The Second Amendment

It would be an ironic footnote to history if one of our liberties—the "Right to Keep and Bear Arms" as guaranteed in the Second Amendment of the Bill of Rights—were to be sacrificed in the name of our late President, who was himself a member of the National Rifle Association. We need not state that honest gun owners everywhere are being challenged with the most serious threat to their constitutional right to private ownership of firearms—a threat more serious than ever before, at both the national and state level. We sincerely urge that each and every man who cherishes this right to do his utmost to defend his heritage for future generations as others have done for us in the past. We urge that you write your congressional and state legislators and reaffirm your dedication to the principle of the ownership of firearms by all free, non-criminal, mentally-sound adult Americans.

We are not against any law that deprives the criminal, the mentally ill or the untrained juvenile of access to firearms. But we are unalterably opposed to the deprivation by bureaucratic and autocratic restriction of firearms owned by the vast majority of honest citizens. We have yet to witness any "gun law" that effectively disarmed the criminal. Unfortunately, the record is full of abuses inflicted upon honest men by sweeping anti-gun laws. Once a law is passed, a near miracle is required to reverse it. Now is the time to fight anti-gun laws—not when it is too late.

---

Game Protectors

Area Supervisors
A. W. BENANDER
H. D. BYRNE
EDWIN GILBERT
CLEMENT GILLESPIE
A. E. KYSER
GEORGE WHITAKER
JAMES BRYAN

District Protectors
FLOYD ANDREW
E. D. BRYAN
KENNETH CAMPBELL
WALLACE FERRELL
TOM CRISPINO
GLENN HURST
LEON HOPKINS
WILLARD JONES
ELMER CRUMRINE
KENNETH KNITIG
ED BOND
JOHN DUNLAP
ROY MCKINSEY
WARD CROWELL
RUSH LANG
ERNEST HUSLIG

Topoka
Concordia
Meade
Arkansas City
Savannah
Atwood
Cherryvale
Anthony
Kansas City
Ottawa
Marshall
Pawnee
Lincoln
Herington
El Dorado
Goodland
Lecompton
Wichita
Holt
Mount City
Junction City
Great Bend

JACK MCNALLY
JOHN SHARP
GEORGE SHAW
PAUL LIES
JOHN SPENCE
CLYDE UELE
J. D. LICHLYTER
CLAUDE BLAIR
BOB NEASE
MARTY MEIER
MICHAEL SHANLEY
HOMER BURKHART
ROYAL ELDER
GENE HITT
JIM HAYNES
ESTER Houser
GARY HESKET
EDWIN LYNBERGER
MARVIN HAMilton
ALVIN AYERS
CHARLES SCHMIDTBERGER
WESLEY WIKOFF
SUD CULLINS
WILMER CLINE
RICHARD GRAGG
ARCHIE MODERLY
EVERETT WILNERD

Eureka
Cottonwood Falls
Garnett
Hutchinson
Horton
Norton
Rush
Enterprise
Garden City
Hutchinson
Mankato
Pittsburg
Salina
Wamego
Marion
Hays
Sedan
Garden City
Wellington
Osborne
Jetmore

Vol. XXI No. 2

Winter 1964

Published Quarterly by the KANSAS FORESTRY, FISH AND GAME COMMISSION, Pratt, Kansas

Commissioners
G. G. BOLING
HARLAN BOXBERGER
W. LLOYD BROWN
FRANK LOMBAR D
ROBERT WELLS

Director
GEORGE MOORE
FRED WARDERS

Division Chiefs
DAVE COLEMAN
ROY SCHOONOVER
RICHARD EGGEN
JOHN POLSON
BOB WARD
FRED WARDERS
NOEL MULLENDORE

Articles in Kansas Fish and Game magazine may be reprinted without permission from this office, provided proper credit is given. Kansas Fish and Game is distributed free to Kansas residents.

Edited by Information-Education Division

Second Class Postage Paid at Pratt, Kansas

90-2070
Deer are found in every county in the state, but little is known about their history in Kansas.

(Okahoma Dept. of Wildlife Conservation Photo.)

Our Kansas Deer

By Leland M. Queal,
Big-Game Project Leader

To see a deer in any part of Kansas ten or twelve years ago created enough interest to make front page news in area newspapers. Since then, deer have increased in number until, today, it is not unusual to see groups of 20 or 30 during the winter, and herds in excess of 50 have been reported. The most current estimate of the state-wide population, based on the number reported to be in each county by State Game Protectors, is approximately 19,400 deer.

Although this estimate may not be entirely accurate, it does furnish evidence that the deer herd has been steadily increasing in size for the past decade. Public interest in deer has grown right along with the deer population. Because deer are seldom active during daylight hours, only a few native Kansans, generally farm people, have actually seen a wild deer in their home state.

So far, only limited information is available about the distribution, the food habits and the life history of our most abundant big game animal. Following are some facts we do have that are important and generally applicable to deer in Kansas.

WHAT KIND OF DEER DO WE HAVE?

Two species of deer occur in Kansas, the white-tailed deer (Odocoileus virginianus) and the mule deer (Odocoileus hemionus). The three most readily observed characteristics which may be used to dis-
Deer are seldom seen by most Kansans unless they are farmers. They are seldom active during the daytime.

(Oklahoma Dept. of Wildlife Conservation Photos.)

A white-tail buck “in the velvet.” Notice the covering of the antlers which gives the appearance of being of a velvet texture.

Deer are seldom seen by most Kansans unless they are farmers. They are seldom active during the daytime.

(Oklahoma Dept. of Wildlife Conservation Photos.)

A white-tail buck “in the velvet.” Notice the covering of the antlers which gives the appearance of being of a velvet texture.

tinguish between the two species are the tail, the antlers, and the gait.

The tail of the white-tailed deer is approximately 12 inches long, being brown on the upper side and pure white beneath. The tail, or “flag” as it is frequently called, is usually raised high when the deer is running, revealing the conspicuous, white undersurface, and for this reason the animal is called the “white-tail.”

The tail of the mule deer is short, only about seven inches long, and much narrower than that of the white-tail. It is white except for the black tip which completely encircles the tail. When the muley is excited or running, the tail is usually held down inconspicuously or is wagged vigorously from side to side.

Each antler of a mature white-tailed buck has one main beam projecting forward above the buck’s head. Typically, several slender tines project upward from along the main beam. Those tines nearest the base of the main beams are called brow tines.

The main beam of a mule deer antler usually forks in the form of the letter “Y” and the upper arms of each “Y” again fork to form two points, producing a total of four points on each antler of the mature buck. Brow tines are usually present on mule deer also.

