

IOWA CONSERVATIONIST

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WHAT MADE THE 1954 QUAIL SEASON?

THE FIGHTING DOORMAT

By John Madson
Education Assistant

When Old Skip, our favorite feist dog, began barking his head off on the other side of the pasture hill, we didn't pay much attention. Skip was always barking at something. But this time his yapping was punctuated with the noise of a broken steam valve, so we trotted over to have a look.

That steam valve was the biggest badger we'd ever seen, and the maddest. The dog had cut him off from his home den but he was going home, dog or no dog. Skip backed up the hill, barking all the way, and the huge weasel got into his burrow. Which doesn't say much for the dog's courage, but a lot for his brains.

That badger, weighing around 30 pounds, could have made a meal of Skip. Squat, broad and powerful, with heavy muscles in neck and shoulders to protect vital nerves and arteries, and with a loose skin he could almost turn in, he was well-armed. His 1½ inch claws could disembowel a dog, and his well-fanged jaws could strike almost too fast for the eye to follow. There are dogs that can whip a badger but most pups have either given up or have died trying.

In the old days, badger baiting was very popular. This "sport" consisted of placing a big badger in a barrel and sending in a dog to pull him out. The practice was widely condemned for its cruelty (probably to the dogs) and has died out.

There's a tall tale that in the early days of the Iowa State Fair badgerbaiting flourished among Des Moines' bully boys. The story goes that a fellow turned up one day with a cur he had found in some alley, paid his entry fee, and entered the dog in the contest. The other dog owners were having a big laugh over this until the stranger pitched the mongrel into the barrel fanny-first. The dog

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Who had more fun, hunters or dogs? Last quail season was good for dog work; not too dry, but cool and with plenty of young birds. Jim Sherman Photo.

LOOK WHAT HAPPENED IN THE PARKS!

Iowa's state parks hit an all-time attendance peak in 1954 in spite of the heavy June and July floods that knocked out some of the major river parks.

State park officials report that the 1954 Iowa park attendance was 4,898,627, as compared to the previous high in 1953 of 4,885,981. The new record capped the gradual increase in park attendance since World War II, when park visitors rose from 2,292,000 in 1946 to the present figures.

In late June and July, Walnut Woods, Ledges, Dolliver, Josh Higgins, Oak Grove and Heery Woods state parks were severely flooded by swollen rivers. The upper picnic areas of these parks remained open to the public but the lower areas were closed. These lowland picnic grounds were heavily silted and covered with flood debris and were out of use most of the summer while being cleaned up and re-

seeded. In June and July of 1953, park crowds in these six areas totaled 210,836. In 1954 the floods nearly cut this figure in half, with June and July visitors of 129,027. In spite of the loss of these parks during the peak of the early season, the new record was set.

The most heavily used park last year was Lake Manawa at Council Bluffs, with summer crowds totalling 712,265. Runners-up were Clear Lake Park with 270,930, Backbone Park with 238,023, and Lake Ahquabi with 236,450. All of the parks with lakes or major rivers were heavily used, usually the case during a hot summer.

Part of the reason for the boom in park visitors was the long, pleasant fall, with autumn colors holding up well in many parks. The 1954 autumn made up for the wet spring, with September-October-November crowds of 730,265, well

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From all over Iowa's primary quail (and from some of the fringes) came reports of a hot quail season. Greenhorns and expert hunters alike had a field day; all it seemed to take was a reasonably good dog and some walking. Coveys were large and plentiful, and even veteran hunters were amazed at the 30-bird coveys they kicked up in ranges that formerly held few, if any, quail.

The 1954 quail season showed what good weather conditions can mean to the bird. A mild winter, a high carryover of seed stock and a near-ideal hatching season, combined with good fall hunting conditions, made the last quail season one for the books.

The Good Rain

In the first place, last winter was mild. Quail biologist Elden Stempel points out that the spring began warm, but May was cool. The critical hatching months of June and July were favorable but instead of the usual late dry period in summer there was extensive and heavy rainfall in the quail range. Stempel believes that this moisture was not destructive, and many quail were hatched during the rainy period. In fact, the moisture was probably beneficial, since quail hatcheries have found that high humidity is necessary for successful quail egg hatching. The nesting peak of quail was in June and July, but warm, humid weather, either before or after this production peak, will permit enough added hatches of quail to build up the population for better fall hunting.

Stempel reports that last August and September an unusually high number of young quail were noticed along roads, possibly driven there to escape dripping vegetation. There were more of these young birds because the adult brood quail came through the mild winter in top physical condition and these birds were ready to take advantage of the ideal pairing, nesting and hatching weather that preceded the appearance of the broods. The biologists' records show that conservation officers reported 125 quail covey ranges occupied in 1954, as

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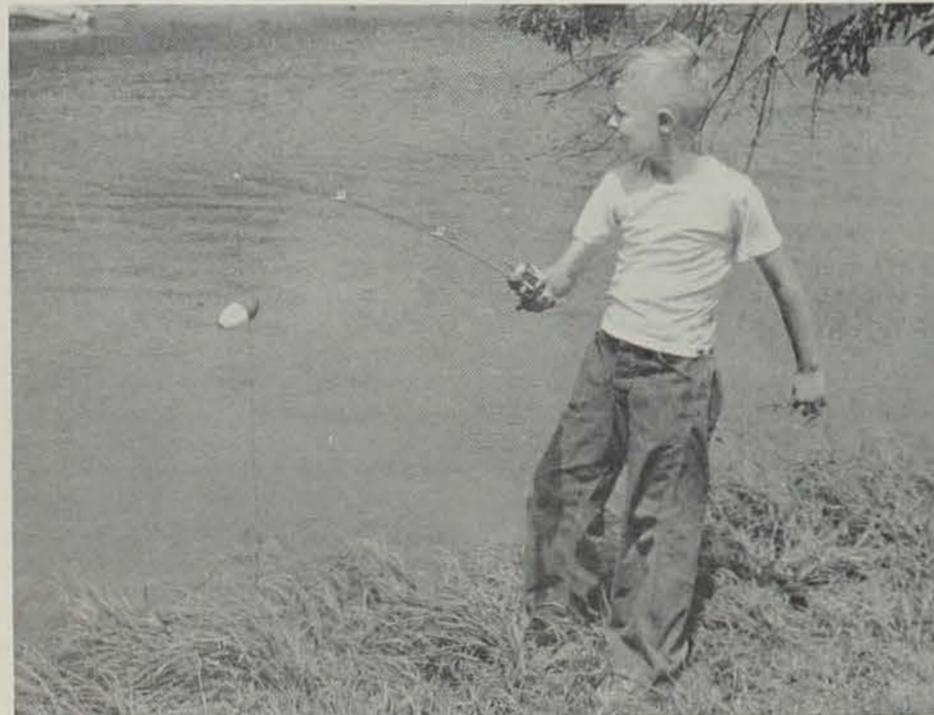
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FISHING BOBBERS

The cork ball with a hole bored through it and a plug in the hole to hold the line is an old-time favorite bobber still used. Of late years, however, the plastic ball has become popular and has to a large extent taken the place of the cork ball. The plastic ball is strong, durable, easy to attach to the line, and is highly visible in the water. One popular type has a spring-loaded plunger that actuates a small brass hook on the other side of the ball. This small hook will, in one position, take a firm grip on the line and prevent it from slipping. If given a slight turn, the hook will rest on the outside of the ball and will allow the line to pass freely through the eyelet thus formed.

