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How to Make a **Sportsman of Your Son**

by Peter Barrett SENIOR EDITOR, MECHANIX ILLUSTRATED

Provided as a public service by The National Shooting Sports Foundation

PLAIN OLD WOODCHUCKS played a big part in my son Steve's becoming a sportsman. He was 9 when I took him on his first 'chuck hunt. Previously he'd learned to shoot various air guns at targets, then a .22 rifle and quite recently, a .222. Steve wanted to become a hunter in the worst way.

After he'd shot his first woodchuck and had admired and examined it thoroughly, I toted the animal to a nearby brook and skinned it, then dressed the carcass. Steve wanted the hide, but I had other plans for the meat.

"We're going to have woodchuck stew," I told him. "If you shoot a creature, you ought to eat it if you possibly can."

This was the beginning of a campaign to instill in Steve a regard for wildlife.

The next logical step was to teach him not to take too much, and woodchuck stews helped-no one would want to make a career of eating these. And there was an aspect he hadn't thought of: "If we take every 'chuck in this field, there'll be none next year, or the year after."

It was the same with trout one day. We'd got into a terrific spot on a secluded stream and for once filled out our limits.

"May I catch just one more?"

"Sure, if you turn it loose."

Presently he caught the best fish of the day, and I knew that, if I let him keep it, my plans for him were done. "Put him back for next time," I said. Act the renegade, and so will your son.

Manners were something I worked on hard. I explained that, if someone was fishing a pool or hunting a cover when you got there, you shouldn't go charging in and spoil it for all. A perfect example occurred on a public stream we like in lower New York-someone was fishing our favorite meadow pool (just big enough for one person) when we arrived.

We stood watching, well back from the bank so as not to spook nearby fish. Soon Steve nudged me. He'd seen a trout rise behind a bush at the lower end of the pool. "Couldn't I try for that one?" Steve asked in a low voice.

It was tempting. But where does a little encroachment stop. I persuaded Steve to bypass the pool and try later. "Twenty minutes after that guy quits, they'll all be hitting again," I heard myself saying. This happens in remote areas, but I wasn't so sure about hard-fished Titicus Outlet.

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MEETING THE GROWING DEMAND FOR TREES

The tufted titmouse painted on the front cover was contributed by J. E. Landenberger.

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An hour later we were back, empty-handed. But we had the pool to ourselves now. While I enjoyed a fresh pipe on the bank, Steve caught the trout by the bush and another, so I was a prophet with honor that day.

Steve is 24 now and an accomplished rifleman, considerate of game animals (he won't fire unless he can make a sure shot) and people as well. I've noticed that, when we take one of his friends fishing, Steve makes an effort to put our guest in the best spots.

We don't eat woodchuck stew at our house any more, though we still hunt the critters occasionally. Steve proposed another way to show regard for our quarry-we'd keep the tails and use their long hairs on fishing lures, dressing up the treble hooks of certain spinners.

I've kept for the last the toughest part of becoming a sportsman: losing gracefully. And believe me, this is a difficult achievement to put across to kids when grownups are so much more experienced and composed than they. You can set a good example yourself, and preach a little, but is it catching?

Anyhow, what gave me hope that Steve was learning to lose occurred on the last day of our vacation on Florida's west coast. Steve had wanted to shoot a crow on the beach with his .22 rifle, but I'd not let him because of the danger to others from ricochets.

This morning we were there early, and the beach empty. Steve was going on 10 and, since he'd become obsessed with swearing, we were trying to break him of the habit by fining him 10c a swearword. I drove the car slowly. Then Steve yelled for me to stop-there was a crow on a dead fish about 100 yards away.

He got out, slipping his arm into the sling as he scuttled ahead bent over, then sat on the sand and steadied the rifle. At this precise moment, a sports car hurtled from behind us and flashed down the beach. The crow flew off.

Steve came back. When he reached my door, I could see he was fighting back tears, and fighting mad besides. "The damned bastard!" he said, "Here's twenty cents!"

TURKEY HUNTING TIME AGAIN?

Photo by Wayne Lonning

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T CAN'T BE, after all, you've just put away your shotgun for the winter! If you are the reflective type, you may have re-lived many a pleasant memory as you cleaned that old pump gun one last time before putting it back on the shelf for another year. You may have remembered many hours afield in the warm, sunny days of autumn and the cold, snowy days of early winter, with each hunt producing its own thrill and providing individual memories. If you were an early bird, there was snipe and rail hunting during the balmy days of mid-September, and perhaps an out-of-state trip after mourning doves. Both you and your dog firmed up those off-season leg muscles and rekindled the special relationship that exists between a man and his hunting dog that had lain dormant for so many months. The early duck season arrived in October, and although the dry, mild weather produced disappointingly few ducks, they whetted your appetite for things to come. Then, at last, grouse hunting, the second duck season, and pheasant and quail hunting seasons opened in quick succession. November offered so many hunting opportunities that for a time your biggest decision was where to go next! Just about the time this hectic schedule began slowing down the deer season opened, and for a short time offered a refreshing change from wing shooting. Perhaps it was about this time you began to hear grumblings on the home front about family responsibilities, chores awaiting and the length of the hunting seasons that had nothing to do with their effects on the animals involved. Feelings had to be soothed with promises of continued devotion and a pledge to make up for lost time later, before you sampled some of the challenging, late season, upland bird shooting Iowa offers in December. Temperatures were colder, the birds were wilder, and the thrill was even greater at having outfoxed a wily ringneck that had managed to elude all those amateur hunters who crowded the fields earlier in the season. But things were definitely winding down toward the end of hunting for another year and now, back to reality, there would be only an occasional rabbit hunt to break the monotony of another long winter. Of course, you just might take a crack at turkey hunting this year. It's supposed to be quite a challenge, isn't it? And hunting in the spring would be something new. The wife couldn't be too upset about a few days away from home by then could she? But that's a long way off, plenty of time to think about it later. Remember how old Ned pointed that covey just as you got one foot over the fence and . . . ?

Wait a minute!! If that's you I'm describing, you had better snap out of the snooze you're heading into if you want to hunt turkeys in Iowa this year. Sure, turkey hunting is open during the spring, but the application period is drawing near and you'll have to apply now to get a license this year. Applications will be accepted in the Des Moines office of the Iowa Conservation Commission from 8:00 a.m. Friday, January 28th, until 4:30 p.m. Friday, February 11th. If you forget or miss the deadline (either too early or too late), you'll just have to wait until next year.