The gaits of the two species of deer are remarkably different. The white-tailed deer usually runs along in a loping fashion, dog-like, and with occasional high, graceful bounds. The muley, on the other hand, bounces along rather stiff-leggedly, like a sheep, with all four feet striking downward and backward at the same time, giving the appearance of a bouncing ball.

While the tail, antlers, and gait are the main features which help to separate the two species in the field, there are other features which may also be noted.

The ears of a mule deer, from which it gets its common name, are much larger than those of a white-tail. On antler-less deer, the size
of the ears is readily noticeable, but on an adult buck with large antlers the ears may appear to be less prominent.

The color of the deer varies with the seasons. In the summer the coat tends toward a rich reddish-brown, but in winter the coat is usually a grayish-brown. In all seasons, the coat of the mule deer appears grayer and coarser than that of the white-tail. On the forehead or brow the mule deer has a dark, v-shaped color patch which the white-tailed deer does not have.

Both species have four sets of specialized scent glands, located between the toes, in front of the eyes, the tarsal glands on the inside of the heel joints, and the metatarsal glands on the outside of the hocks. The size of these glands is much greater in the mule deer than in white-tailed deer.

WHERE ARE OUR DEER HERDS?

Already, deer are known to occur in every county in the state. The areas of highest density are in the "Chautauqua Hills" area of Chautauqua, Elk, Greenwood, Montgomery, and Wilson Counties, the loess drift hills associated with the Kansas and Missouri Rivers, and the northern two tiers of counties in the central and western parts of the state.

In the Chautauqua Hills, the deer distribution is closely associated with the blackjack-oak and post-oak forest uplands interspersed with agricultural cropland and native prairie. Throughout the remainder of the state, the distribution of deer is closely related to the woodland and brushland associated with the numerous river and stream courses. The belt of forested upland along the Missouri River from the Nebraska line to Kansas City, including Doniphan, Atchison, Leavenworth and Wyandotte Counties, is one of the major deer-producing areas of the state.

White-tailed deer are found in almost every county, and are the predominant species in the eastern three-fourths of the state. Mule deer become more numerous in the western quarter of Kansas.

WHAT DO WE KNOW ABOUT DEER ACTIVITIES?

At this writing, only a small amount of information is available concerning the life history of Kansas deer. Until the past few years deer were not common enough here to warrant serious study of their food habits, population dynamics, and life history. Recently, the Forestry, Fish and Game Commission hired a biologist for the expressed purpose of formulating management procedures that will be in the

(Continued on next page)
best interest of the landowner, the sportsman, and the deer population. This means we must become familiar with the problems peculiar to deer in Kansas to supplement basic facts already known about deer and their population dynamics.

Basically, the breeding season for both the muley and the white-tail is in the fall of the year. The peak of the rut varies some from cool, northern areas to warm, southern regions of North America, but it generally occurs in November. In Kansas, spotted fawns have been seen as early as April; and, the presence of unborn fawns has been noted during autopsy of road-killed does as late as July. This would indicate that the actual breeding period may extend from October into January.

Deer usually do not become sexually mature until about 18 months of age; however, doe white-tailed fawns frequently breed during their first year when they are but six or seven months old. An early birth date and a high level of physical health are major factors determining whether a doe will breed during her first year.

The breeding activity of does is determined by an estrus cycle which encompasses 28 days in white-tailed deer and 24 to 28 days in mule deer. The doe is usually receptive to a buck for only a short period (18-24 hours) during each estrus cycle. If the doe is not bred during this short “heat” period the cycle is repeated. If the doe does not conceive, a maximum of three or four estrus cycles will occur before her breeding potential is terminated for any one year. It is generally considered that the shortening of day length in the fall is the major contributing factor determining the onset of the breeding season.

A white-tailed buck will mate with several does during a rutting season, but often will remain with a single doe for several days prior to and following her short heat period. While the white-tailed buck does not form strong family ties with a single doe and her offspring, neither does he collect a harem as in the case with elk.

A mule deer buck also will mate with several does during the breeding period, and as with the white-tail, the muley does not form close family ties. It does, however, have a slightly greater tendency to collect a small harem, but in no way comparable to the elk.

Prior to the breeding season there is much “shadow boxing” on the part of the bucks. They remove the velvet from their antlers while testing their strength on limber saplings. Actual fighting among the bucks occurs much less frequently than is commonly thought, and the vivid reports of “a fight to the death” are uncommon. The bucks do, however, expend tremendous amounts of energy during the rut because of their active pursuit of the does, with little interest in feeding or time for rest. Body weight may decrease by several pounds
during the rut and, after the end of a breeding season, a buck may appear to be entirely devoid of fat. Following the breeding season, activity lessens and both species of deer tend to form into groups. This is frequently an environmental requirement because of severe weather and reduced food supplies during the winter. The tendency for such grouping is greatest in northern latitudes where it is referred to as “yarding.” Yarding, usually restricted to white-tailed deer, is less common or not practiced at all in southern regions. The young of the year ordinarily remain with the does throughout the winter.

Bucks lose their antlers during late winter, from January to March, the exact time again being related to latitude. In any particular area, most of the bucks will lose their antlers within a two or three-week period. Within a few weeks, the new antlers begin to grow and the bucks become very secretive.

The gestation period for white-tailed deer averages 201 days from the time of breeding until the fawn is born. Mule deer generally have a gestation period of 210 days. The does of both species of deer usually produce a single fawn from their first mating. Thereafter, if the deer population is kept within the limits of the carrying capacity of the range, twins are usually the rule.

In the late spring, immediately prior to the fawning season, the does of both species become less tolerant to the presence of other deer, even their own fawns of the previous year, and begin to spend more time alone. When the fawn is born it is quite weak, but it usually manages to rise to its feet and nurse within two or three hours. The doe will usually eat the afterbirth following the birth of the fawn. This presumably serves to remove any traces of the birth process from the area.

If the fawn is in suitable cover, the doe generally does not attempt to get the fawn to move from the area for the first three or four days. During this time the fawn moves very little, getting up only to nurse or to shift its position. The fawn is isolated from all other deer except the doe which returns periodically to nurse the youngster. Twin fawns are usually hidden in separate locations. It is during this period that fawns are frequently found and picked up by well-meaning persons who assume that the fawn has been abandoned. It is only rarely that a fawn actually will be abandoned, and all fawns should be left undisturbed if found.

From the time the fawn is three or four days old until it is about three weeks of age, it generally continues to remain in the same area. It spends more time with the doe and also wanders about the immediate area by itself or with its twin. The fawn does not begin to actively follow the doe on her daily rounds until it is about three weeks old.

