larrabee, veteran member of the Kansas Fish and Game Commission, tendered his resignation as a member of that Commission to Governor Arn in July, and voluntarily retired after more than a quarter of century of service, without pay, to fish and game matters in Kansas.



Retired—Mr. Lee Larrabee

Mr. Larrabee was first appointed a member of the Commission, starting with the creation of a fish and game commission by the state legislature in 1925, and served every year since, except for four years during

the terms in office of Democratic Governors Woodring and Huxman. For the past twelve years, Larrabee was chairman of the six-man bipartisan commission.

No other man has done as much to bolster the fish and game interests of Kansas and none has ever worked as earnestly and efficiently for the Commission as did Mr. Larrabee. He worked tirelessly at the job and his decisions were always well founded and approved by his colleagues. A genial man of high ideals and magnetic personality, Lee was well known throughout the state.

Kansas has benefitted immeasurably through the years by the quiet, thorough way Mr. Larrabee approached fish and game matters and the problems at hand.

Garden City Businessman Named Commissioner

Vern R. Mayo, Garden City businessman and stockman, was named by Governor Edward F. Arn to membership on the Forestry, Fish and Game Commission, to fill the vacancy created by the resignation of Lee Larrabee, of Liberal.

An ardent hunter and fisherman, Mayo has been active for years in fish and game matters in Finney county. He took an active part in the development of the Finney County Parks, Fish and Game Association into one of the largest and most active county sportsmen's organizations in the state. He also served several terms as state representative from Finney county and is widely known throughout the state.

Mayo's term will expire December 31, 1952.

Indians always had sharp knives even though they had no whetstones as we know them. If you're caught out in the woods with a dull knife, you can find a smooth Indian sharpening stone along the riffles of any shallow stream. It'll put an edge on a blade as quickly as the best carborundum.

KANSAS HUNTING SEASONS AND REGULATIONS, 1951

Here is a summary of the Kansas hunting seasons and regulations for 1951.

QUAIL: November 20, 22, 24, 25, 26, 28, 30, and December 2, 4, 6 and 8, in all counties. Daily shooting hours from one-half hour before sunrise to 4 p. m. Daily bag limit, 8; possession limit after opening day, two days' bag limit.

PHEASANTS: Open season, November 14, 16, 17 and 18, in the following counties: Barber, Barton, Cheyenne, Clay, Cloud, Decatur, Ellis, Ellsworth, Finney, Ford, Gove, Graham, Grant, Gray, Greeley, Hamilton, Haskell, Hodgeman, Jewell, Kearny, Lane, Lincoln, Logan, Meade, Mitchell, Morton, Ness, Norton, Osborne, Ottawa, Pawnee, Phillips, Pratt, Rawlins, Republic, Rooks, Rush, Russell, Saline, Scott, Seward, Sheridan, Sherman, Smith, Stafford, Stanton, Stevens, Thomas, Trego, Wallace and Wichita. Daily bag limit, 3 cockbirds; possession limit, two days' bag limit. Pheasants in possession of hunters and in lockers must retain head and feet. Daily shooting hours from 9 a. m., Central Standard Time, to sunset.

PRAIRIE CHICKEN: Open season, October 24, in the following counties: Allen, Anderson, Bourbon, Chase, Chautauqua, Coffey, Elk, Franklin, Greenwood, Linn, Lyon, Morris, Osage, Wabaunsee, Wilson and Woodson. Daily shooting hours from one-half hour before sunrise to sunset. Daily bag limit, 2.

SQUIRREL: Open season, June 15 to November 30, inclusive. Daily bag limit, 8; possession limit, two days' bag limit. Legal shooting hours one-half hour before sunrise to sunset.

BULLFROGS: Open season, July 1 to September 30, inclusive. Daily bag limit, 8.

FUR-BEARING ANIMALS (except beaver and otter): December 1 to January 31, both dates inclusive.

BEAVER AND OTTER: Season closed.

RED AND GRAY FOX, SWIFT OR PRAIRIE FOX: Season, January 1 to December 31.

RABBITS: Season is closed from October 16 to December 14 inclusive, with the following exceptions—October 24, November 14, 16, 17 and 18 and November 20, 22, 24, 25, 26, 28, 30, and December 2, 4, 6 and 8. When rabbits are taken on the open dates for pheasant shooting (November 14, 16, 17 and 18) they may not be hunted before 9 a. m. Central Standard Time, and when taken during the quail season (November 20, 22, 24, 25, 26, 28, 30, December 2, 4, 6, 8) they may not be hunted later than 4 p. m. on those days. Rabbit hunters, unless otherwise exempt from hunting license requirements, must have a license to hunt rabbits.

DUCKS, GEESE AND COOT: Season, October 19 to December 7, both dates inclusive. Daily bag limit, ducks (except coots and American and red-breasted mergansers), 5; possession limit, 10. Daily bag limit, geese, 5; possession limit, 5 geese, including in such limit not more than two Canada geese or its subspecies or two white-fronted geese, or 1 Canada goose or its subspecies and 1 white-fronted goose.

Daily bag limit, coot, 10; possession limit, 10. Daily bag limit American and red-breasted mergansers, 25; no possession limit after opening day.

WOOD DUCKS: No open season.

Shooting hours, one-half hour before sunrise to one hour before sunset, except on opening day when hunting shall not begin before 12 noon.

RAILS AND GALLINULES: Season, September 1 to October 30, both dates inclusive. Daily bag and possession limit, 15, in the aggregate. Daily shooting hours, one-half hour before sunrise to sunset, except when they are permitted to be taken during the waterfowl season (October 19-30) they may not be hunted after one hour before sunset.

SORA: Season same as for rails and gallinules. Daily bag and possession limit, 25.

MOURNING, TURTLE DOVES: Season, September 1 to September 30, inclusive. Daily bag and possession limit, 10. Shooting hours on all days of open season, one-half hour before sunrise to sunset.

POSSESSION PERIOD: The postseason period for possession of migratory game birds remains the same as in previous years—90 days. The postseason period for possession of quail and pheasant, 30 days. In transportation or importation of dressed migratory game birds and pheasants, as a means of identification, are required to have the head, head plumage and feet attached.

DUCK STAMP: It shall be unlawful for any person



Wm. Carpenter, of Horton, with the "granddaddy" of all catfish ever taken from the waters of Mission Lake, near Horton. The fish weighed forty pounds and gave Mr. Carpenter quite a battle before being brought to line the evening of June 19, 1951.

over the age of 16 years to hunt for and take any migratory waterfowl unless at such time he is in possession of an unexpired, properly cancelled federal migratory bird stamp.

QUAIL STAMP: All persons who hunt quail and are required to have a hunting license must also procure and affix to that license a quail stamp.

OTHER HUNTING REGULATIONS: No game bird or game animal shall be shot at, killed or pursued from a motorboat, airplane or automobile and no wild game bird shall be shot at or killed unless that bird is in flight.

It is unlawful to hunt and kill wild game birds and wild game animals with gun larger than ten gauge.

It is unlawful to hunt, kill, pursue or have in possession any wild song and insectivorous bird or to destroy the nests or eggs of such birds.

It shall be unlawful to use directly or indirectly, live waterfowl decoys for the taking of waterfowl, nor may waterfowl be taken by means, aid or use of cattle, horses or mules. Blind or floating craft other than sinkbox, motorboat or sailboat are permitted in taking of migratory waterfowl.

The use of shotguns in the taking of waterfowl and doves is permitted providing such guns are not capable of holding more than three shells in magazine and chamber combined. The use of plugs in automatic and repeating shotguns is permitted providing such plugs cannot be removed without disassembling gun.

For further information write to the Forestry, Fish and Game Commission, Pratt, Kansas.

The Hunting Outlook

Kansas sportsmen and those from out of state who normally hunt in Kansas should have good hunting opportunities this fall, despite floods and bad weather during the summer. Game surveys completed in August revealed more birds than first thought possible. There were many late hatches and apparently both pheasants and quail renested after the floods to provide a normal crop of young birds.

Hunting will be tough going throughout the state because of the dense cover, said to be the heaviest in years. Those hunters with dogs will probably have the better hunting and should experience no difficulty in bringing home some birds.

In setting the seasons later this fall, the Commission took into consideration the late nesting of the birds during the summer and also to give the western Kansas farmer more of an opportunity to have the maize crops harvested before the opening of the pheasant season. There will be a vast acreage of maize crops

in the best pheasant territory, which will be posted to hunting, unless the grain is cut before the hunting season opens.

Quail hunters were given an 11-day staggered season, which includes two Sundays, Thanksgiving, and three consecutive days of shooting over Thanksgiving week end. Pheasant hunters were given three consecutive days of shooting over a week end which included one Sunday.

Here is a brief outlook on the game bird situation, as reported to the Fish and Game Commission:

PHEASANTS: Populations are down in some areas and up in others. Many late hatches seen in August. Cover is more dense than ever and hunting will be tough going. The dense cover made it almost impossible to obtain accurate pheasant count. More pheasants this year were reported in Ellsworth, Saline, Decatur, Norton, Phillips, Sheridan, Morton, Stevens, Pratt, Thomas and Cheyenne counties, except for scattered areas where heavy hailstorms fell. All hailed areas were stocked quite heavily with birds from the state pheasant farm.

Pheasant populations reported down in Ford, Gray, Meade, Seward, Lincoln, Ottawa, Barton, Osborne, Rooks, Russell, Smith, Finney, Haskell, Grant, Hamilton, Kearny, Stanton, Hodgeman, Ness, Pawnee, Rush, Cloud, Jewell, Mitchell, Republic, Wallace, Logan counties. However, there is ample supply of birds in nearly every county to provide good hunting.



The once free and majestic buffalo makes use of modern inventions. The above scene shows one of the herd of buffalo at the Finney County Buffalo Refuge using an Old Scratch cattle scratcher and oiler. "Old Scratch" is a new automatic machine that kills warbles, lice, ticks, mange mites and insects, cures skin diseases, and keeps hide and hair healthy. It was invented by Bill Kirk, a Spearman, Texas, rancher, and is in great demand by cattlemen throughout the Southwest. The oiler was a gift to the Forestry, Fish and Game Commission by the Wolfe Motor Co., of Meade, and Mr. Kirk.

