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Ohio conservationist

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COVER

1980 - Iowa Migratory Waterfowl Stamp by Paul Bridgeford. Collector prints are available from the artist, 1014 N.W. 4th, Altoona, Iowa 50009.

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OPEN SPACES ~IOWA

BY GREGORY WM. SCHMIDT

Photos by Gregory Wm. Schmidt and Rock Bridges

Supplementing the white-tail's food supply with hay helps to maintain their population during the winter in the wildlife management areas.

From the top of a wooded ridge — an overview of the Marsh.

Pintail and mallard d

IN JANUARY of this year the State Conservation Commission took possession of 57 acres of woodland adjacent to Bright's Lake and 220 acres of the Hogsback Marsh. These purchases were made under the state's Open Spaces Acquisition Program. The project is directed at the preservation and protection of natural and cultural resource areas, and is only secondarily concerned with providing public use areas.

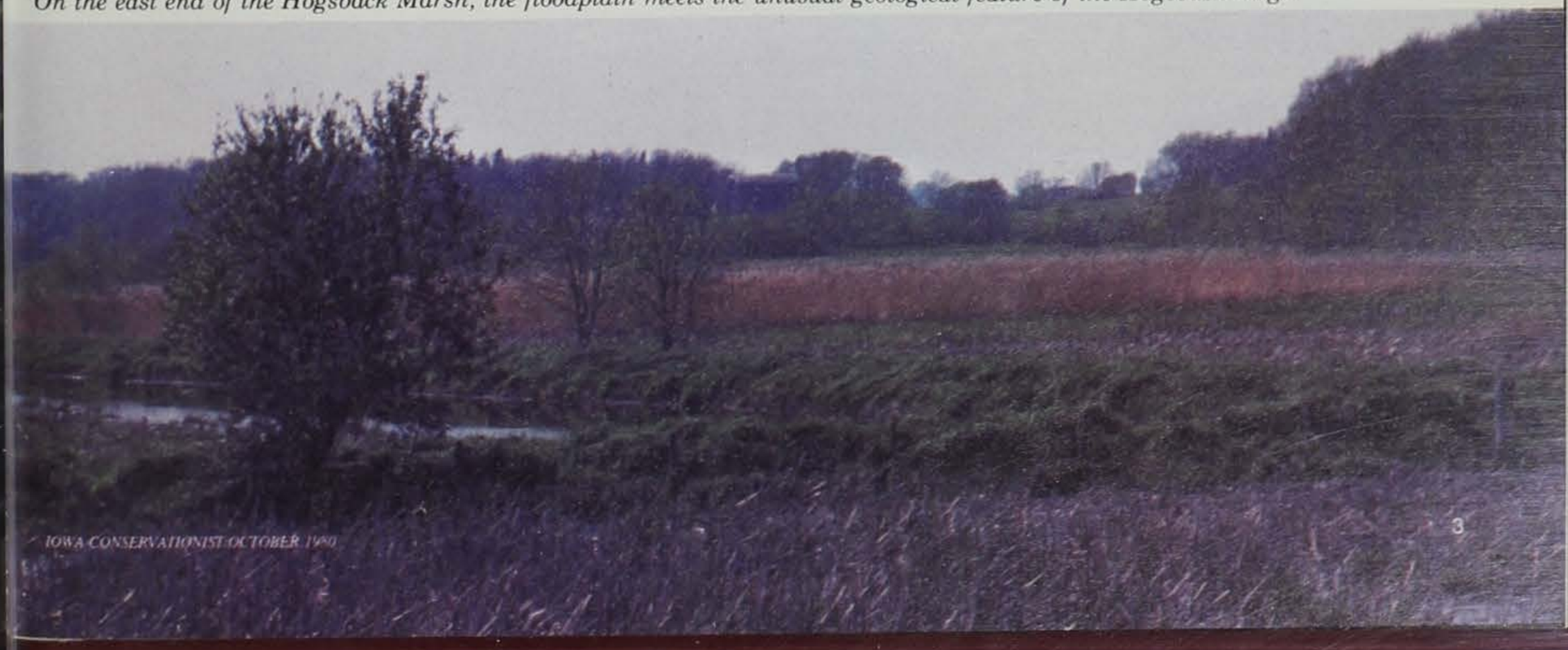
Bright's Lake is 122 acres of dried lake bed, just south of the Iowa-Minnesota border near Emmons. The nearby woods are needed to conserve the steep watershed for the restoration of the Bright's Lake marsh. The Hogsback Marsh, two miles northeast of Lake Mills, is a high, wooded ridge which runs for several miles. The Winnebago River runs along the floodplain of this marsh and the spawning of most of the river's northern pike takes place here.

Since 1973, when the state started bringing land into public ownership, 15,000 acres of parks, woodlands and wildlife management areas have been purchased with $5,400,000. One of the first acqusitions was the largest — 2,438 acres in the Loess Hills of Monona County.

The on-going appeal for funds is aimed in the near future at Brown's Lake in Woodbury County, Indian Bluffs in Jones County and the Upper- Iowa Mounds in Allamakee County.

It is necessary, despite some critical comment, to integrate a network of natural resources into our plans for Iowa's future. The Conservation Commission is also developing a protected water areas plan, designed for natural water features in the state. Iowa's dwindling open spaces is an acute problem, considering that such a small proportion of Iowa's land is in public ownership. Generations to come have the right to enjoy all that is beautiful in Iowa. □

On the east end of the Hogsback Marsh, the floodplain meets the unusual geological feature of the Hogsback ridge.



The Rape of Wildlife

by Gerald Hoilien
LAW ENFORCEMENT SUPERVISOR

Photo by Beth McGeough

THE SHARP BEAM OF LIGHT bounced across the field, jerking back and forth, running up and down the trees and following the large branches in search of eyes. Suddenly, it flipped back and zeroed in on a large bump on the limb. The eyes lit up as the raccoon turned and stared into the light. The pickup jerked to a stop as the rifle came out the window, several shots pierced the night air and the animal came crashing down. Hurrying out to retrieve the animal, the game poacher was anxious to leave the area because of the noise this gun had made. People don't like shots at 3:00 a.m. and might come out to see what's going on or call the game warden.

A mile or so down the road the pickup turned into another field where it surprised several deer feeding — this time both men jumped from the truck as the deer ran from the lights. Two stopped and stared back at this thing that was still now but blinded them as they stood fascinated by the headlights. The explosions were deafening as the highpowered rifles roared thru the night. One deer dropped dead. The other, wounded, ran off into the darkness. Twice more the rifles sounded, but the deer struggled off. The dead deer was quickly loaded into the back of the pick up and the wheels spun as they hurried to leave. *"Good night"* one shouted to the other. *"Let's get out of here. I see a car coming back there."*

Too many times a year this scene is repeated. Poaching has been going on since the first laws were passed for the regulations of hunting and management of our wildlife. Who's doing it? What makes a poacher, game violator, or slob hunter. Why do they do it? I've asked myself and others this many times, trying to figure out a way to stop this thing. I'm a Game Warden.

I took this job, as most of our people, to do what I felt was a real contribution in my life's work. The love of fish and wildlife and the urge to see them thrive and prosper, continuing on so each generation can learn to enjoy and respect our wildlife is important to me. I've done a lot of hunting and fishing, did most of it before I went to work as a Conservation Officer. Seems like each year now I do less and less. Don't have the time, too many things to do. With all the activity now days, I can't seem to even get a day off. Even staying at home, the phone rings early in the mornings, with a complaint, or a request for a license, information, tips, or just to settle an argument. If not that, it's a road-killed deer to pick up or someone wants to claim for salvage, usually in the middle of the night. That's when a lot of the poaching comes, in the middle of the night. Often someone calls, they saw a spotlight last night. No description of the car or subjects, but want me to do something about it. Or the one that tells you about all the poaching going on last year. "I was going to call you, but . . ."