Until the fawn is about three months old it has very little contact with other deer. The doe will frequently chase away any deer which comes near her fawn. About 1½ months prior to the breeding season the doe appears to relax her attempts to keep the fawn isolated and the fawn begins to have more contact with other deer. It is about this same time that the fawn loses its spotted coat.

A fawn usually will nurse until it is three or four months old, but it begins to feed on vegetation at about two to three weeks. By the time it is eight weeks old it is nutritionally self-sufficient and could subsist on vegetation alone.

White-tailed deer do not generally travel far. The average range is usually less than two miles. It is probable that farmland white-tails range farther than forest-dwelling deer due to the extreme variability in available food and cover.

In the mountain areas of western North America, the mule deer make an annual migration to lower elevations for the winter; however, very little is known about the movement patterns of mule deer in the high plains region. It is quite probable that such migration is restricted to short summer movements away from the river courses where they spend the winter.

WHAT DO DEER EAT?

Deer as a group are commonly considered to be browsers rather than grazers—that is, they subsist mainly on woody plant materials. (Continued on page 17)
The fleet-footed antelope depends upon speed and extraordinary sight for protection.

**Antelope in Kansas?**

_by Bill Hlavachick, Big Game Biologist_

Sure! And with increased interest and management we can have more.

The pronghorn antelope is the only North American big game animal with branched horns, thereby acquiring its name. It is also unique in being the only ruminant that annually sheds its outer horn sheaths. These sheaths are composed of fused hair compacted over a bony core and are lost every year from November through January.

Pronghorns are animals of the open plains and depend upon speed and extraordinary sight for protection. In color, the antelope is basically tan with white markings. No other big game animal in North America can be confused with the pronghorn.

Antelope are one of our most elusive and fleet-footed game animals. Now occupying some of the larger grassland areas of extreme western Kansas, he was formerly an inhabitant of the entire western two-thirds of the state. It has been estimated that 40 million antelope existed throughout the western United States around the year 1800. In 1889 documented reports show antelope as being common near WaKeeney, Kansas. Early-day explorers mentioned that antelope were as numerous as the bison. These multitudes no longer exist; man and his plow having done their work well. Settling of these western prairie regions by farmers and their agriculture has been the main contributing factor in reducing antelope numbers. One other factor of almost equal importance that has had much to do with the reduction of many of our game animals was market hunting. Reports from early day Colorado indicate that antelope carcasses were being sold for 25 cents each, that being the smallest coin available at the time.

The large herds that once roamed through Kansas have now been restricted primarily to Wallace and Sherman counties in Western Kansas. There are approximately 85 head of antelope still residing in the state. They exist in small scattered bands, each of which is in danger of extinction.

With this and other considerations in mind, the Forestry, Fish and Game Commission initiated a program designed to perpetuate and increase the antelope in Kansas.
MANAGEMENT

In the beginning months of the antelope program, a distribution and density study was undertaken by the game biologist assigned to the antelope project. Ground and aerial counts were made in order to answer two major questions—where are the antelope and how many do we have?

After this came studies to evaluate the currently-occupied range, evaluation of potential habitat in other areas of the state and a trip to Wyoming to make the biologist more cognizant of antelope management as carried out in a state where pronghorns are a major game species.

Currently, studies are being undertaken to provide information on food preferences, movements and activities of antelope now in Kansas.

Ranchers in Wallace, Sherman, Logan, Gove, Barber and Clark counties are being contacted as a first step in a program to release wild-trapped antelope into these areas. Antelope are to be trapped in Montana for release in Kansas during the winter of 1963-64 and subsequent years. Approximately 50 antelope will be released at a time.

Releases will continue to be made, providing transplant stock is available, until all suitable range in the state has been utilized. A possible barrier to the successful completion of the antelope stocking program could be a lack of ranchers who wish to co-operate with the Commission on sponsoring antelope releases.

Perhaps, within the next 5-10 years, a token antelope season can be set in areas where the population warrants it. A permit system of licensing with a public drawing of permits probably would be the way hunters were selected.

To some, this may seem a pipe-dream, but with sufficient understanding of the antelope’s requirements, with landowner co-operation and with a sound management program, it is possible that the pronghorn may yet take its place with the mule deer and the whitetail as a future target for some lucky Kansas sportsmen.
Outdoor Writers of Kansas, less than two years old, has come of age.

Not old enough to vote, it still is mature enough, vigorous enough, and big enough to become a real factor in the swift development of interest in outdoor participation sports in Kansas—in hunting, fishing, camping, boating, photography, and allied recreational activities—plus constant support of conservation and improvement of all wildlife resources.

Outdoor Writers of Kansas first became an idea at Jackson Hole, Wyoming, in the spring of 1961. There the Outdoor Writers Association of America was in annual convention.

Writers from Missouri, Arkansas, and Oklahoma, with a dream of a four-state, regional organization, invited Kansas to become a fourth member of such a regional group.

The invitation was accepted. The writer undertook the job of presenting the plan to Kansas writers and broadcasters of outdoors material. First, he explained, Kansas must organize their own state group; members of the state group would be eligible for membership in the regional, or four-state organization.

At Branson, Mo., autumn of 1961, was held a meeting of writers and broadcasters (outdoor sports) from Missouri, Arkansas, Oklahoma—and Kansas. All the states excepting Kansas already possessed outdoor writer organizations, and the Kansans present agreed to form such a group in this state.

With that agreement, Kansans were invited to become members of the four-state, or regional organization which was formed at Branson. Its name: GROW (Great Rivers Outdoor Writers), the first president, Homer Circle, of Heddons and Daisy Air Rifle. The organization was given immediate and nation-wide recognition. From Washington, D. C., came dignitaries to appear on the program. From a vast area and from conservation leaders in many states came encouragement and approval.

Kansans went home from Branson and began immediately the task of organizing a writers group in this state. The following May (1962), Outdoor Writers of Kansas was organized at Toronto and Yates Center. Membership totaled about three dozen. The constitution stressed conservation, co-operation with all other groups, and reporting of the story of outdoors activities in Kansas. Bulletins were issued. Support was given all programs designed to improve recreational facilities in Kansas. The Forestry, Fish and Game Commission, Parks Authority, Highway Commission, Industrial Development Commission, sportsmen’s clubs, and many individuals were quick to join hands with this group, so that OWK found itself a friend among friends.

The second meeting of GROW was at Bull Shoals, fall of 1962, and Kansans were given enthusiastic welcome.