For small pan fish there are on the market very little balsa wood bobbers shaped like a top with a rod running through them. A worm hung from one of these creates a good balance. For a slightly heavier rig, a porcupine quill is a fine float. This type comes in a variety of sizes, adapted to the use of minnows, split



Portrait of an optimist. Any fish that could pull this bobber under water could pull the fisherman under, too.

EYES OF ANIMALS

By David H. Thompson
and Roberts Mann

The eyes of an animal tell the story of the creature's life: its sources of food, its habits, its fears, and the history of its kind. Stop and think about that. Our modern civilization has come about because man has a complex brain that reasons; hands with the all-important thumbs; and eyes which, because of their position and construction, can be instantly focused on any object whether near or far—"binocular vision"—and which see all the colors of a rainbow.

Only the higher apes have such eyes. The lower apes and monkeys have eyes similarly placed, which enable them to examine things and swing from tree to tree, but they, like most mammals, see colors as shades of gray. A bull does not see red. Birds and lizards apparently see colors about the same as we do. Color vision is also found in turtles and the higher fishes—such as black bass and bluegills—but the fish see colors as we do when wearing amber sun-glasses. Not much is known about insects except that ants, honeybees and butterflies see ultraviolet light, which is invisible to us, but are color-blind to red: it's dark gray or black to them.

shot, and so forth. There are also balsa wood imitations of porcupine quills, but they are not as delicate in action as real quills.

A sliding bobber is of considerable importance in some kinds of fishing. If you want to cast fifty feet out from shore and have your bobber five feet above your bait, you will probably have to use a sliding bobber. True, it is that you can use a fixed bobber on a hand line and twirl your tackle around your head and fling it to its destination. But the hand line is not very popular these days.—Ed Howard, *Fisherman Magazine*.



Jim Sherman Photo.
Alligators, cats and 'coons have mirrors in their eyes.

The predatory mammals—flesh-eating hunters such as the cats; the dogs, wolves and foxes; the bears; and the weasel family—have binocular vision: eyes in the front of their heads, with powerful eye muscles that enable them to focus very rapidly and to contract or dilate the pupils according to whether the light is bright or dim. An animal that is preyed upon by many enemies has its eyes out on

the sides of its head; each eye with its own field of vision. For example, a cottontail rabbit can see what is above, behind, on either side, and in front of it except what is right before his nose. He probably does not see the clover leaf he eats. Species which are hunted by other animals but which are predators themselves at times, commonly have eyes that are a compromise. A possum's eyes are located at an angle of about 30 degrees with the axis of the body.

In most mammals, the pupil of the eye is round but in many of the flesh-eaters, such as the domestic cat, it becomes a vertical slit in bright sunlight and widens to cover most of the pupil in darkness. That is why they see so well at night. In the eyes of the kangaroo and some hoofed animals, notably the goat, the pupil is a horizontal slit. The eyes of many animals shine at night because of a peculiar mirror, on the retina at the back of the eyeball, which reflects light; so that a cat's eyes have a green glare and those of alligators and crocodiles shine red. Such eyeshine is found in many

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In July or February, there's fun for the kids in state parks. This lad's luckier than most; doesn't have far to fall.

WINTER SPORTS IN STATE PARKS

With cold weather and snow in many parts of Iowa, state park officials report that the winter sport season in the parks is in full swing. All state-owned lakes are frozen, and many parks now offer skating, sledding and tobogganing.

Park visitors are urged to contact the park custodians or officers before skating. Iowa's 22 artificial lakes, as well as the larger natural lakes, often have thin spots caused

by springs. Some lakes have had skating areas marked off by park custodians, but others have not. To play safely, ask the park man first.

The custodians can also give tips on the best hills for sledding. State parks are usually in the more rugged parts of counties and often have excellent sledding hills that are not endangered with fences.

State parks are never closed to visitors, and most areas are even open to traffic. Drivers are cautioned, however, not to drive off roads.



By checking fishermen along the Des Moines River, biologists and conservation officers found that the best fishing is farther north. Jim Sherman Photo.

REPORT FROM THE FIELD

—January Seminar Briefs from the Biologists—

Artificial Lakes Creel Census

Tom Moen
Fisheries Biologist

During 1953 and 1954 a creel census was carried on for seven artificial lakes: Springbrook, Red Haw Hill, Wapello, Keomah, Nine Eagles, Darling and Ahquabi. Of the lakes reporting in 1954, there was an increase of 200 per cent in total fishing hours over 1953. Fishing hours increased from 17 per cent at Nine Eagles to over 1000 per cent at Springbrook.

Average fish caught per hour ranged from 1.1 at Wapello to 1.7 at Lake Darling. The average number of fish caught per trip in these artificial lakes ranged from 4.2 at Keomah to 6.7 at Lake Darling. The average fisherman took home five fish for every trip he made to an artificial lake last summer.

Crappies were the main fish caught in all lakes except Darling and Ahquabi. At Lake Darling bullheads were of equal importance and at Ahquabi bluegills were more abundant. Bluegills were second in importance at all lakes except Darling. Main species caught in the lakes were largemouth bass, bluegills, bullheads, crappies, perch, white bass, channel cat.

Trap Nets on Northeast Iowa Rivers

Bob Cleary
Fisheries Biologist

Trap nets have been used for six years in an effort to estimate the fish populations in eastern and northeastern Iowa rivers. The nets are set with a "lead" webbing stretching from the trap to the bank, and fish are herded by this webbing into the trap.

Fish taken in the nets are counted, weighed, fin-clipped and returned to the river. Two such

stations were set on the Wapsie, one on the Maquoketa, and two on the Cedar River.