The outlook in Ellis, Gove, Graham, Trego, Clay, Rawlins and other counties open to pheasant shooting is good, except in the south part of Gove county where the birds suffered heavy losses in hailstorms.

QUAIL: Hunters can look forward to the opening of the season with the assurance that, with weather permitting, it should be one of the best in Kansas history. The quail crop appears to be excellent in all of the eastern quail range and this popular game bird seems to be making a fine increase in western Kansas counties. Cover is dense and dogs will be almost a necessity. Hunters generally seem well pleased with the later season set this year.

PRAIRIE CHICKEN: The one-day season should again prove very popular. A heavy carryover of adult birds from last year reported. Populations reported down from last season in Butler and Greenwood counties although a lot of old birds are reported in the latter county. Butler county was closed to prairie chicken hunting this fall, but new counties open to shooting for the first time were Wilson and Chautauqua. Anderson county should be the leading prairie chicken county but there are lots of birds in Wabaunsee, Linn, Woodson, and other counties open to shooting.

RABBITS: An increase in cottontails reported over much of eastern Kansas, except in the lowlands that were heavily flooded. Hunting for this popular game animal should be good this fall.

City of Wamego Has Kid's Fishing Day

The city of Wamego, under the leadership of E. J. Hecker, chief of police, joined the ever-increasing list of Kansas cities and towns sponsoring Kid's Fishing Derbies.

Over 500 kids, fourteen years of age and under, enjoyed the Wamego derby which was held on August 17. Nearly every kiddie caught at least one fish, some of which weighed as much as 1½ pounds. The merchants of Wamego contributed over seventy prizes for the day. The Veterans of Foreign Wars of Wamego donated all the pop and ice cream the kids could eat and drink; the Chamber of Commerce provided ponies for the kids to ride if they tired of fishing, and Chief Hecker provided boats for them to ride in. In the evening, the Wamego band furnished a concert and movies from the Kansas Fish and Game Commission's film library were shown.

In reporting on the derby, Chief Hecker said it was more successful than the Fourth of July celebration and was a wonderful thing for the kids. As Mr. Hecker said, "It makes good citizens out of the kids."

Gillespie Named Chairman of Commission

Mr. H. M. Gillespie, of Wichita, was the unanimous choice of the remaining members of the Commission to be chairman of the body, following the resignation of Lee Larrabee.

Gillespie has been a member of the six-man bipartisan commission since its origin in 1939. He was reappointed by Governor Arn for a four-year term, which expires December 31, 1954.

Kansas Host to Midwest Fish and Game Commissioners

The annual meeting of the Association of Midwest Fish and Game Commissioners and the Central Flyway Council was held in August at the Broadview Hotel in Wichita.

Top authorities on conservation of fish, game and other natural resources from the states of Colorado, Indiana, Illinois, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin, and the Provinces of Ontario and Manitoba, Canada, attended the meeting. Representatives of the U. S. Fish and Wildlife Service, the Wildlife Management Institute of Washington, D. C., Albuquerque, New Mexico, and Minneapolis, Minnesota, were also present, as were representatives from the Corps of Engineers, U. S. Army, of Kansas City, Mo.

The Central Flyway Council meeting was held the day before the Midwest meeting. States in the Central Flyway include North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Texas, New Mexico, Colorado, Wyoming, and Montana.

Mr. Bruce Stiles, director of the Iowa Conservation Commission, Des Moines, Iowa, was elected president of the Midwest Association at the closing session. Also elected were W. J. K. Harkness, chief of the divisions of fish and wildlife, Ontario, Canada, vice-president, and Lester F. Faber, superintendent of federal aid for the Iowa conservation commission, secretary-treasurer. The retiring president was Dave Leahy, Director of the Kansas Forestry, Fish and Game Commission.

Mr. H. R. Morgan, Commissioner, North Dakota Game and Fish Commission, Bismarck, North Dakota, was elected chairman of the Central Flyway Council.

The true sportsman quits when he has taken his limit of game or fish even though he may still have the time and opportunity to get more.

Cover Picture

A thrilling sight to any hunter and one that will be repeated many, many times in Kansas during the 1951 upland game bird seasons. The three dogs shown on point in the picture are owned by Andy Carrier of Moran, Kansas. The scene was taken on a hunting trip last fall in Allen county.

Butterflies can tell differences in the sweetness of liquids that taste alike to human beings.

A female mosquito can produce 159,857,000,000 offspring in a single year.

Tips for the Sportsmen

Although the odds are against such a catastrophe, there might come a time in your life when you have a brush with a skunk. In case you do it is a good idea to be prepared.

Skunk odor can be removed from clothes and the body simply by washing the affected areas in bulk cider vinegar. If your bottled vinegar is too weak to neutralize the odor two or three applications may be necessary.

Chances are, too, that you may get mixed up in some poison ivy. Of course, the best rule is to avoid it but in case you do wash the area thoroughly with strong soap or ammonia. If blisters appear break them and apply ammonia.



Fish and game administrators of four states got together with a genial host at the annual meeting of the Association of Midwest Fish and Game Commissioners at Wichita in August. From left to right, they are: Harry Ruhl, Director of Game, Michigan Conservation Department, Lansing, Michigan; C. N. Feast, Director, Colorado Fish and Game Department, and President of the International Association of Fish and Game Commissioners, Denver, Colo.; Dave Leahy, Director, Kansas Forestry, Fish and Game Commission and immediate past president of the Midwest Association; Sheldon Coleman, president and general manager of the Coleman Company, Inc., Wichita; and Lester Bagley, Commissioner, Wyoming Game and Fish Commission, Cheyenne, Wyoming.

Kansas Gaining in Stature As Hunting and Fishing Land

Kansas is gaining considerable stature as a hunting and fishing land, something that has more than just a little to do with recent increases in the tourist business and with the piqued interest of residents.

That may be a surprising revelation to some who would think of Kansas as a place to pass through on the way to mountain streams or as a desolate territory to cross en route to hunting grounds. It will surprise others who have not taken it upon themselves to become apprised of the extent to which funds of the state and federal government have been used to develop sport facilities.

Singularly, not a cent of tax money from the state coffers has gone into the program. The funds for million dollar projects that all may enjoy have been derived entirely from the sale of hunting and fishing licenses and from federal funds acquired from taxes on guns and shells. This includes the administrative costs of the Kansas Forestry, Fish and Game Commission.

For instance, it was back in the late 20's that Kansas had no lakes at all, no parks and some mighty poor bird hunting. Quail and pheasant had been farmed right out of the country and ducks avoided the state as avidly as did tourists except in such years as abnormal rainfall filled the few swamps and low places before normal runoff could take care of it.

As it is now, the state owns or operates twenty-two state lakes scattered widely and conceived brilliantly. Natural scenic beauty has furnished a great beginning. Picnic facilities, buildings, fishing, boating, swimming complete the picture.

These lakes and hundreds of others ranging from city, county or township lakes to farm ponds are stocked with fish from the two state fish hatcheries at Pratt and Meade. It is worthy of note that the number of fishing licenses jumped from 98,000 in 1940 to nearly a quarter of a million in 1950 with a significant increase showing in nonresident licenses.

As for hunting, it is there that even a wider gap has been closed. Kansas simply farmed itself right out of quail and pheasant when wheat became King as the thickets and hedgerows were uprooted to make room for plows, drills and combines. Such flora are natural protection for the birds, also food.

For thirty years, the state has been fighting its way uphill on two fronts, one trying to replenish the natural protective cover, the other restocking the game birds. Three game bird farms have tooled up to a factory output that approached 50,000 quail and pheasant for the 1951 seasons. The recovering program has been experimental until recently but is now a full-fledged

operation to produce nursery seedlings for distribution to farmers.

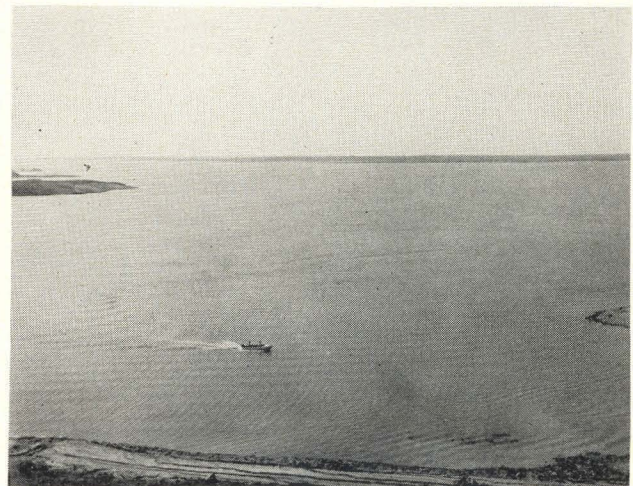
What is probably the greatest migratory waterfowl project in the nation is located in Kansas, an idea long envisioned by the Forestry, Fish and Game commissioners—and long-sought. The impounding of the waters in the Cheyenne Bottoms, huge marsh area near Great Bend, was achieved only recently and the completion of two channels in the near future will make permanent a lake larger than any in the state. The final cost, some two million dollars, will be borne by Pittman-Robinson funds and the Fish and Game monies.

The more than 61,000 duck stamps sold to Kansas hunters during the fiscal year ending June 30, 1950, is indicative of the high level of hunting interest. Add to that 191,347 resident hunting licenses reported by the Fish and Game Commission up to the beginning of the 1950 hunting season plus 2,265 nonresident tickets and it would seem that the fever is high. What is more indicative is the fact that hunters and fishers spend more than \$700,000 per year for Kansas licenses alone.

That Kansas is rapidly becoming a sportsmen's mecca as a result of this program seems to be borne out. Obviously, as more and more hunters seek quarry in Kansas, the greater money realization from sale of licenses assures continued improvement in the facilities.

Public ownership of wildlife is inherited by everyone. But the full enjoyment of wildlife use must be earned by the individual himself.—*Tennessee Conservationist*.

Vampire bats, when on the ground, are said to be able to run as fast as a rat.



Boating is becoming a popular diversion on the Cedar Bluff Reservoir. The point of land at the left is in the private cabin site area.

A New Fish Bulletin Available Soon

The Kansas Fish and Game Commission, in response to numerous requests from sportsmen and farmers of Kansas, is publishing a bulletin on the construction and management of farm ponds.