The second meeting of OWK was at Manhattan, spring of 1963, at the Holiday Inn. The program itself was outstanding. Attendance was good. Little by little, Kansas had begun to hear of her Outdoor Writers. George Halazon, KSU, was named president to succeed the first president, Clelland Cole.

The big question: Would Kansas be ready, in the fall of 1964, to be host to GROW—to the members from the other three states? Would OWK be able to offer entertainment, talent, accommodations, and recreational facilities?

The question was given lengthy study. GROW was to meet in Oklahoma in the fall of 1963; the four states had agreed to rotate the honors as host, and Kansas’ turn would come in the fall of 1964.

By the time Kansans had arrived at the Western Hills Lodge on Grand Lake in Oklahoma they had decided that Kansas would be ready; GROW was invited to Kansas, and will be here in the fall of 1964.

The meeting place will be at Manhattan. Kansas State University has offered superb meeting and convention facilities, plus entertainment. Tuttle Creek will be available for boating, camping, fishing.

(Continued on page 17)
Design Selected
For Duck Stamp

Stanley Stearns of Stevensville, Maryland, is the winner of the 1964-1965 duck stamp design contest conducted by the U. S. Fish and Wildlife Service. The Marylander's design features a pair of the rare Nene (pronounced Nay-Nay) geese standing on a lava-strewn mountainside in their native Hawaii. A unique, non-migratory species of waterfowl, the Nene now are the beneficiary of an extensive effort to increase their numbers.

Second and third places in the Service's 15th annual duck stamp judging contest were taken by the same artist, Leslie C. Kouba, of Minneapolis, Minnesota. Stearns' design was chosen from among 158 entries from 87 artists. He also drew the winning design for the 1955-56 duck stamp.

Winning design for 1964-65 duck stamp. (Fish and Wildlife Service photo.)

Unlike any other duties of game protectors, biologists and area managers of the Kansas Forestry, Fish and Game Commission, the annual buffalo round-up at Garden City is in a category by itself. It sounds like an easy day's work, that is, unless the buffalo have other ideas. They had other ideas this year and it wasn't an easy day's work for anyone. Even when they are "co-operative," it's no easy job.

"Look out, here they come," means exactly that when you are dealing with buffalo. They may appear to be slow-moving and awkward, but you would be surprised at their speed and agility. Buffalo grazing on an open range is a peaceful sight, but the peaceful scene is disrupted when the huge animals realize that humans have invaded their range and are trying to control their movement.

Plans for the round-up, branding and vaccination are made at the headquarters office in Pratt. Dates are selected, personnel notified and other details ironed out. Ted Drees, area manager is on hand to greet the "buffalo wranglers" when they arrive. If it has been possible, some buffalo will already be in the pens. Those that are still on their own will have to be driven to the corrals using vehicles instead of horses. That is when the real problem begins. They are not inclined to be co-operative.

There is always the possibility that after the hot, dusty job of getting them into the corral something will "spook" the herd and they will decide to leave the enclosure (without anyone opening the gate). The best thing to do at that point is get out of the way, but fast.

After corraling, the animals were vaccinated, branded if necessary, shipped out if sold or released to the range if they were to remain. Buffalo aren't too fond of cramped quarters. Especially, it seems, the corral fence which leads to the loading chute and up the ramp into the waiting truck. When finally coaxed into a start down the narrow chute to the truck with a biologist or game protector in hot pursuit adding verbal encouragement, the huge beasts can reverse directions with surprising speed, much to the amazement of anyone following behind, who, through this change of direction is now in front. That is no place to be. The safest spot at this point is the top of the corral fence. Whether you climb up or catch the top of the eight-foot fence on your way down after the buffalo changes direction is a matter of choice—depending upon the situation and the person's reflexes.

This goes on for hours, but it's all in a day's work to those in the area near Garden City. The herd must be thinned out to the capacity of the available range, much the same as cattle. The land will only support a certain amount, whether it be grain, cattle, buffalo or wildlife. Each is a crop and dependent upon the quality of the land for its existence.

As the use of the land changed, the buffalo population dwindled and finally reached a point of almost extinction. Our use of the land now will determine the availability of any species of wildlife in the future.

(See pictures next page)
ABOVE—A peaceful sight, with little indication of the struggle to come later in the corrals.

RIGHT—Buffalo receive verbal encouragement as they head down the chute to a waiting truck. They can turn with surprising speed sending the wranglers climbing.

ABOVE—Safest way to work. (Garden City Telegram photo by Howard Brock.)

RIGHT—A man wouldn’t last long if caught on the ground in the milling herd.
ABOVE—Use of the land changed the life of the buffalo from that of freedom to one of fenced enclosures.

ABOVE—Branding and vaccination requires many hands and strong muscles.

Cautious, but apparently unafraid!
With the temperature down around the zero mark and snow hiding the landscape, it is usually difficult to remember the hot, muggy days of last August. At least it is hard to remember just how uncomfortable a person can be with perspiration running down his face trying to unsnarl a backlash and keep the mosquitoes from boring through the hide on his back. I guess that it is fortunate that our memories tend to retain only the pleasant thoughts of summer and the glories of the fishing trips we took.

The August heat was bearing down on the countryside the last time I visited Osage County State Lake. Wavy mirages danced ahead on the blacktop but there was enough humidity in the air so that a haze was collecting around the horizon. If signs meant anything, it could foretell of a shift in wind and perhaps a thundershower by evening. At least that was what I was hoping for since, with the high temperatures of the season, fishing is best in the late evening. If a weather change was in the offing, the fishing should be good.

As I passed through Lyndon on the way to the lake, I decided to find out how the fishing had been and how good a reputation it had with the local residents. While filling my gas tank, the service station attendant informed me that fishing was as good there as anywhere in the area. Another resident told me, "Man, they have really taken the big ones up there recently. Caught an eight-pound bass just last week." When I queried him as to whether he had taken it, he replied that he hadn't but he did see the fish and it was the largest bass he had ever seen.

Proof that Osage County State Lake is popular with fishermen was...
forthcoming. Upon my arrival, I found that nearly every camping spot was occupied and almost every shady spot on the bank sheltered a fisherman. They were there mostly from Shawnee and Osage counties but a surprising number of the automobiles present carried out-of-state tags. For the most part, these nonresidents represented service men from Forbes Air Base which is located just a few miles to the north. However, some were travelers and others, mostly from the Kansas City area, represented the appeal of this lake for those who like to travel out of their own locality for fishing.