During the 6-year survey, it was found that the game fish-total fish ratio was fairly constant. In the Cedar River game fish made up a smaller portion of the total catch than on the other two streams. In the Cedar River in 1954, about 20 per cent of the fish netted were game fish; in the Wapsie about half were game fish and in the Maquoketa about two thirds of the fish taken were game fish. (That is, fish caught per net hour, and not necessarily total numbers of fish for the season.)

Des Moines River Creel Census

Harry Harrison
Fisheries Biologist

In 1953 and 1954, contacts were made with fishermen along the Des Moines River and the kind of fish caught, the baits used, length of time fished, and other information was recorded.

General angling success on the Des Moines River was about the same in 1954 as in 1953. Last summer an average of .75 fish was caught for each fishing hour. Pole and line fishing in the upper reaches of the river is better than further downstream. Channel catfish is the most important fish in the creel, and carp rank second. Most walleye fishing in the river is north of Polk County, and the take of sheepshead is just the opposite.

The number of fish per rod hour dropped as one went down stream on the Des Moines River. Following is the fish per fishing hour caught in 1954; Humboldt County: 160; Webster, .53; Boone, .31; Polk, .40; Warren-Marion, .43; Mahaska, .25; Wapello, .38; Van Buren, .22; Lee, .24.

Fluctuation in Walleyes at Spirit Lake

Earl Rose
Fisheries Biologist

In 1947 the walleye population in Spirit Lake was estimated at around 30,000. For 19 years gill

net catch records have shown a considerable fluctuation in the abundance of the walleyed pike and white bass in Spirit Lake. These species are the two dominant predator fish in the lake, and studies indicate that when white bass populations are low, walleyes are high, and vice versa.

From 1944-48 no walleyes were stocked in Spirit Lake and there was poor natural reproduction, but during the next six years of heavy walleye stocking there was a decided increase in walleyes. This may not be due to stocking alone, for the lows and highs in walleye populations coincided with highs and lows in the white bass numbers. Predation on walleye eggs by bullheads, carp, suckers or some invertebrates might also have caused poor walleye reproduction.

A tag and recapture study, still incomplete, indicates a walleye population in Spirit Lake of about 50,000 as of May 15, 1954, a favorable increase over the estimated 30,000 of 1947.

Waterfowl Bag Checks, 1954

Jim Sieh
Game Biologist

State Conservation Officers and other field men checked 6,407 duck hunters in 57 counties during the 1954 season, providing a sample of duck-hunting success to compare with results of other seasons.

The hunters contacted had killed 5,929 waterfowl, made up of 16 species of ducks and mergansers. This is fewer ducks than recorded for the past three seasons but more than recorded for 1949 and 1950. Three hundred and eighteen geese were sampled.

Mallards totalled 55 per cent of the kill, as compared to 43 per cent in 1953. Mallards are the most important species of waterfowl to the Iowa hunter and the annual kill of mallards largely determines the success of the season. Because of the late 1954 season, the total kill of bluewinged teal dropped to 9.3 per cent of the total bag, an abrupt change over 1953 when teal

were 24 per cent of the total kill. Pintails accounted for 5.4 per cent of the total take this year and bluebills, 8.2 per cent. This is about the same as for previous years.

The average hunter in this sample shot one duck in 3.6 hours of hunting in 1954, as compared to 3.2 hours per duck in 1949, 1952 and 1953. In 1951 only 1.9 hours were required for the most successful duck season on record. In 1954 it required an average of 68 hunting hours to bag a goose, but in 1953 it required only 27 hours.

HIGH-POWERED RIFLES IN IOWA

For many years a rumor has been circulating through Iowa that it is unlawful to fire "high-powered" rifles in the state, and that any rifle larger than .22 is illegal to fire except on supervised ranges.

This is not true, there is no state law limiting the calibre of rifle that may be fired in Iowa.

The only law on the books that pertains to the general use of rifles in Iowa is:

Section 109.54, Code of Iowa: "No person shall at any time shoot any rifle on or over any of the public waters or public highways of the state or any railroad right of way."

Additional laws prohibit the use of rifles for hunting deer in Iowa, and federal law prohibits the use of rifles for shooting migratory waterfowl. The law governing the transport of firearms in automobiles pertains to shotguns and rifles alike.

High-velocity, smallbore rifles are not as dangerous as they might seem, even in Iowa's crowded landscape. These little bullets, traveling at great velocities, shatter on impact and almost never ricochet. Because of their light weight, bullets like the .222, the .220 Swift and others fall off rapidly, and their maximum range is comparable to a .22 long rifle's.



Small game shooting with high-powered rifles is not prohibited in Iowa. This rifleman and his brethren regard shooting as a science, are extremely careful. Jim Sherman Photo.



Jim Sherman Photo.

Fewer deer were killed last year, but averaged heavier than in 1953. Some hunters said the big bucks were wiser, hiding out in heavy timber.

THE HUNTERS' DEER SEASON: 1954

Glen C. Sanderson, Game Biologist
and
E. B. Speaker, Supt. of Biology

This is a preliminary report based on postcard returns sent in by 86.0 per cent of 3,880 licensed deer hunters and 82.5 per cent of 3,368 farmers who received free permits to hunt on their own land. Some data from the eight voluntary deer checking stations is also included. Hunters who have not reported are being contacted by letter so the information will be more complete at a later date.

Iowa's second consecutive deer season was held with the gun season from December 10-12 and the special bow season from December 1-12. The 51½ counties open to gun hunting included 29½ counties open last year plus 22 additional ones. Twelve counties were dropped from last year's list. The 5½ counties with a special bow regulation included 3½ open to deer hunting in 1953 plus two new ones. Deer hunting with guns was not allowed in the 5½ counties with a special bow season, however, bows were legal in all counties open to deer hunting during the gun season. The hunting period was two days shorter this year than it was one year ago, but with the exception of the special bow season already noted, the other rules and regulations remained unchanged.

Harvest—As shown in Table 1, deer hunters have reported killing 2,423 deer compared to a total of about 4,000 during the 5-day season in 1953. Based on the returns received so far and experience gained from the returns last year, it is estimated that the total statewide kill figure will fall between 2,600 and 2,700 animals. Licensed hunters killed nearly 76 per cent of the deer bagged, with 53 per cent of these hunters bagging at least one deer. Farmers who received free permits were less successful hunting on their own land, because only 23 per cent reported success. A number of hunters again reported multiple kills, but like last year, these did not comprise a significant part of the total deer kill.

The county kill ranged from none reported in Taylor and Wapello counties up to 354 in Allamakee. In general, counties with the most deer reported shot were the upper two-thirds of the Missouri River counties; Allamakee and Clayton on the Mississippi River in northeastern Iowa, and the inland counties of Winneshiek, Butler and Bremer, also in northeastern Iowa.