Dr. Otto Tiemeier of Kansas State College with the collaboration of Seth Way, fish culturist, and Roy Schoonover, fisheries biologist, of the Commission's technical staff, have written the bulletin. It will be available upon request to the Commission's office at Pratt as soon as it can be printed.

There are more than 40,000 farm ponds of all sizes in Kansas. Many of them are not being utilized as fully as they might be, especially for recreational purposes, because fishing, swimming, picnicking, etc., were not considered as possible uses when the ponds were planned and built. We believe that ponds are one of the best means of keeping up with the ever increasing desire of Kansans for fishing and more recreational opportunities. Also, good impoundments will make the future residents of the farm more desirous of living on the land and conserving it. In order to build and properly maintain a pond it is necessary for the builder to be aware of conservation principles and to use these principles on other portions of his farm besides those immediately involving the pond.

The requirements for a multiple-purpose farm pond are listed as follows: (1) Adequate but not too large a drainage area in permanent vegetation; (2) adequate sodded spillway and dam; (3) sufficient depth of water to prevent drying or winterkill; (4) entire pond area fenced for the protection of earth fill and the water; (5) drain pipe or water-level regulator for draining pond; (6) trickle tube for protection of sodded spillway; (7) pipe to tank for watering livestock; (8) stocked with suitable fish; and (9) intensive fishing for all species of fish stocked.

A wide variety of pertinent topics are considered in the bulletin. These are: Seven possible uses of ponds; five reasons why some farm ponds have failed; details of construction such as costs and state laws pertaining to ponds; choice of a suitable site; size of the pond; importance of a trickle tube; the water-level regulator; water supply and drainage pipe; the sodded spillway; the earth fill; and planting of grasses, shrubs, and trees around the pond for erosion control and for wildlife.

The second section discusses the management of farm ponds for fish production and considers such topics as: Three desirable characteristics of fish for pond stocking; the species of fish used for stocking and those not to use; the rate of stocking the different

species and combinations; Kansas farm ponds can support at least 200 to 500 pounds of fish per surface acre of water and the harvest should be 50 to 200 pounds per surface per year; how to obtain fish from the Commission for stocking; why and how to drain old ponds and restock them; several reasons why large numbers of fish die in early spring and late summer; the problem of muddy water and how to prevent and alleviate the condition; and finally the advantages and disadvantages of using commercial fertilizers in ponds and how to use the fertilizers.

The fish called the flounder can imitate the pattern as well as the color of their backgrounds. Placed on a checkerboard, the flounder will attempt to reproduce the arrangement of the squares on its body.

The orange-colored lenses of the prairie dog's eyes act as filters permitting this rodent to withstand the sun's intense glare.



These two Wichita anglers have proof that the bass were hitting this past summer at the Marion county lake. The gentlemen are Wilbur M. Kellogg and Dr. C. C. Parmley. Using artificial bait, they landed the two "lunkers" on June 7. Total weight of the two fish was fifteen pounds. Mr. Kellogg owns and operates a sporting goods store in Wichita.



View of Cedar Bluff dam and reservoir, located on Smoky Hill river, about eighteen miles southwest of Ellis, showing some of the 13½ square miles of water already impounded. Dedication services at the dam were held on June 10, 1951.—Photo courtesy of Ellis Review.

KANSAS' NEWEST RESERVOIR—CEDAR BLUFF DAM

Newest addition to the fast-expanding network of dams and reservoirs built in Kansas by the Bureau of Reclamation and U. S. Corps of Engineers is the huge Cedar Bluff dam, just recently completed on the Smoky Hill river, about 18 miles southwest of Ellis.

The 12,560-foot earth-filled dam will impound a reservoir covering 6,600 acres, measuring nine miles long and nearly five miles in width. The length of shore line at this stage is 54 miles.

The Cedar Bluff dam was designed by the Bureau of Reclamation as a multipurpose reservoir and includes 188,700 acre-feet of flood control storage, and will ultimately make possible the irrigation of 50,000 acres of land in the Smoky Hill river basin.

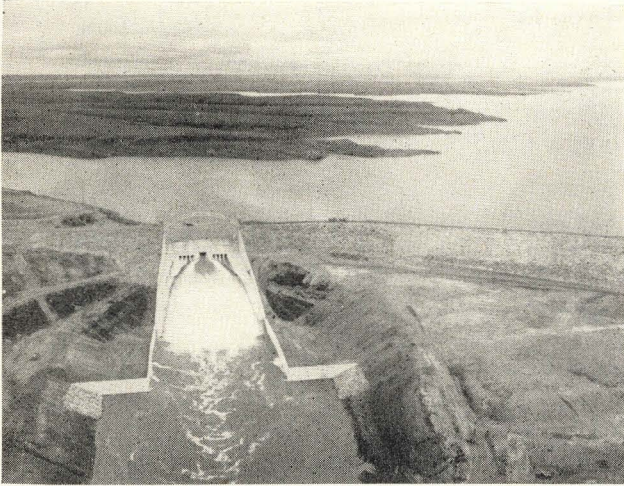
In addition to the flood control and irrigation pur-

poses, the Cedar Bluff dam is destined to be the top recreational center for western Kansas.

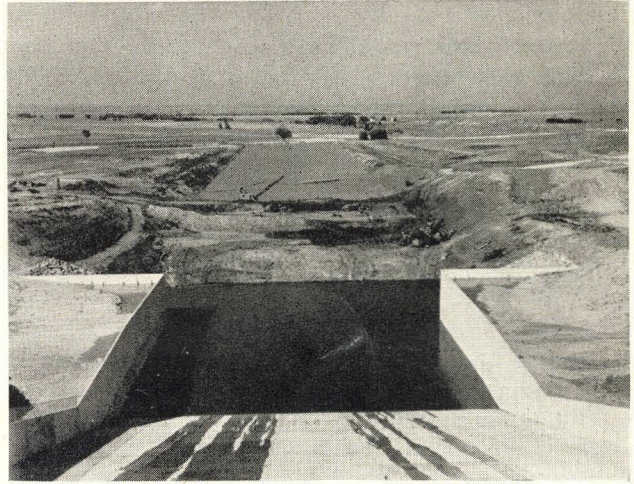
While many of the recreational facilities are still in the blueprint stage or are in the process of being completed, hundreds of persons visit the dam and lake each week to sightsee, go boating, picnicking, fishing, etc.

Fishing has been good below the dam and local fishermen of that area are taking full advantage of the good fishing opportunities. The migration of fish from the Kanopolis reservoir, some 95 miles east of Cedar Bluff dam, has certainly stocked the Smoky Hill river the entire reach of the river between the two reservoirs.

The Kansas Forestry, Fish and Game Commission has already planted more than 250,000 bass, channel



View of the Cedar Bluff spillway with dam in background shortly before the water began spilling through the uncontrolled orifice opening in the center of the spillway. The tops of the eight 5'x5' sluiceway openings are barely visible above the water surface.

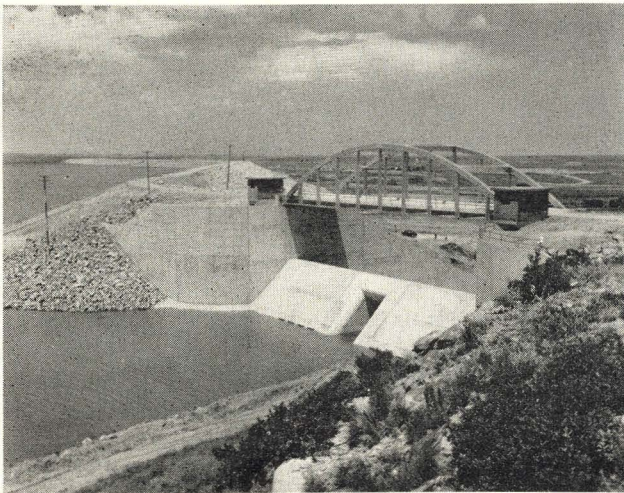


View looking east from spillway bridge before first water spilled. Contractor's equipment worked day and night to remove a construction road across the outlet channel as the water in the lake climbed towards the level of the spillway opening.

catfish, bluegill, crappie, white bass, drum and bullheads in the Cedar Bluff reservoir and more will be planted from time to time.

Work is under way on the construction of roads, boat ramps, and a bathing beach at the public use area on the south shore of the reservoir. Private cabin sites are being developed and will be available later this year.

When the planned development of the public use areas are completed, the huge reservoir will provide excellent public use facilities for fishing, boating, hunting and picnicking, which will make the area a popular recreational spot for western Kansas. The Kansas Forestry, Fish and Game Commission will assume the management of the public use areas at the reservoir.



Aerial view of the spillway at Cedar Bluff dam on July 12, 1951, looking west. The reservoir surface was at a level 2.1 feet below maximum stage on that date. The spillway orifice opening was discharging 1,300 cubic feet per second.—All photos of Cedar Bluff dam courtesy Bureau of Reclamation.

Meanwhile, the operation of Cedar Bluff dam has already saved the lowlands along the Smoky Hill river from flooding. On July 2, the Cedar Bluff reservoir reached its maximum stage. At that time, the water surface elevation was 2,154.9 feet above sea level and the maximum depth of the lake was 91 feet. At the maximum stage, the lake covered over 13½ square miles and held enough water to cover 270,700 acres or 423 square miles, a foot deep.

It was very fortunate for the cities of Ellsworth, Lindsborg and Salina that the Cedar Bluff dam, originally scheduled for completion on November 2, 1952, was so far ahead of schedule. Without Cedar Bluff reservoir, the storage at Kanopolis reservoir would have been filled early in June. From May 15 to June 23, the Cedar Bluff dam had stored a total of 220,000



Aerial view of the public use area looking southwest. The Page creek arm of the lake is at the left. Partially completed work on roads to the boat ramp and bathing beach are visible on the peninsula.

acre-feet of water. By June 26, when nearly all of this stored water would have reached the Kanopolis reservoir, the latter already had a storage of 358,000 acre-feet. At full stage, Kanopolis can store about 437,000 acre-feet, so they had room for only about 78,000 of the 220,000 stored at Cedar Bluff during the 39-day period. More severe flooding would thus have occurred in Lindsborg and Salina during June, had it not been for Cedar Bluff reservoir alone.

