Do You Care About Conservation?

Law enforcement is one of the most vital elements in a sound fish and game program. Without it, violations would plague every agency involved in making outdoor recreation available to you, and would run rampant across the land.

In this connection, the “good sport” can be of valuable aid to the Fish and Game Commission.

Whenever you observe a fish or wildlife violation, you have a decision to make. You must either turn your head and obey the code of the underworld which says “Don’t help the law,” or you lend a hand.

How can you be of help, without getting “directly involved”? There are many ways. You should gather all the information possible at the time the violation occurs and get in touch as quickly as possible with a law enforcement officer.

Good citizens who ignore a crime of any kind help to destroy our society. Sportsmen who break fish and wildlife laws or stand idly by while others do so are helping to destroy both the natural resources and recreation we all value so highly.

To prosecute a violator, a game protector needs to know what the violation included, where and when it occurred, and if possible, the names and addresses of persons involved. If there were other witnesses, their names should be secured, also.

If you find that you can’t reach a game protector at home, call the nearest sheriff’s office, which maintains two-way radio contact with protectors in the field. If you wish, your information will be kept confidential.

A man who shoots more than his share of game, or catches more than his legal limit of fish, is depriving you and yours, and other good sportsmen, of a share of our natural resources, which really belong to everyone.

Don’t protect the violator.—THAYNE SMITH.
Cover Photo

Marvin Miller, prominent St. Francis sportsman and businessman, typifies Kansans who are taking to the fields to pursue their favorite game this Autumn.

It goes without saying, of course, that the ringneck pheasant will receive a big share of the hunters' attention, with quail, prairie chicken and doves following. It's really not necessary to tell Kansans that their own state is among the finest when it comes to small game and waterfowl hunting.

In fact, guys like Miller say it's "tops," and you can't argue with success. . . . Photo by Leroy Lyon.
The greater prairie chicken is often called the wild bird of the prairie. Hunters and bird fanciers alike will testify that it can be the most wary, and yet at times the most unconcerned bird that ever flew the hills of Kansas.

Kansans can be proud of the fact that the state has the largest population of greater prairie chickens in the nation. Ten other states have the birds within their borders, but only five (Kansas, Oklahoma, Nebraska, North and South Dakota) can boast of having a greater prairie chicken hunting season.

In the last decade, Kansas has averaged 49,000 prairie chicken hunters per year, with an annual harvest of 53,000 birds.

There are two methods of hunting prairie chickens in the state: Feed field hunting and pasture shooting. The majority of hunters (67 percent) use only the feed fields, while 20 percent venture into both feed field and pastures. A small but hardy 13 percent hunt only in pastures.

In feed field shooting, hunters station themselves in or around harvested grain fields which are used by feeding birds. Some pre-season scouting is necessary to determine whether the bird are flocked up. (Generally this occurs by the middle of October.) Search in open country for large harvested grain fields, preferably bean, corn or milo. Weather conditions before the hunting season might then become the most important factor. During October and November some birds will come into feed fields regardless of previous weather conditions, but they will concentrate into larger flocks after a hard freeze. A frost that kills insects and vegetation in pastures make waste grains in fields a more desirable source of food.

Prairie chickens will generally feed just after sunrise and again in late afternoon. It is best to locate a feeding area about a week before the season as the birds' habits won't change much before opening.

Good shooting provides Kansas hunter with two fine prairie chickens.
morning. When a flock is found, obtain permission to hunt from the landowner. If permission is granted, watch the flock for several feeding periods and get the general flight pattern of the birds coming to the field.

Make sure there is some type of cover you can use near the birds’ flight path. By the time the season rolls around your anticipation and expectations will be greater because you have permission to hunt where you know chickens are coming to feed. On the morning of the hunt, get to the field at least half hour before shooting time so you will be assured of the most favorable blind location. At this stage half of the battle is won.

Shooting and hitting the birds is a problem in itself. Unfortunately, when prairie chicken season opens, most hunters haven’t shot their guns for several months. The disadvantages increase as hunters, deceived by the flight speed of the prairie chicken, fail to “lead” as much as they should. The birds appear to be coasting along at a rather slow clip when they pump their wings briefly and sail without wing motion. Many times their speeds exceed 30 m.p.h.

Sportsmen who hunt pastures will find a dog helpful in locating birds. During mid-day, the most likely place to find prairie chickens is on hill tops or along ridges within a mile of a feed field. This type of hunting is sometimes discouraging because the birds flush wild and usually out of gun range, especially when flocked up. Single birds seem to hold much better.

Sometimes, early November weather is warm, and the chickens should be drawn as quickly as possible in order to prevent meat spoilage. These dark-meat birds are excellent table fare when given proper field care and preparation.

A bird’s eyes often weigh more than its brain.

A small bird known as the sipper (also water ouzel) lives in the mountains but dines underwater on insects, surfacing only occasionally for air.

The male swan is called a cob, the female a pen, and the young, cygnets.
Biography of a Deer

By WILLIAM C. PEABODY
Big Game Project Leader

Deer are beautiful and adaptable creatures. As the “No. 1” big game animal in North America their habits and exploits are annual topics of conversation from Maine to Oregon and from Canada to Mexico. Hunters talk of the buck with huge antlers that got away, while others find the sight of a doe and her fawns one of uncomparable beauty.

Like all other living things deer have had to adapt to a changing environment or face extirpation. History tells us of many animals that did not yield to change and were subsequently eliminated. With protection and proper management deer have flourished.

White-tailed deer are the predominant species in Kansas, comprising about 80 to 85 percent of the total population. They are most numerous in the eastern two-thirds of the state, while mule deer are more common in the west. Deer are found in every county. Their distribution is closely tied to wooded, brushy areas along and adjacent to the state’s many drainages, but it’s not uncommon to see deer in grassland habitat that may have little woody vegetation except for clumps of dogwood, skunkbrush, chokecherry, plum, buckbrush and an occasional cottonwood, elm or hackberry tree.

Our subject is a whitetail buck that has lived for the past 1 1/2 years in the woods, meadows and grassy draws along the Cottonwood River west of the little community of Saf-fordville. Contrary to what many local residents may think, he didn’t move here from some distant county nor did he wander in from Missouri or Oklahoma. He began life like most Kansas deer the first week in June in a hay meadow bordering a small stand of burr oak trees.