Most wardens, (Conservation Officers), have two counties to take care of and that's enough, but particularly in the fall when they are called upon to work night and day.

In some cases the man calling is mad, justifiably so, someone has been driving in his field, shooting, and Lord knows what. But he takes it out on the game warden. *"Why don't you people do something! Those d_ _ _ hunters!"*

First of all, most hunters are good sportsmen. In the past twenty years I've met a pile of them and I know!

The poacher is a thief, to be sure, just like a bank robber. He's taking things contrary to law and the rules society has set up, just like any other thief. People today have a strong tendency to generalize and be critical. One individual gave me heck one day for not catching all 'those city guys' coming out here causing all these problems. He told me to watch a particular road about sundown. I did that evening and caught three of his neighbors killing a deer with a high-powered rifle right out the car window.

I've studied a lot of violation reports and found one thing — there is no particular group, either by what they do for a living or where they live, that violates game laws more often. It's people and their greed. Get it, anyway you can, before it gets away or someone else gets it.

Last fall was the most frustrating one most wardens have ever put in. With fur prices at an all time high, the poaching became extremely profitable. Jacklighting deer was secondary to spotlighting raccoon. I attempted to stop two young men one night, driving down the highway without headlights. After a mile and a half chase, I found a loaded .22 rifle, a hand-held spotlight, two raccoon, and one's cap in a road ditch.

The following night I was on night patrol in the state airplane and directed the stopping of several spotlighters, including, you guessed it, the same two young men, right back out again.

The maximum fine is $100 and with the high fur prices, getting caught was more like an "operational" expense. In fact, if we caught them every other night, they could have stayed ahead of us.

Jacklighting, shining, hunting with an artificial light, or what ever you call it, is one of the worst attacks on sportsmanship. Blinding an animal with a light and then shooting it down is not my idea of fair play. The danger of shooting at anything on the ground at night is obvious, there's no way to see beyond the end of the light for the buildings, cattle, people, or anything else beyond that may be well within range of even the small .22.

Hopefully the legislature will see fit to give us some help in this direction. We've got to have some help or we'll just plain lose.

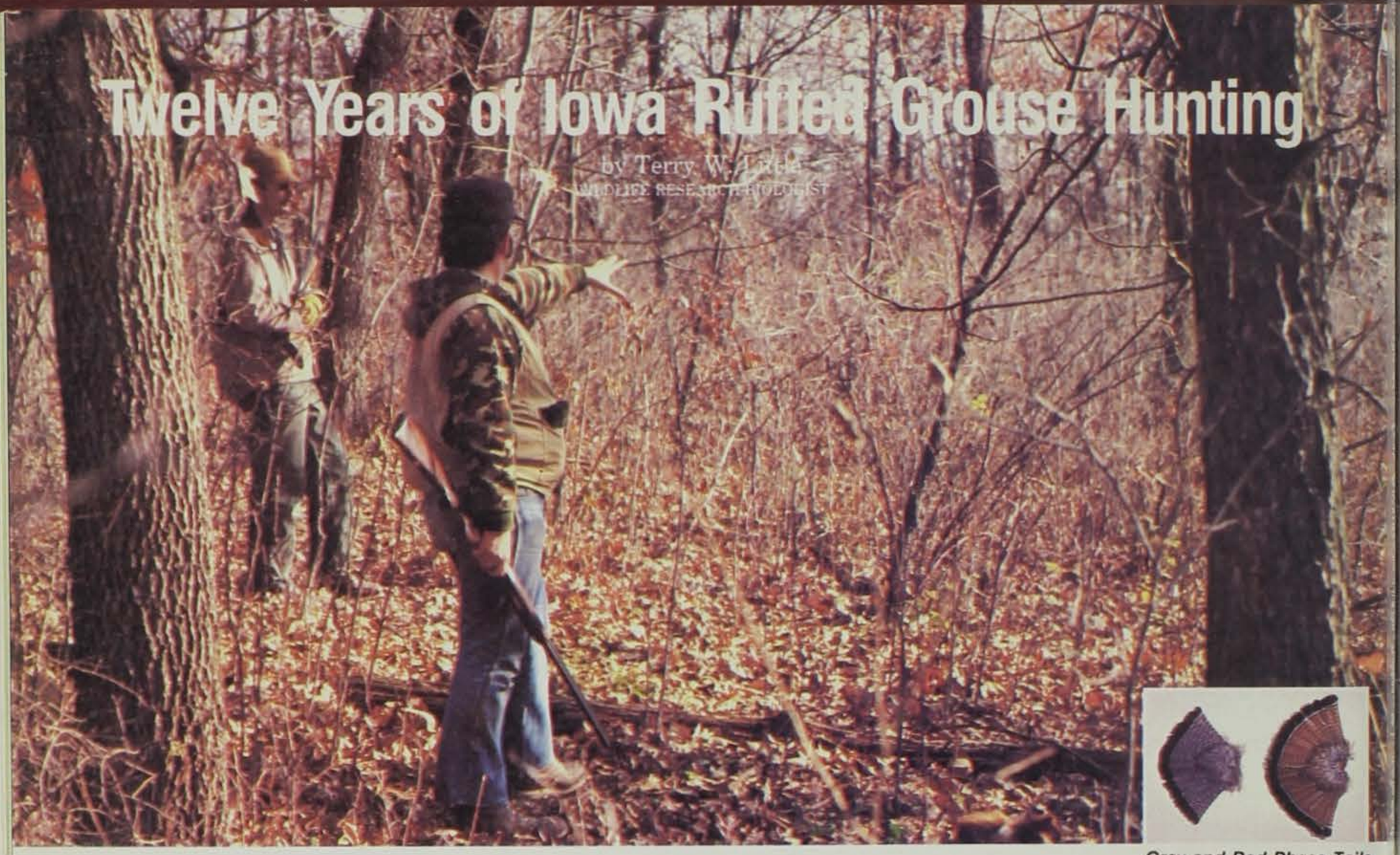
We lose in game population. The honest hunter loses there, and in the slandering of the sportsman's name. Everyone becomes angered and upset, tempers flare and things happen. It makes me smile when I hear coon hunters get up tight about a couple of non-resident coon hunters when it's the jack-lighter who's getting all the coon and the majority of those caught have been our local residents.

We and the wildlife need your help. The time has come to stand up and be counted. Contact your Conservation Officer and help! Don't just hint or give him heck for not stopping it — he's the one guy who's trying to bring the violator to court. Ask him what information he needs to take action. Turn in the violator. Become involved. The professional poacher knows where the local warden lives, what he drives, and what he looks like, but he can't abide against the general public and their thousands of eyes and ears.

(Continued on Page 9)

Twelve Years of Iowa Ruffed Grouse Hunting

by Terry W. Little
WILDLIFE RESEARCH BIOLOGIST



Gray and Red Phase Tails

RUFFED GROUSE *(Bonasa umbellus)* are a wildlife resource unknown to most Iowans. Though abundant in northern states and Canada and once found statewide, they are currently restricted to forested portions of the extreme northeast corner of Iowa. Geographical isolation, their secretive nature and the rugged terrain they inhabit have insured that relatively few sportsmen seek the challenge of grouse hunting. Fewer than 3% of Iowa's 300,000 + small game hunters hunt grouse annually, and estimated grouse harvests (9,000-24,000 annually) represent less than 2% of the state's annual ring-necked pheasant kill. In spite of this unfamiliarity, grouse hunting has captured the imagination of a group of avid sportsmen who seek the physical and mental challenge of hunting what is often called the "king of upland game birds."