Leahy Urges Caution for Hunters

With another hunting season in full swing, Dave Leahy, Director of the Kansas Forestry, Fish and Game Commission, urged sportsmen to exercise more care and respect towards gun handling. Mr. Leahy said, "Each hunting season we seem to have more and more hunting accidents by careless gun handling. These gun accidents can be avoided if we learn and practice the Ten Commandments of Safety in gun handling:

1. Treat every gun with the respect due a loaded gun.
2. Carry only empty guns, taken down or with the action open.
3. Always be sure that the barrel and action are clear of obstruction.
4. Always be sure to carry your gun so that you can control the direction of the muzzle even if you stumble.
5. Be sure of your target before you pull the trigger.
6. Never point a gun at anything you do not want to shoot.
7. Never leave your gun unattended without unloading it first.
8. Never climb a tree or a fence with a loaded gun.
9. Never shoot at a flat, hard surface or the surface of water.
10. Do not mix gunpowder and alcohol.

"The above ten rules of safety in gun handling can be condensed into two rules," Leahy said. "First, handle every gun as if it were loaded, and second, never point the muzzle of your gun toward anything that you do not intend to shoot."

"As we go afield this season," Leahy continued, "let's be careful, let's be sure of our target, let's make our motto—SAFETY FIRST ALWAYS IN GUN HANDLING."

The true sportsman doesn't leave crippled game at the mercy of predators. He makes all possible efforts to retrieve any game that is downed.—*Tennessee Conservationist*.

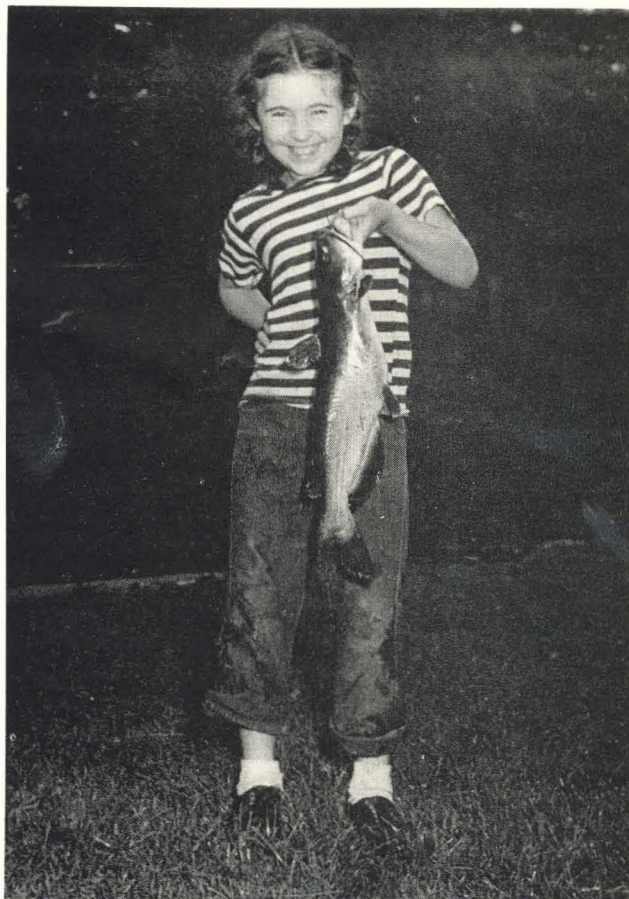
Have Your Youngsters Asked You For a .22 Caliber Rifle?

If your boy has longingly asked you "When May I Have a Gun?" have you been puzzled for the proper answer?

The Sporting Arms and Ammunition Manufacturers' Institute of New York City, has issued a helpful booklet for parents confronted with this dilemma.

Entitled WHAT EVERY PARENT SHOULD KNOW WHEN A BOY OR GIRL WANTS A GUN, this pamphlet was prepared to assist parents in arriving at their own conclusions as to when junior can be regarded as qualified for the safe handling and use of a .22.

This excellent publication can be obtained without charge by writing to Sporting Arms and Ammunition Manufacturers' Institute, 343 Lexington Avenue, New York 16, N. Y.



A cute little miss with a five-pound channel catfish which she caught at this summer's opening of Big Eleven Lake in Kansas City. She is Miss Suzanne Aita, age 8, of 2604 W. Forty-seventh St., Kansas City. Despite a rainy day, over 800 children participated on opening day and Miss Aita's catch was the biggest fish caught that day so she has a right to look so happy. The weekly Wednesday morning fishing sessions for children at the Big Eleven Lake are sponsored by the Kansas Rod and Gun Club of Kansas City, and are open to any child twelve years of age or younger.—Photo courtesy Ben Shanoski, Kansas City.

Landowner—Sportsmen Relations

By REED FAUTIN

(Reprinted Courtesy of *Wyoming Wild Life*)

The modern farmer or rancher is a combination business and professional man whose specialized vocation requires an intimate working knowledge of a wide range of diversified subjects. Since he operates in a competitive field, his existence depends on a well-planned and well-executed land usage program which will give him maximum returns on a sustained-yield basis. Under such conditions the game and fish, as sportsmen know them, are simply a by-product of the land and contribute little, in a financial way, to the average landowner's over-all economy.

Although the wildlife resources produced on the individual landowner's property may not have a high cash value, as far as the landowner is concerned, any increase in the productivity of these resources can be completely controlled by the landowner. He can encourage greater productivity of wildlife through improvement of food and cover, or he can discourage and prevent productivity. One of the most important aspects of management of our wildlife resources on private property is that the landowner can completely control the harvest set up by the Fish and Game Department, if he so desires, by preventing hunting and fishing on his property.

There is no justification for the production of wildlife unless it can be adequately harvested and properly utilized for recreational purposes. Harvests which are made on private property must be made at the discretion and with the consent of the landowner. Thus there must be coöperation between the landowner, the fish and game department which is responsible for the management of the wildlife resources, and the sportsmen.

The Role of the Sportsmen

Sportsmen are the harvesters of the wildlife resources. The state agency which is charged with the responsibility of managing our fish and game is dependent on the sportsman for harvesting the wildlife which is produced. What the harvest shall be each year; the time of year when the harvest is to be made; the areas from which the harvest is to be made; and the distribution of the harvest among the public in the form of bag limits, is the responsibility of the fish and game department of each state, except in the case of migratory waterfowl, where such responsibility rests with the federal government.

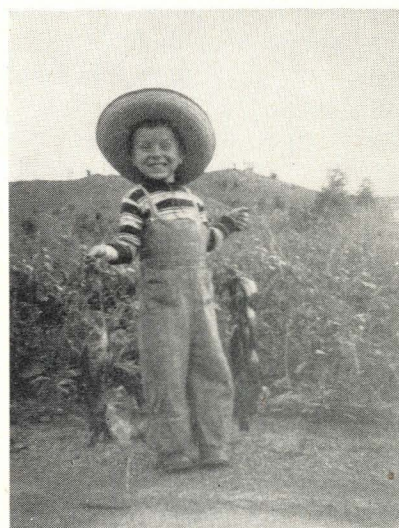
The responsibilities of the sportsmen in harvesting the fish and game are many and varied. In the first place it is their responsibility to obey the laws governing the management of our wildlife resources.

Game-law violators are thieves and should be treated accordingly. It is the sportsmen's responsibility to respect the property and rights of the private landowner at all times and to work actively to improve landowner-sportsmen coöperation. It is the responsibility of the sportsmen to teach beginners their obligations as well as their pleasures in the field. It is their prerogative to demand sound conservation legislation, but at the same time they should refrain from interfering with the proper management of our game and fish by applying political pressure on the agency which is charged with that responsibility. To do this, they must respect the training, experience, and judgment of the professionally trained personnel of the Fish and Game Department. It is their responsibility to learn and to teach the philosophy that the greatest values to be derived from the harvesting and utilization of our wildlife are the pleasures and enjoyment that come from it. They should let maximum sport and respect for private property, rather than kill, be their guide.

Points of Controversy

The general concept and principle that the game belongs to the people dates back to the Magna Charta in 1215 A. D. when it was decreed that "The wildlife was to be held in trust by the Crown for the benefit of all the people." This idea was brought to America by the early colonists and has been incorporated in the laws of all the individual states.

Because of the fact that the actual ownership of our wildlife rests with the people of the state, even though that wildlife may exist on privately-owned land, has sometimes led to a controversial situation in



Even youngsters take their share of fish from Kansas waters. The happy youngster shown above is Teddie Sears, four-year-old grandson of Ted Scheibner, of Parsons. Mr. Scheibner is an ardent fisherman and sees that his grandson has the "know-how" to catch fish, also. This string of fish was caught in one of the Strip Pits southeast of McCune, Kansas.

which any attempt on the part of the landowner to interfere with the legal harvesting of game on his private property has been resented by certain sportsmen. This has often been the basic bone of contention from which pet peeves, grievances, and personal grudges have developed.

Coupled with this source of contention has been the far more serious matter of lack of respect on the part of many sportsmen for the property of the landowner where the fish and game harvest is being made. Cutting of fences, the disregard for crops, and even the injury to or killing of livestock by a small minority of the sportsmen has often resulted in poor relations between the landowners and sportsmen.

What Can Be Done?

Even though the sources of contention which are responsible for poor relations between the landowners and sportsmen are recognized, these poor relations cannot be improved unless a serious and concerted effort is made to improve them. It seems to me that our only hope lies in the educational approach, but that approach must be realistic. It must be well designed and prosecuted frankly and openly. Both the sportsmen and the landowners must become acquainted with the basic facts and be willing to cooperate accordingly.

Here are some of the fundamental concepts which I believe both the landowners and sportsmen must learn; must become fully aware of; and must freely admit in order to improve relationships between themselves.

(1) That no game and fish department can ever provide, through subsidy or other means, adequate hunting and fishing opportunities on public lands for the number of people who desire it. Our Fish and Game Commission can go only a little way toward socializing hunting and fishing areas. Such areas are like public playgrounds in the city. They are for the fellow who can't have one of his own or be invited to one his friend has. Public areas will not adequately meet the needs of the public. Sportsmen are going to become increasingly more dependent on private areas for hunting and fishing. Let's admit it!

(2) We must hold to the belief that private rights and freedom from unauthorized trespass are an integral part of liberty as we know it in this country. No one can enter your home or damage your property without permission. Even officers of the law must gain the approval of the courts before doing so. Private rights and freedom from trespass are guaranteed by the Constitution. Let's admit it!