Average Body Weights—Average weights of all age and sex classes of deer weighed at the checking stations were somewhat

Table 1.

Deer kill by farmers holding free permits and licensed hunters.

Number deer killed by each hunter	Number of hunters who hunted		Number of deer killed		Per cent of deer bagged by each group		Per cent of hunters who hunted	
	Farmers	Licenseses	Farmers	Licenseses	Farmers	Licenseses	Farmers	Licenseses
0	1,909	1,566	0	0	0.0	0.0	76.7	47.2
1	567	1,677	567	1,677	95.9	91.5	22.8	50.5
2	12	73	24	146	4.1	8.0	0.5	2.2
3	0	3	0	9	0.0	0.5	0.0	0.3
1-3 incl.	579	1,753	591	1,832	100.0	100.0	23.2	52.8
Number who hunted	2,488	3,319						
Did not hunt	292	19						
Total No. returns	2,780 ¹	3,338 ²						

1 (82.5% of 3,368 free permit holders)
2 (86.0% of 3,880 license holders)

Table 2.
Percentage of deer bagged each day of the open season.¹

Day	Number of deer reported as to day of kill	Per cent of total
Friday 2	1,069	44.4
Saturday	768	31.9
Sunday	572	23.7
TOTALS	2,409	100.0

¹By gun hunters only. ²December 10, 1954.

heavier this year than in 1953. Fawn and adult females averaged slightly more than 20 pounds heavier than the previous fall. Since the percentage of fawns in the sample increased appreciably, the average weight of 132 pounds for all deer was essentially the same for the two seasons. Calculated "live weights" ranged from 62 pounds for a female fawn, up to 281 pounds for a 4½ year old buck killed near Inwood in Lyon County. Some unverified reports of larger deer were reported.

Daily Kill—As shown in Table 2, about 44 per cent of the deer were bagged the first day of the season, 32 per cent the second day and 24 per cent the final day. This is similar to the results reported by Allen (1951) for Indiana's 1951 season. There, 52.0 per cent of the kills were made the first day, 25.9 per cent on the second, and 22.1 per cent on the final day.

Age and Sex Ratios—As shown in Table 3, Hunter replies on the postcards indicate that 20 per cent of the deer shot were fawns. This figure is considerably lower than the 42 per cent fawns found at the eight biology checking stations. We believe that several hunters did not realize how large some fawns are by December in Iowa and mistakenly placed them in the adult class. For example, at the checking stations female fawns ranged up to 120 pounds in weight while

male fawns weighed as much as 142 pounds.

Females comprised 45.5 per cent of all deer reported by hunters. This is in close agreement with the 46 per cent reported for the previous season.

Hunting Success—As shown in Table 4, Hunting success did not appear to be quite as good as it was during the first season. It was noted in Table 1 that nearly 53 per cent of the licensed hunters were successful this year. This is compared to 61 per cent that bagged one or more deer in 1953. Table 4 shows that both successful and non-successful hunters required an average of 27.6 hours for each deer killed with a gun. For the 1953 season this figure was 21.5 hours per deer. All deer hunters saw an average of 0.5 deer per hour as compared to 1.4 for the previous fall. Only 373 licensed hunters reported that they did not see any deer but about 40 per cent of the free permit holders saw no deer. All hunters saw an average of 5.7 deer during the season. This figure is considerably lower than the average of 21.2 deer seen by each hunter during the 5-day hunt in 1953.

Hunted Residence—It appears that Iowa deer hunters ranged a little farther from home for their deer hunting in 1954 than they did the first deer season. Information collected at the checking stations

Table 3.
Age and Sex ratios as reported by hunters

Males	Females	Number Sexed	Per cent females	Fawns	Adults	Number Aged	Per cent Fawns
1,318	1,101	2,419	45.5	482	1,897	2,379	20.3



Jerry Jauron Photo.

Good numbers of deer are still reported in the state. Pilots and officers take winter surveys, checking size and location of herds.

IOWA DEER KILL
1954

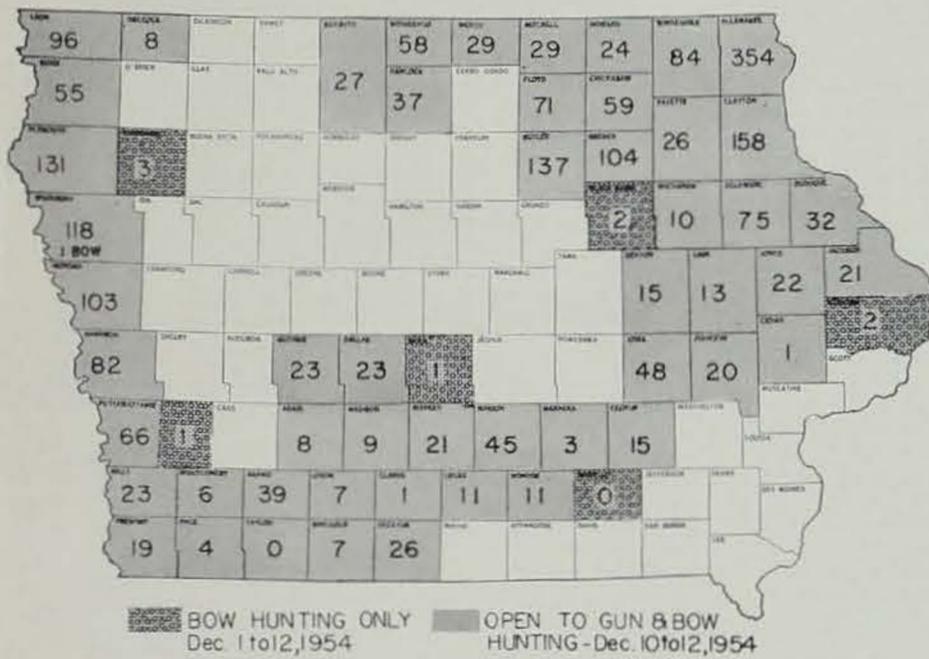


Table 4.