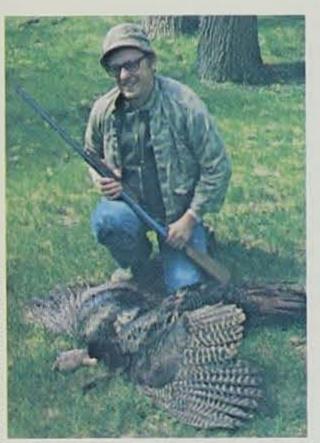
Okay, so now that you're awake and want to apply, what should you consider before filling out your application (they're available from sporting goods stores, county recorder's offices, Conservation Commission field stations, etc.)? The first thing you will have to decide is where and when you want to hunt. For the second consecutive year there will be 4 zones open to turkey hunting, all in southern Iowa (see map). There will be 3 seasons in each zone spanning the period from April 21st to May 15th. Season lengths are 7 days (April 21 to April 27), 7 days (April 28 to May 4) and 11 days (May 5 to May 15). Each zone has its own license quota for each season (see map), based on the number of turkey hunters that zone can support and still maintain high quality turkey hunting. Nothing spoils a turkey hunt or affects success in bagging a bird like repeated interference from other hunters, and quotas are set to reduce the chances of this occurring. Once you've decided on your choice of zone and season, fill out the application blank as indicated and mail or carry it in. After the application period is closed, the license quota will be filled randomly by computer drawing from among the applicants for each individual zone and season. But how do you decide which zone and season to apply for? Obviously you would like to apply where your chances of bagging a turkey are greatest, if travel and accomodations are not a problem. While some of our turkey hunters can hunt close to home, most (65 percent or more) come from the urban areas of central and eastern Iowa and are forced to travel quite a distance to hunt. If you are one of many who will have to plan on an overnight stay, then you may as well apply where the hunting is best. So you'll apply for the zone where turkey numbers are greatest, and of course everyone knows hunting is best on opening day, right? Wrong!! Unlike most types of hunting, more than just the abundance of turkeys should be considered when you decide which zone and season to apply for. Two factors will determine your chances of bagging a turkey this spring - first, your chance of getting a license (if you don't get one you can't hunt), and second, your chance of bagging a bird if you are allowed to hunt. Results from previous

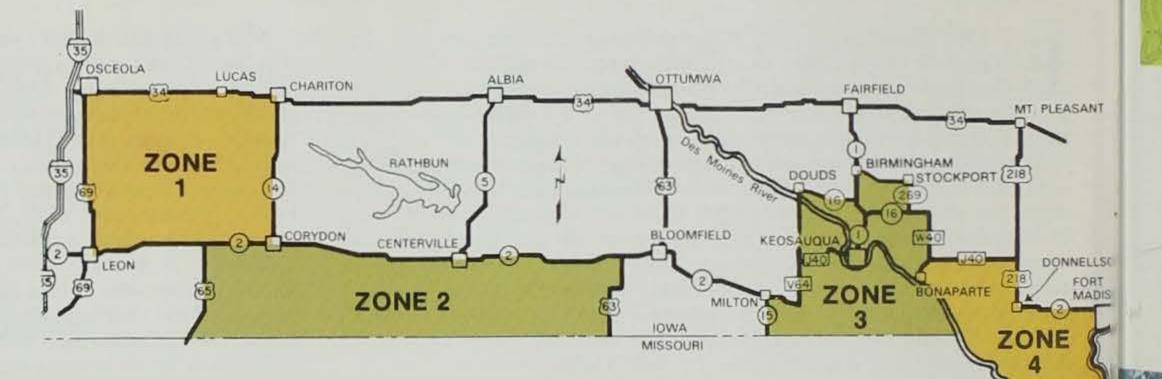
IOWA CONSERVATIONIST/JANUARY, 1977

Table 1. Turkey harvests and success rates by hunting zone, 1974-1976.

	Zone 1 ¹		Entire	Zo	Zone 4				All Southern
Turkeys bagged	Public	Private	Zone	Public	Private	Entire Zone	Zone 2 ²	Zone 3 ²	
1974	41	14	55	31	16	47			102
1975	29	38	67	41	31	72		-	139
1976	38	50	88	37	23	60	26	19	194
Success rate (%)									
1974	44	32	41	31	36	33	10 - <u>1</u> -10 - 10		29
1975	18	37	25	23	15	26			19
1976	24	45	32	15	27	18	21	16	23

¹Calculated for hunters hunting on state forest and private land. ²Little, if any, public land available.





1977 Turkey Hunting Zones

seasons shed some light on both probabilities. Most hunters apply for the first season, apparently thinking that hunting is better at that time, but since quotas are the same for all 3 seasons a smaller proportion of first-season applicants receive a license. Of the 1,924 hunters who applied for a turkey license in 1976, 50 percent applied for a license the first season and 25 percent applied for each of the second and third seasons. As a result, only one-third of first season applicants got a license, compared to two-thirds of second and third season applicants. You might also consider not applying for the two zones with the largest license quotas because they also attract the greatest number of applicants. Zone I (which contains Stephens State Forest) and Zone 4 (which contains Shimek State Forest) received 53 percent and 39 percent of all applications, respectively, so less than one-third and one-half of the applicants for each of these zones were able to hunt. Neither Zone 2 nor Zone 3 filled their quota during the initial application period last year and every hunter that applied received a license. Although any zone which does not fill its quota during the initial application period will be re-opened for further applications, planning on re-applying for Zone 2 or Zone 3 if you are unsuccessful in one of the other zones is not necessarily a good idea. Reapplicants are accepted on a first-come, first-served basis, and some hunters were turned away last year after all 4 zones had filled up. Your chances of bagging a turkey, if you are allowed to hunt, depend a great deal on your skill as a hunter, but some zones have produced consistently more birds in the bag than others (Table 1). Zones 1 and 4 have accounted for the majority of turkeys harvested in all 3 years hunting has been allowed, with Zone 1 producing more birds in the bag and higher hunter success in 2 of 3 years. Zones 2 and 3, which were hunted for the first time in 1976, both produced success rates comparable to Zone 4 and lower than Zone 1. Success rates in all 4 zones compare very favorably with those reported by other turkey hunting states and reflect both the good turkey populations found in the hunting zones and the restricted number of hunters which are allowed to hunt. The big advantage to hunting in Zones I and 4 is the amount of public land available to the hunter, but hunting on the state forests has not been as good as on private lands. Hunters have tended to concentrate on state owned lands, rather than ask