(3) The landowner, in securing a deed to property, is only the temporary custodian of that property. Our country, and the welfare of future generations who

dwell in it, will be determined, and the landowner himself affected by the way he handles it. Society, through government, has subsidized agriculture and many of our basic resource industries. These include the soil, forest, range and water resources. Farmers receive payment for the government for soil improvement. Millions are spent by the Department of Agriculture, Soil Conservation Service, Production and Marketing Administration, and other agencies, to aid the farmer in conserving our soil and water. Society seems to recognize this obligation by contributing through taxation to an effort to conserve certain of our natural resources. Under such a plan the farmer benefits immediately and society benefits in the long run. One important natural resource which is an integral part of the soil, water, and vegetation is our wildlife. There is a definite interdependency between wildlife, soil, and the products of soil and water. All are necessary to all of us if we are to continue as a healthy, prosperous nation. The landowners generally, I believe, are beginning to accept their responsibilities to soil, forest, and water. Most certainly wildlife should not be excluded when the interdependence of wildlife with these other resources is so evident. The landowner, as custodian of these resources, has as much of a moral obligation to perpetuate and provide a reasonable harvest of wildlife for society as society has for subsidizing his agricultural management practices. Let's admit it!

(4) The landowners and sportsmen are now much closer together and treading on more common ground than they ever have been before, yet they must come to know each other better and become acquainted with each other's problems to a much greater extent. There must be a much greater degree of mutual understanding. The no-hunting-this-means-you type of landowner and the fence-cutting-irresponsible type of sportsman still exist. However, I think that the majority of landowners and sportsmen are reasonable, honest, conscientious, and willing to cooperate. The average farmer or rancher spends more time in town, attends more meetings, reads more magazines and newspapers, hears more radio programs, and stays up later than he used to. His mode of living tends more and more to parallel that of his city cousins. Contrary to some opinions, he doesn't have hayseed in his hair, and he's a whole lot closer to the wildlife problems than the average sportsman. Most landowners and sportsmen are "Good Joes." Let's admit it!

(5) The sportsmen must realize that if they are to have enough places to hunt and fish, it is up to them to make their arrangements with the landowner and to gain his confidence.

It seems to me that it is up to the sportsmen to take the initiative. They are the ones who have

everything to gain and will lose out on a valuable fish and game harvest if the proper relations are not maintained between themselves and the landowners. The average landowner on the other hand has little if anything to gain from the game and fish but runs a chance of losing such if he doesn't get the utmost coöperation and respect for his personal property from the sportsmen.

The ways in which the sportsmen can coöperate are many. The specific ways in which these two groups can get together are often dependent on the kinds of game involved and the land-use pattern of a particular area, but there are certain things which can be done regardless of the land use.

Here are some suggestions for improving relations between landowners and sportsmen:

For the Sportsmen—

1. Always to obtain permission from the landowner to hunt or fish on his property.
2. To treat the landowners' property with the highest degree of respect by:
 - (a) Closing the gates.
 - (b) Avoiding damages to fences.
 - (c) Refraining from trampling down meadow grass or other crops.
 - (d) Leaving a clean camp or picnic place.
 - (e) Careful consideration of livestock to avoid injuring them.
3. To become an active and constructive member of an organized and respected sportsmen's group.
4. To be willing to report any other sportsman who damages private property or violates game laws.
5. To be willing to do little favors for the landowner in order to promote his good will and to repay him in part for the privileges of hunting or fishing on his property.
6. To encourage the landowner to become a member of his sportsmen's group.
7. Never forget that mutual understanding depends on courtesy and fair discussion.

For the Landowner—

1. To give the sportsman a chance to conduct himself as a true sportsman should.
2. To replace such signs as "No Hunting or Fishing—This Means You" with signs such as "No Hunting or Fishing Without Permission."
3. To become a member of a sportsmen's group so that mutual problems between the landowners and sportsmen can be discussed and a better understanding developed between the two groups.
4. To demand that each sportsman be a member of an organized group and that the sportsman display

his membership card so that any grievances that may develop can be referred to the sportsman's organization.

5. Never to forget that mutual understanding depends on courtesy and fair discussion.

Save Those Christmas Trees

Discarded Christmas trees can make valuable wildlife shelters, according to the Fargo, North Dakota, Gun and Wildlife Club. They urge sportsmen to save the trees after they have served their purpose in the family living room.

Obtain permission from landowner to place the trees in selected spots on his land. Some of the best spots would be along fence lines, in gullies, and shelterbelts which game birds are known to frequent. They should be placed, however, as close as possible to readily available sources of food so the birds do not have to venture too far during severe weather.

This could be a good project for any wildlife group.



Imagine this gentleman's surprise when he landed this curious looking specimen while fishing on the Smoky Hill river, south of Salina. He is Mr. Andreen, of the Sundry Drugstore at Salina. The fish is a flathead catfish, evidently deformed from birth or suffered an injury somewhere along the line.

News of Sportsmen's Clubs

Shawnee Sportsmen Elect New Officers

The Shawnee Sportsmen, Inc., of Topeka, have elected new officers to steer the organization the forthcoming year. They are: President, Alf Robinson; vice-president, Roy Derby; treasurer, Harold Brower; secretary, Walt Firestone.

Robinson succeeds C. A. Marlatte as president of the organization after the latter had so successfully headed the group for the past two or three years.

Hiawatha Rod-Gun Club Chooses Its Officers for Another Year

The Hiawatha Rod and Gun Club elected Hurshal Boyd as president for the ensuing year at a recent meeting of the Brown county sportsmen's organization. Other officers elected included L. B. Shubert, vice-president, and Granville H. Bowen, secretary-treasurer.

Elected as members of the board of directors for three-year terms were C. W. Bebermeyer, Don Kay and Mr. Boyd.

The Hiawatha club is an active organization and are doing much to further fish and game interests in that area.

New Officers for Gray County Fish and Game Association

New officers for the Gray County Fish and Game Association have been announced as follows: President, Gilbert Egbert of Ingalls; vice-president, Lloyd Tuggle, Cimarron; secretary-treasurer, Brice Ramsay, Cimarron.

Brink Re-elected President Atchison Fish and Game Group

Roy Brink was re-elected president of the Atchison County Fish and Game Association at a meeting held during the summer months. Other officers named by that association were: Dr. Eugene Berney, vice-president; Robert Berridge, secretary, and W. W. Hetherington was re-elected treasurer.

The Atchison club held their annual Fish Fry in July and it was a big event. Fish for the event were river carp caught there in the Missouri river by Joe Vanhorn, and prepared by him. Vanhorn has quite a reputation as a fish frier.

Brink reported that fishing wasn't so good in that area this past spring and summer although he did make some fine catches at the Nemaha County State Lake in April. Brink is a dyed-in-the-wool channel catfisherman, using smelly old stink bait. A year ago, Brink and his fishing partner caught over three hundred pounds of channel catfish along the Big Blue river near Irving, but didn't have as good luck this spring and summer.

Recipe for Successful Sportsman's Club

Mabry I. Anderson, in an article in *Outdoorsman*, remarked that although much has been written on how to organize a sportsman's club, he has never seen anything on how to make one work.

Whereupon Anderson tackled the job himself, elaborating upon these points:

1. BE SOLD ON THE NEED FOR ORGANIZATION. (A look around at the conservation jobs to be done should do it!)

2. ELECT OFFICERS THAT ARE INTERESTED AND HAVE SUFFICIENT TIME TO DEVOTE TO THEIR JOBS. ("Just because good old Bill is a great duck hunter doesn't necessarily mean he can shoulder the responsibility of heading an active conservation group. Good old Bill is already president of most of the country's useless clubs.")

3. HAVE A DEFINITE SET OF OBJECTIVES. ("Don't simply fight things, create something! Study your list of objectives carefully and take first things first.")

4. REALIZE THE ABSOLUTE NECESSITY OF REGULAR MEETINGS AND INTERESTING PROGRAMS. (Good outdoor movies are always available and a program committee worthy of the name can dig up any number of novel events such as quiz contests, skish contests, shooting matches and so on.")

5. BE AWARE OF THE FACT THAT EVERY MEMBER POSSIBLE SHOULD BE GIVEN A JOB. ("Clubs often fail by throwing the majority of the work toward some select few, thereby working their good horses to death and eliminating participation by other members.")

6. BE THICK-SKINNED AND WILLING TO STICK OUT YOUR NECK. ("Why be afraid to harass the poachers and violators that are stealing your birthright?")

7. PRACTICE SHOWMANSHIP. ("Plan and carry out events that are real publicity items and get your club in the limelight.")—*Wisconsin Conservation Bulletin*.

Violation of a safety rule may take only a fraction of a second. The result may mean a lifetime of regret.

Outdoor Notes

By JOE AUSTELL SMALL

Chestnut Dressing

For game birds—pheasant, duck, prairie chicken, etc., this recipe for a dressing is hard to beat. Shell and skin six cups of chestnuts. Drop them in boiling salted water. Cook until soft. Put cooked chestnuts through potato ricer. Combine with: 1 cup melted butter, two teaspoons salt, $\frac{1}{4}$ teaspoon pepper, $\frac{1}{2}$ cup cream, two cups dry bread in small pieces, 4 tablespoons chopped parsley, one cup chopped celery. Man—it's good!

Something Really New

A gauge that promotes gasoline economy and provides a constant check at all times on your engine's condition? Sounds like a robot? Maybe it is. They call it Mile-O-Meter. It fits on your dashboard and indicates relative miles per gallon fuel consumption at all normal cruising speeds. On long vacation trips, this alone should be exceptionally valuable to sportsmen and general motorists.

It also provides a constant check on engine condition. Erratic flutters and other reactions by the gauge pointer have specific meanings which are interpreted by a chart furnished with the meter. It gives the driver adequate advance warning as the efficiency of his engine deteriorates. It is impossible to explain the workings of this "mechanical brain" for your car in short space. You can get the Standard Model for \$9.75 or the Deluxe Model for \$14.95. For all particulars, write Gale Hall Engineering, Inc., Dept. 1321, Boston 18, Mass.