Average success as reported by hunters on the postcard returns

	Number deer bagged	Number hours hunted	No. Hours per deer bagged	Number deer seen	Number deer seen per hour	Number deer seen per hunter
Gun Hunters	2,398 ¹	66,195	27.6	33,354	0.48	5.7
Bow Hunters	10	3,637	36.4			
Gun & Bow Hunters						

¹Fifteen deer bagged by hunters who did not report hours hunted.

indicates that less than one-third of the successful hunters checked at the stations were residents of the county in which they killed their deer, compared to more than 50 per cent in 1953. Likewise, approximately 55 per cent of the successful hunters this year killed their deer in their home county or an adjacent county, whereas this figure was slightly more than 77 per cent for the previous year. Much of this change was accounted for by the Allamakee County hunters. In 1953, nearly 73 per cent of the hunters checking into the Lansing station were residents of Allamakee County, but this year slightly less than eight per cent of the hunters checked were residents of the county. Probably this change was caused by an increase in the number of non-local hunters in Allamakee County, rather than by a reduction in hunting by residents. This was the one county visited by the writers during the season where hunting pressure was greater this year than it was last. Estimates from checking station personnel and the local conservation officer placed the hunting pressure here at about twice what it was in 1953.

Weapons Used—Of 285 hunters who reported on the gauge of shotgun used, 88 per cent used a 12 gauge, seven per cent a 16 gauge, and five per cent a 20 gauge.

Hunter Occupation—Again this year, farmers made up the largest single occupational group to buy deer licenses. Slightly more than 42 per cent of the licensed hunters who reported their occupation were farmers. In 1953 this figure was nearly 40 per cent. Laborers accounted for 20 per cent, and all other groups for 26 per cent. Of

course, all hunters who applied for free permits were either farmers or landowners. Thus of the 7,248 people who either bought a license or received a free permit to hunt on their own land, approximately 68 per cent were farmers.

THREE YEARS: 3,000 SHOOTINGS

With shotgun, rifle and pistol, American hunters killed or wounded each other to the tune of 1,166 casualties in 1953, 335 more than in the year before. At least, this is what was reported to the National Rifle Association from only 24 states and two Canadian provinces. No one knows what the national toll of shooting accidents really was.



Don't worry about boys who are this careful with guns. Worry about the "experienced" hunters who caused 76% of the accidents in 1953.

In its 1954 Uniform Hunters' Casualty Report, the Association has compiled the grim total of 3,080 hunting accidents for the years 1950-53. Of these, 549 were fatalities.

What Happened?

The accidents were caused by the same old thread-bare reasons, the main cause being the victim unseen by the shooter. Of 495 accidents caused when a hunter deliberately fired his gun, 181 occurred when the victim was out of sight of the shooter. However, poor visibility was no excuse; 71 per cent of all accidents occurred in clear weather, and 65 per cent of the accidents took place in the open or in only light cover.

Of these 495 shootings, 135 were caused when the shooter swung on game and shot a human being that happened to be in the way, and 110 accidents were caused when the victim was mistaken for game.

Of 371 accidents caused by accidental discharges in 1953, 83 were caused when the shooter stumbled or fell, and 47 when the trigger caught on brush or some other object. Nationally, as in Iowa, a high percentage of accidental shootings took place when loaded guns were being placed in or taken out of vehicles.

During 1953 there were twice as many accidents as in the previous year caused by hunters using their guns as clubs on cover or game! From 1950-51, 122 fatal shootings were caused when the victim was mistaken for game and 600 non-fatal shootings caused when the victim was unseen by the shooter.

And The Kids?

Hunters under 19 years of age caused a high percentage of shooting accidents (49%) in 1953, but experienced hunters contributed their share. From 1950-53 the highest percentage of gun accidents were caused by hunters with three to five years of hunting experience. Hunters with 31 or more years of hunting experience caused 10 per

cent of all accidents during the 3-year period; the "old-timers" who should have known better but who evidently let down the bars of caution.

In 1953, 20 per cent of the accidents were caused by hunters from 20 to 29 years old; 17 per cent caused by hunters from 30-39; nine per cent by hunters from 40-49; six per cent by hunters from 50-59; and five per cent by hunters 60 years old or older.

Most Dangerous Game

From 1950 to 1953, 227 hunters were reported killed while hunting deer, and 572 reported wounded. Since most of these shootings were with high-powered rifles, it is safe to assume many of the non-fatal wounds were severe or critical. In the 3-year period, 26 per cent of all hunting accidents took place while deer were being hunted.

Rabbit hunting ranked next in potential danger, causing 92 fatalities and 630 non-fatal accidents in this period. The two next "most dangerous" game species were pheasants and squirrels.

Iowa Toll Declines

In 1953 the Iowa gun toll was 27 shootings, but during 1954 our total accidental shooting deaths dropped to 19. The most lethal month for Iowa hunters last year was November, when five gun deaths were reported to the Vital Statistics Section of the State Health Department. There were four deaths reported in October.

The total non-fatal shooting accidents in Iowa are not known, for such accidents are reported only to local authorities and not to state agencies.

The decline in Iowa shooting deaths may have been due to more careful gun handling, or it may have been just luck. But any pride we take in such a decline must be overshadowed by the 19 tragedies and one other fact: shooting accidents of any kind, involving humans, livestock or property, stand as the shame of the hunter.

"IT WAS SELF DEFENSE, OFFICER!"

Iowa Conservation Commission staffers were checking Palo Alto and a few neighboring counties for pheasant poachers recently, using two men in a plane for spotters and an officer in an automobile below to make arrests. The flyers told the man on the ground where to go via a plane-to-car radio.

From their perch in the air, the spotters saw a suspicious-looking car. It drove slowly, stopped, went ahead again, and once in a while a door was opened and closed. Only catch was nobody got out to pick up anything, such as a dead bird, but the spotters told the ground official to investigate anyway. Which he did, and he found the man in the car was a Minnesotan who hadn't even thought of poaching. He was fighting a wasp and trying to get it out of his car. —Emmetsburg Democrat.



Even on margins of our quail range, the bird showed a strong increase. This wild covey was "shot" in Allamakee County, north of Iowa's normal quail country.

Quail Season . . .

(Continued from page 105)

compared to 82 occupied ranges in 1953. Rural mail carriers found a 12 per cent gain in quail over 1953 and in many parts of the primary southern Iowa quail range there was a 20 per cent increase (or more) in quail.

Then came November, and the fun began. Unlike the 1953 autumn, the ground was usually damp and the dogs could work the coveys and singles. Many young quail were present in some big coveys and the birds sat tight, letting the hunter get within good firing position. Coveys were larger than in 1953 and Stempel's records from southern Iowa reveal that some hunters were able to get quail in one third less time than the year before.

Hunters' Diaries

Veteran quail hunters who keep close records of their quail hunts reported 1954 as an excellent quail year.