permission from private landowners, and these hunter concentrations have reduced success rates (Table 1). This trend has been greatest in Zone 4, where nearly three-fourths of the hunters hunted on Shimek State Forest in 1976, compared to the one-half of all hunters who hunted on state lands in Zone 1. In both zones an increase in hunting pressure on public lands has resulted in a decrease in hunter success, while so few hunters utilize private lands that this relationship does not exist off of the state forests. In short, turkey hunting has been good in all zones, particularly on private lands, so your choice of a zone to hunt in will not as drastically affect your chances of bagging a bird as it

will affect getting a license to begin with.

(Continued on page 15)

Table 2. Turkey harvest and success rates by season, 1974-1976

1974	1975	1976
62	54	53
51	53	75
	35	66
113	142	194
32	23	20
25	22	25
	14	23
	62 51 113 32 25	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

Table 3. Percentage of applicants which bagged a turkey, by zone and season, 1976.

	Season 1	Season 2	Season 3	Zone average
Zone I	5	12	14	10
Zone 2	18	33	13	21
Zone 3	9	20	22	16
Zone 4	7	13	10	9
Season average	7	16	16	12

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IOWA TROPHY TURKEY RECORDS



The Iowa Conservation Commission has begun maintaining records on trophy sized wild turkeys. In order to qualify for an award certificate and shoulder patch, gobblers must weigh a minimum of 23 lb. The bird must be weighed on scales legal for trade and two people must witness the weighing. Other information needed includes the length of the beard, length of spur, date and county taken and name and address of the hunter.

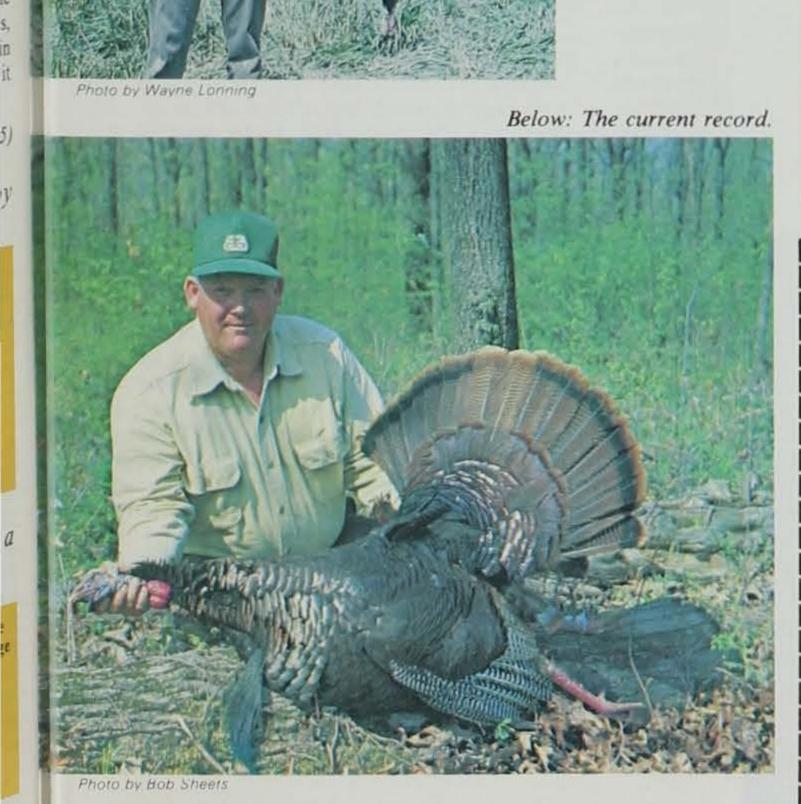
Hunters who have bagged turkeys in the past that qualify will be recognized. A NEW STATE RECORD-SIZED TURKEY, HOW-EVER, MUST BE EXAMINED AND VERIFIED BY IOWA CONSERVATION COMMISSION PERSONNEL.

The current state record topped the scales at 27 lb. and was taken by Greg Smith, RR #2, Donnellson. Smith bagged the big gobbler in Lee County May 3, 1975.

1075 Season

Following is a list of trophy turkeys that have qualified:

Name	Address	Weight	Beard	Spur	Date	County
E. T. Mentzer	1100 14th Ave. W. Newton, Iowa 50208	23.31	10.75"	L.13"	4-29-75	Clarke
John H. Rouse	314 SE 33rd St. Des Moines, Iowa	23.25	10**	1.06*	4-29-75	Lucas
Howard Heidman	Grimes, Iowa 50111	23.38	8.50"	1.25"	5-1-75	Lucas
Richard E. Owens	Allerton, Iowa 50008	24,19	11.25"	0.81"	5-3-75	Clarke
Richard A. Bishop	1004 S. 14th St. Clear Lake, Iowa 50048	24.31	11,75"	1.13"	5-3-75	Clarke
Joseph J. Schwartz	707 E. Adams Mt. Ayr, Iowa 50854	24.50	10.50"	0.94*	5-3-75	Clarke
Richard Runnells	Box 364 Chariton, Iowa 50049	23.13	10.75*	1.0*	5-16-75	Lucas
Mike Simpkins	RFD # 1 Farmington, Iowa 52626	25.29	10.50"	1.25"	5-2-75	Lee
Ralph Mower	921 Melrose Ct. Burlington, Iowa 52601	24.44	11.0"	1.25"	4-2-75	Lee
Gerald Bailey	RFD #1 Salem, Iowa 52649	23.06	8.75"	0.94"	4-27-75	Lee
Clifford D. Kelley	Lot-B-I Oakland Ct. Hiawatha, Iowa 52233	24.31	11.0"	1.13"	4-27-75	Van Buren
Dennis R. Phillips	Douds, Iowa 52551	24.00	10**	1.06"	5-5-75	Van Buren
Doug Franta	R.R. # 2	24.0	10"	1.13"	5-4-75	Lee
William E. Kreamalmyer	R.R. #4 Lot #66 West Burlington, Iowa 52655	24.0	9"	1.13"	5-3-75	Lee
Greg Smith	R.R. #2 Donnellson, Iowa 52625	27:0	10.25"	1.13"	5-3-75	Lee