The adult doe had come through Kansas’ relatively mild winter in good shape. She had feasted on green winter wheat and as new twigs and leaves began to appear on elm, ash, hackberry, willow and various other woody plants, she ate them with regularity. Her thick grayish-brown winter coat consisting of many hollow hollow hairs for protection against the cold winter winds was rapidly being replaced with the thin, red coat of summer.

Her fawns of the previous spring, two yearling bucks, spent much time with their mother and five other deer until early May. At this time, the other deer moved down river, returning to their summer range or in the case of some deer, were looking for new homes. (One of two peak periods of annual deer movement in Kansas, 108 deer were killed in collisions with vehicles in May.)

The doe and her offspring of the previous year stayed together for almost two more weeks. The one-year-old bucks were beginning to grow their first antlers. Antler development had begun in early April and now each animal had several inches of new velvety growth exposed.

Energy requirements of both bucks and does are high at this time of the year. Bucks utilize tremendous amounts of calcium in growing new antlers and does need additional strength to prepare them for the birth and care of their fawns.

Each animal was becoming more independent of the others and finally the three parted company in late May. Actually, the bucks had little choice. The doe was becoming more and more intolerant of their presence as her time for fawning was near.

The doe did not move far from her winter home. She “selected” a native hay meadow bordering a draw which was lined with sumac and oak trees to have her fawns. The “nursery” was above the frequently flooded bottomland and spring breezes sweeping the meadow helped to reduce annoyance from many insects.

Twin, wobbly-legged fawns, a buck and a doe, were born on June 6. The buck was first, followed ten minutes later by his sister. The doe consumed the afterbirth and carefully cleaned each new fawn with her tongue. The fawns began to nurse almost immediately. Relatively inactive for the first couple of weeks, young fawns gain strength rapidly and may follow their mother for short distances as she feeds. This is the time of the year when misinformed persons finding fawns assume them to be abandoned. This is seldom the case and the fawns should be left where they are found.

Spotted fawns blend in well with the vegetation in which they are hidden. Generally, but not always, twin fawns are bedded in separate locations. This may be instinct-controlled behavior to insure survival of at least one fawn should a predator find and kill the other. At four weeks of age fawns are able to outdistance a conditioned cross-country runner.

Weighing five to seven pounds at birth, fawns grow rapidly and by midsummer are eating the tender tops of various forbs and succulent browse along with the doe. Wild lettuce, fruits and berries are favorites of deer in eastern Kansas. Daily early morning and late evening excursions with the adult doe become more frequent as the summer progresses. By early October fawns have lost their spots and are nutritionally self-sufficient.

Fawns, like children, are playful. I had the opportunity to watch two fawns playfully butting each other one warm October afternoon. They would butt their heads, then turn and run through the trees one after the other. They are also curious at
this time of their life. If not alarmed by alert, older deer they can sometimes be approached closely.

Based on a sample of about 700 fawns taken during our December firearms season, males outnumber females about 114 to 100. This may be nature’s way of compensating for a higher mortality rate among bucks.

Autumn browns, golds and reds were beginning to paint the landscape. It was apparent that the buck had grown slightly larger than his sister and he had developed small “buttons” on his head. He would not grow a set of antlers prized by hunters until his second summer. The fawns had learned many things from their mother. Their keen sense of smell and acute hearing were sharpened by the past experiences of the adult doe. Events of the summer also became imprinted upon them. Experiences along with their natural instincts would play an important part in their survival.

It was now October. Food was plentiful in the form of agricultural crops, acorns, buckbrush fruits, river grape, sumac and a host of other browse species. The fawns were becoming more independent, but still stayed with the doe as a family group. A yearling buck, one of the doe’s fawns of the previous summer, joined the family. All had nearly completed the molt of their summer coats and were replacing them with the thick, grayish-brown coats of winter.

The rut, or breeding season for deer in Kansas begins in October, reaching a peak in about mid-November. Bucks seem to lose much of the caution exhibited at other times of the year and also become increasingly hostile toward one another.

The yearling buck was a proud, magnificent animal. His newly polished antlers had four points on each side. He had plenty of nutritious food to eat during the spring and summer months—the size and number of points on his antlers were ample proof of this. During September the buck had rubbed the remaining velvety covering from his antlers by slashing at tree saplings and shrubs. Now he was ready for the “Mad Moon.”

During the rut whitetail bucks do not collect harems of does as do elk and to a much lesser degree mule deer. Instead, at the height of the rut, bucks are active in their search for does in breeding condition. It is at this time of the year that many deer are killed on our highways. When a doe in heat is found the buck generally stays nearby until she is receptive. Does have a short heat period of about 24 hours. If breeding and conception do not occur during the first oestrus, the cycle is repeated and heat recurs in 28 days. As many as three heat periods have been re-
corded, thus insuring that most does capable of breeding are actually bred.

Adult does in Kansas in good physical condition generally have twin fawns approximately 202 days following conception; triplets are not uncommon. By contrast, a doe breeding for the first time usually has one offspring. A study involving the examination of female reproductive organs showed that 60 to 75 percent of our whitetail doe fawns are breeding for the first time when they are only 6 to 8 months old. Excellent physical condition as a result of a high level of nutrition is responsible for this added productivity.

The yearling buck’s neck started to swell the last week in October. The rut is “triggered” by decreasing day length, thus accounting for the fact that the height of the breeding season occurs so regularly in mid-November despite differences in weather from year to year. The buck was now ready to do battle with other bucks in his quest for does in breeding condition. We have factual evidence that bucks sometimes fight to their death, but this is uncommon. Generally, a pushing contest results with the stronger, more mature bucks running off the younger ones.

The adult doe came into heat the first week in November. During her feeding forays she had noticed several buck scrapes along a well used trail. Bucks paw up places on the ground and urinate on them to alert does that they are in the area. An informed hunter looks for buck rubs and scrapes when selecting a stand. The doe stayed in the vicinity of the scrapes leaving her fawns to fend for themselves.

An adult buck had moved into the doe’s territory several days before. Resplendent in large, gleaming antlers and swollen neck, he truly was “king” of that stretch of the Cottonwood River. The yearling buck was also competing for the attentions of the doe, but after only a brief encounter with the adult buck he knew that he was no match for this patriarch and retreated. The older buck serviced the doe on November 7, after spending several days with her. If she got enough nutritious food to eat during the critical winter months ahead she would probably bear twin fawns again in late May; perhaps even triplets.