Dr. A. E. Scott of Albia has kept such records for many years. In 1954 he hunted 12 times, in Monroe County, walking 25 hours and flushing 20 coveys, or about .8 coveys per hour of hunting. In 1953 he and his companions flushed .51 quail per hour. He kept no records for 1952 and 1951, but in 1950 he flushed .56 quail coveys per hour. Dr. Scott's best Iowa quail season was in 1939, when he put up 1.4 coveys for every hunting hour.

Edwin Connelly of Des Moines, another avid quail hunter, also reported a good 1954 quail season. In 21 days of hunting in Ringgold, Clarke, Decatur and Union counties, Connelly hunted 88 hours and flushed 54 coveys for an average of .61 coveys per hour. In 1953, also a good quail season for him, he flushed .63 coveys per hour. In 1952 Connelly jumped .35 coveys per hour, and in 1951, .37 coveys per hour.

Harry Rector of Vinton hunted 16 days in November and December; his hunts totalling 55 hours and flushing 34 coveys for an average of .6 coveys per hour of hunt-

ing. Rector reported that quail hunting was much better than average.

From The Wardens

Another look at the 1954 quail season, and some reasons for the high bird numbers and good hunting came from state conservation officers:

Clayton County: Bob Timmerman: Fair quail population in this county, but aren't hunted heavily. Believe the increase in quail is due to the mild winters and high winter carryover.

Warren and Marion: Glenn Harris: Quail hunting here was the best in the past five seasons. Last year was also good, but so dry that dogs couldn't work well and harvest was less. Weather conditions in this area were favorable for nesting, resulting in heavy fall population.

Des Moines and Henry: Jim Baldwin: . . . an exceptional quail season for the real quail hunter. A hunter with a good dog, knowing where to hunt, found four coveys last fall for every one of previous years.

Lee County: Bill Fuchs: Quail were hard to handle due to heavy underbrush. Plenty of quail covey shooting but singles hard to handle. This was balanced by a heavier crop of birds, due to favorable hatch conditions and heavy winter carryover. Two local sportsmen who keep logs each year say that quail are more abundant than they've been in years.

Tama County: Bill Boswell: Apparently one of the best quail seasons ever. Large, healthy birds and plenty of them to the covey. Good nesting seasons and mild winters have made the difference.

Buchanan and Delaware: Jim Becker: We had the highest quail population in many years. Almost every decent quail range had a covey this year; limiting factor was lack of cover.

Lucas and Wayne: Christie Hein: Past season was considered better by hunters; high success in finding birds. We possibly had a few more quail this year than last due to mild winter and high carryover of seed stock. Also had a good hatching season and growing season, more young birds reaching maturity.

Story County: Warren Wilson: Only our second quail season, and very little hunting. This year's population was best in several years. Perhaps due to open winter and larger carryover.

Scott County: Charlie Adamson: Quail hunting not a major sport here, but there was increase in quail this fall, and good brood stock left for next season. Nesting cover and covey ranges are limited.

Pottawattamie County: Ward Garrett: We're in fringe area of quail

range. Little hunting here, but I've flushed many coveys of 20-25 birds and am sure we have wonderful brood stock left. My quail hunters who went south thought good quail hunting due to good winter carryover, little snow, better cover.

Jefferson and Washington: Dwight Bramon: My quail hunters thought it was best season in past five years. Thought winter carryover was very good and hatching success was high. Weather was very favorable in this section of the state.

Iowa and Johnson: Wendell Simonson: Not many quail hunters here, but many quail were mixed with pheasant bags. On my patrol I have seen and heard quail where I've not heard or seen any in previous years. Reason: Mild winter, dry fall and shattered grains, moderate spring rains.

Benton County: Monty Johnston: My hunters report an excellent quail season; some say it's the best they can remember. I believe the mild winter and good hatch of large broods was responsible.

Keokuk and Mahaska: Butch Olofson: My sportsmen believe it's the best quail season for four years. Last year had good quail crops, but dry conditions made it hard for the dogs. This year wasn't as dry possibly accounting for the high success. Believe the good quail crop was due to the mild winter last year.

Dubuque County: Harlan Frankl: Very few real quail hunters in this county. The ones that did hunt had a very good season especially late. Most of the harvest was taken by pheasant and rabbit hunters. Increase in birds was due to the mild winter, high winter carryover, and highly successful hatch.

Jackson County: Carl Warren: Few quail hunters here, but good season for those. We seemed to have had a more bountiful supply of quail last year. We have no more cover here than before, but had a high winter carryover and excellent hatch. Didn't see larger coveys this year, but ran into coveys where I had never seen any before.

Adams and Taylor: Guy Krall: Hunters in the field claim this was the best hunting season for five years. Most experienced hunters, especially those with good dogs, had little trouble getting birds, and hunters from other open counties came over here to hunt. An almost snowless winter last year, and a good nesting and hatching season were reasons for plenty of birds in this area.

Ringgold and Union: Pat Tilley: Very fine quail season down here. Coveys were much larger than in recent years, and the remaining crop still looks good. Last year's mild winter and favorable conditions during hatching season was reason. Ralph Ely went hunting 21 times and killed 69 quail. His hunts averaged two hours and he always used a dog. (I turned in 347 quail wings to the biologists.)

Bremer and Chickasaw: Dick Thompson: Both my counties open but it's our first quail season and almost no hunting pressure. There do seem to be a few more quail this year than in past years.

Fayette County: Wes Ashby: General opinion here is that quail were more numerous than for several years. But we just don't have many quail or quail hunters. . . . We probably have as many ruffed grouse as quail.

Jasper and Poweshiek: Gene Hlavka: 1954 quail season was best in several years. A good winter carryover and a good hatch may have produced this good crop. Quail hunting pressure here was light to moderate.

Louisa and Muscatine: Dan Nichols: Louisa County had the best quail season in several years. Had a good seed stock last spring because of little ice during the winter. Also had a good nesting season, and fall conditions were not as dry, making hunting better for dogs and boosting the hunters' kill.

Dallas and Madison: Louis Lemke: Quail hunting here was the best in the past five years. From talking to sportsmen and what I've seen, hunting success was the best in years. There was a good winter carryover and a good hatch, making the 1954 quail season the fine season it was.

With one of our best quail seasons now behind us, some hunters are wondering what 1955's snow and cold will do to next season's quail crop. Quail are limited in northern Iowa ranges by severity of weather; they may build up in northern counties during mild years only to be cut back sharply by a severe winter.

But there's more to quail hunting than weather. Bill Macheak, conservation officer for Wapello County, said in his report:

"The good winter carryover and high hatching success was the reason for so many birds. With present cover conditions we had as great a quail population as we can expect—only when we build up cover can we consistently build up good quail populations."