You boys who are successful in the deer fields this year, have you ever tried venison barbecue made this way? Brother, it's terrific! Here's the recipe: One cup catsup, one tablespoon salt, two tablespoons Worcestershire sauce, one-quarter cup vinegar, one tablespoon butter, one-eighth tablespoon cinnamon, three slices lemon, one onion (sliced thin), one-eighth tablespoon allspice. Sear three pounds venison in frying pan. Mix above ingredients in saucepan and bring mixture to boil, stirring to avoid burning, and simmer ten minutes. Cover venison with the sauce and roast in moderate oven (350 degrees F.). Cook one and one-half to two hours, turning occasionally. It's Good!

Leave a shock of corn standing in the corner of a field this winter, it may help save some game birds.

Gun Shortage Again?

Things in the gun world were gradually getting back to normal again when "Bang," and we were at war again. Ithaca, whose gunmakers say: "We can't make all the guns in the world, so let's just make the best," has enjoyed a snow-balling popularity in recent years that keeps them sorely pressed. They've got three generations of gunmaking behind them and their guns are works of art. I know—I've got one! They've got a new catalogue of guns and shooting tips which they'll send for ten cents if you write to Ithaca Gun Co., Box 6, Ithaca, New York. It'll tell you something about lightness in shotguns you probably never knew.

Before leaving the gun-gab line, I want to report a sporting book sale that is the doggondest thing I've ever seen. Top sporting titles (new books) are being sold for as much as a forty percent discount in a giant sale that is unusual in these days of high prices. You can get details from the Sporting Book Shop, 3303 Bridle Path, Austin, Texas.

The nighthawk has a habit of "buzzing" his mate, as she sits on her eggs. He does this by darting down upon her from a considerable distance and then sweeping upward with a loud booming noise.



Good channel catfishing attracts this fisherman in the white water below the outlet works control house at the Cedar Bluff Reservoir.

How Fast Do Shot Travel?

Members of the "cold stove league," which is made up of the more enthusiastic hunters throughout the country, can always find matters pertaining to guns and ammunition about which to argue, or, at least, converse.

"Yeah, I've read all those figures on muzzle velocities in terms of feet per second, but what I want is the dope in miles per hour. For instance, how fast does a charge of shot travel . . . in words a speed cop would use?" This is a familiar question to members of the sporting ammunition industry.

"When a 12-gauge Remington Express shot load, consisting of $1\frac{1}{4}$ oz., No. 6 chilled shot, leaves the muzzle, it is traveling at the rate of about 950 miles per hour," says Henry P. Davis, public relations manager, Remington Arms Company, Inc. "By the time it has gone twenty yards, it is whizzing along at about 650 miles per hour and at forty yards it has slowed (?) down to about 525 miles per hour . . . which isn't exactly a crawling gait.

"The speed of other loads may be of interest. A Remington Shur Shot load, powder equivalent to $3\frac{1}{4}$ drams and $1\frac{1}{8}$ oz. of No. 6 chilled shot, leaves the barrel at about 875 miles per hour; at twenty yards it is going nearly 640 miles per hour, and at forty yards a little over 500 miles per hour.

"The standard Remington trapshooting load, $1\frac{1}{8}$ oz. of No. 7 $\frac{1}{2}$ chilled shot, is moving over 825 miles per hour when it leaves the muzzle, about 600 miles per hour at twenty yards distant and at forty yards about 475 miles per hour.

"Skeet loads get out of the barrel at the rate of about 820 miles per hour and at twenty-five yards, due to the smaller shot (No. 9 chilled), the speed has diminished to around to 540 miles an hour, which is still a bit faster than you can throw a rock.

"With shot traveling at such high rates of speed, it is small wonder that duck hunters frequently see ducks struck by the shot charge of another gunner shooting from a blind considerable distance away, before they hear the blast of the gun."

It is estimated that our annual loss of soil by run-off would fill a freight train 175,000 miles long or seven times around the earth. "Conserving our soil is everybody's business or there will come a time when we have no business to conserve."—*Ohio Conservation Bulletin.*

New Winchester Ammunition Handbook Available

Reissued for the first time since before World War II, publication of a new edition of the much sought after Winchester Ammunition Handbook has just been announced.

Completely new, the 1950 edition is a guide to the use of Winchester sporting ammunition and firearms and contains 112 pages of information helpful to shooters and hunters. Free on request to Department No. 2 at the Winchester Repeating Arms Company division of Olin Industries, Inc., New Haven, Conn., the handbook is said to contain as much useful information as is usually found in expensive gun books.

Among the many new features is a new range table for all Winchester center fire cartridges, a table of wind allowance, and a table of cartridges interchangeable and adapted to the same gun.

For the first time, various aspects of bullet and shot-shell performances are explained with many of the famous super high-speed photographs made in the Winchester Research and Development Laboratories at speeds of $3/1,000,000$ ths of a second.

Besides ballistic tables and ammunition recommended for all types of shooting with shotshell, rim fire and center-fire ammunition, the handbook also explains in simple language the mysteries of shot string, barrel length, pattern, powder, velocity, trajectory, killing power, the range of bullet types and their particular uses, and a host of other subjects.

In addition, the handbook pictures ammunition and firearms and explains the differences between various types of rifles, and a host of other subjects necessary to hunters and shooters.

In Australia the bald eagle will follow white men hunting kangaroos, hoping for the offal from the kill. It will pay no attention to the black man hunting the same animal, as it knows the black native will make personal use of all portions of the prey.

Dispersion of young spiders is accomplished by "ballooning." The young spiders throw out streams of silk and rise on warm currents of ascending air. They rise as high as 14,000 feet or better and travel hundreds and even thousands of miles.

In laying in its winter supply of food, the chipping squirrel, or hackee, always carries four nuts in the pouches of its jaws on each journey to its storehouse.

Corn for Quail

Feeding quail cafeteria style may become the "poor man's way" to build up a supply of birds for his hunting, according to Cecil M. Webb, of Tampa, Florida, chairman of the Florida Fish and Game Commission.

Webb said he tried it last year on 5,000 acres of his own land in Pasco county, Florida, and raised an average of about five new, fatter quail per acre—which is good quail production by any method.

It's done by setting out automatic feeding pans from which the birds can pick cracked corn, and laying mash at the proper season to increase egg production.

Webb said private landowners could afford to undertake the program either individually or coöperatively.

Webb's 5,000-acre feeding program last year cost him \$600, but there was a lot of waste because the cows kept turning over the feeding stations and eating the quail feed. With improved methods, Webb estimated he can do it for \$175.

He said there were only two coveys of birds on his 5,000 acres when he started, about twenty quail to each covey. He released sixty-two pairs of new birds setting each pair down beside a feeding station so they would get used to eating there.

The result?

When the next hunting season rolled around he and about thirty others started shooting. They killed 526 birds and left from eight to ten in each of an estimated seventy coveys for breeding purposes.

They weighed the quail and found they averaged an ounce apiece more than birds raised under natural conditions. The birds evidently liked the feeding plan, too. Webb said every one killed had his craw filled with the cracked grain.



A section of the seedling beds at the Commission's Cover Restoration Nursery, near Calista.

Why Game Laws

In the countries of Europe wildlife belongs to the landowner. In order to hunt game, a man must either be rich or a friend of a property owner who commands an estate. Hunting and fishing fees are simply beyond the reach of the average working man. Here in the United States we have a different arrangement. Game and fish belong to the various states and can be taken or killed as the people may direct. Thus every person who wishes to hunt and fish and who applies for the right license can enjoy his sport as well as the next man. This is a democratic way of handling our wildlife resources and it is, we feel, the best method.

Yet, this very freedom with our game and fish has caused many grave and serious problems. Because everyone is entitled to hunt and fish we must have laws to see that we don't cut the supply down too much. Man by nature is the greatest enemy of wild birds and animals. We know from observation and past history that wildlife succeeds even in the face of natural enemies, but let man come into the picture and take an excessive toll of wildlife and you're bound to have some species disappear. So to have a continuous supply we must have laws for the proper protection of birds, mammals and fish.

The next time you see a game protector in the field checking on some hunter and fisherman, don't start cussing him out. He is only a public servant enforcing the regulations enacted by people like yourself for your own benefit and the welfare of everyone alike. Above all, he is helping to perpetuate your sport and the wildlife that makes your sport possible.

—*Colorado Conservation Comments.*

The cuckoo, which places its eggs in the nests of other and smaller birds, does this through necessity. The largest of the insectivorous birds, it requires a large quantity of food, keeping it constantly on the search. If it sat on its eggs, it could not obtain this food; if it left its eggs, they would become chilled.

Extinction of some bird species, says the National Wildlife Federation, may be in part due to their laying only one or two eggs. The passenger pigeon, now extinct, laid only one egg. The mourning dove lays only two—need we say more?

The physical conformation of a calf moose makes it almost impossible for him to eat off the ground without kneeling down.