Man, currently the only and most efficient deer predator since the elimination of the cougar from much of its former range, entered the deer’s domain on October 1, with the onset of the archery season. It was at this time that the younger deer first experienced danger associated with man-scent. Two archers had obtained permission from the landowner to hunt that portion of the river. The doe and her fawns had several encounters with one of the bowmen early in the month, but he did not lose an arrow at them. This particular archer wanted a trophy deer with huge antlers.

The two yearling bucks, each possessing fine sets of antlers for their age class, were joined by the “old patriarch.” The younger animals had a healthy respect for his long, sharp tines. Although having only two more points than the younger bucks, the mature deer’s antlers were more massive. He was about 4½ years old and had six points on each antler. Contrary to popular belief, the number of tines do not indicate a deer’s age.

On one beautiful October afternoon the three bucks were feeding on acorns, buckbrush and mulberry when the lead yearling detected man-scent. Head raised high, he sniffed the wind trying to pin-point the smell of the intruder. His actions and the raising of his “white flag” alerted the other deer. In seconds they wheeled and retreated away from the scent. Unknown to the deer, an archer had been hiding in a clump of buckbrush only 15 yards away and could have shot at either yearling buck. The deer had detected the scent of his partner upwind.

Late in October a young archer from Strong City killed the doe fawn. It was his first deer. She was...
a fat, healthy animal and would make excellent eating. The herd was now reduced by one. What other method besides hunting could be used to control a productive, growing deer herd? Kansas’ deer resource provides residents with many hours of recreation and good quality venison for those hunters who are successful.

October passed all too quickly and the chill of November settled over the land. Other deer had moved into the area and now there were 19 in the herd. The brushy, ungrazed timber and the protected bluffs and draws afforded excellent winter cover. Good quality deer wintering areas are fast becoming a premium in Kansas. Over-grazing, application of aerial herbicides and complete timber removal to make way for agriculture (even when surpluses abound) are taking their toll of good deer habitat. Timber and brushland are needed to stabilize stream banks as watersheds—and as an additional source of marketable timber income for the informed landowner—it is also a dire necessity of the white-tailed deer.

By late November most of the adult does had been bred. As the December firearms season approached, rutting activity was beginning to decline. The yearling buck who had been thwarted in his earlier efforts to breed by the adult buck was finally successful in breeding a yearling doe and a fawn that had come into heat for the first time.

The herd had adjusted to the light hunting pressure exerted by archers and were settling into their winter “routine” when the firearms season was upon them. During December gun seasons we have found that antlerless deer are more vulnerable to hunting pressure than are antlered bucks. In “bucks only” hunting areas yearlings comprise the greatest portion of the harvest.

Certainly, younger deer are probably not as alert as adults, but they learn quickly. It is also possible that following approximately two months of rutting activity mature bucks “retire” to secluded pockets of timber, clumps of brush or other out-of-the-way places to rest up, feed and gain back some of the weight they lost during the breeding season. As the urge to breed declines they are less active, affording firearms hunters fewer opportunities to see them.

Hunting pressure in most of Kansas’ firearms deer management units has been light to moderate. However, one or two counties in each unit draw most of the hunters and subsequently have the largest harvests. Localized areas have received heavy hunting pressure and temporary over-harvests have occurred. But, other deer soon occupy the vacated habitat.

Five fat, healthy bucks were taken by firearms permittees on about a 4-mile stretch of the Cottonwood River, and our yearling buck was among those to fall to the gun. Hunters tagged, dressed out their deer and took them to a Fish and Game Commission check station where trained personnel examined each deer, obtaining biological data necessary for the sustained yield management of YOUR deer resource.

Winter had come to Kansas. Small groups of deer formed in favored wintering areas. On a late December coyote hunting trip along the Cottonwood River I found 13 deer; two were antlered bucks. Hunters in this area had taken few deer and in all probability there would be more deer next year. Those that survived the hunting seasons would have more to eat and would probably come through the winter stress period in good physical condition.

Our deer are not restricted by deep snows in their search for food as are deer in more northern climes. No cases of known starvation have occurred in the state. Corn, wheat, orchards and other browse species are readily eaten by Kansas deer. Bucks begin to shed their antlers in late December and by February most have lost their racks. However, I have personally seen antlers on deer about mid-March. It is generally thought that older bucks lose their antlers first, followed by yearlings.

While winter food shortage areas are not yet known in Kansas, we must maintain a surveillance of range conditions, physical characteristics of our deer herd and production success to insure that carrying capacity of the available winter habitat is not exceeded. Over-browsed native vegetation, deterioration of deer weights and antler development along with reduced productivity would sound the warning. More deer should be harvested! It is likely that farmers and ranchers experiencing deer damage and motorists colliding with deer on our highways will vent their anger upon the Commission long before the foregoing conditions are evident.

Public and private land around the Sunflower State’s many reservoirs are favorite wintering areas for deer. On Game Management Areas administered by the Fish and Game Commission a portion of the agricultural crops grown by lessees are left for wildlife food, as are food patches placed in strategic locations by the area managers. Deer make intensive use of this readily available winter food supply.

One of our Regional Game Managers has planted alfalfa to attract deer to public hunting land. Some have even gone so far as to improve the habitat by knocking over mature trees to open up the overstory canopy. This will allow sun to reach the understory influencing the growth of brush and forbs. Whitetails prefer brushy habitat with timber in the immature or pole stage.

Spring, a glorious and long awaited time for all forms of wildlife is here. Mammals become more active, plants burst forth in greenery with a renewed vigor and birds herald their happiness with a chorus of songs. Does carrying fawns are generally in good physical condition following our relatively mild winters. Healthy does produce strong, healthy fawns. The never-ending cycle of birth, survival and death is repeated. Those that have survived to produce young will hopefully be better adapted to their constantly changing environment than their ancestors.
It was a cold, grey November morning in a north Lyon County milo field. Frost crystals covered the stubble, giving an illusion that snow was on the ground. The air was so still that it was deafening. Nothing was stirring, except for an occasional field mouse hurrying for cover.