TWO BOBCATS KILLED

Since last fall two bobcat kills have been reported in Iowa.

Hubert Bombei, a Keokuk County farmer, was plowing in a field by the north fork of the Skunk River about 7 miles west of Talleyrand when he decided to take a break and look over his trap line.

While walking along the river bank he noticed a movement in a tree crotch about 12 feet above the ground. It was a big bobcat, and although Bombei was armed with only a .22 revolver he decided to take a chance. His first shot was good, striking the big cat in the head and killing it instantly.

The cat weighed 27 pounds and measured 5 feet from the outstretched front paw to the hind paw. At last reports Bombei was keeping the cat in his deep freeze, with plans to have it mounted.

Another report comes from Allamakee County, where raccoon hunters killed a big bobcat west of Harper's Ferry. Although the cat made free and liberal use of the hounds, it was finally shot.

Bobcats, although rare in Iowa, are sometimes killed by hunters. They are nocturnal animals and extremely wary, and few hunters ever see one, let alone bag one. Even so, one or two bobcats turn up every winter, usually shot by hunters who were after something else.

Here's an outdoor tip from Clarence Yarn of Des Moines: Before you broil meat over coals, sprinkle on a few hickory nut hulls . . . not the shells, but the outer hulls that may be picked up from under hickory trees.

Yarn claims that these hulls will give meat a fine hickory smoked flavor, are easy and light to carry on picnics, and that a small quantity of them will produce surprising results.



Now you see him, now you don't—in two minutes this badger can dig out of sight. His claws are fine shovels, but can be used as swords.

Doormat . . .

(Continued from page 105)

came streaking out of the barrel with badger swarming all over him and in spite of protests from the other contestants, the man pocketed the prize money and strolled off.

The largest Iowa weasel, the badger is second in size only to his terrible cousin, the wolverine. Like all weasels, he has great vitality. He doesn't look for trouble but when he finds it he can usually take care of it; under some conditions a badger will attack a man.

A trapper friend of ours was once running his line in northern Iowa and at one set found a crater about 5 feet across and 2 feet deep. At the bottom of the pit was a trapped badger. When the trapper stepped near the edge of the hole the badger came out swinging, and struck at the man's legs with his claws. The trapper was wearing high leather boots and was unharmed, and shot the animal. A few minutes later he noticed a tuft of red on one of the badger's claws. It was a bit of red wool from a heavy boot sock; one of the badger's claws had cut through the man's boot—not quite deeply enough to break the skin.

Badgers are "fossorial" or digging animals. They are constructed for moving large quantities of real estate and moving them rapidly. When they really dig, they do so with all four feet and their jaws, literally sinking out of sight. A rapidly digging badger can send a geyser of earth shooting four feet into the air and can dig through hard sod and be completely buried, with the tunnel plugged behind him, in less than a minute and a half.

Clyde Updegraff of the Boone Game Farm tells of a female badger that escaped from a cage and commenced a tunnel. Clyde and two of his helpers tried to dig her out, and as they began they could see her tail ahead of them. But

that's the last time they saw it. The three men, digging most of an afternoon in shifts, couldn't outdig the badger.

Like the wolverine, the badger is immensely powerful for its size. Last spring an old male was obtained in Warren County and placed on the Commission's Traveling Exhibit. Rex Pendry, Exhibit Supervisor, reports: "The front bars of the badger cage are 5/16 inch steel rods, spaced at about 2 inches. They are welded at top and bottom. One night the badger broke the weld on one of these, bent the rod up, and was working on the next. I pried the bar back into place but the badger simply reached out and broke it off. So I closed the outside cage cover."

So the badger went to work on the expanded steel floor of the cage, which is welded on all sides. He tore one of these welds loose and opened up a 6-inch hole in the cage floor. In despair, Pendry got rid of the crusty old rascal and got a younger, more tractable animal.

Updegraff once placed a big boar badger in a new cage with a concrete flooring that had been poured 24 hours before. The concrete was green but a man could easily walk on it. The old badger dug down through 15 inches of this concrete, through the fox wire netting beneath it, and escaped.

Badger diggings can be told from other animals' because they are usually vertical, from one to three feet deep, and look as if a major tunnel had been started and then abandoned. These "prospect" holes were the bane of the old-time cowboy because of their danger to livestock and horses, and badgers were often shot or roped on sight.

No one is quite sure how the badger hunts as accurately as he does, but it's probably by scent. He digs out almost all of his food—ground squirrels, gophers, prairie dogs, chipmunks—and has the uncanny gift of knowing just where

in the tunnel his next meal may be and often digs straight down to it.

In his lifetime an old badger may dig literally miles of tunnels. He prefers bare, rolling hills and is almost never found in swampy areas or in heavy timber. Badgers like to dig in sandy or gravelly soil, and these areas usually support the most burrowing rodents. Years ago, badgers in some parts of the country were accused of being ghouls. A badger once trapped in an Ohio cemetery was exhibited as the "Wood County Grave Robber". This was probably not true, for the badger was only digging in search of rodents. Early settlers often established cemeteries on sandy ridges, areas preferred by badgers.

In 1953 there were only 82 badgers sold to Iowa fur dealers for an average value of 44 cents. There have been times when badger pelts brought \$25; back in the days when the best badger hair was used for shaving brushes. Those days are gone—you might say that the price of badger fur was shaved by the electric razor.

White-tipped badger fur was also used to "point up" plain black furs to simulate silver fox. It is these long hairs that give the badger his flat, doormat appearance, for hair on a badger's back may be only 1 1/4 inches long, while hairs on the sides may be 3 inches.

Even in mid-February, when most other animals are asleep, our badgers are still hunting in open pastures and prairies. The grizzled old warriors are poking along cold, windblown hilltops ready for a feast, a fight or a frolic, and are capable of handling all three.

Eyes . . .

(Continued from page 106)

other kinds of animals including various mammals, sharks, sturgeons, and some moths, but not in birds nor amphibians; and in all colors except violet and white.

Swift animals, like the antelope, usually have large eyes. Nocturnal animals like the deer mouse and flying squirrel, have also developed very large eyes which enable them to see better and evade their many enemies. Others, which live mostly in tunnels, like the meadow mice, shrews and moles, have tiny weak eyes. Some, like the earthworm, are blind. Land snails have eyes on tentacles with which they can see around a corner, but leeches merely have "eye spots" or none at all. Crawfish and crabs have eyes on short stalks. Spiders have from 2 to 8 eyes. Many insects have huge compound eyes—the dragonfly has from 20 to 25 thousand tiny lenses in a honeycomb pattern—and some, like the grasshopper, also have three little "simple" eyes for close vision. Birds have the keenest eyes and those of the hawks, eagles and vultures can see small objects at incredible distances.