Historical Trends

Grouse hunting has undergone dramatic fluctuations in popularity since the presettlement era as grouse populations have adjusted to changes in land use. Grouse were a readily available food source for early settlers with no restrictions placed on subsistance hunting until 1856 (Table 1). From then until 1923, hunting seasons were intermittently shortened and bag limits were introduced to protect an ever dwindling resource. Reports that one hunter was still able to shoot 20 grouse in a single day in Linn County as late as 1903, place the abundance of early grouse populations in perspective. Faced with what appeared to be the imminent disappearance of ruffed grouse from Iowa, the Fortieth General Assembly instituted a year-long closed season in 1923 that was to remain in effect for 45 years.

Clearing forest land for agricultural purposes and severe overgrazing, which eliminated the dense shrub understory from much of the remaining forest land, were the primary factors which led to the historic decline in grouse numbers.

Table 1. History of ruffed grouse hunting in Iowa.

YEAR	SEASON DATES	NO. DAYS	BAG[1] LIMITS	SHOOTING HOURS
Pre-1856	Continuously open	365	None	None
1856-1878	16 July-31 January	200	None	None
1878-1904	16 July-31 January	200	25/none[2]	None
1904-1923	1 November-15 December	45	25/none	None
1924-1967	**Continuously closed**	0	—	—
1968	1 November-17 November	17	2/4	8:00a.m.-4:30p.m.
1969	31 October-29 November	30	2/4	8:00a.m.-4:30p.m.
1970	31 October-29 November	30	2/4	8:00a.m.-4:30p.m.
1971	30 October-28 November	30	2/4	8:00a.m.-4:30p.m.
1972	21 October-1 December	42	2/4	8:00a.m.-4:30p.m.
1973	20 October-25 November	37	2/4	Sunrise-Sunset
1974	12 October-6 December	56	3/6	Sunrise-Sunset
1975	11 October 1975-4 January 1976	86	3/6	Sunrise-Sunset
1976	9 October 1976-1 January 1977	86	3/6	Sunrise-Sunset
1977	8 October 1977-1 January 1978	86	3/6	Sunrise-Sunset
1978	14 October 1978-8 January 1979	87	3/6	Sunrise-Sunset
1979	13 October 1979-6 January 1980	86	3/6	Sunrise-Sunset

[1]*Daily bag/possession limits.*
[2]*No bag limit was in effect for hunting on one's own land.*

Decreased hunting opportunity was a result, rather than a cause, of the disappearance of ruffed grouse from most of their former range. By 1930 only 6 counties in northeast Iowa still retained grouse in reasonable numbers, although scattered sightings were verified in east-central and southeast Iowa for several years.

Spring breeding population surveys were initiated by the ICC in primary grouse range in 1961. Survey results during the next 7 years indicated that northeast Iowa retained grouse in numbers similar to surrounding states which still allowed grouse hunting. A 17-day experimental season with a daily bag of 2 grouse of either sex was instituted in 1968, after 45 years of continuous closed seasons. Season lengths, bag limits and shooting hours have been liberalized considerably in the ensuing 11 years as a result of continued successful seasons (Table 1), until Iowa's grouse season now compares favorably in length with those offered by adjacent states.

Table 2. Characteristics of ruffed grouse hunting trips as reported by hunter cooperators.

PARAMETER	69	70	71	72	73	74	75	76	77	78	Total and average
No. parties[a]	26	74	89	85	79	46	81	104	145	110	847
Hunters per party[b]	3.23	1.38	2.83	2.33	2.74	2.04	2.40	2.42	2.12	2.28	2.46
Hours hunted per day[c]	4.24	4.10	4.30	3.77	4.53	3.67	4.60	5.57	3.81	3.69	4.22
% parties using dogs[d]	—	—	—	59	68	57	64	55	47	60	58
Flushes per party	12.35	8.21	15.07	15.41	12.38	12.43	11.51	11.41	10.18	9.81	11.94
Flushes per hour	2.83	1.78	3.12	3.41	2.23	2.40	2.21	2.23	2.79	2.21	2.58
Flushes per hunter-hour	1.06	0.86	1.20	1.93	1.15	1.53	1.13	1.04	1.52	1.15	1.29
Grouse bagged per party	2.65	2.68	2.64	2.93	2.61	2.95	2.89	2.75	1.83	1.93	2.43
Grouse bagged per hour	0.72	0.40	0.63	0.65	0.50	0.58	0.58	0.55	0.49	0.43	0.54
Grouse bagged per hunter	0.99	0.75	0.99	1.41	1.02	1.69	1.27	1.11	0.78	0.89	1.04
Grouse bagged per hunter-hour	0.33	0.21	0.26	0.37	0.22	0.38	0.29	0.25	0.25	0.23	0.27
Grouse bagged per flush	0.34	0.20	0.23	0.23	0.23	0.27	0.29	0.28	0.18	0.23	0.24

[a] *Number of parties providing information on all variables.*
[b] *Table values for all following parameters are annual or 10-year averages.*
[c] *Based on parties hunting just 1 day.*
[d] *Information was not collected prior to 1972.*

Modern Grouse Hunting

A select group of grouse hunters has cooperated with the Conservation Commission each year since 1968 by reporting the success of their hunts. Each autumn cooperators were mailed several envelopes in which to return the tail and one wing from each grouse they shot, to provide information on the age, sex and color phase of harvested grouse. A questionnaire on the envelope requested information on the date of the hunt, number of hours hunted, number of grouse flushed and bagged and whether or not a dog was used. Questionnaire data described the characteristics of hunting parties, evaluated their success and provided a means of comparing Iowa grouse hunting with other states. The sale of hunting licenses and a Federal excise tax on the sale of arms and ammunition (Pittman-Robertson Aid to Wildlife Restoration Act monies) funded this survey.

In examining grouse hunter statistics, keep in mind that generally the most avid hunters participated and unsuccessful hunts were probably not reported as often as successful trips. Thus hunter effort and success are somewhat overestimated and data do not reflect the "average" hunt or hunter.

Annual and 10-year averages for various characteristics of grouse hunting trips are shown in Table 2. The "average" grouse hunting party contained 2.5 hunters, hunted 4.2 hours per day, flushed nearly 12 grouse (2.6 flushes per hour) and bagged 2.4 grouse (1 grouse bagged per 2 hours of hunting). On a per-hunter basis, this translates to 1.2 flushes and 0.3 grouse bagged per hour (or 3 hours of hunting per grouse bagged). The average party reported bagging 1 grouse per hunter per trip, and just 1 grouse for each 5 flushes. Surprisingly, this compares well with Iowa pheasant hunters, who reported bagging 0.8 ring-neck cocks per trip in 1979. Nearly 60% of the grouse hunting parties hunted with a dog.

Values for the average party do not accurately reflect the success of most parties. Of 847 individual hunting trips reported by cooperators, 82% of the parties consisted of 3 or fewer hunters, 87% hunted 6 or fewer hours per day, 81% flushed 15 or fewer grouse, 82% bagged 3 or fewer grouse and 77% bagged 1.5 or fewer grouse per hunter (Fig. 1). Thus, while a few very successful hunters inflated the averages, most parties were less successful.

There are no significant long-term trends in values for any variable in Table 2 except party size and grouse bagged per hour, which tended to decrease over the 10-year period. Decreased bag per hour may be explained by the decrease in hunters per party, since bag per hunter-hour did not change.

The only statistically significant change between years that could be detected for any variable was for flushes per hunter-hour. Since this variable is standardized for party size and hours hunted, it may provide an index to fall grouse populations (i.e., the number of flushes per hunter-hour might increase or decrease in years grouse were more or less abundant). This "flushing rate" was greater in 1972 than in other years, suggesting grouse populations were higher in that year. Although ups and downs were recorded in other years, there was too much variability between parties in most years to determine if annual fluctuations were real. The 1972 flushing rate was 26% greater than the next highest year, implying that grouse populations would have to change at least by this much to be detectable by hunters. If the flushing rate does reflect population trends, fall grouse populations in Iowa would seem to be fairly stable.