Osage County State Lake is located just a short distance from the junction of U. S. 75 and U. S. 56. Access is marked on both highways with the lake lying about one mile southeast of the junction. Good gravel roads lead to both the north and west entrances.

The lake site lies close to the old Santa Fe Trail which occupies a hallowed spot in Kansas and United States history. Although the main trail actually passed through south of the location, some persons believe that a loop of it passed through a part of the land now owned by the state. Regardless of whether this is fact or fancy, one can almost envision in his mind's eye a procession of covered wagons winding its way down one of the rolling hills and into the valley now covered by the lake waters.

Osage County State Lake has a picturesque quality characteristic of its location. The rolling, grassy hills of the northeast part of the state coupled with the wooded valleys give a feeling of intimacy to the countryside. One would expect to find clear, sparkling waters in a lake in this area and there is no disappointment. With the exception of rainy periods, the waters are relatively clear. Wherever sunlight penetrates into shallow water, vegetation is a problem to fishermen. The clearer the water, the better the vegetation flourishes and persons who fish the shallower areas at this lake find it troublesome during the summer months. The three arms on the eastern shore of the lake are favorite fishing spots with many anglers but these seem to suffer worst from the water weeds.

None-the-less, fishing is usually great at Osage Lake. The boat fisherman comes into his own, during the late summer, fishing at night along the edges of these weed beds. At such locations, a surface lure produces well on bass up to three or four pounds. And, there is always the chance that you might connect up with one of the lunkers

(Continued on next page)
which are to be found there. One of the favorite locations for bass fishermen is at the first point of land directly across the lake east from the boat launching ramp.

Channel catfish fishermen also find much to recommend this lake. Specimens up to twelve pounds have been taken and even larger ones can be expected in the future. Crappie fishing is also good at times with early spring probably the best. Almost any youngster with the simplest tackle can take bluegill from the stumpy water on the northwest shore.

Construction at Osage County State Lake was begun in 1955 and the dam was completed in November of that year. The actual cost of the dam, not including the price of the land, was $76,229. The Forestry, Fish and Game Commission was reimbursed for three-fourths of the cost by the Federal Government since the lake was an approved federal aid project. The monies for such federally-approved projects come from an excise tax on fishing tackle and are apportioned to the various states for fishery improvements.

A drought during 1956 delayed the initial stocking of the lake since water was inadequate to build up a good pool. Stocking with bass, channel, crappie and bluegill was accomplished in 1957 and the lake was opened to fishing on November 10, 1959. The opening day saw a horde of fishermen descend on the lake with varied success. One thing was apparent right from the start, there was certainly an adequate supply of bullheads present and fishermen were urged not to throw any back. One can still take bullheads from the lake but they are not so numerous now. Evidently the bass are taking care of the surplus by their predation on the young fry.

A concession is in operation during the major portion of the fishing season and offers food, bait, tackle and boats for rent. The concession area is located on the west shore near the south end of the lake. This location also contains the boat launching ramp with adequate space for trailer parking. Like other state lakes, the use of motor boats is limited to fishing purposes only.

The favorite camping areas are on the west shore of the lake north of the concession. This shore is more gentle in slope than the east side and an abundance of trees provide the desired shade. Picnickers also seem to prefer this area but tables and grills are located at several points around the lake.

Raymond E. Parish is the caretaker at Osage Lake and he also serves Lyon County State Lake near Reading. Since he divides his time between the two lakes, you won't find him there every day. However, you may be sure that he will be glad to assist you in any way possible when he is present.

In case you are interested in statistics, Osage County State Lake has 140 surface acres of water. The total land acreage is 506 acres in an irregular shape. A considerable amount of the land is in good wildlife cover and supports a healthy population of quail. Prairie chicken used the area in the past before the lake was built so there may still be some nesting in the more remote parts. Native wildlife of all species may be seen at various times throughout the management unit.

As evening approached, the sun did a premature fade-out calling attention to the bank of dark grey clouds in the west. As the darkness settled, lightning flashes jabbed from cloud to cloud and it was plain to see that a summer storm was indeed on its way. As the wind freshened and the lake waters grew rough, I was content to reel in my line and head for the car. It would be nice to fish in the rain and try for one of those big ones which often go on a feeding spree in such weather. But, I had quite a distance to travel and much to do the next day.

As I drove by a camping area on my way out of the grounds, I stopped for a moment to watch a newly-arrived fisherman and his

---

Is Your Boat Overloaded?

How many small boat skippers are carrying excess weight around? Well, the Outboard Boating Club of America says that boatmen are a pretty active bunch, so it's doubtful that there are many modern mariners carrying excess poundage around the middle. And most small boat skippers are savvy to the fact that they should check the weight capacity of their craft before starting out on a pleasure voyage.

However, OBC has this reminder for boatmen: The weight capacity recommended by the boat's manufacturer—usually found on a small plate near the transom—gives the total weight capacity of the craft. To determine how much weight in passengers and gear a boat can handle, follow this simple procedure:

1. Add up the weight of your outboard motor (check manufacturer's specifications), battery, fuel (gasoline weighs six pounds a gallon), and normal operating gear, such as anchor, oars, radio, fire extinguisher and the like.
2. Subtract this total from the manufacturer's recommended weight capacity.
3. Never exceed the resulting total in weight of passengers and extra gear.

---

GET PERMISSION from Landowner
To HUNT or FISH
(Continued from page 10)

The Forestry, Fish and Game Commission has suggested a buffalo barbecue. An overnight camp-out is possible. State government officials have indicated a friendly interest in helping. Industries have evidenced a willingness to assist. A wealth of talent is available to furnish superb programs in the fields of photography, casting, conservation. There is a strong likelihood that the Department of the Interior may be represented from Washington.

The question: “Can Kansas entertain these neighbors and provide them a really fine convention?” seems already to be answered emphatically—affirmatively.

Outdoor Writers of Kansas will bring to this state, in the fall of 1964, the most impressive assemblage of nationally known sports writers, conservationists, and publicists of allied fields ever to be in Kansas at one time. Writers for the big outdoor sports magazines, photographers whose names are bywords across the land, dignitaries from high places are coming to Kansas to have one heck of a good time in the Kansas fashion—informally and genially—and Kansas’ vast resources of wildlife, of boating, hunting, fishing, camping, water sports will be seen and enjoyed by many who have never learned about the great Kansas outdoors.

George Halazon, OWK president, spearheads the operations. He will look to support not only from members of OWK, but from every sportsmen’s group, every club and organization interested in furthering the favorable image of Kansas.

OWK, as a youngster, has bit off a man-sized bite.