By their eyes ye shall know them.



THE PRIZE ALIBI

(An answer to the Commission's request for the return of deer hunt report cards from Iowa deer hunters.)

Dear Sirs:

This report is being filed late and is best explained by the following description of my hunt:

On opening day of deer season I spotted a deer, shot it, and with surgeon's knife and skill immediately removed heart and liver from same. I was apparently too quick, because I had the heart and liver out before the deer died and it got up and jumped the fence into White Pine Hollow State Park.

I secured permission from the local conservation officer, Mr. Frankl, to track the deer into the park. Well, as you can imagine, with no heart there was no blood trail and I have been trailing that deer ever since. I got out of White Pine Hollow yesterday (January 21) without ever seeing that deer again, and Mr. Frankl returned the heart and liver today. Actually, you see, I am being prompt with my deer card even as tired as I am.

By the way, how do you cook deer heart and deer liver?

Very truly yours,

(S)

CHARLES C. GRIFFIN, M.D.

REDS CROPPING UP

You can't ever tell where a red will crop up these days. A Soviet whaling expedition carried back to Russia a family of red-headed penguins from Antarctica recently. They'll probably be used for propaganda purposes in the cold countries.—*Outdoor Notes*

Among ducks, the old-squaw is the diving champion. There are records of hundreds of old-squaws being taken in Great Lakes gillnets set at depths of 50 to 180 feet.—*J. M.*

January 8, 1955

Editor, IOWA CONSERVATIONIST

Dear Sir:

I have a story which is hard for even me to believe. Today I saw a fellow on West Okoboji Lake catch a 3-pound Walleye while he was sounding the lake depth with a hook and 2 small sinkers.

This fellow (I don't know where he lives or who he was) was all rigged up to fish so after chopping his hole in the ice he slipped 2 small bell sinkers to find his depth and *wham!* were both he and I surprised when he pulled up the pike! This sounds fishy, but it's the truth.

Mike Hone
Okoboji, Iowa

A fair share of flies are named for the profession of the person instrumental in their development or their use. The Coachman, the most famous of trout flies, was named for its originator, Tom Bosworth, who was coachman for the royal family in England. The Butcher was named in honor of Mr. Moon, a skillful angler but a butcher by trade. The Shoemaker was named for the occupation of George Sears, author and angler, of Wellsboro, Pennsylvania. The Professor, for John Wilson, well known Scottish author and professor at Edinburgh University.—*Fisherman Magazine.*

WHAT NEXT? MULE DEER KILLED IN IOWA

When Iowa deer hunters go into the field, almost anything is likely to turn up. Last year it was a European fallow deer killed in Pottawattamie County. This year it was a western mule deer, turned in to the Osceola checking station by a 71-year-old hunter.

The young mule deer was killed in Decatur County on the first day of the 1954 deer season. It was a yearling buck with one forked antler, and weighed about 110 pounds dressed. It was positively identified as a mule deer by Conservation Commission Biologists Glen Sanderson and Elden Stempel and Area Game Manager Bob Barratt. Local farmers told the men that there are a few more deer "like this one" in the area.

Historically, mule deer have been known to occur in Iowa, but not in modern times. Normal mule deer range is in the western third of the United States, extending from the California coast to North Dakota and western Nebraska.

The mule deer takes its name from its sensitive ears, which are considerably larger than a white-tail's. Instead of the large white "flag" of a whitetail deer, the mule deer's tail is smaller, with a black tip.



Jim Sherman Photo.

The Big Pinch: parking at Clear Lake Park on the Fourth. When crowds filled picnic and parking areas some cars were turned away.

Parks . . .

(Continued from page 105)

ahead of the 1953 figure for these months: 646,060.

Parking and picnic facilities at most of the parks were inadequate on weekends and holidays and some parks were closed to traffic early on some Sunday afternoons. The upswing in "weekend vacationing" has been attributed to increased leisure time, better roads and more automobiles, and an increased interest in the outdoors.

Iowa's 88 state park and recreation areas were flooded with crowds almost twice as large as the total population of Iowa. Many park visitors make it every weekend; others go all out and spend vacations in cabins or tents in camping areas in the parks. Two couples in southern Iowa took advantage of mild weather last winter and picnicked every week at Lake of Three Fires during the winter. Other couples spend vacations just touring the various parks

in the state, spending a week or two at it and driving a thousand miles or more.

One of the reasons of high park attendance during a sweltering summer like that of 1954 is water . . . something that nearly all Iowa parks have in some quantity or another. All 22 artificial lakes of the state are park areas, containing 2,600 acres of water. In addition are the natural lakes of northern Iowa, many of which are accessible by state parks and furnish excellent fishing and swimming. Then, when a sweltering summer comes along, the temperature is directly proportional to the park attendance in these areas.

Conservation Commission officials are making no prediction for 1955. For the past few years they have predicted a "levelling off" of annual park attendances, but the figures have continued to rise. Whether or not a new park record is set in 1955 is up to the weatherman.



Jim Sherman Photo.

The hotter the sun, the better they liked it. In a sweltering summer bathers flock to the "water parks" to swim a little and bake a lot.

THIN ICE TAKES TOO MANY LIVES

NEW ICE, 4 INCHES THICK, IS CONSIDERED REASONABLY SAFE. AFTER MIDWINTER AND SPRING THAWS, HOWEVER, ALL ICE IS TREACHEROUS.

ICE THAT LOOKS PLENTY SAFE MAY HAVE THIN SPOTS DUE TO SPRINGS, CURRENTS OR SUBMERGED ROCKS.

HERE ARE A FEW PRECAUTIONS TO TAKE.

CARRY A PAIR OF AWLS IN YOUR BREAST POCKET, SHARP ENDS PROTECTED BY CORKS—STRING IS TO WEAR AROUND YOUR NECK.

WHEN CROSSING ICE ON FOOT, CARRY A LIGHT, STRONG POLE, 8 TO 10 FEET LONG.

JAB AWLS INTO ICE, GET ONE LEG OUT OF WATER AND ROLL AWAY TO SOLID ICE.

PARENTS ARE URGED TO TEACH THEIR YOUNGSTERS TO STAY OFF THE ICE EXCEPT WHEN IT IS ABSOLUTELY SAFE.

IF A LADDER OR LONG BOARD IS NOT AVAILABLE, A HUMAN CHAIN CAN BE USED TO SAVE A LIFE.

Minnesota Conservation Department.