Glen Wood R.R. #1, Box 39 23.0 10" 1.06" 5-10-75 Lee Wever, Iowa 52658 1.20" 4-29-76 Van Buren 902 N. "I" Street 23.0 Jerry M. Conley 9.20" Indianola, Iowa 50125 Bonaparte, Iowa 52620 11.20" 1.04" 4-24-76 Van Buren Milton J. Wenke 23.5 10.00" 1.44" 5-1-76 Lee Terry W. Little 1209 Benton St. 24.6 Boone, Iowa 50036 John O. Reich Adel, Iowa 50003 23.8 10.40" 1.36" 4-30-76 Lucas 11.20" 1.56" 5-2-76 Lucas Neola, Iowa 51559 23.5 Ralph P. Kroll

Entry Blank for Iowa Trophy Turkey

Street/RFD		City
Weight	lb oz. County	Taken
Date Taken	Beard Length	Spur Length
Vitnesses		
Name		
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Iowa State Snowmobile Association A Credit to Iowa's Snowmobilers

I N 1973 a small group of snowmobilers from the Fort Dodge area along with a representative of a Chariton snowmobile club were looking for ways to improve their sport. They felt that some important goals could be achieved by forming a statewide organization. Just three years later, the Iowa State Snowmobile Association (ISSA) is doing great things for some 6,000 families, dealers and clubs.

An early goal of the association was to establish an effective force to work with Legislators and the Iowa Conservation Commission toward laws and programs which would benefit snowmobiling. Prior to this, an effective line of communication between snowmobilers and key commission staff responsible for developing and expanding the Commission's growing snowmobile program had not yet been established.

The first annual meeting held in 1974 was not an overwhelming success in terms of how many people came. It was a success however in voicing the concerns of those assembled to the Commission. As a matter of fact, if measured on the "A" scale, the decibels of that voice may have exceeded the noise of some of the early snowmobiles. Commission representatives were questioned and probed with the intensity of a skilled surgeon and the gentleness of a 250-pound lumberjack. Since those days a spirit of communication and cooperation has been nurtured both by the State Snowmobile Association and the Conservation Commission.

By late 1974 the state was divided into 12 regions and publication of a newspaper had been initiated. From such modest beginnings, ISSA has grown to more than 6,000 family memberships (the state association feels there are approximately 3 persons in an average snowmobiling family), 125 snowmobile club memberships, and 150 snowmobile dealer memberships. Since 1975, approximately one-third of Iowa's 54,000 snowmobilers belong to ISSA. ISSA seeks to benefit all Iowa snowmobilers in at least four important ways. They are: (1) Promote legislation which provides safe recreation opportunities for snowmobilers. Seek to prevent legislation which would needlessly restrict snowmobile activities. (2) Cooperate with and help the Conservation Commission in administering snowmobile programs. Monitor funding of the snowmobile program relative to annual registration fees. (3) Through the ISSA newspaper, provide information to snowmobilers concerning ISSA programs, legislative news, Conservation Commission programs, and local club and individual activties. (4) Work with the Conservation Commission on safety and a trail program. ISSA encourages snowmobilers to become certified instructors and to be safety-conscious when snowmobiling. The State Snowmobile Association also helps explain the cost-sharing program to clubs and encourages them to utilize this program by working closely with political subdivisions, such as county conservation boards, county boards of supervisors, etc. Regional directors of ISSA help local clubs establish trails from county-to-county and state-to-state.

by James E. Horan SNOWMOBILE SAFETY COORDINATOR

Governor Robert D. Ray signs the proclamation naming Nov. 1-8 Snowmobile Safety Week.



Iowa snowmobilers, especially those of the ISSA and its member clubs, have also contributed considerable time and money to worthy projects such as the annual multiple sclerosis fund drive.

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As an additional result of organizing, snowmobilers quieted the fears of environmentalists and resource managers by exercising control over their own activities. ISSA actively attempts to foster environmental concern among all snowmobilers. They believe that, as with any activity, some individuals can be abusive to the world in general (evidence littering along highways or forest fires started by campers). The great majority of snowmobilers share a common interest in and concern for the natural environment.

For the future, the Iowa State Snowmobile Association would like to see: (1) A continuation of communication and cooperation with the Conservation Commission especially with respect to representing the snowmobilers views to the legislature. (2) More multi-purpose trails. Most trails can often be designed for use by a variety of non-competing activities. Trails designated for hiking or horseback riding during summer months can be used by snowmobilers during winter. ISSA sees a distinction between

Photo by Jerry Roskammer

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snowmobiles and such off-road vehicles as trail bikes and fourwheel drive vehicles. They feel that current research indicates that snowmobiles do not cause significant disruption to the natural environment especially when compared to motorcycles, horses' hoofs, or the pressure of hundreds of feet walking on a trail in any of our popular state parks. The association also hopes to more actively work with other outdoor recreationists to promote a cooperative atmosphere for the benefit of all.

The Iowa Conservation Commission feel that ISSA is a worthy organization and a credit to the efforts of many Iowa snow-mobilers. They have achieved many of their early goals and have helped set positive guidelines for the future of snowmobiling in Iowa. For membership information contact *Richard Grosse*, *President*, *Iowa State Snowmobile Association*, 7543 Ford Road, Cedar Falls, Iowa 50613.