Never worry, the bite is not too big and Kansas will be seen in a new and glowing light by the visitors who are our guests, autumn of 1964.

About membership in Outdoor Writers of Kansas:

Any person engaged in writing or broadcasting material pertaining to the participation sports, is eligible, for active membership. Associate membership is available to anybody who subscribes to the principles of OWK. Sustaining memberships are invited from firms or friends. Helen Ward Rennie, secretary-treasurer at Montezuma, Kan., can supply any further information needed. Clelland Cole, St. John, Kan., will also help supply such information.

OWK members are eligible for membership in GROW, but need not join GROW to be active in OWK. GROW membership is encouraged, however.

OWK does not compete with any other organization; its members are anxious to be of service to all other sportsmen’s groups, to the state FF&G commission, to other state promotional groups, and to the state at large.

(Continued from page 7)

Nevertheless, with a great proportion of Kansas devoted to grass and agricultural crops, it may be that our deer include a larger share of grasses and grass-like foods in their diet.

Among the native plant species, oaks (acorns, twigs, and leaves), coralberry, sumacs, dogwoods and greenbrier, along with various forbs and grasses, make up the major food types. The twigs of woody species are used year around, while other food items are utilized when in season.

Corn, sorghums, winter wheat and alfalfa are the agricultural crops most frequently utilized by deer. Winter wheat and alfalfa are used mostly in the late fall, winter and early spring. Corn and sorghums are used mostly in the fall after the grain has ripened.

SO OUR DEER HERD IS GROWING—NOW WHAT?

The continuing increase in the deer population in Kansas is beginning to cause serious problems. Two hundred seventy-two deer were killed in highway accidents during the twelve-month period from April 15, 1962, to April 15, 1963. This was a marked increase over the 203 deer killed in 1961 and the 150 in 1960. The average estimated damage to the vehicles involved in the collisions was approximately $155; fortunately, no one has been seriously injured.

In addition, the number of complaints of crop damage attributed to deer is rapidly increasing. Deer in some areas of the state are ceasing to be a novelty and are in fact becoming a liability.

It is obvious that something must be done soon to control the deer herds in known problem areas, and the only realistic, effective and economical method of accomplishing this is by way of a well-planned hunting season.

Kansas has not had an open season since near the turn of the century, and is currently the only state that does not have a deer season of some sort. In recent years, deer populations have increased in other midwestern states, and each one in turn has reopened deer seasons to provide hunting recreation while controlling problems caused by deer.

Based on the information available at present, the fall of 1965 is the best estimate of when the first modern deer season will be opened. Much work has to be done before a deer season can become a reality, but some aspects of the proposed season are almost certainties at the present time. The first firearm season, in all probability will not be “state-wide.” Permits to hunt deer probably will be issued to a specific number of applicants on a drawing basis rather than an “open-to-everyone” season such as those held in the neighboring states of Colorado and Missouri.

An article outlining the deer-management program will appear in a future issue of KANSAS FISH AND GAME. In the meantime, Kansas sportsmen can look forward to the day when deer hunting becomes a reality and they can plan a home-state big-game hunt.
NEW STATE LAKE OPEN TO FISHING

Geary County State Lake latest addition to state’s fishing waters—
Kingman and Clark County State Lakes reopened after rehabilitation

By JOHN POLSON

November 23rd may have been the time of year when most sportsmen are concerned with the prospects of getting their limit of birds for the day, but many fishermen throughout the state were not to be overshadowed. Three state lakes opened to fishing at 7 a.m. on that morning. It was cold at most of the locations, but this didn’t seem to bother the anglers.

The occasion was the opening of the Geary County State Lake to fishing for the first time, and the reopening of Kingman and Clark County State lakes to fishing after rehabilitation.

Geary County State Lake is the newest state lake to be opened to fishing. The original stocking was made in the fall of 1961. The new 96-acre state lake, surrounded by 355 acres of state land, is nine miles south of Junction City on highway 77. Construction was completed in the summer of 1961.

Approximately 550 fishermen took part in the opening of the lake. Commission personnel operating creel check stations at each entrance to the lake reported fishermen took bass averaging 14 inches in length and weighed one and one-half pounds. Channel catfish averaged 17 inches in length and weighed one and three-quarters pounds. The largest channel catfish taken weighed 4 pounds and was 20 inches in length.

The Kansas Forestry, Fish and Game Commission held its meeting prior to the opening day at Junction City and then were on hand to observe the opening.

Rehabilitated Lakes Opened

Two other lakes opened to fishing for the first time following re-
habilitation on that same date. Clark County State Lake and Kingman County State Lake were restocked by the commission following necessary improvements. The initial work was begun on Kingman County State Lake in the summer of 1961. At the Clark County State Lake rehabilitation was begun in 1960, but problems of siltation around the outlet delayed the scheduled work. When the draining was completed in early 1961, the bottom was seeded and vegetation allowed to grow.

Special creel limits are in effect at all three of the lakes until June 1, 1964. Not more than 6 catfish (bullheads excepted) or 6 bass or not more than 6 fish in the aggregate of both catfish and bass may be taken daily. After June 1, the regular daily creel limits will apply.

The opening day at Kingman County State Lake resulted in approximately 331 fishermen taking bass that averaged one to one and a quarter pounds. The largest reported taken was two and three-quarters pounds. The largest channel catfish taken was two and one-half pounds. Most averaged one and one-quarter to one and one-half pounds. Kingman County State Lake also has public hunting areas and serves sportsmen as a multiple use area.

More fishermen fished at Clark County State Lake on the second day of the opening weekend, an estimated 258 compared to 204 on Saturday. Half of the fish taken were bass and one-third channel catfish. The bass averaged one and one-quarter pounds and were thirteen and one-half inches in length. The largest reported was two and one-quarter pounds. Channel catfish averaged sixteen and one-half inches in length and weighed one and one-half pounds. The largest weighed five and one-third pounds.

Taking advantage of the double opportunity offered, sportsmen who took their limits early wasted no time in getting their fish home and in the freezer then heading for their favorite quail hunting spots.

The Kansas Forestry, Fish and Game Commission held a meeting prior to the opening day. It was the first meeting of the group for Robert Wells of Garden City who was recently appointed by the Governor. (Shown left to right) Lloyd Brown, Columbus; Frank Lombard, Enterprise; Robert Wells, Garden City; G. G. Boling, Leavenworth, Chairman; and Harlan Boxberger, Russell, Secretary. (Junction City Daily Union photo.)