The cooperator survey provides information only on individual hunts and not annual totals. Information provided by the ICC's small game hunter survey, which is mailed to a 2% random sample of the State's small game license holders, estimated that grouse hunters bagged from 1.1 to 3.2 grouse per season from 1976-1978. Since this is certainly an overestimate, it emphasizes the trophy nature of grouse hunting in Iowa. Cooperators reported that in excess of 75% of their total hunting trips occurred during the first month of the season, with the remaining 25% spread out over 50 or more days. Once pheasant season opens, most upland hunting pressure switches to this more accessible and less challenging game bird and grouse hunting nearly ceases for the year.

Biological Information

Of 1,278 useable grouse wings and tails submitted by cooperators, 22% were from adult males (1½ years or older), 20% from adult females, 24% from juvenile males (hatched the previous spring) and 34% from juvenile females. This translates to a 10-year average of 2.8 juveniles and 1.7 juvenile hens per adult hen in the sample. Overall juveniles comprised 58% of all grouse examined. Ruffed grouse hens, which are the critical reproductive segment since grouse are promiscuous and males play no role in raising young, appear to be nearly doubling their numbers from spring to fall. This is a maximum estimate since adult hens suffer some mortality during nesting and brood-rearing activities. There were no statistically significant differences in age ratios between years, nor did annual changes in age ratios correspond to changes in flushing rates.

Ruffed grouse have 2 color phases (tail colors) — gray and red (Fig. 2). Although there are many intergradations in

color between these extremes, most hunters could probably classify most grouse as belonging to one phase or the other. Of 748 tails which could be color phased, 72% were red and 28% gray. There were no differences in ratios between age and sex groups or between years. A pure or nearly silver gray tail is a rarity in Iowa. Most of our gray phase grouse will have at least a slight brownish or red flecking in the gray areas on the tail between the dark bands.

Increase Your Success

In addition to grouse population information, the hunter survey provided some data on characteristics of hunting parties which may aid grouse hunters in planning future hunts. Multiple regression is a complex statistical tool that was used to determine which characteristics of hunting parties (party size, hours hunted, flushes, flushes per hunter-hour, use of a dog) contributed most to hunter success. While the results are somewhat technical, they can be summarized as follows: The number of grouse bagged per hunter could be maximized by decreasing party size, hunting more hours, hunting in good habitat (increasing the number of flushes) and by using a dog. The choice of habitat was especially important, which indicates that experienced hunters who recognized suitable habitat flushed the most grouse and were the most successful.

The effect of party size on hunting success is shown in Table 3. The average number of flushes and grouse bagged per hunter-hour declines geometrically as party size increased, while grouse bagged per flush remained constant. Adding additional hunters to a party did not necessarily result in flushing more grouse or increasing the bag. This is probably a result of the configuration of Iowa's grouse habitat. Most huntable timber in northeast Iowa is found along the narrow shoulders of high ridges between the less steep agricultural crests and sharp vertical drops on the sides of ridges. Apparently one or two hunters walking these narrow areas are as efficient as larger parties in flushing grouse.

Table 3. Effects of party size on hunter success.

NO. OF HUNTERS	NO. OF PARTIES	FLUSHES PER HUNTER-HOUR	GROUSE BAGGED PER HUNTER-HOUR	GROUSE BAGGED PER FLUSH
1	199	2.26	0.47	0.24
2	327	1.12	0.24	0.24
3	173	1.00	0.19	0.21
4	99	0.75	0.17	0.23
5+	58	0.67	0.15	0.26

Hunting parties with dogs were more successful; they flushed and bagged more grouse per party than parties without dogs, but bagged the same number of grouse per flush. Interestingly, dogs were less of a benefit to large parties than to small groups. Perhaps dogs were harder to control and performed less admirably when several hunters were present to confuse them. Larger parties may also have had more than one dog. Since few Iowa bird dogs hunt grouse often enough to do especially well on them, several dogs may have been a greater handicap than just one experienced dog.

These results indicate that the single hunter, hunting several hours in good habitat and with a dog, has a greater chance of maximizing his bag than larger groups without dogs. The easiest of these factors to control when planning a hunt are party size and length of the hunt. The survey shows, however, that recognizing suitable habitat is vitally important. Grouse prefer dense brushy areas in recent cut-overs or along the margins of timber stands. Late season hunters find grouse concentrated in evergreen thickets and plantations. Although difficult to hunt, these areas consistently produce the most grouse. Training a dog to be efficient at grouse hunting is also time consuming. Pointing dogs used to working running pheasants tend to "bump" grouse on their first hunts and most dogs do not spend sufficient time on grouse to become adept hunters. Occasional grouse hunters apparently do not spend the time locating promising coverts or training their dogs to participate effectively in what most consider a minor part of their annual hunting effort.

Comparisons with Other States

Hunter survey data from other states helps place Iowa grouse hunting in perspective. Iowa's grouse hunting seems noticeably better than Ohio and Indiana, states on the southern edge of grouse range. Flushing rates in these states range from 0.5-0.9 per hour and grouse bagged per hunter-hour from .04-.12 (8-25 hours of hunting per grouse bagged). Iowa grouse hunters flushed at least 43% and bagged 125% more grouse per hour (3 hours of hunting per grouse). Comparisons with northern states are complicated by cyclic trends in grouse populations. In northern regions ruffed grouse go through cycles in abundance, peaking at approximately 10-year intervals in the first 5 years of each decade (e.g., 1970-75). Between peaks, populations often crash to less than 25% of peak numbers, usually during the last 5 years of each decade. During peak years hunters may flush 5 or more grouse per hour, but during lows this may fall to 5 hours or more of hunting per flush. Iowa hunting is much more stable, and falls at about the long-term average of peak and low numbers for northern populations.

Age and color phase ratios seem to follow the same north to south gradient as do population levels. In northern states, juveniles tend to make up 65-75% of the bag, while southern states report 45-55% juveniles. Northern grouse populations (central Minnesota and north) tend to have predominately gray tails, while grouse in the eastern and southern states are nearly all the red color phase. Ratios of 58% juveniles and nearly 75% red-phase grouse in Iowa are intermediate to these north-south extremes and confirm that gradients do exist. The exact significance of these trends is not known, but it is presumed that gray phase grouse are better adapted to colder temperatures than the red phase. Birds in more severe northern environments may be subject to greater winter mortality, resulting in higher productivity rates and fewer adults in fall populations than southern grouse which inhabit relatively benign environments.

In summary, Iowa grouse hunting compares favorably in terms of individual hunter success to most other regions. While Iowa can't match the success enjoyed by grouse hunters in northern states during peak grouse numbers, our grouse hunting is more stable and produces good hunting averaged over several years. Because Iowa's timber resource is much more restricted than most states, total grouse harvests will never match those reached throughout most of grouse range. The tough physical challenge presented by high ridges and steep slopes in northeast Iowa, geographical isolation, plus the availability of other upland birds means that grouse hunting will never be a major sport here. But twelve successful modern hunting seasons have demonstrated that grouse hunting can provide many hours of recreation for the hunter seeking a little extra challenge for his reflexes and for his bird dog. For those few hunters who indulge successfully, the thrill of Ol' Ruff exploding through brightly colored autumn leaves is difficult to match. □

FALL CANOEING

BY BETSY MALUEG

IOWA is blessed with two great river systems — the Mississippi and the Missouri, over 43,000 acres of inland lakes and ponds, four federal reservoirs, and numerous inland streams. On most of this water one can enjoy smooth canoeing under peaceful and scenic conditions. Under normal water conditions there is no better time to enjoy Iowa's canoeable streams and lakes than during late summer and fall.