It was about 6 a.m. In the east, a thin gray line was starting to appear, indicating that dawn was only a matter of minutes away. Suddenly, from the south end of the field, two figures appeared, trudging. One was a small boy, about ten years of age. The other was an older person. They were both dressed against the numbing cold and neither seems to mind the chill morning air.

It was the opening day of prairie chicken season, and one they had been awaiting anxiously for some time. Once in a while, the boy would stumble, but he didn't seem to care. This was his first real chicken hunt and he had done everything he had been trained to do. The boy cradled the gun in his arms, pointing the barrel up and in the opposite direction from the older man, then sat back and waited.

It was about 6:20 a.m. The air crackled with frost and the hunters shivered as they watched the eastern horizon for the first sign of any movement.

A lonely sparrow hawk streaked its way across the horizon to break the monotony of waiting. Several meadowlarks made their mark overhead as they glided in for their first meal of the day. The appearance of the hawk and the larks didn't disturb the older man, but the boy fidgeted and turned and rechecked his gun again and again. He changed positions several times and finally stood up.

"Sit down," the older man ordered. The boy obeyed and all was quiet again.

Several minutes passed, then suddenly the elder man said: "I see chickens in the east—stay down." The boy didn't move, but he kept his eyes on the horizon, looking for the swift birds.

At first, they appeared as two tiny dots. From a distance, their wing beats were too small to detect the tell-tale sign of prairie chicken in flight, but second by second they drew closer.

"Get ready," the man whispered, "but don't shoot until I give the word."

On and on the birds came, first gliding with wings unmoving, then with a few rapid beats they gained momentum, coming nearer and nearer.

"Now can I shoot?" asked the anxious boy when the birds were about 100 yards away. "No," whispered the older man. "Wait."

More seconds passed.

"Don't forget to lead your target," the man warned. "Now, shoot when you're ready!"

The boy slipped off the safety and took aim on the lead bird. He pulled ahead of his target, kept the gun swinging and touched lightly at the trigger.

The blast reverberated across the countryside, breaking the morning stillness, and the boy knew he had missed. Again he aimed, giving the bird more lead this time, and fired. The lead chicken faltered, sidleslipped and fell to the ground among the stubble.

The boy bounded up, placed his gun on the ground carefully, then ran wildly toward the spot where the chicken had fallen.

After a short search he found his prize and kneeled to pick it up. For a moment as his hand touched the bird, he stroked its mottled feathers and drank in the beauty of its composition. He valued the bird greatly, and respected it as he had been taught, as a prize that many veteran hunters in our land had never taken, or even seen.

Then he remembered the older man, grabbed the chicken in both arms and ran back yelling: "I got him! I got him!"

The older man smiled and nodded, and patted the boy on the shoulder as he sat down in the blind, holding the bird before him.

A proud smile crossed the older man's face—a smile that said "thanks" for the game which remained for the game which remained for them to hunt, and for this moment which the two of them would share forever.

Who were they? The older man was myself. The

(Continued on page 23)
Pretty Margo Schroeder, Hillsboro, Miss Kansas for 1969, looks over a pickup camper during a visit to Kansas Fish and Game headquarters following her crowning at the annual Miss Kansas pageant at Pratt.

Theodore A. Sanborn, former state senator Safari Club International, recognizing his observing in the State Legislature.
A young fawn is content in the arms of Marvin (Butch) Hamilton, Salina game protector and its foster father. Hamilton gave the fawn its life when he cut it from its mother's womb after the mother was struck and killed by a car. The fawn is now in Great Bend zoo. (Salina Journal Photo by Dennis Lundgren.)
SHOREBIRDS . . .
Beauty Among Confusion

By MARVIN D. SCHWILLING

They come with many names. Some call them “peeps” and “snipes.” Others term them long-legged snipe, short-legged snipe, yellow-legged snipe, long-billed snipe, short-billed snipe, and others.

Regardless, they’re all shorebirds, and Kansas attracts thousands of them each year.

Undoubtedly, shorebirds are among the most difficult birds to identify, but they can be fascinating to those who like to watch “Nature” at its best.

Not until Dr. Roger Tory Peterson published his first colorful “Field Guide to the Birds,” with a new concept for bird identification by pointing out characteristic field marks for individual species and seasonal plumages, has it been relatively easy to identify any bird found in the field.

These field guides allow outdoormen to learn individual traits or plumage marks which separates each and every kind of shorebird.

Shorebirds include seven closely related families. All are small in size, the largest being the long-billed curlew, also known as “sickle bill.” The smallest are the least, western and semi-palmated sandpipers.

Generally speaking, most species of shorebirds are brown or blackish on the backs, mottled and streaked with buff or whitish below.

Most prefer mollusks, crustaceans, and insects for food, found in the mud flats or along the moist marsh and wet grassland habitat.

Most shorebirds nest on the ground. They lay four pointed and heavily blotched eggs. The eggs blend in well with the background of scantily built nests. The young are precocial, being able to run and feed themselves almost as soon as they have struggled free of the shell.

The Kansas list includes 38 species, all individually fascinating. At the peak of migration, numbers sometimes exceed a million and a half birds. Individual flocks may even number 150,000 birds. Nine species are known to nest in Kansas, including killdeer, upland plover, avocet, long-billed curlew, Wilson phalarope, snowy plover, spotted sandpiper, mountain plover, and woodcock. Only the killdeer and upland plover are considered common nesters.

The killdeer, more accurately killdeer plover, is the best known of the Kansas shorebirds and gets its name from its familiar “killdeer” call. It is not a dedicated wader or always a water bird. They may be found in open or plowed fields far from water. They sometimes nest and rear their young along roadsides, and bare fields.

The nest is a simple scratched-out saucer, in typical shorebird style, often lined with stones, pebbles or short bits of sticks depending on what is available and handy at the nest site. If the incubating bird is flushed from the nest she resorts to a convincing crippled-bird-and-broken-wing act, fluttering away dragging a wing while flashing the normally concealed orange brown rump patch . . . almost rolling over, or stopping to gasp and pant as if totally exhausted. The male soon joins in, circling close, scolding loud and doing his bit to drive the intruder away from the nest.

Upland plovers, like the killdeer, are not always found near water. They are basically grassland pasture birds frequenting water edges consistently only during migration. They are friendly prairie birds well known to the Kansas cowboys as the “wolf-whistle” birds. They are as much a part of the pastures of Kansas as the meadowlark, the prairie chicken or the horned lark, whether in the flint hills or the sandhills. The three syllable whistle or wolf-whistle call of the upland plover returns to the prairie about Easter time each year and remains until late September.