With their bird dog standing by in the car, these fishermen (left to right), “Butch” Augustine, Jim Kidd and E. L. Augustine, the boy’s father were there to get their limits early and then hunt quail at a favorite location later in the day.
State Lake Camp Areas

In Kansas, camping areas are located on recreational and game management areas of the Forestry, Fish and Game Commission, and at state parks, roadside parks, county and city parks.

Information on state parks under the jurisdiction of the Kansas Park Authority, may be had by writing that agency at 801 Harrison, Topeka. The State Highway Commission is located in the State Office Building, Topeka, and supplies information regarding roadside parks. For touring information write the Kansas Economic Development Commission, State Office Building, Topeka.

Recreational and Game Management areas of the Forestry, Fish and Game Commission are located adjacent to state lakes or federal reservoirs. No reservations are necessary and no charges are made for the use of these areas. However, a permit to camp must be obtained when camping on an area which has a resident caretaker. These permits are good for three days and may be renewed at the discretion of the caretaker.

Drinking water is available on many recreational or game management areas and, where provided, has been tested for safety. When water is not available on the area grounds, it is generally available within the immediate vicinity. Pets are allowed on game areas only if kept confined or restrained on a leash.

Boats may be used on all state lakes. However, motor-boats may be used for fishing purposes only. On federal reservoirs and Kearny County State Lake, motor-boats may be used for fishing, waterskiing and cruising. Complete hunting, fishing and boating information is available from the Forestry, Fish and Game Commission, Information-Education Division, Box F, Pratt, Kansas.

Fishing license fees are $3 for residents, $3 for non-resident trip licenses (good 10 days), $5 for non-resident annual license. Residents between the ages of 16 and 70 need a fishing license. Non-residents, regardless of age, must have a fishing license.

On the opposite page a map is provided for your convenience along with a list of recreational and management lands open to camping. The numbers on the map correspond to listed management areas.
CAMPING AREAS ON FORESTRY, FISH AND GAME COMMISSION WILDLIFE LANDS

(For other areas contact Kansas Park Authority and Kansas Highway Commission. For tourist information, contact Kansas Economic Development Commission. Addresses listed on opposite page.)

<table>
<thead>
<tr>
<th>State</th>
<th>Lake</th>
<th>Location</th>
<th>Acres</th>
<th>Tables</th>
<th>Toilets</th>
<th>Water</th>
<th>Boats</th>
<th>Fishing</th>
<th>Swimming</th>
<th>Cafe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hamilton</td>
<td>3W, 2N, Syracuse</td>
<td>432</td>
<td>94</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2.</td>
<td>Neosho</td>
<td>3X, 3N, Neosho</td>
<td>919</td>
<td>105</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3.</td>
<td>Kansas</td>
<td>3E, 4E, Kansas</td>
<td>1,249</td>
<td>120</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4.</td>
<td>Kansas</td>
<td>4W, Kansas</td>
<td>1,562</td>
<td>180</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5.</td>
<td>Ottawa</td>
<td>5N, 1E, Bennington</td>
<td>711</td>
<td>138</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6.</td>
<td>McPherson</td>
<td>5W, 7N, McPherson</td>
<td>483</td>
<td>111</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>7.</td>
<td>Washington</td>
<td>7S, 5W, Washington</td>
<td>360</td>
<td>109</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>8.</td>
<td>Chase</td>
<td>3W, Cottonwood Falls</td>
<td>360</td>
<td>109</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>9.</td>
<td>Butler</td>
<td>2W, 5N, Labor</td>
<td>351</td>
<td>124</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>10.</td>
<td>Cowley</td>
<td>3E, Arkansas City</td>
<td>197</td>
<td>80</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>11.</td>
<td>McPherson No. 1</td>
<td>5N, McPherson</td>
<td>100</td>
<td>24</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>12.</td>
<td>McPherson No. 2</td>
<td>25E, 4N, McPherson</td>
<td>215</td>
<td>75</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>13.</td>
<td>Lyon</td>
<td>3W, 14N, Reading</td>
<td>582</td>
<td>135</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>14.</td>
<td>Nemaha</td>
<td>4E, Nemaha</td>
<td>705</td>
<td>156</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>15.</td>
<td>Shawnee</td>
<td>7S, 2E, Shawnee</td>
<td>608</td>
<td>135</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>16.</td>
<td>Osage</td>
<td>10N, Osage</td>
<td>566</td>
<td>140</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>17.</td>
<td>Woodson</td>
<td>5E, Woodson</td>
<td>445</td>
<td>179</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>18.</td>
<td>Wilson</td>
<td>15E, Wilson</td>
<td>291</td>
<td>119</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>19.</td>
<td>Montgomery</td>
<td>3S, 1E, Montgomery</td>
<td>408</td>
<td>105</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>20.</td>
<td>Brown</td>
<td>7E, 18N, Brown</td>
<td>189</td>
<td>62</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>21.</td>
<td>Atchison</td>
<td>4N, 2W, Atchison</td>
<td>124</td>
<td>70</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>22.</td>
<td>Leavenworth</td>
<td>4N, 3W, Leavenworth</td>
<td>106</td>
<td>175</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>23.</td>
<td>Neosho</td>
<td>4N, 5E, Neosho</td>
<td>216</td>
<td>92</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>24.</td>
<td>Bourbon</td>
<td>4E, Bourbon</td>
<td>391</td>
<td>103</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>25.</td>
<td>Crawford No. 1</td>
<td>15N, 1E, Crawford</td>
<td>460</td>
<td>150</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>26.</td>
<td>Crawford No. 2</td>
<td>4N, 1E, Crawford</td>
<td>418</td>
<td>50</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>27.</td>
<td>Geary</td>
<td>8S, 8N, Geary</td>
<td>355</td>
<td>96</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>28.</td>
<td>Douglas</td>
<td>1N, 1S, Douglas</td>
<td>715</td>
<td>180</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

* Federal Reservoirs.

+ Facilities to be added soon, open for fishing soon.
Wichita Resident
Sets New State Record
On White Bass

A Wichita resident, Leonard Gardner broke the old Kansas record for white bass on November 9, 1963 at Fall River Reservoir in Greenwood County. The new record is 4 pounds, 8 ounces. The previous record was held by another Wichita resident, Edwin C. Elrod with a 3 pound, 10 ounce white bass.

Mr. Gardner took his new state record on a Saturday afternoon about 4:30 using a red and white Heddon Sonic. The previous state record was taken on the same type lure in August, 1962 from Fall River Reservoir.

White bass are the only true members of the bass family found in Kansas. Black bass are members of the sunfish family.