Recently the sport of canoeing has undergone a tremendous growth in popularity across Iowa. Along with such popularity there has been a major increase in the number of fatalities caused by capsizing.

Know How to Swim

If you are a canoeist you can bet your life sometime or another you will capsize. BE PREPARED TO SWIM! Wear a life jacket. (If the water and air temperatures do not add up to one-hundred degrees Fahrenheit, you should also wear a wet suit). In late fall the canoeist should be aware that while days may be warm, the water may be cold. If you should capsize, pain, loss of muscular control, and unconsciousness will quickly set in. You may not be able to buckle the straps on your "personal flotation device (PFD)" or hang onto your canoe.

River Canoeing

Even though the water may be shallow in most areas, deep holes do exist in every free flowing stream. Keep your feet up if you capsize. Never stand up in flowing water, unless it is too shallow for swimming. The current could quickly trap a person's legs or feet under a log or a rock. Hang onto the canoe and maneuver it so that it stays in front of you.

Brush, fallen trees and bridge pilings, pose a few of the dangers of river and stream canoeing. Every precaution should be taken before the trip. If hazardous conditions exist, such as high water levels, do not go out.

A special danger on many of the streams in Iowa is the low-head dam. Below such an obstacle, the water curls back on itself in a stationary wave. The surface water is actually going upstream and this action will trap a person or any floating object between the drop and the wave. If you go over a dam you and your canoe may be held and rolled in this recirculating water for hours. Once trapped, a swimmer's only hope is to swim downward where the current is flowing downstream.

Public Access

Land along public waterways most likely is privately owned. Caution should be exercised to avoid infringing upon the rights of adjacent landowners and trespassing on private lands. Therefore, on those waterways where there is any doubt concerning ownership, canoeists planning to go out on the banks or bed of a river should obtain permission from landowners before starting their trip.

At a leisurely pace, an average day's canoeing trip is 8-10 miles. The Iowa Conservation Commission has prepared a pamphlet (Iowa Canoe Trips) covering fourteen different areas. For a copy of this brochure write to the Wallace State Office Building, Des Moines, Iowa 50319.

Lake Canoeing

Paddling on quite smooth water is restful, peaceful, and charming in a way all of its own. However, wind and waves can make paddling difficult. In crossing open stretches of water with a cross wind, keep your weight in the center of the canoe and low. If a person sits in the bottom of the canoe it is virtually impossible to capsize.

Boating Laws Affecting Canoeist

1. One U.S. Coast Guard approved personal floatation device (PFD) in good condition and readily available, must be aboard the canoe for each occupant. 2. Loading a canoe with too many passengers violates state law. 3. Paddle propelled canoes must exhibit a white light which shows all around the horizon (360 degrees) between the hours of sunset and sunrise. 4. Canoes larger than 13 feet or equipped with a motor must be registered. 5. An accident report is required for any incident which results in a fatality, an injury requiring medical attention, or property damage over $100.00. □

WILDLIFE *(Continued from Page 5)*

If you wish to remain anonymous, tell the warden this and work something out. But contact him. Let's stop this rape of our wildlife and put sportsmanship and honest hunting first.

The following violation report form is available from your local conservation officer to aid you in supplying the necessary information. Fill in the blanks and give it to your conservation officer, or mail it to: Superintendent of Law Enforcement, Iowa Conservation Commission, Wallace State Office Building, Des Moines, Iowa 50319.

Violation Report

Violation _____

Auto: License # _____ State _____

Make _____ Model _____

Color _____

Violator: Sex _____ Age _____ Ht. _____

Wt. _____ Hair _____ Eyes _____

Identifying Marks or Features _____

_____

Location _____

Date and time of violation _____

Details of violation: _____

a. Illegal animal taken _____

b. How taken _____

c. Disposition of carcass _____

d. Vandalism _____

e. Offense against person _____

I agree to appear in court and testify against the above game law violator.

Signed _____

Name _____
(print)

Address _____

City _____ State _____ Zip _____

Remember, you can help enforcement officers in doing their job by reporting instances of violations of conservation laws, or abuse of property rights. Such violations are EVERYBODY'S business!

Common Goals for Wildlife's Benefit

TO TAKE a superficial look at a situation can lead one away from reality. Such a circumstance exists with many individuals and groups acting to save wildlife today.

Groups opposed to hunting often recite fluctuating levels of wildlife populations as proof of their point. They often attempt to invoke emotion by playing up "Disney-type" images of soft, furry, woodland creatures and stay away from the reality of the outdoor world.

So it goes with people who let their analysis end on the surface. They spend a great deal of time and money fighting hunters and hunting and all the time their true goal goes unattended. Instead of working toward saving the wildlife resource, they become obsessed with preventing people from hunting. Efforts to preserve wildlife populations are both necessary and to be admired. But, if the desired result is to ever be achieved, the efforts need to be channeled toward the cause of the problem and not the symptom. How is it possible to imagine that the act of hunting is not the cause of fluctuating populations of wildlife? It is only possible after having been exposed to some of the relationships existing between species that have been hunted and those that have not.

One of these relationships evolves around two birds very familiar to us all, the turkey and the bald eagle. When our founding fathers were nominating choices for the symbol of our nation, the top two were the bald eagle and, would you have imagined, the wild turkey. The wild turkey was a serious part of the settlers' food source (eg. Thanksgiving) and is revered as one of the most cunning and intelligent of all fowl. Incidently, the wild turkey's major proponent was Benjamin Franklin.

The attributes of the bald eagle are well known to us all, as is the outcome of the balloting. Upon being elevated to its new status, the eagle enjoyed a great deal of honor and the cloak of eternal protection from the hunt. The second place finisher, however, remained a vital source of food and sport.

As we are familiar with the attributes which placed the eagle in this honored position, we are all too familiar with its current position on the endangered species list. And what of the wild turkey? Under the watchful eye of modern game managers, the wild turkey has flourished to the point of exceeding its original range. Why then the demise of the eagle? Because it was protected from hunting but not from changes in its environment.

A second important example would come from examining the waterfowl populations of North America. In the mid-1930's, the waterfowl population of North America reached an all time low. It is reported that during the "Great Dust Bowl" only thirty-five million waterfowl flew south.

Water is of course the focal point of life to all waterfowl. In the case of the Dust Bowl years, the habitat literally dried up. When the habitat diminished, the population of waterfowl diminished in direct proportion with it.

In recent years modern game managers have helped waterfowl build their numbers to levels that exceed one hundred million and reach the one hundred and twenty-five million mark when there is a sufficient availability of water in the nesting regions.

During this period many species of waterfowl responded to improved breeding habitat and have been regenerating their populations, there are more geese on the North American Continent today than there were at the turn of the century. In fact, in the 1947 census, 27,000 Canada Geese were tallied in the Mississippi flyway. In the 1976 census, over 900,000 (a thirty-fold increase) were counted in the Mississippi flyway.

How then, is it possible, to increase a waterowl population 250% while it is the focal point of the hunt. Is the hunt actually a villian?

Consider the relationship between man and coyote. Considered to be a profit-reducing pest, no protection was ever available to the coyote. Bounties were paid for proof of its death. Poisoning on a large scale was commonplace, and when these methods were not satisfactory, professional hunters have been used in an attempt to further reduce its population. In spi of this out and out attempt at extermination, the coyote flourishes a is today being reported in regions where it was never found before.

It is not regulated hunting that caus wildlife populations to diminish, instea it is because the adult animals cannot find food and suitable places to rear their young. In some cases the young that are born have too much difficulty surviving in an environment of minim quality.