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by Don R. Helms FISHERIES RESEARCH BIOLOGIST

Photos by the Author

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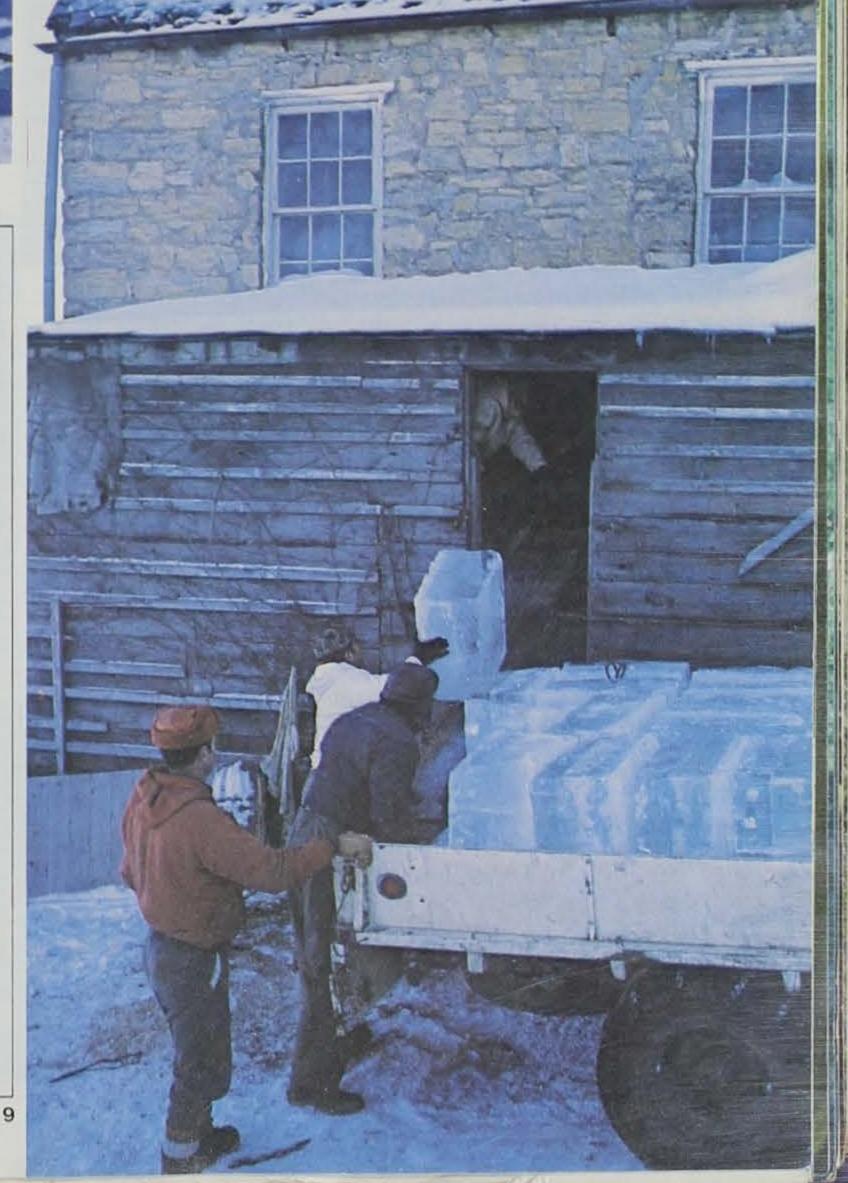
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S EVENTY-FIVE YEARS AGO Iowa was one of the largest producers of raw ice in the nation. Our lakes and rivers were well known throughout the country for the fine quality of ice produced. The Mississippi River not only produced ice for use elsewhere, but was and remained until recently, important locally in the preservation of commercial fish for shipment to markets.



Cakes of ice are transferred to ice house by hand using tongs.



Not long ago, I happened across a crew cutting ice near Guttenberg. Although they had devised some modern contrivances to ease their burdens, the basic methods were those learned from their fathers and their's before them.

First, the field was marked off. A large power saw was used to cut the ice in long strips of desired width. Then, with specially designed hand saws, blocks were sawed and finally broken off with an ice-spud and guided through a channel cut to an elevator. The elevator, powered by a garden tractor, lifted ice to a platform where it was loaded on an awaiting flatbed truck.

Storage took place on the north side of a large stone building, once used as a button factory. The room, prepared especially for ice was made of wood with foot thick hollow walls filled with sawdust. Additional layers of sawdust were used between layers of ice to prevent their freezing together.

The following summer, I stopped for a visit. It was a hot day in mid-August. Yes, they were still using ice stored the previous winter. The blocks, somewhat smaller then, were still nestled in their bed of sawdust awaiting use. Blocks were removed almost daily and chipped for use in icing fish for shipment to a Chicago market.

Today, ice is made by machines and food-fish are stored in large coolers and freezers, a requirement in every modern fish market. Only a handful who make ice as a tradition remain. A day of nostalgia has passed. \Box

JANUARY, 1977

Intensive Warm Water Fish Rearing

By Alan Moore FISHERIES BIOLOGIST

Photos by the Author



Rathbun Fish Hatchery is Iowa's newest and most modern fish production facility. It is being constructed in Appanoose county on a 375 acre tract directly below Rathbun Dam. Completion date for the hatchery should be late 1976 and it will be open for full visitor use by spring 1977. of the fish in each pond. In the six ponds presently in use at Rathbun, 20,000 pounds of channel catfish should be produced in an area the size of 1/3 of an acre. This same poundage would require approximately ten, 1-acre earthen ponds. As can be seen, by using the intensive culture method, more fish can be reared in less area but it also gives the fish culturist more control over fish growth, fish feeding and generally improves fish quality.

However, this type of culture has problems that are unique to the situation.

Fish Disease

Fish disease, although not restricted to intensively reared fish, can have a devastating effect on production. Because the fish are crowded into smaller rearing units, disease spreads faster and destroys fish quicker than in earthen ponds. Bacterial and parasitic infections are very common and all ponds must be checked daily for mortalities to "head off" a disease outbreak. If detected at an early stage, various antibiotics and chemicals can be used to control or eradicate the disease.



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Hatchery facilities will include an office-hatchery building, twenty concrete circulating rearing ponds, 40 concrete fry start tanks, visitor information center, dormitory, pollution control ponds and three residences.

Rathbun Hatchery is designed to be an intensive fish culture facility. This means large poundages of fish can be raised in small raceways or circulating ponds by utilizing high water flows through the system. It is similar to trout and salmon culture except warm-water fish (channel catfish, largemouth bass, ocean striped bass, walleye) will be raised.