Other Kansas state record fish, the record holder, where taken and when, are as follows:

LARGEMOUTH BLACK BASS—10 lbs., 1 oz.

CHANNEL CATFISH—52 lbs.

BLACK CRAPPIE—4 lbs., 10 ozs.
Hazel Fey, Toronto, Woodson County State Lake—October 21, 1962.

WHITE CRAPPIE—3 lbs., 4 ozs.

WALLEYE—10 lbs., 8 ozs.
Roy Laster, Hutchinson, Kanopolis Reservoir—April 2, 1961.

FLATHEAD CATFISH—70 lbs.

GREEN SUNFISH—2 lbs., 2 ozs.

BLUEGILL—2 lbs., 5 ozs.
Robert Jefferies, Modoc, farm pond Scott County—May 26, 1962.

DRUM—27 lbs.
Louis Hebb, Howard, Howard City Lake—June 27, 1953.

CARP—24 lbs., 9 ozs.
Harvey W. Haas, Junction City, Clarks Creek near Skiddy—June 18, 1963.

PADDLEFISH—26 lbs.

STURGEON—4 lbs.

LEGAL NOTICE
(In compliance with Statement of Ownership, Management and Circulation Act of October 23, 1962; Section 4369, Title 39, United States Code.)
Date of Filing: September 24, 1963.

KANSAS FISH AND GAME is a quarterly magazine owned and published by the Kansas Forestry, Fish and Game Commission, Box F, Pratt, Kansas, Zip Code 67124. (State Agency.)

Editor: Information-Education Division of above.
Managing Editor: John D. Polson, Chief, Information-Education Division, Kansas Forestry, Fish and Game Commission, Box F, Pratt, Kansas, Zip Code 67124.

Distributed free of charge. Advertising not permitted by state law.
I certify that the statements made by me above are correct and complete.

JOHN D. POLSON.

Analyzes Ohio Hunter Questionnaires

In a final analysis of 1,100 questionnaires returned by Ohio hunters, Dr. Tony J. Peterle, leader, Ohio Co-operative Wildlife Research Unit, reported that 46.8 percent of the hunters had been in the armed forces; 85 percent hunted with the same persons year after year; only 40 percent would hunt more with liberalized hunting season; about 30 percent do not fish; 66 percent bowl or play pool; 25 percent do not know how to contact the game warden; 94 percent like to talk about their hunting experiences; only 12 percent paid a fee for hunting privileges during the year sampled; 57 percent thought that hunting was a good way to get away from the monotony of work; 72 percent were in favor of prosecuting those who pollute streams and waterways; 25 percent thought that the 3-shell limitation was unfair; and less than 10 percent of the hunters who also fish believed in the age-old practice of anointing bait copiously with saliva as a prelude to piscatorial success.
**Trajectory**

. . . Mid-Range Trajectory is a term that is sometimes confusing to the novice riflemen. By definition it is the point midway between the rifle muzzle and the center of impact on the target. In the course of its flight from muzzle to target, a bullet follows a curved path, or trajectory. The summit, or highest point, of this curved path constitutes the mid-range trajectory for any given bullet. The following examples are obtained with a 308 Win., 150 grain, silver tip cartridge. With a rifle sighted in at 100 yards, the bullet registers 0.6 inches above the imaginary sight line between the rifle’s muzzle and the target. With the same rifle zeroed in at 200 yards, the bullet’s summit (mid-range trajectory) is 2.6 inches; at 300 yards, mid-range trajectory is 6.5 inches.

**Twist**

The term “twist” today tends to conjure up an image of a mixed group of teenagers and young-in-heart gyrating in contortive fashion. But for many years the term has meant something quite different in the firearm industry: Twist is the angle, or inclination, of the spiraling groove that is cut into the bore of a rifle’s barrel. The classification of twist is determined in inches by the distance one revolution travels down the barrel length. For example, using a starting point at 12 o’clock, if the spiral travels 10 inches down the barrel before it returns to a 12 o’clock position, it is classified as a “1-in-10” twist—it took a spiral 10 inches to complete one revolution. A 1-in-8 means it took 8 inches of barrel length for the spiral to complete one revolution.

**Range Tables**

Range Tables enable shooters to pinpoint highs and lows in the flight of a bullet once the rifle is sighted in. The following examples are given using a 308 Win. 150 grain silver tip cartridge and a rifle that is sighted in at 100 yards. At 50 yards the bullet from this rifle will be 0.1 inch below the line of sight—an imaginary line leading from the rifle’s sights to the target. (At 50 yards, the bullet is low because it has not yet risen to the sight line.) At 200 yards, the bullet will be 3.9 inches low since it has passed the 100 yard sight-in point and begun to drop. At 300 yards, the bullet is 14.0 inches low. . . Using a rifle sighted in at 200 yards, the same bullet will be 1.9 inches high at 100 yards, and 8.2 inches low at 300 yards.

---

**Coincidence in Pheasant Contest**

Gene Euwer, who runs a hardware store in Goodland, has been holding a contest each year and awarding a prize for the longest pheasant tailfeather submitted during the season. He was left scratching his head and wondering “how come?” when a 16-year-old Goodland High School junior won the contest this year. Gale Johnson submitted a pheasant tailfeather which measured 25 inches in length to win an insulated jacket. Not unusual? Well, not by itself, but look at the entries which won the contest in 1961 and 1962.

The 1961 winning length was 25 inches. The 1962 winner, 25 inches and now the 1963 winner measured 25 inches. (No, it’s not the same one.) Gene is wondering if maybe there isn’t a standard-size bird in that part of the country.

(Our thanks to Jack Everton, KLOE News Director for the picture and information.)

**Suggestion for Sportsmen**

On numerous occasions the subject of sportsman-landowner relations is brought up. Many sportsmen wonder what they can do. Following is a suggestion from a landowner who provides lodging and a place for sportsmen to hunt:

“I wrote you after pheasant season last year about the hunters throwing trash in the ditches and fields and mentioned that I didn’t think that the farmers would mind if they would stop and put their trash in the trash barrels. My wife said she heard this suggestion broadcast over the radio. Please keep it up.

We let hunters come in here to hunt and I feel they can do that much for us.

I am going to put a barrel by the road at my place.

We usually have 12 hunters stay here and they bring their trash here to our barrels.”

This seems like a reasonable suggestion and perhaps a project for sportsmen clubs, placing trash barrels at various points and seeing that they are used and emptied in their particular area.

**Things You May Not Know**

Just before the molting period, ducks and geese fly to bodies of water where they will be safe from land enemies. The reason is the fact that they molt their primary feathers all at one time and for a short period cannot fly.