In many ways wildlife populations a being killed today without the aid of a gun! Consider the impact on the remaining habitat as more and more

by Al Weaver

Photo by Rock Bridges

nland is drained, burned, and tilled, prime wildlife habitat is destroyed. sider a government agency that ds a concrete impasse for rivers, if they cannot "dam-it" they ch-it". With each and every one of e efforts comes irreversible nage to the life support systems of vildlife (i.e. prime habitat is lost). is not the man and boy that venture ld on an autumn day that cause the uction of wildlife populations. ead it is the draining, the cultivating ess productive agricultural lands and developer that kills habitat. dozers and chemicals are having most direct impact on wildlife ulations.

To preserve our wildlife populations we need to work toward the maintenance of remaining habitat and the re-creation of habitat that has been lost. The wildlife population of the future will be the result of your efforts today. No effort - no future!

If groups that have a decided intent and purpose of saving wildlife continue to "spin their wheels" battling the symptom and each other, and continue to overlook the cause, the patient could easily die on the operating table!

Anti-hunting concerns and hunting concerns have common goals, and this should make them allies and not enemies. These common goals should lead to a union that is directed toward the cause (i.e. habitat reduction). They should align their efforts and their goals (habitat preservation and creation) shall be more easily and sooner accomplished. □

Ken Formanek

Chipping Sparrows need trees and shrubs for nesting

The machinery is probably not going to do much to improve this marsh

DRYING-
a simple and inexpensive method for harvesting nature's bounty.

BY DON R. HELMS

With ever-increasing costs for foods, people have been looking for alternative methods of preserving seasonal products. This is true not only for garden produce but also for the bounty nature provides.

One method which has been creating interest is drying. It seems people on the West coast have taken to this and are drying everything from zucchini squash to tomatoes. Can you imagine dried tomatoes?

From written descriptions of a typical home drier, I fashioned one of my own. Made of ⅜ inch plywood sides and back and ¾ inch plywood double doors, it measures 36 x 36 x 16 inches deep with a screened partition in the center and removable screen shelves. A 100 watt light bulb on each side, top and bottom, furnish heat while the material drys on the screens.

Homemade drier (left) and beans

Its first use was to dry apples last fall. Peeled, cored and quartered apples were dipped in salt water for 10 minutes to help retain whiteness. Spread evenly over the screened trays, it took about 3 days for them to dry.

Our family is still eating dried apples for snacks. Better than commercial "junk" food, I often carry a handful in my pocket when hiking. Can't say much for the dried apple pie. Though, maybe I haven't found the right recipe.

When my wife's 86 year old grandmother saw the dried apples, she knew right away what they were but was somewhat puzzled because they didn't have black specks on them. When she was a girl, she remembered drying apples on the roof of a shed and taking them in each evening before the dew. The specks she expected were probably fly specks. Ugh!

One spring, when we found many mushrooms, I preserved our excess by drying. What a surprise! They dry in a day and taste delicious. No hint of the rancid off-flavor often experienced with frozen mushrooms. Just soak them in salt water to soften and prepare as you would fresh.

With the problems many are having in keeping the pantry filled, you can bet more and more families will be drying this fall — how about you? □

Photos by the Author

Above: Dried nuts; Below: Dried mushrooms and apples.

The Molding of a Sportsman

by Carl M. Priebe
WILDLIFE MANAGEMENT BIOLOGIST

It started with a fishing trip to a lake near home. Soon the young boy grew restless and began to throw rocks. Knowing that young fishermen have difficulty sitting still the old man did not object. It was important that the boy enjoyed this first trip.

The old man took the boy fishing more often during the next few years, noting that his enthusiasm grew with each outing. The boy soon was refining his raw skills and wanted to do everything himself, bait the hook; cast by himself; and most of all take off his own fish.

By this time the old man felt that the boy was ready for his next big step. The boy had already been taught the importance of handling a gun safely and had shot at many targets. Now it was time for his first hunting trip.

After several reminders about which way the gun should be pointed and endless checks on the gun's safety the old man pointed out a cottontail. The two had walked a considerable distance and the boy was tired of the constant corrections from the old man but now they were forgotten. He took aim and fired but the rabbit bounded off untouched. Tears swelled in the boy's eyes but were quickly wiped dry. Surely the old man would not take him again if he were caught crying. Soon another rabbit was spotted sitting at the base of a small tree. This time the boy was more determined but his confidence had suffered a severe setback. The barrel wavered more than ever before but all of a sudden it became motionless. The gun barked loudly, unheard by the boy, and the rabbit immediately collapsed in the leaves. The boy's excitement spread across his face in a broad smile, words began rolling out at a mile a minute. In his excitement the boy failed to see the smile and the pride that lit up the old man's face. The boy would not notice this for some time.

As the boy grew he and the old man expanded their trips. They fished many lakes, including trips to Minnesota and Canada. They hunted ducks, pheasants, quail, and rabbits, spending countless days together in the field. Somewhere during all this the boy began to forget some of the things the old man had stressed. The boy grew impatient when the fish weren't biting, tired quickly when pheasants could not be found, and wanted to go home when the ducks weren't flying. He became obsessed with getting something. Keeping score became the most important part of each trip. He was determined that someday he would get more than the old man.