Ruddy turnstones, black necked stilts, and avocets are three shorebirds that are colorfully garbed, a sharp departure from the generally brown mottling of the group. It is a rare and beautiful sight, indeed, to find that a flight of ruddy turnstones has stopped at your favorite marsh allowing you to observe them as they flip over stones and sticks with their bills as they search for food. Even their raucous, loud, slow, rattling call draws your attention to their rusty red, black and white bodies.

Black-necked stilts are rare migrants here. They are large, long, red-legged and have a striking white pattern, thus the bird is not often overlooked. This species is normally found west of Kansas.

Avocets have long been common migrants through the state. I was privileged to be able to report the first nesting in Kansas. This was near the Pronghorn Lake area north of Garden City in the Spring of 1952. Since that time, avocets have become particularly common nesters in the Cheyenne Bottoms Waterfowl Management Area marsh of central Kansas. They reared about 2,000 young last summer. They are colorful chestnut, brown-headed, black-winged and white-bodied birds, with long legs, an upturned long bill that they sweep back and forth while they feed on insect larvae as they wade in shallow water.

Despite the fact that many other shorebirds are called snipe, the Wilson snipe is the only snipe to be found in all of North America. It and woodcock are the only shorebirds that are still hunted as game birds. Nearly all
major reasons woodcock and Wilson snipe have been able to maintain their numbers and persist as huntable game species.

Among all shorebirds the reproductive potential—one brood of three or four per year—is very low when compared to other game birds, thus shorebird species that migrate in large flocks and decoy well cannot produce the annual surplus necessary to sustain hunting pressure. By comparison the bobwhite quail produces three to four times as many young.

During the height of the shorebird migration at the Cheyenne Bottoms Waterfowl Management Area, flocks of as many as 200,000 dowitchers, 75,000 white-rumped sandpipers, 10,000 stilt sandpipers, 25,000 least sandpipers, 100,000 semi-palmated sandpipers, 500 Hudsonian godwits, 20,000 yellow-legs and 1,000 sanderlings are not uncommon, and the list goes on.

This is barely an introduction to shorebirds—books have been written about the group or individuals in this group. Spend some time with them when they cross Kansas. I'm sure you'll find them fascinating.

were hunted during the much publicized "market hunting" days. Snipe hunting is traditionally the concocted ultimate hunt of pranksters. Supposedly they are night roaming critters that are hunted with a sack and flashlight.

Nimrods who hunt the snipe have come to hold the twisting speedster in high respect. No sack and light are needed or necessary to bag this bird! They are never found in flocks, usually flushing from short grass or rushes around a marsh edge as singles or doubles. They often flush wild, flying a zig-zag pattern close to the ground, uttering a "scape-scape" sound as they go, almost appearing to be mocking the hunters with the words "e-scape-e-scape."

Woodcock have habits that are similar in many ways to snipe. They do not flock in migration, flush wild, fly fast and travel an erratic zig-zag pattern. Their unusual speed and flight patterns are probably the

Avocet, one of many shorebirds seen in Kansas, on nest in Cheyenne Bottoms area.
Fall is a season of transition and unrest. Bright green summer foliage turns to purple, red, gold, yellow, orange, pink, and finally bronze and brown. Leaves have served their purpose and now are cast off by the living plants to fall to the ground, rot and return to the soil.

Wobbly legged spotted fawns are two-thirds the size of their mother. Their spots are disappearing and, like their mother’s sleek red summer coat, is being covered over with the heavy grayer coat of winter. Cute little rabbits are almost as large as their mother and no longer have home ties, being entirely on their own.

Fuzzy quail chicks are now flushed as a covey, flying strong and scattering wide, regrouping to the mother’s rally call after danger has passed. Young pheasant cocks still appear a little ragged but are developing that rich gaudy garb of the adult bird.

Wildlife seems to be everywhere. The populations are at their yearly high, with each individual actively laying in a winter food supply or building up fat reserves for the long migration flight or for the cold winter days ahead. Hunters have already begun their harvest of the surplus, first with the opening of the dove season, then as other seasons open, a mixed bag may be taken in a day afield. These are pleasant days with hunting companions or dog and gun.

Most species of wildlife have distinct food preferences, or requirements, which are different than that of other species. Some are only minutely different, others radically so. However, many species, both birds and animals, prefer nuts, particularly acorns and pecans. Competition is often keen to see who can horde the most pin oak acorns when the crop is good. Redheaded woodpeckers stuff them in cavities until the cavity is full, then seal them in by pounding the hole full of wet pliable bark from young trees. Native mice store large caches for winter use. Squirrels lay up supplies and bury many which they are able to locate through heavy snow, apparently by smell. Even woodducks and mallards gorge themselves on acorns when they are available, and deer feed on them extensively to add to their fat reserves.

My most reliable deer blind had drawn a blank for three evening hunts and it was time to scout out a new area.

Leaving the car at a parking area, I took my bow and assorted tools for blind construction and headed upriver into a marshy, swamp-like area of scattered young clumps of cedars, cottonwood, sedges, rushes and grass tussocks. Sign and plenty of tracks left little doubt that deer were using the swamp. I rounded a bend in the cow trail I was following and stepped into the open. A big whitetail buck snorted and took off upriver. Other deer could be heard running in the distance, but I was unable to determine how many, or if there were more bucks. I continued upstream about a half-mile where the seepy swamp ground gave way to drier conditions and a predominant stand of large cottonwood. Deer sign was still much in evidence. It appeared they holed up in the cottonwoods and willow brush, feeding in adjacent corn fields and swampy areas. After some time I decided on two ten-foot cedars growing about six feet apart along the cow trail, near where I had spooked the big buck, as a blind site. With pruning shears I cut an opening between the trees just large enough to give me adequate room to draw the bow freely. This gave a clear field of view both ways along the trail. Another cedar provided a dark background to better conceal my movements from deer coming downriver.

Having completed the blind I left the swamp early but was back in the blind the next evening prepared for action.