The hatchery is a new innovation in warm-water fish production. At the present time, virtually all warm-water fish are being produced in large earthen ponds with a static water supply. (Very little water is added to the ponds during the rearing season.) This limits the amount of fish that can be raised. To give an example, intensively reared catfish at Rathbun are produced in circulating ponds containing 48,000 gallons of water with 500 gallons per minute flowing through each pond. Stocking rates range from 25,000 to 40,000 catfish per pond. Each day these fish are fed a high protein diet at a rate equal to 4% of the total weight

Above, left: Conventional warm-water rearing is done in many large earthen ponds. Above, right: Rathbun's concrete circulating ponds. Right: Continual water flow allows for large poundages of fish to be reared intensively.

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Pond Cleaning

The circulating ponds are designed to be self cleaning of all fish wastes and unused feed by utilizing water currents in the pond. However, at warm water temperatures (70°-80°F) algae grows rapidly on the concrete bottoms and can prevent this flushing action. This results in an accumulation of wastes and gives unsanitary fish rearing conditions. Weekly pond cleaning with a power scrubber is required to prevent the build up of algae and other contaminates.

Pollution

This problem goes hand in hand with pond cleaning. Large fish poundages concentrated in the circulating ponds result in large amounts of fish wastes and other debris being discharged from each pond. To reduce this flow of organic matter back into the environment, all fish rearing water percolates through two earthen ponds. This allows for the settling out of any particulate matter, breakdown of materials and overall water quality improvement.

Future Production

Rathbun Hatchery has been in partial operation for the past two years with 171,000 fingerling channel catfish produced in 1975 and a projected 250,000 produced this summer. The catfish raised at Rathbun are presently being hatched at the state's Fairport Hatchery. After construction is complete and when fish production is in full gear, Rathbun will have the capacity to spawn and hatch eggs for its own use. Emphasis will be placed on the channel catfish with an estimated 100,000 pounds produced annually. The main objective is to turn out enough large catfish (8" to 10" long) for state lakes and streams and 4" to 5" catfish to be further raised in the county conservation cage rearing program.

Additional species to be produced will include walleye, ocean striped bass and possibly largemouth bass.

All fish from Rathbun Hatchery will be distributed state wide to help bolster Iowa's fish populations and put more and bigger fish in the angler's creel.

CLASSROM CORNER

by Robert Rye Administrator, Conservation Education Center



The personnel of the Conservation Education Center stress making observations to all groups utilizing the Center. Nature hikes have often been based around this one particular idea when a group arrives for a visit. Taxidermy is also done by groups which have the time and desire to go through the entire process.

Last month we looked at birds ... now let's look at mammals. Once a specimen has been obtained, wipe off and cleanse the hair with a damp cloth. Make several contact outlines of the animal before and after skinning. This entails laying the animal on a sheet of paper, posing it in the stance you want, and tracing around the body. Measurements should be taken for future use.

Lay the animal on its back and cut through the skin — not through the abdominal wall — from between front legs to between back legs. Work skin loose down each side and over the legs down to the toes. Separate the skin from each toe and cut off leaving the foot attached to the skin.

Start separating the skin from around the base of the tail. Now hold the animal in one hand and the skin around the tail in the other and pull the tail out.

Continue removing skin up to the skull. Care must be taken to

hoto by Wayne Lonn

HAVE YOU taken time since last month to observe birds in nature? Have you thought about mounting any of them? Let's continue to examine the art of taxidermy this month.

Birds, as discussed last month, have the advantage that their feathers will cover some mistakes a taxidermist might make. Mammals, especially the short haired ones, do not allow us this bonus so more care must be taken as we do our work.

Again, observations are important. You must first select a position or pose that is characteristic of your animal and one that is easy for you to work on. Your time studying them in their natural habitat is essential to finishing this first step. Continued experience with taxidermy will help to make life-like positions in your mounted animals. You can use local, state-owned areas to observe the animals alive and also use pictures in the Iowa Conservationist to assist you. cut close to the skull when skinning out the head especially around the ears and eyes. When the lips are reached, skin these away from the teeth taking care not to cut the lip skin. Cut the end of the nose so the nostrils will remain with the skin. Now take more measurements of the body.

After the skin is removed, clean it again with a damp cloth to remove dirt or blood. Scrape the inside of the hide of all flesh and fat. Salt down the hide and place in a solution of salt, alum, and water to preserve it.

While the hide is being preserved, clean the skull of all flesh or shape one out of balsa wood or some similar material. You can carve the body out of balsa wood or styrofoam or form one from excelsior following the dimensions you recorded earlier.

Place wires, as you would with birds, into the body building up the legs and tail with tow or cotton and thread. The skin is now placed over your form and carefully adjusted and worked into place. Sew the incision together if no further adjustments need to be made.

Place glass eyes into eye sockets, shape eyelids and pin them into position. Put your animal onto its mounts and shape to the desired position. The lips and nostrils will also need to be pinned into place. Comb and brush the hair until smooth. Add cardboard and pins to hold ears or other parts in position.

It may take a couple of weeks for your specimen to dry. When dry remove all pins and cardboard. Again brush and comb the hair. Restore natural colors as needed with oil colors.

Many hours of enjoyment can be gained not only from your work in taxidermy but in observing and learning about the animal. Encourage your friends to use wildlife areas, state parks, and forests to observe the animals. Learning their homes, food, and sounds can be a challenge. Your Conservation Education Center has specimens in their display area which you can observe between 8:00 A.M. - 4:30 P.M., Monday through Friday.

IOWA CONSERVATIONIST/JANUARY, 1977



Just as in grain farming, the soil is carefully prepared for planting.

MEETING THE

Photo by Jerry Leonard

A shift in tree preference has also occurred. "Ten years ago, most of the seedlings distributed from this nursery were conifers," Grebasch said. "But now, the emphasis is on hardwoods. I believe people are becoming more attuned to the natural heritage of this state and consequently desire to maintain the hardwood forests that are so important to Iowa." Our district foresters have fostered this awareness and the department is committed to it. "We now produce six hardwood species including walnut," he said. "In three years our walnut production has increased from 50,000 to 500,000 seedlings."

Conifers are still grown at the nursery. "There are soil types and sites for which conifers are best suited. Conifers can serve as erosion control and some people plant them just for esthetics." Grebasch also noted that a number of Iowans have successfully established Christmas tree plantations. "Most Iowa Christmas tree growers have used nursery stock at one time or another."