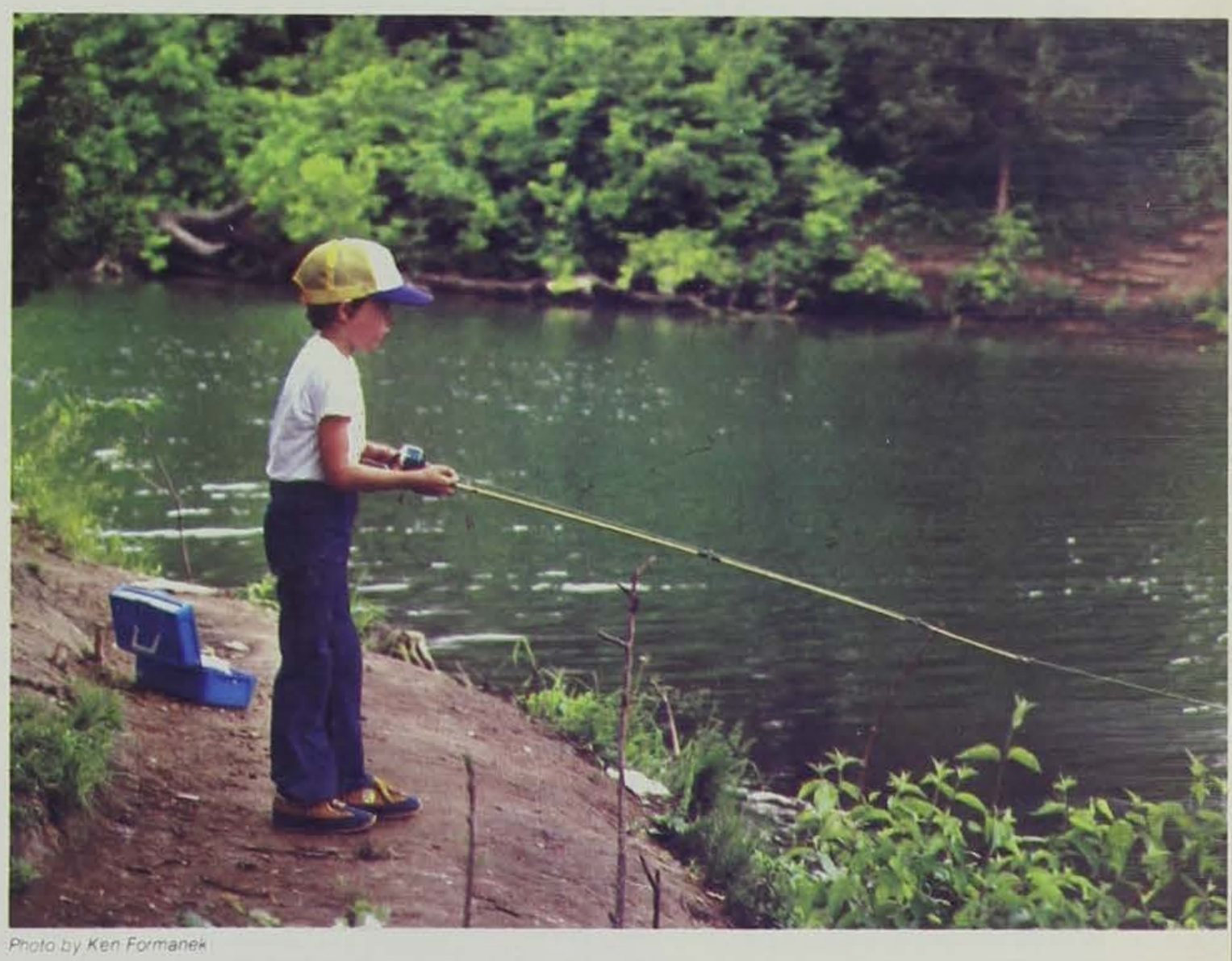


Photo by Ken Formanek

The old man was troubled by the changes in the boy's attitude but recollections of his own youth reminded him that this was to be expected. He took the boy in the field more before the hunting season. He used scouting trips to check out marsh conditions, get permission to hunt private land, and most of all to point out some of the fascinating features of the marsh, grassland, and woodland.

Slowly these trips began to pay off. After one trip the boy talked more about the dog's stylish points than he did about the birds he got. He talked with excitement about the Canada geese that circled the decoys and then left, rather than with frustration. He marveled at the osprey's beauty and fishing skill all but forgetting his own angling accomplishments for the day. He no longer had to get something. He found satisfaction in the companionship and the sights and sounds that were an integral part of each trip. The boy had matured.

From time to time the young man still regresses to boyhood. At times he still feels the need to "get something" but these regressions come sparingly. Perhaps they come from frustration, perhaps from the little kid that resides within us all. But he recognizes these feelings and has learned how to handle them. The young man has become a true sportsman.

As once it began, it begins anew. This time, however, there are three. An old man. A young man. A small child. At some point the old man will be gone but his ideas and memories will linger on. The shared moments of the past will be relived again and again. The young man will realize the frustrations, the pride, and the warm satisfaction his father once felt. He will teach his children the same respect and concern for the outdoors that his father once taught. His life and those of his wife and children will be filled with memories and experiences that can brighten the darkest days. And most of all, they will share the togetherness that few families ever achieve. □

LOOKIN' BACK

Ten years ago

the *Iowa Conservationist* featured an article on small game hunting in Iowa. We may not have much in the way of big game, but hunters took some "big" numbers in 1969 including over one million each of pheasants, quail, rabbits and squirrels.

In January of 1940 a severe freeze struck the winter range of the Wilson's snipe killing a major portion of the population. It was more than ten years before the birds could once again be hunted.

Twenty years ago

the magazine examined fox trapping in Iowa. It was generally decided that outsmarting "Ol Red" could be the most frustrating of outdoor activities.

The Commission purchased 83 acres adjoining Elk Creek Marsh in Worth County.

Iowa has five native evergreen species.

Thirty years ago

the *Conservationist* celebrated the silver anniversary of pheasant season in Iowa. The first season had legal hunting for 3 half-days in 13 counties. In 1950 hunters could hunt as long as 25 days in 83 counties. The bill earmarking excise taxes on fishing equipment for federal funds to aid state fisheries programs sponsored by U.S. Representative John Dingell (Dem. Michigan) was finally signed into law.

Classroom Corner

by Robert Rye

ADMINISTRATOR, CONSERVATION EDUCATION CENTER

WILDLIFE is a product of the land.

Many words have been used to describe wildlife and how it relates to variables such as predators, nonpredators, space or food. Often the use of many facts will confuse an audience.

Summarizing the dynamics of our wildlife resources in such a concise manner as the first sentence can be misleading, yet understanding that statement is an important link in the chain of events that control life on this earth. Let's delve into the first statement with a few examples.

Agriculturally, we can easily observe ways in which plants respond to the soil. Soil moisture, other plants, and nutrients are just a few variables that influence the life cycle of plants. Their growth, from seed to maturity, can be monitored in a flower box, cornfield or wood lot. Since plants are immobile, their growth patterns can hardly escape our notice. Young corn seedlings erupting from a recently sown field catch our attention, as do the oats as they turn from green to gold.

Wildlife responds to land much like plants; but since animals are mobile we cannot expect to see them at an exact location or precise time each day. The doe and her twin fawns seen in the morning will not be there tomorrow at the same time. The squirrel running on an old tree may not wait for us to take a photograph *(see photo)*. Those same species are, however, very much dependent upon the land where they reside, for it is the plants which are found there that provide them with food and cover — two critical needs of every wild animal.

Wildlife including fish are highly sensitive to environmental change. Change stream temperature or flow; drain wetlands; channel natural water courses; clear forests or make other changes that limit their food, water or shelter and wildlife are immediately affected.

Nearly every wild fish, bird or mammal has a comparatively narrow range of environmental elements that determine its survival. These may be divided broadly into food, water, and cover. But, every species' need for each of these essentials differs to some degree from those of others.

Climate, topography and geology in a given area are basic influences on the composition of the plant community. The nature and abundance of the local plants, in turn, govern the kinds of wild animals that an area can support.

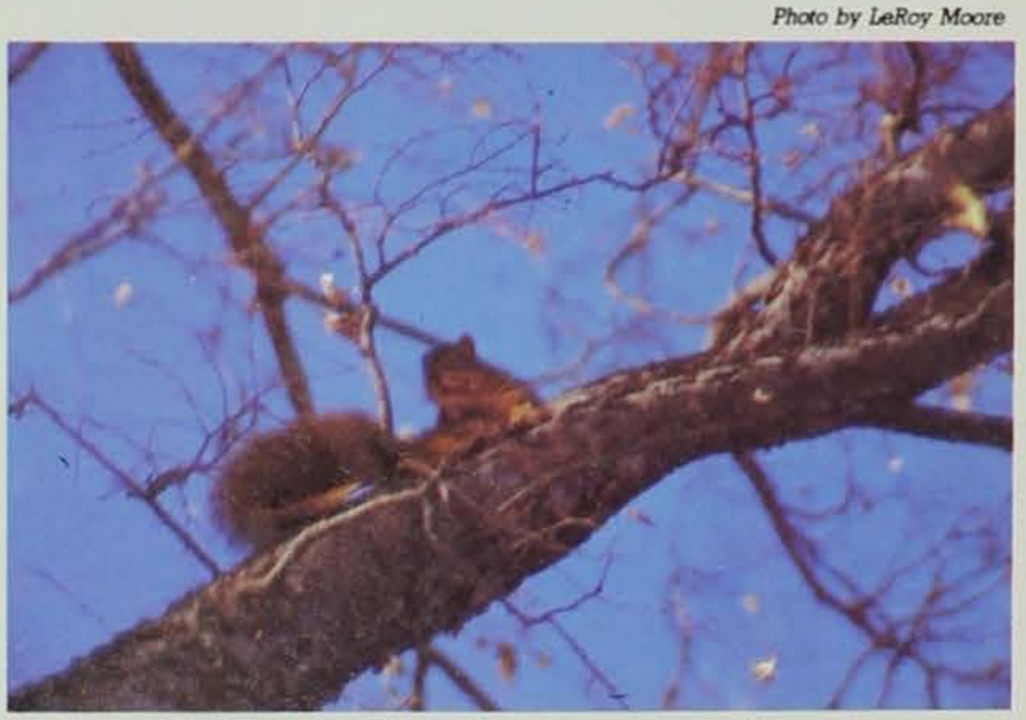
By manipulating the vegetation on a tract of land we are in effect determining the wildlife residency, for wildlife is truly a "product of the land".