ARRESTS—APRIL, 1951

Name	Address	Offense	Fine
Charles Budenosky	Edgerton	No trapping license	\$5.00
Robert D. Longnecker	Russell	No fishing license	10.00
Dwight Mitchell	Hugoton	Hunt, shoot and kill ducks	50.00
J. D. Groves	Hugoton	Possession of ducks	50.00
Robert K. Seematter	Manhattan	Hunting ducks in closed season	50.00
Wayne Luken	Denison	Hunting ducks in closed season	10.00
John Kellogg	Lecompton	Possess one bald eagle; no fur dealers license	20.00
Michael Steponick	Salina	Hunting pheasants in closed season	20.00
Herb Wilhelm	Russell	Hunting pheasants in closed season	20.00
Robert Nowlin	Wakeeney	No fishing license	5.00
Herb C. Teeters	Oakley	No fishing license	15.00
Earl Branstetter	Grinnell	No fishing license	5.00
Fred Struckhoff	Grinnell	No fishing license	5.00
Charles Jenkins	Belvue	Possess duck in closed season	50.00
Joe Beal	Colby	No fishing license	25.00
Jack Berry	St. Francis	Hunting pheasants in closed season	50.00
Odis Berry	St. Francis	Hunting pheasants in closed season	50.00
Leo A. Carter	Cherryvale	No fishing license	5.00
Joe Cizerle	Girard	No hunting license; kill ducks in closed season	15.00
Bill Garrett	Pittsburg	No fishing license	10.00
W. H. Harrison	Colby	No fishing license	10.00
Ralph Hixon	Lawrence	Hunting without permission of landowner	10.00
Dean Cain	Lawrence	Hunting without permission of landowner	10.00
Duane Persinger	Republic	Shooting pheasant out of season	10.00
Robert Miller	Lyndon	No trapping license	10.00
Ben Warren	Parkville, Mo.	No fishing license	5.00
Jacob Levey	St. Louis, Mo.	No valid fishing license	5.00
Norman D. Warren	Coffeyville	No fishing license	5.00
Harold Harvey	Garden City	Illegal fishing	10.00
Billie Joe Thompson	Garden City	No hunting license	25.00
Earl Dean Eastburn	Pittsburg	No fishing license	10.00
Lenord Conoway	Wallace	Fishing with too many poles	10.00
Charles M. Teach	Phillipsburg	Shooting and possess ducks out of season	50.00
Harry M. Wyatt	Tulsa, Okla.	No fishing license	10.00
Tom Quinlan	Perry	No trapping license	20.00
Stan Gedwello	Sioux City, Iowa	No hunting license	5.00
Dwight S. Tillotson	Wichita	No hunting license	10.00
Frank Fitchett	Emporia	No fishing license	10.00
Leslie Tackett	Wichita	Take channel cat less than 12"	15.00
Clyde Ganstine	Wichita	Take channel cat less than 12"	15.00
Lowell G. Anderson	Lawrence	No fishing license	5.00
John Stork	Marysville	No fishing license	5.00
Ray Kilburn	Willard	No trapping license	10.00
L. F. Garness	Nevada, Mo.	No nonresident fishing license	20.00
Robert Benson	Lakin	No fishing license	5.00
Raymond Martin	Topeka	No fishing license	5.00
Robert Miller	Topeka	No fishing license	5.00
Charles Bennett	Denver, Colo.	No fishing license	5.00
W. L. Wilkison	McPherson	No fishing license	6.00

ARRESTS—MAY, 1951

Name	Address	Offense	Fine
Charles Andre	Kansas City, Mo.	Misrepresentation; operate two trotlines in state lake	\$15.00
Frank Baird	Dodge City	Operate more than 2 poles in state lake	5.00
James Behrens	Great Bend	No fishing license	5.00
Ottis Bell	Wichita	No fishing license	10.00
Arnold Boisdrinhien	Pittsburg	No fishing license	25.00
Roy Bradley	Missouri	No fishing license	5.00
David Bryant	Satanta	Operate more than 2 poles in state lake	10.00
R. B. Campbell	Kansas City, Mo.	Misrepresentation; operate two trot lines in state lake	15.00
Bob Clinkenbeard	Colby	No fishing license	5.00
Jim Crosby	Larned	No fishing license	5.00
William Crumpton	Manhattan	Illegal fishing	10.00
Charles E. Davis	Kansas City	No fishing license	5.00
David K. Davis	Easton	No fishing license	10.00
Sebastian De Modica	Pittsburg	Vandalism at Crawford County State Park	1.00
Alfred Ditgen	Medicine Lodge	Illegal fishing	15.00
Roman Ditgen	Medicine Lodge	Illegal fishing	15.00
Charles Gilliland	Atchison	Fail to carry and produce license	5.00
Jess Graham	Kansas City	No fishing license	5.00
Tom Grant	Scammon	Vandalism at Crawford County State Park	1.00
Israel Gray	Little Rock, Ark.	No fishing license	10.00
Floyd C. Gregory	Scott City	Gave false name and address; did not show fishing license	40.00

Name	Address	Offense	Fine
James Hile	Kansas City	No fishing license	5.00
Bill Hitchens	Bonner Springs	No fishing license	5.00
Jefferson Jackson	Kansas City	Taking bullfrogs in closed season	40.00
R. A. Kelsheimer	Florence	Illegal fishing; no fishing license	20.00
Lawrence Kilner	Manhattan	Illegal fishing	10.00
Merle Kindred	Topeka	No fishing license	5.00
Charles B. Kinniard	Kansas City	No fishing license	5.00
T. A. Kuffler	Parsons	Possession of fish gig	10.00
R. E. Lane	El Dorado	No fishing license	5.00
S. E. Leighty	Kansas City	No fishing license	5.00
R. L. Linenberger	Garden City	Operate 3 poles in state lake	10.00
H. O. Lynch	Russell	Kill mourning dove in closed season	25.00
Ernest McCoy	Arkansas City	No fishing license	5.00
Roy Neville McGraw	Coffeyville	No fishing license	5.00
Charles H. Meador	Bartlesville, Okla.	No fishing license	10.00
Buddy Melton	Arkansas City	No hunting license	5.00
Don Meyers	Manhattan	Illegal fishing	10.00
Cleo Miller	Coffeyville	Take bullfrogs in closed season	10.00
Roy Lem Miller	Wichita	No fishing license	10.00
J. B. Nottingham	Wichita	No fishing license	10.00
Jerold Nottingham	Wichita	No fishing license	10.00
Robert Lee O'Hara	Wichita	No fishing license	10.00
Verlin F. Osburn	Independence	Take bass in closed season	10.00
Raymond Perez	Larned	No fishing license	5.00
Thomas J. Potts	Wichita	No fishing license	10.00
Frank Rinke	Sharon	Illegal fishing	15.00
James Ryan	Pittsburg	Vandalism at Crawford County State Park	1.00
Geo. A. Sharp	Oklahoma	No fishing license	5.00
Verle Smith	Dodge City	Operate more than 2 poles in state lake	5.00
C. W. Stinson	Kansas City, Mo.	Misrepresentation; operate two trotlines in state lake	15.00
Richard Unruh	Great Bend	No fishing license	5.00
L. V. Vaughn	Tulsa, Okla.	No fishing license	10.00
H. B. Vinson	Kansas City	Take bass in closed season	10.00
J. R. Webb	Galena	No fishing license	5.00
George T. Weibel	Los Alamos, N. Mex.	No fishing license	10.00
Ray Westmoreland	Downing, Calif.	No fishing license	10.00
Tom Williams	Pittsburg	Vandalism at Crawford County State Park	1.00
John P. Wright	Hays	No fishing license	15.00
Denver C. Wilson	Wichita	No fishing license	10.00
T. R. Williams	Kansas City	Operate too many poles in state lake	10.00
Paul Leo Withrow	Chetopa	No fishing license	5.00
Marvin Wright	Manhattan	Illegal fishing	10.00
Kenneth Zook	Ellis	Illegal fishing, no fishing license	20.00

ARRESTS—JUNE, 1951

Name	Address	Offense	Fine
Carl Allen	Atchison	No fishing license	\$5.00
Gerald Joseph Angood	Pratt	No fishing license	10.00
Quentin Brunker	Great Bend	No fishing license	10.00
L. R. Burchett	Leavenworth	No fishing license	5.00
Adolph Campbell	Colby	No fishing license	10.00
Jas. Clark, Jr.	Oklahoma City, Okla.	No fishing license	10.00
Mrs. Audrey Cooper	Wichita	No fishing license	25.00
J. B. Cormode, Jr	Lancaster	No fishing license and two fish traps	15.00
Alex Depperschmidt	Liebenthal	No fishing license	5.00
Jane Doe	Ellis	No fishing license	5.00
James Donahue	Irving	No fishing license	5.00
Lawrence Edwards	El Dorado	No fishing license	5.00
Joe Gerlecz	Junction City	Trespassing	5.00
Melvin Gottschalk	Liebenthal	No fishing license	5.00
J. R. Gray	Chanute	No fishing license	5.00
Robert Paul Hegarty	Atchison	No fishing license	5.00
Elmer Herman	Liebenthal	No fishing license	5.00
Wenny Herman	Liebenthal	No fishing license	5.00
Floyd Andrew Johnson	Oklahoma City, Okla.	No fishing license	10.00
Loren M. Kerr	Kansas City, Mo.	No fishing license	10.00
Margaret Kerr	Kansas City, Mo.	No fishing license	10.00
James Vernon Long	Leoti	No fishing license	10.00
B. R. McDonald	Osborne	No fishing license	5.00
Andrew McDugan	Norton	Fishing with trotline with 20 hooks in Decatur County State Park Lake No. 2	12.50
Claud McFarland	Frontenac	Taking frogs in closed season	10.00
Tom McLean	Beaver City, Neb.	Dynamite and taking fish from farm ponds	50.00
Virgil H. McNeill	Lakewood, Colo.	No fishing license	5.00
G. S. Maddox	McPherson	No fishing license	1.00
L. P. Miller	Oberlin	Using bank lines in State Park	10.00

Name	Address	Offense	Fine
Paul Miller	Oberlin	Using bank lines in State Park	10.00
Gay Miller	Oberlin	Using bank lines in State Park	10.00
George Miller	Sharon Springs	No fishing license	10.00
LaVaughn Miller	Sharon Springs	No fishing license	10.00
Joe Mossom	Frontenac	Taking frogs in closed season	50.00
R. H. Neitzke	Arkansas City	No fishing license	10.00
Wayne Nyland	Norton	Illegal fishing	10.00
Verlin Osburn	Independence	Take bass during closed season	10.00
Don Otis	Phillipsburg	No fishing license	10.00
Mary Roe	Junction City	No fishing license	5.00
Frank Sayers	Kansas City	No fishing license	5.00
Robert Scott	Kansas City	No fishing license and two fish traps	15.00
R. F. Skaggs	Kansas City	Operate 40 bank lines; too close to mouth of stream	20.00
Robert Snyder	Wichita	No fishing license	10.00
Paul Soontag	Penokee	Dynamite and taking fish from farm ponds	50.00
Virgil Stamey	Norton	Illegal fishing	10.00
Vernon Strotkamp	Peabody	No fishing license	5.00
Wayne Thompson	Garnett	No fishing license	5.00
Wayne Thompson	Junction City	Trespassing	5.00
Alvin Tucker	Fort Scott	No fishing license	5.00
D. D. Vaugh	Ulysses	No motorboat permit; using motor exceeding 7.5 H. P.	50.00
Bill Waller	Phillipsburg	No fishing license	5.00
Ray Wheeler	Woodruff	Dynamite and taking fish from farm ponds	50.00
Eugene White	Hutchinson	No fishing license	5.00
William A. Williams	Great Bend	No fishing license	10.00
W. G. Wilson	Great Bend	No fishing license	10.00
Roy I. Woods	Hutchinson	No fishing license	10.00
Lennard J. Young	Garden City	No fishing license	5.00
J. J. Naab	Garden City	Taking minnows from State Lake	5.00

What's Cookin', Doc?