The State Forest Nursery now produces four million plants, but the facility hasn't always been so productive. The original facility was purchased and constructed by the Civilian Conservation Corps in the 1930's. Until recently it was basically a manual labor operation: weeding, lifting or taking the seedlings from the soil

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GROWING DEMAND FOR TREES

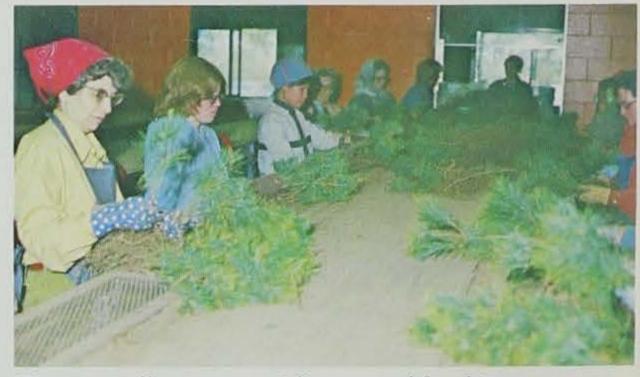
By Roger Sparks

MORE AND MORE IOWANS are responding to the need for planting trees and shrubs in this state. Although new facilities at the State Forest Nursery in Ames have greatly increased seed stock and seedling production for statewide distribution, nurserymen are finding it difficult to keep up with the demand.

Since 1900 the state nursery has been providing seedlings at reduced cost to private landowners for erosion control, reforestation and more recently for wildlife cover. A new nursery facility utilizing highly mechanized equipment and techniques was completed last year. Despite the improvements, Nursery Forester, Gerry Grebasch is still forced to turn down many orders each year.

"We've witnessed many changes during the last ten years in the demand for seedlings," Grebasch noted. "At one time, nearly all our orders were for trees, but now because of an increasing interest in planting wildlife cover, about half the requests we fill and packaging were all done by hand. Because the nursery had no cold storage facilities, the operation was pretty much seasonal and the number of seedlings made available were greatly limited. Working conditions were miserable. At today's nursery, mechanization assists in weeding, lifting and packaging of the stock. Cold storage facilities with controlled temperature and humidity can keep four million plants at least until spring.

"The most critical aspect of a nursery is timing," Grebasch added, "and the new equipment and the modern facility has allowed for vast improvements in this area. Woody plants must be lifted at the dormant or resting state, yet before the ground freezes, and this period may last for only a few days. Once lifted, they must be graded and packaged. Our modern facility minimizes the time for these critical steps and adds that all important cold storage feature. We're producing much better stock now, with much higher survival."



are for shrubs for wildlife habitat."

Grebasch pointed out that district foresters and wildlife management biologists stationed in offices around the state, work with cooperating landowners in developing wildlife habitat areas on their farms. Thus, the demand for suitable cover plants and special wildlife packets has been high.

Seedlings are kept in cold storage



The new seedlings are carefully prepared for shipment.

Grebasch sees no conflict between forestry and agriculture. "In many cases they're compatible. Not only are trees raised as a crop on some areas, but they provide much needed erosion control on others. I think, too, there has been a change in the rural landowner.

"The Iowa farmer is more progressive now. Many farmers are becoming more concerned with erosion control, wildlife habitat, forestry and esthetics as well as the agricultural uses of their land." Grebasch pointed out that the Iowa Conservation Commission is not trying to create forests on farmland. "We merely want Iowans to recognize that on some areas, the wisest use may be forests and wildlife cover," he said.

For those who agree, the following order may be clipped and mailed to the State Forest Nursery. Supplies of certain species may be limited, so get the order in now.

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IOWA CONSERVATIONIST/JANUARY, 1977

FROM THE STATE FOREST NURSERY, IOWA CONSERVATION COMMISSION IN COOPERATION WITH THE U.S. FOREST SERVICE

ORDER NO.

APPLICATION FOR OBTAINING TREES FOR ESTABLISHING OR IMPROVING EXISTING FORESTS, EROSION CONTROL OR WILDLIFE COVER

1977

INSTRUCTIONS FOR COMPLETION OF ORDER

1. Mail your application and remittance to: Nursery Forester State Forest Nursery 2404 So. Duff Ave. Ames, Iowa 50010 Phone No.: 515-294-4622

- 2. Payment or purchase order for the entire amount must accompany order blank. Make a check or money order payable to the lowa Conservation Commission. (Cash will NOT be accepted.) Your cancelled check will be your receipt. You will receive a confirmation of order.
- 3. Claims for adjustment due to shortage or delay in shipment must be made within 20 days from receipt of shipping notice.
- 4. No order will be processed for less than 500 plants, except: One (1) wildlife packet

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DO NOT ORDER LESS THAN 500 IN MULTIPLES OF 100

GENERAL SHIPPING INFORMATION (Please Print)

□ Ship prepaid via United Parcel to:

(Only up to 100 lbs. [This is approximately 1,500 - 2,000 plants, depending upon species.] allowed to be shipped to one customer at one location in a given day.) If you live in country, give clear direction for reaching your home.

SHIP TO:

(name)

(address)

(phone)

(city) (IMPORTANT to have NAME, ADDRESS and PHONE of person at home during daytime to accept this order.)

□ When notified, I will pick-up stock at Nursery.

Code	Kind of Trees or Shrubs Wanted	Age Class	No. Wanted	Cost	Application Information
					PLEASE CHECK BOX I received assistance in planning this order from:
					1. D No One
					2. Soil Conservation Service
					3. ASCS Office
					4. Co. Extension Director
					5. District Forester
					6. Conservation Officer
					7. D Wildlife Biologist