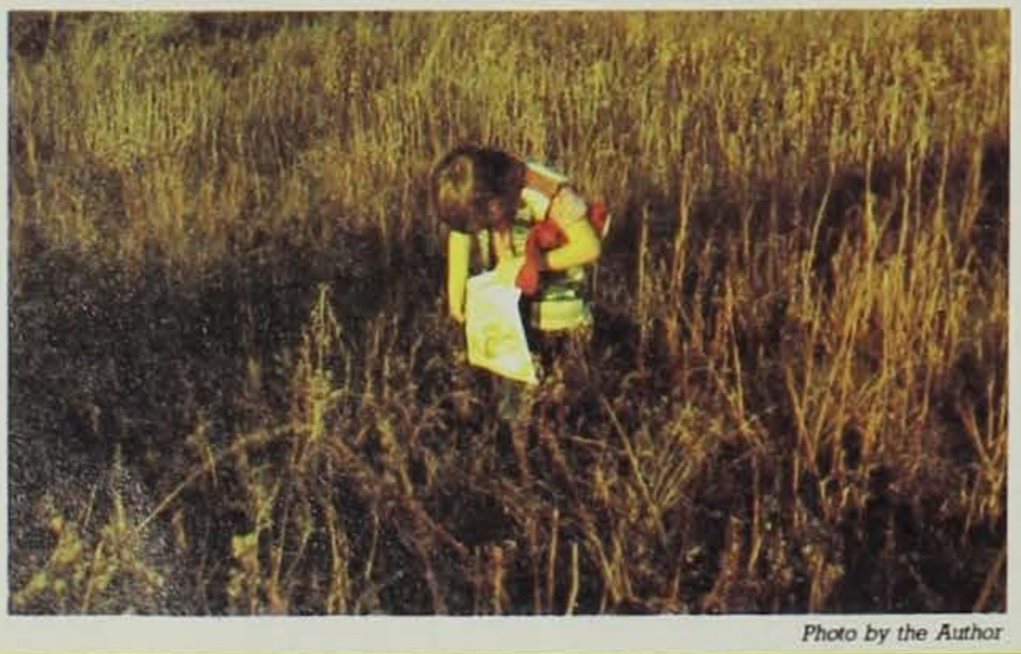
Go out by yourself or with a group and survey what wildlife is found on different types of land. Group the types of plants and compare these with the types of wildlife found. Contrast these lists to where manipulations have occurred.

Make a list of animals which do not live in your area. What do they need for food, water, and cover? What is missing? Is it possible to provide these or is there something in the land missing?

Assistance in learning how to make surveys or comparisons can be obtained by bringing your group to the Conservation Education Center, R. R. #1, Guthrie Center, Iowa.

Photo by LeRoy Moore





Above: Fox Squirrel; Below: Grasshoppers usually turn up on youngster's surveys.

Photo by the Author

Warden's Diary

By Rex Emerson
LAW ENFORCEMENT SUPERVISOR

DID I EVER TELL YOU about the nice, little well-dressed gentleman from an eastern state who hired one of the local hunters to take him duck hunting on Lake Odessa? It was a little before midnight when they got into the big duck boat. The guide had the little gentleman sit on a steel folding chair in the middle of the boat with his fancy gun resting on his knees. From this position he couldn't even see out. The guide didn't tell him what was going to happen and the little man didn't ask.

At midnight the race was on for the best duck hunting spot. When their boat hit the rough water churned up by all the other boats, the little guy landed on his back. Just as fast as he would get up he would get thrown the opposite direction. I can understand why he never came back.

That's the way it *was* at Lake Odessa. I'm referring to the big boat races of the past. Duck hunting has changed over the years at this Louisa County lake. The change is not so much in the actual hunting but in the getting to where one is going to hunt.

Most of the duck hunting on Lake Odessa is done from "feather boats", usually powered with a motor in the 50 to 100 H. P. range. The so-called "feather boat" is usually a flat bottomed Jon boat which the hunters have spent days camouflaging, using weeds, grass and tree branches. This camouflage material covers a frame built above the boat so that when the hunter stands up in the boat the camouflaging comes up to his armpits.

There are two places from which the hunters can start out. At one of them they go across the main lake and then through a thirty foot wide ditch for a quarter mile to get into the three thousand acre marsh. Can you imagine fifty of those big, fast boats racing across the lake and down that narrow ditch in the dark, to get to their favorite hunting spot first? That's the way it *was*.

There were a few years when the duck hunting season on this lake was called the "blue light days". At a certain time each night during the duck season the blue light automatically came on and the race was on. No one would give an inch even when they got to the ditch.

Then there were several years when they could go out at midnight. The duck hunters still had this dangerous race. Some hunting parties would even have one person use a high powered racing boat in order to get out there fast and hold their spot. Some would try to sneak out ahead of the legal time and hope they wouldn't get caught by the game warden.

One duck hunter complained about the other hunters going out before midnight. He had a fast boat, but when he got out there some hunters were already there, so he knew they were leaving early.

I told him, *"Tonight we are going to be sitting out there on the marsh, and anyone who comes out before midnight gets a citation."*

Three times that day he complained to me and each time I told him the same thing. Who do you think we caught that night going out one hour too early? Right!! The guy who complained.

When asked why he was the one we caught, after we told him we were going to be out there, he said, *"You are not going to believe this. I had my boat ready to go last night. Before I went to bed I told my father-in-law to wake me up at two minutes before midnight. I went to bed with my clothes on and had my coat hanging on the doorknob. When I got out here and saw you guys turn on your red light, I knew what happened. The old man had forgotten to change his watch back to standard time and he actually work me up at 11:00 p.m."* He took a deep breath and said, *"Give me the ticket."*

The boat race was dangerous so the regulations were changed again. They could go out at 8:00 p.m. each night. Now everyone *knew* that no one in his right mind would go out at 8:00 p.m. and sit out there all night to hunt ducks the next day. WRONG! At 8:00 p.m. the race was on. With sleeping bags, plenty of groceries, and a gas stove to cook on, it was actually an enjoyable experience. The smell of bacon and eggs frying hung over the marsh in the early hours of the morning.

Like any group of hunters there were a few tricks played that sometimes strained friendships. One night someone stole the prop from one of the faster boats just before the race started. When everyone else moved out the poor guy without a prop just sat there with his motor revving up, but not moving.

Another time a boatload went out at 8:00 p.m., occupied the most favorite spot on the marsh and got their boat all situated right where they wanted it next to some growing vegetation so it would blend right in when the ducks started to fly.

Then they bedded down for the night and went to sleep with visions of their limits of ducks the next day. Later that night some friends of theirs came out. Recognizing whose boat was in this favorite spot they quietly slipped into the water with chest waders on, just as quietly pushed the boatload of sleeping hunters about 50 yards out into the open water, and then put their own boat in the good spot. At the break of day the sleeping hunters awoke. One of them stood up, stretched, and looked out. As he gazed all around at that open water, he let everyone on the marsh know what he thought of his *ex*-friend.

Things have changed now. Each hunter goes through a check station. In one part of the marsh the hunters draw for a hunting site which is marked with a numbered stake. In the other part of the marsh they may hunt where they wish, but must check in and get a permit before going out. In both areas the hunters also check out and show their ducks before going home each day.

The races in the dark were extremely dangerous and had to be stopped before someone was seriously injured or even killed. But, it has taken part of the excitement out of duck hunting on Lake Odessa.

Fall colors by Ken Formanek, Ron Johnson and Bob Runge