Chum, unless you've collaborated with a squirrel under the conditions described below, you haven't eaten a real Brunswick stew yet! Start it off this way: One small can corn (six ears); one pint lima beans; four potatoes; one onion; one quart sliced tomatoes; three teaspoons sugar; one-half pound butter; one teaspoon salt; one teaspoon pepper. Clean squirrels (two or three of them) and cut into pieces. To four quarts boiling water, add salt, minced onion, beans, corn, potatoes, squirrels and pepper. Cover and simmer for two hours. Add sugar and tomatoes. Simmer an additional hour. Add butter. Simmer ten minutes, bring to boil, and remove from fire. Add additional salt and pepper to suit taste. Brother, she's good!

Monkeys Not So Dumb

Next time someone calls you a monkey, thank him! A monkey will not pull a banana from a tree until he intends to make use of it. On the other hand, humans have grain rotting in one place and bread lines standing in others.

A warm shower is often worth fishing through; it freshens and agitates the water, often causing fish to begin biting.

The white bass has two dorsal fins distinctly separated; the black bass but one—in two sections but always connected.

Out on a Limb

It is said that before the white man came to America, a squirrel could have traveled through the trees from the Atlantic Ocean to the Mississippi river without ever touching the ground.

The barn or screech owl is often called "the feathered cat" because it is a great foe to mice.



Winners in annual Fishing Rodeo sponsored by the Better Fishing, Inc., of Chicago, held at Big Eleven Lake in Kansas City, Kan., Saturday, August 26, 1950. From left to right: Nathaniel Green, twelve, of 2010 N. Fifth, Kansas City, with a three-pound four-ounce channel cat-fish; Raymond Fulton, eleven, of 2721 Brighton, Kansas City, Mo., with a one and one-half pound crappie; Terry Kraft, twelve, of 1719 Stewart, Kansas City, Kan., with a five-pound eight-ounce bass; Marianne Herold, eleven, of 1934 N. Twenty-fourth, Kansas City, Kan., with a six-ounce bass.

Photo by Ben Shanoski, Kansas City, Kan.

SUNRISE AND SUNSET TIMES DURING KANSAS' OPEN WATERFOWL SEASON—1951

DATE	Kansas City, Mo.		Topeka		Wichita		Great Bend		Hays		Garden City		Goodland	
	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
October 19	6:32	5:34	6:36	5:39	6:42	5:46	6:47	5:52	6:50	5:53	6:56	5:58	6:00	5:04
October 20	6:33	5:33	6:37	5:38	6:43	5:45	6:48	5:51	6:51	5:52	6:57	5:57	6:01	5:02
October 21	6:34	5:32	6:38	5:37	6:44	5:44	6:49	5:50	6:52	5:51	6:58	5:56	6:02	5:01
October 22	6:35	5:30	6:39	5:35	6:45	5:42	6:50	5:48	6:53	5:49	6:59	5:55	6:03	4:59
October 23	6:36	5:29	6:40	5:34	6:46	5:41	6:51	5:47	6:54	5:48	7:00	5:54	6:04	4:58
October 24	6:37	5:28	6:42	5:33	6:47	5:40	6:52	5:46	6:55	5:47	7:01	5:54	6:05	4:57
October 25	6:38	5:26	6:43	5:31	6:48	5:38	6:52	5:44	6:57	5:45	7:02	5:52	6:07	4:55
October 26	6:39	5:25	6:44	5:30	6:49	5:37	6:54	5:43	6:57	5:44	7:03	5:51	6:08	4:54
October 27	6:40	5:24	6:45	5:29	6:50	5:36	6:55	5:42	6:58	5:43	7:04	5:50	6:09	4:53
October 28	6:41	5:22	6:46	5:27	6:51	5:35	6:55	5:40	7:00	5:41	7:05	5:49	6:10	4:51
October 29	6:42	5:21	6:47	5:26	6:52	5:34	6:56	5:39	7:01	5:40	7:06	5:48	6:11	4:50
October 30	6:44	5:20	6:48	5:25	6:53	5:33	6:57	5:38	7:02	5:38	7:07	5:46	6:12	4:49
October 31	6:45	5:19	6:49	5:24	6:54	5:31	6:58	5:37	7:02	5:38	7:08	5:45	6:13	4:48
November 1	6:46	5:18	6:50	5:23	6:55	5:30	7:00	5:36	7:03	5:37	7:09	5:44	6:14	4:47
November 2	6:47	5:17	6:51	5:22	6:56	5:29	7:01	5:35	7:04	5:36	7:10	5:43	6:15	4:46
November 3	6:48	5:15	6:52	5:21	6:57	5:28	7:03	5:34	7:06	5:35	7:11	5:42	6:16	4:45
November 4	6:49	5:14	6:53	5:19	6:58	5:27	7:05	5:32	7:08	5:33	7:12	5:41	6:17	4:43
November 5	6:50	5:13	6:54	5:18	6:59	5:26	7:06	5:31	7:09	5:32	7:13	5:40	6:18	4:42
November 6	6:51	5:12	6:56	5:17	7:00	5:25	7:07	5:30	7:10	5:31	7:14	5:39	6:20	4:41
November 7	6:52	5:11	6:57	5:16	7:01	5:24	7:08	5:29	7:11	5:30	7:15	5:38	6:21	4:40
November 8	6:53	5:10	6:58	5:15	7:03	5:23	7:09	5:28	7:12	5:29	7:17	5:37	6:22	4:39
November 9	6:55	5:08	6:59	5:14	7:04	5:21	7:10	5:27	7:13	5:28	7:18	5:36	6:23	4:38
November 10	6:56	5:08	7:00	5:14	7:05	5:21	7:11	5:27	7:14	5:28	7:19	5:35	6:24	4:38
November 11	6:57	5:07	7:01	5:13	7:06	5:20	7:12	5:26	7:15	5:27	7:20	5:34	6:25	4:37
November 12	6:58	5:07	7:02	5:12	7:07	5:20	7:13	5:25	7:16	5:26	7:21	5:34	6:26	4:36
November 13	6:59	5:06	7:03	5:11	7:08	5:19	7:14	5:24	7:17	5:25			6:27	4:35
November 14	7:00	5:05	7:05	5:10	7:09	5:18	7:15	5:23	7:18	5:24			6:29	4:34
November 15	7:01	5:04	7:06	5:09	7:10	5:17	7:16	5:22	7:20	5:23			6:30	4:33
November 16	7:02	5:03	7:07	5:09	7:11	5:17	7:18	5:23	7:21	5:23	7:25	5:31	6:31	4:33
November 17	7:04	5:03	7:08	5:08	7:12	5:16	7:19	5:21	7:22	5:22			6:32	4:32
November 18	7:05	5:02	7:09	5:07	7:13	5:15	7:20	5:20	7:23	5:21			6:33	4:31
November 19	7:06	5:01	7:10	5:07	7:14	5:15	7:21	5:20	7:24	5:21			6:34	4:31
November 20	7:07	5:01	7:11	5:06	7:16	5:14	7:22	5:19	7:25	5:20	7:30	5:28	6:35	4:30
November 21	7:08	5:00	7:12	5:05	7:17	5:13	7:23	5:19	7:27	5:19			6:36	4:29
November 22	7:09	5:00	7:13	5:05	7:18	5:13	7:24	5:18	7:27	5:19			6:37	4:29
November 23	7:10	4:59	7:14	5:04	7:19	5:12	7:25	5:18	7:29	5:18			6:38	4:28
November 24	7:11	4:59	7:15	5:04	7:20	5:12	7:26	5:17	7:29	5:18	7:34	5:26	6:39	4:28
November 25	7:12	4:58	7:17	5:03	7:21	5:12	7:27	5:17	7:31	5:17			6:41	4:28
November 26	7:13	4:58	7:18	5:03	7:22	5:11	7:28	5:16	7:31	5:17			6:42	4:27
November 27	7:14	4:57	7:19	5:02	7:23	5:11	7:29	5:16	7:33	5:16			6:43	4:26
November 28	7:15	4:57	7:20	5:02	7:24	5:11	7:30	5:16	7:34	5:16	7:38	5:25	6:44	4:26
November 29	7:16	4:57	7:21	5:02	7:25	5:10	7:31	5:15	7:34	5:16			6:45	4:26
November 30	7:17	4:56	7:22	5:01	7:26	5:10	7:32	5:15	7:35	5:15			6:46	4:25
December 1	7:18	4:56	7:23	5:01	7:27	5:10	7:33	5:15	7:37	5:15	7:41	5:24	6:47	4:25
December 2	7:19	4:56	7:24	5:01	7:28	5:09	7:34	5:15	7:38	5:15			6:48	4:25
December 3	7:20	4:56	7:25	5:01	7:29	5:09	7:35	5:15	7:39	5:15			6:49	4:25
December 4	7:21	4:56	7:26	5:01	7:29	5:09	7:36	5:15	7:40	5:15	7:43	5:23	6:50	4:25
December 5	7:22	4:56	7:26	5:01	7:30	5:09	7:37	5:14	7:40	5:15			6:50	4:25
December 6	7:23	4:56	7:27	5:01	7:31	5:09	7:38	5:14	7:41	5:15			6:51	4:25
December 7	7:24	4:56	7:28	5:01	7:32	5:09	7:38	5:14	7:41	5:15	7:46	5:23	6:52	4:25

The above listed times are U. S. Weather Bureau figures compiled by the Kansas Forestry, Fish and Game Commission with the co-operation of the U. S. Weather Bureau at Wichita. The sunrises and sunsets for Kansas City, Mo., Topeka, Wichita, Great Bend, Hays and Garden City are computed for Central Standard Time. Those for Goodland are for Mountain Standard Time.
 (IMPORTANT NOTE: These times are NOT shooting times. Shooting may begin one-half hour before the listed sunrise time and must end one hour BEFORE the listed sunset time each day during the open hunting season on migratory waterfowl.)



Conservation Pledge

I GIVE MY
PLEDGE AS AN AMERICAN
TO SAVE AND FAITHFULLY TO
DEFEND FROM WASTE THE
NATURAL RESOURCES OF
MY COUNTRY - ITS SOIL
AND MINERALS, ITS
FORESTS, WATERS,
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