I had been in the blind about fifteen minutes when a single doe appeared, feeding slowly downriver. She continued to browse to within 50 yards, and seemingly satisfying her hunger for browse, walked east into a cornfield never realizing she had been watched. The blind was occupied almost every evening for the next two weeks. Deer were seen or heard on almost every evening. The big whitetailed buck was seen twice. I now knew he had five points on the right side and six on the left—a fine specimen with much red showing in the winter coat. It was apparent that he was the dominant buck in the marsh. Two other bucks were observed several times. One appeared to be a two-year-old with a broken stub antler about three inches long on the left and three points on the right. I couldn’t help but wonder if he had broken the antler in a battle with the big buck. The third buck was the smallest of the three, probably a two year old, with two points on the right and three on the left.

The long evening hours spent in the (Continued on page 23)
Decoys for Dabblers

By R. E. McWHORTER
Regional Game Manager

Life in a duck blind can be miserable or marvelous. It all depends on the number of ducks that pass over your decoys.

There are two groups of common ducks, dabblers and divers. Dabblers (mallards, pintails, widgeon, gadwell, teal and shovelers) make up more than 90 percent of the ducks harvested in Kansas. Diving ducks (scaup, canvasbacks, redheads and ringnecks) frequent big water and are usually found only on the major Kansas rivers and lakes.

There are three major points to remember in decoying waterfowl. (1) All waterfowl (ducks and geese) light into the wind. (2) Diving ducks usually fly over the decoys and land in front of the spread on the upwind side. (3) Dabbling ducks usually light short of or among the decoy spread.

For most dabbler sets in Kansas, 10-20 decoys will suffice. On big water larger numbers of decoys are desirable. In flooded timber 1 to 3 decoys will usually do the trick. Remember, the better the decoy set the less important the calling.

Waterfowl change plumage in the summer and fall, so early in the season remember to emphasize the number of hens in your set. At this time the drakes are in eclipse plumage and resemble the hens. As the fall and winter progresses, gradually increase the number of drakes in your spread to about 60 to 70 percent by December.

What is the best pattern for a decoy spread? Keep in mind that dabblers feed in shallow water less than 18” deep and loaf in deep water in the open or in flooded timber and usually feed and fly about in small flocks.

The spread that I like best is called the “fishhook” or “hunter’s pipe” (See Figure 1). It works for both dabblers and divers, but the location of the blind is important and varies with the two groups of ducks. You can take advantage of the dabblers’ characteristics with this set by placing the blind in front of the pocket. The birds will be coming in to land immediately in front of the blind. This will put the flight speed of the bird at its slowest in front of the blind, approximately 20-25 yards away.

Some hunters prefer to let dabblers
light, then shoot them on the rise when flushed. Whatever the technique, ducks can be effectively decoyed to within "quail gun" range.

Another productive set is the "square hook." Although adaptable to dabbler shooting, it is most effective on divers. By placing the blind near the square corner, divers are shot in front of the blind as they attempt to land just ahead of the spread. For dabblers the blind would have to be moved down wind to shoot over the pocket, which is in reverse to the "fishhook," and the point of landing is beyond the decoys (See Figure 2). Dabblers shot over this spread are usually a bit farther from the blind compared to the "fishhook" set.

Next to the "fishhook," I like the "cove" set shown in Figure 3. This is adaptable to many locations—in farm ponds, favorite resting areas, indentations in flooded timber, and it is adaptable to the wind, either blowing into the blind or directly away from the blind. When the wind is coming into the front of the blind, the birds will be turning from left or right to land directly away from you in front of the blind. When the wind is from behind the blind, they will be landing head-on, sometimes at close range.

Other combinations of diver and dabbling duck decoys or duck decoys and goose decoys are frequently used. The main thing to remember in using more than one kind of decoy is to keep them grouped to themselves. When using duck and goose decoys on the water, for example, leave a space between ducks and geese. When using goose decoys on the water or in fields, remember to keep them in family groups of 4-6 birds. If snow geese decoys are used, remember the young birds are gray and not white. Over half of the decoys should be young, and a portion of the flock should be blue goose. In extreme eastern Kansas, there is a higher proportion of blue geese (about fifty percent) in the population than in Central Kansas (about twenty percent).

Flooded timber hunting for mallards is a classic sport, whether in Arkansas or on a Kansas reservoir. Calling from a good blind or camouflaged boat in flooded timber with one to three mallard drake decoys scattered a few yards from a boat can be an extraordinary experience. Calling is probably more important in this kind of a set than in any of the others.

My experience has been that nearly all of the dabbling duck species respond to mallard decoys, and mallard calls; this point has been borne out many times but particularly during the September teal seasons of recent years.

If you will, do your "getting ready" for duck season well in advance such as conditioning decoys, preparation of the right lengths of decoy cords for the water which you anticipate to hunt, and the construction of the blind.

Use your acquired knowledge in spreading your decoys. You will enjoy your hunt more.

The fastest game fish is the sailfish. It has been clocked taking out 100 yards of line in three seconds, nearly 70 miles per hour. They can do 60 m. p. h. with regularity.

Crickets' chirps have surprising carrying power. One cricket barely an inch long sounds a note audible for almost a mile.

Under usual desert working conditions, the maximum time between drinks for the average camel is eight to ten days. If it were not required to work during this period, it could probably last longer.

The tall giraffe has only seven vertebrae in its neck. A small sparrow has fourteen. In fact, the neck of a bird has more freedom of motion than that of a snake.
How Hunting Seasons Are Set

By GEORGE C. MOORE

Director, Kansas Forestry, Fish and Game Commission

During the early days of the Kansas Fisheries Department (later called the Kansas Fish and Game Department) all laws were spelled out in detail by the Kansas Legislature. They included seasons, bag limits, closed periods, methods of taking fish and game and other restrictions placed on the hunter and fisherman. The Department could not make regulations to fit the changing conditions or everyday needs. This gave little opportunity for good game and fish management as we know it today.

In 1927 the Legislature established the Commission system and gave it authority to “adopt such rules and regulations not inconsistent with the laws governing its organization and procedure and the administration of the provisions of this act as may be deemed expedient.”

The quote is the basis for modern and efficient game and fish management. Rather than going to the Legislature, the Commission may establish changes in seasons and bag limits, plus other conditions for harvesting annual game and fish crops.

Naturally, it’s good business to maintain rules and regulations easily understood by sportsmen whom the Commission serves, but, they must be flexible enough to protect the species and yet permit adequate and equitable harvest by as many sportsmen as possible. There are limits under which the Commission must operate, as there should be. The Legislature reserves the power to make basic laws under which the Commission operates, establish fines and penalties, define private and public property and establish budget limitations.

The Legislature establishes basic laws and gives the Commission authority to establish regulations for day-by-day implementation of them. Certain regulations, which have the effect of laws, are established for the purpose of general management and the control and harvest of fish and game. Most remain effective for a considerable time. There are others, however, which must be short in duration as they govern everyday operations and must be established according to changes in game and fish populations. Laws set forth definite procedures under which the Commission can establish or change regulations.

Here is a step-by-step example of how the Commission establishes the hunting seasons:

For a starting point, let’s take the end of a typical Kansas hunting season, which generally coincides with a new year. Many people, much thinking and work are included in gathering data before recommendations are submitted to the Commission. The responsibility for planning, gathering and analyzing data rests in the Game Division, but almost every
employee assists in gathering information. Sportsmen, recreationists, nature observers and the general public contribute a part and are never ignored.

Starting soon after the end of the hunting season the Game Division staff sends a mid-winter survey questionnaire to all rural mail carriers. Each carrier is requested to count the number of pheasants, quail and other game seen on his daily route. This provides an estimate of the density of game birds and animals following the hunting season. Since the same people, normally, run the same route each year it gives a year-by-year comparison.

During the same period, commission biologists and game protectors are also recording the number of birds and animals seen during their normal travels. This information is used to determine populations following the hunting season and provides an index to winter carry-over.

Again in April, May, and June mail carriers are asked to record the number of pairs of quail and the number of pheasants seen. Pheasant numbers are recorded by sex. Commission personnel undertakes quail whistling counts, dove coo counts, pheasants crowing counts, turkey gobbling and prairie chicken booming counts. This information is used as an index to the breeding population of these species at the start of the breeding season.

In mid-summer, after the breeding season is well underway, a third questionnaire is sent to all rural mail carriers and each records the number and size broods of birds seen on his route. At the same time game protectors and other personnel are recording the same information. This data is used to give the Game Division personnel an estimate of nesting success. Queslandowners, soil conservation technicians are also sent to certain technicians and others, requesting information on deer and turkey populations and distribution.

Finally, all information is analyzed and a meeting is held with technical specialists, district game protectors and staff participating to summarize and evaluate the data and make last-minute recommendations. Immediately following the meeting, the staff draws up hunting season proposals, based on information gathered from all sources, and submits it to the Commission for consideration in establishing hunting season dates, bag and possession limits.

The meeting is held in late August or early September to permit the gathering of as much data as possible regarding game bird production. This is important, because hunting success each year is based entirely upon the success of the breeding seasons.

The Commission evaluates the data submitted by the staff, reviews requests and information from the public, considers economic and social problems and also the welfare of wildlife. The five-member Commission, in turn, strives to establish seasons and bag limits which will give adequate protection to the resources and maximum recreation to the greatest number of people. All meetings are open to the public and anyone who desires may make his wishes known. The setting of game bags and seasons is democracy at work.

During the hunting season, Commission personnel gather data on adult-juvenile ratio, cock-hen ratio, age class of the game and hunter success. This is compared with data collected throughout the year, and is useful in evaluating the inventory and production techniques used during the remaining part of the year. For example, if four of each five quail harvested are birds of the year (juvenile) it indicates that a good hatch occurred during the summer. If the adult-juvenile ratio is nearly equal, it indicates a poor hatch or poor survival during the production season.

Setting of seasons, bags and other regulations for the "benefit" of the hunter is a never-ending and well-planned program. It is necessary to give adequate protection to the game and yet permit adequate harvest of the wildlife crop.

Although the chipmunk hibernates like the woodchuck, it does not drift into a deep sleep. It snoozes lightly and awakens periodically to feed on food it has stored.

Winter takes a heavy toll among wildlife each year. Here, a game protector inspects quail and pheasant killed in a snowstorm. Mortality rate among many species of wildlife exceeds 50 percent annually.
Before me is an Associated Press news item clipped from the June 24, 1969 issue of the Wichita Eagle. Its headline blares, “Bloody Minded Shoot 206 Americans in Week,” referring to the week of June 15 to June 22, 1969. Some pointed excerpts from this clipping read:

“Last week, 206 persons were killed by guns in the United States, a grim counterpoint to a description earlier this month of Americans as ‘a bloody minded people.’”

“‘We are a pluralistic society with grown frictions,’ said Dr. Graham. ‘We are also an affluent and liberal society with a hulleva lot of turmoil for a long time.’”

What possible connection could such a job of sensationalizing tragedy have on resource conservation in Kansas? More than we might suspect. Anti-gun factions are continually working toward total abolition of private ownership of firearms in the U.S. Such abolition will mark the downfall of nearly all game conservation activities in our state and country. Without firearms, there will no longer be hunters. Without hunters to buy licenses, stamps and permits in support of their state and Federal fish and game agencies, no funds will be available to carry out game management programs.

Further, without private purchases of sporting arms and ammunition, Federal excise taxes placed on those items, earmarked for wildlife management programs by the Federal Aid in Wildlife Restoration Act of 1937 (Pittman-Robertson Act), will go by the wayside. These funds are equally important to the welfare of both game and nongame species. True, fishermen will still be furnishing funds through similar licenses and taxes, but those fishermen will rightly demand their funds be spent on fish management activities. Management of our other game resources will either stop, or fall on the shoulders of already overburdened general taxpayers.

Suppose total abolition of firearms were already in effect. How would it have changed statistics gathered by AP as a basis for their biased news release? Of the ten incidents listed, would any have been prevented by absence of firearms?

First on AP’s list was a suicide. Obviously, a person bent on self destruction will try to do so with any means at hand. Gun prohibition would have no influence on that person.

Next, two accidental shootings were cited. In all probability, if no guns had been available, the accidents would have been prevented. This, however, is hardly justification to outlaw guns in total.

Next were six deaths inflicted by criminals and felons. Surely a person can protect his own life and personal life and property from mentally ill individuals and felons. Without private purchases of arms in total.

The article goes on to list ten recorded incidents of gunshot deaths as illustrative and supportive material. The AP staff writer concludes with a question of his own: “Why do Americans continue to die by the gun?” He then answers it himself by quoting a paragraph from the referenced report which may or may not have any connection with or allusion to firearms as such. The quote used as a self-assumed answer was:

“We are a pluralistic society with grown frictions,” said Dr. Graham. “We are also an affluent and liberal society with a hulleva lot of turmoil for a long time.”

Thoughts...

By BOB WOOD
gun controls. Such controls will in effect be applicable only to law abiding citizens.

The latest legislative report by the National Rifle Association lists at least ten bills currently alive in Congress to impose strict Federal gun controls on the law abiding public. Fortunately, there are also many bills being introduced to reduce unnecessary restrictions already in effect as a result of 1968 legislation.

We as conservationists may have fought off one indirect but determined attack on our wildlife programs in 1968, but others are coming! A real tragedy occurs when a Kansan writes, "Due to ... gun control laws I don't think I will hunt anymore." Now is not the time to desert state fish, game and conservation agencies. Now is the time to unite in their support! Sportsmen, protect yourselves! With continued writing by influential news agencies such as we have seen, anti-gun minorities will gain support of the apathetic majority, sweeping aside reason and common sense and ultimately destroying an American heritage that goes far beyond mere private ownership of firearms.

Wildlife Wonders
(Continued from page 17)

blind wondering—should I try the doe in bow range or continue the wait for the big buck—were not boring or unenjoyable. A coopers hawk also used this as his hunting area. A sudden hush of bird songs meant that the dreaded hunter was near.

A rustle of leaves coming down the trail quickened the heartbeat. Could it be the big buck? No, only two jovial cock pheasants, each trying to appear more important than the other. They were within three feet of me when one saw me. He froze in his tracks disbelieving that he had ventured this close to danger. It took only a minute to regain his composure and to decide this was no place for them. They turned and ran about six feet before rocketing off upriver.

Another evening a squirrel came up the trail, checking tussocks of grass for food and scampering along fallen logs when available. Finally he saw me, froze flat on a log for a few minutes, then sat up, obviously puzzled at what I was doing there. His tail began to twitch as his anger at my presence increased. He began scolding, letting all the woods know I was there. Blue jays joined in the harangue. He was so persistent that I finally left the blind and ran him off, only to have him return in a few minutes to continue the harassment. I seriously considered an arrow at the varmint, but he finally tired of the game and crossed the river.

Finally, only one more evening of the season remained. Light snowfall during the afternoon had made the swamp ghostly, quiet and beautiful. I was fearful that I had waited too long for the big buck and would end up without a deer. Nothing stirred. The sky was heavily overcast, darkness was falling early.

Upriver I heard running deer. They broke into the open 30 yards from the blind. There were at least five of them, two does, two fawns and the broken antlered buck. They were frolicking like playful calves in the fluffy snow.

The buck came bounding stiff-legged down the trail directly toward me. His guard was down and he failed to see me until he was within eight yards. He stopped, head high, tail up, and on the alert.

I was ready. The first arrow struck just behind the right shoulder and disappeared. He leaped high into the air, lost his footing on the snow-covered frozen ground as he tried to turn, and fell to the ground.

A second arrow pierced the rib cage. The buck never regained his feet.

A Gun . . .
(Continued from page 10)

boy was my son. And as I look back now on that November day, a thought comes to mind:

"So, my son has a gun. Is there anything special about that?"

You bet there is!

To me a gun represents freedom of expression, satisfying a longing to do something now that our forefathers did in olden days, when early history of our area of Kansas was being made. It means seeing yourself in your son, and wondering if you can implant in him some regard for the future, and teach him some of the things you expect of him when he becomes a man.

Some fathers communicate with their sons through athletics, school, or just plain talking. I chose the use of a gun.

How do you reach a boy with a gun? To me it's simple! With a gun he has freedom. When he is with me, he is learning something that he would be unable to achieve from school or any other source—the joy of a morning sunrise, the thrill of game birds in the early autumn, the sounds of wild geese calling, and the whisper of duck wings passing overhead. These things mean much to me, and I know now that he shares my feelings for them. He has learned well, and I think he will be a better man for it.

The sounds and actions of nature are truly honest. If possession of a gun can instill a feeling of fairness, not only toward our natural resources, but also to his fellow man, then I can brag.

My son, you have a gun now. Use it in the ways you have been taught. Learn from it, and hold it dear. Then thank God you had the opportunity to do so.

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## 1969-70 Kansas Hunting Seasons

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<tr>
<th>Species</th>
<th>Opening Date</th>
<th>Closing Date</th>
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<tbody>
<tr>
<td>Squirrel</td>
<td>Now Open</td>
<td>Closes December 31</td>
</tr>
<tr>
<td>Dove</td>
<td>Now Open</td>
<td>Closes October 30</td>
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<tr>
<td>Rails, Gallinules</td>
<td>Now Open</td>
<td>Closes November 9</td>
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<tr>
<td>Snipe</td>
<td>Now Open</td>
<td>Closes November 19</td>
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<tr>
<td>Deer (Archery)</td>
<td>Now Open</td>
<td>Closes November 30</td>
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<tr>
<td>Ducks, Coots, &amp; Mergansers</td>
<td>Opens October 25</td>
<td>Closes November 20</td>
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<tr>
<td>(Second Segment)</td>
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<tr>
<td>Geese</td>
<td>Now Open</td>
<td>Closes December 10</td>
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<tr>
<td>Woodcock</td>
<td>Opens October 18</td>
<td>Closes December 21</td>
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<tr>
<td>Prairie Chicken</td>
<td>Opens November 1</td>
<td>Closes November 9</td>
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<tr>
<td>(Second Segment)</td>
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<tr>
<td>Pheasants (West of U. S. 81)</td>
<td>Opens November 8</td>
<td>Closes December 31</td>
</tr>
<tr>
<td>Pheasants (East of U. S. 81)</td>
<td>Opens November 15</td>
<td>Closes December 31</td>
</tr>
<tr>
<td>Quail</td>
<td>Opens November 15</td>
<td>Closes January 15</td>
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<tr>
<td>Deer (Firearms)</td>
<td>Opens December 6</td>
<td>Closes December 10</td>
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Rabbits, open the year around except from October 16 through December 14. In addition, rabbits may be taken during upland game bird seasons.