PLEASE PRINT

AVATION COMM		8. 🗆 Other
	nts Except Packet) Subtotal <u>3% Sales Tax</u> Shipping Charges O per 100 plants) TOTAL COST	Early Orders Have Preference
THE LEGAL PLANTING LOCATION AND YOUR SIGNATURE IS REQUIRED These trees are to be planted inQuarter, Section, Township, Range, inCounty, County, Iowa. Information found on tax assessment) I agree to plant and use the trees ordered upon the described property for establishing or improving existing forests, erosion control, game or water conservation according to restrictions noted below. I agree NOT to re-sell or give these trees away with roots attached to any person, firm, corporation or agency nor to plant any of them as windbreak, shade, ornamental, or street trees. All areas planted with state stock must be protected from fire and domestic livestock grazing. I agree to forfeit for destruction any trees planted or used in violation of the above restrictions. Signed	(Please mark ' A. MAIN PURPOSE OF PLAN 2 UVildlife, 3 Education 5 Other B. METHOD OF PLANTING: C. PLANTING SITE: 1 Sod 4 Existing Timber, 5 D D. ARE YOU PARTICIPATIN PROGRAM: 1 Yes, 2 D E. I AM A (OR MY LAND IS) 3 Industrial (except min 6 Municipality, 7 0 Ot	Field, 2 Brush, 3 Sandy Field, Crop Field, 6 Other NG IN A FEDERAL COST SHARING No): 1 Farmer, 2 Suburban, ning), 4 Mining, 5 Institution,
Mail Address-R.F.D.:	FOR OFFICE USE ONLY Cash Sale	Rec'd: Rec'd Com'd: Rej'd:
Phone No.: DO NOT ORDER LESS		

SEEDLING TREES AND SHRUBS AVAILABLE FOR DISTRIBUTION **DURING SPRING OF 1977**

Species	Age Class	Avg. Ht. In INCHES	Cost Per 100 Plants	Cost Per 500 Plants	
Austrian Pine Red Pine Scotch Pine White Pine Shagbark Hickory Silver Maple Burr Oak Red Oak Russian Olive Black Walnut Autumn Olive Dogwood Ninebark Tatarian Honeysuckle *Special Wildlife Packet (one)	2-0 3-0 2-0 3-0 1-0 1-0 1-0 1-0 1-0 1-0 1-0 1-0 1-0	5-12 6-14 4-10 5-12 4-12 12-24 6-12 6-12 6-12 6-12 6-12 6-12 6-12 6-12	\$3.00 3.00 3.00 2.50 2.50 2.50 2.50 2.50 3.00 2.50 2.50 2.50 2.50 2.50 2.50 2.50 2	\$15.00 15.00 15.00 12.50 12.50 12.50 12.50 12.50 12.50 12.50 12.50 12.50 12.50 12.50 12.50 12.50	The SPI plants, suckle, plants t NOTE: United ordered

*SPECIAL WILDLIFE PACKET

PECIAL WILDLIFE PACKET contains 200 , including 50 evergreens, 25 honey-, 50 dogwood, 25 ninebark and 50 other beneficial to wildlife.

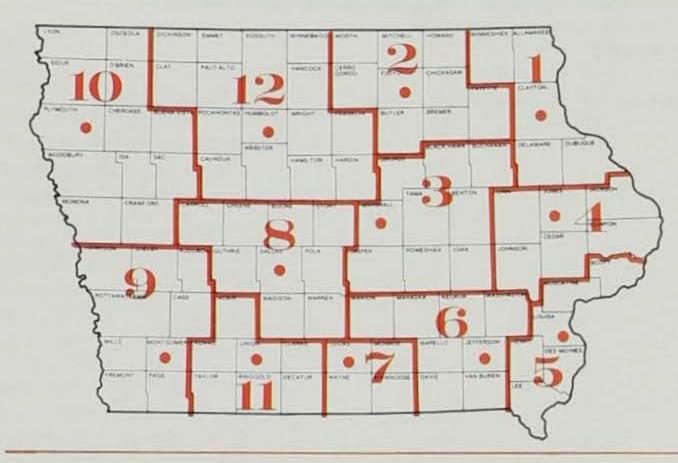
Shipping charges Parcel shipping: \$.50 per 100 plants

PLANT A TREE TO **KEEP IOWA GREEN**

NOTE: The Nursery reserves the right to substitute species of a suitable type if a shortage occurs.

TREES ARE AMERICA'S ONLY RENEWABLE RESOURCE!

TO OBTAIN FURTHER INFORMATION, CONTACT YOUR NEAREST DISTRICT FORESTER OR WILDLIFE MANAGEMENT BIOLOGIST



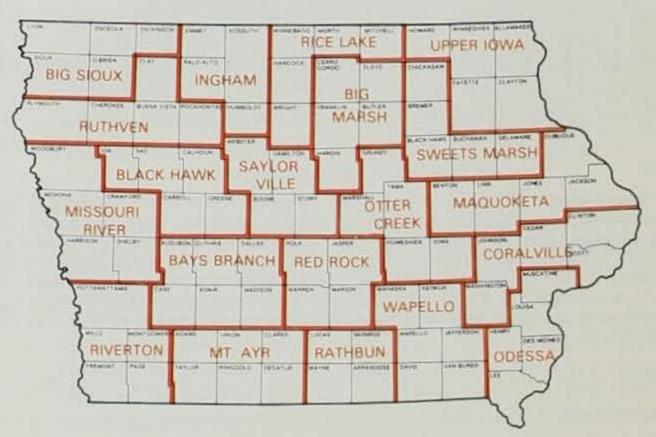
DISTRICT FORESTER ADDRESSES

1. E	LKADER			Box 662.	52043
2.0	CHARLES CIT	ΓΥ		Box 4,	50616
3.1	MARSHALLT	OWN		Box 681,	50158
4.4	ANAMOSA .			Box 46,	52205
5. V	NAPELLO			Box 62,	52653
6. F	AIRFIELD			Box 568,	52556
7.0	CHARITON	Ster	ohens State	Forest, R.Rt. 3,	50049
8. A	ADEL			Box 175,	50003
9. F	RED OAK			Box 152,	51566
10. L	E MARS			Box 65,	51031
11. 0	CRESTON			Box 2,	50801
12. H	HUMBOLDT			102-8th St., S.,	50548

WILDLIFE MANAGEMENT BIOLOGIST ADDRESSES

1. Bays Branch Wildlife Unit	
ASCS Office Bldg., Box 247, Guthrie Center, 50115 2. Big Marsh Wildlife Unit Fish Hatchery, Clear Lake, 50428	
3. Big Sioux Wildlife UnitSCS Office Bldg., Rock Rapids, 51246	
4. Black Hawk Wildlife Unit	
SCS Office Bldg., 406 Main St., Rockwell City, 50579	
5. Coralville Wildlife Unit	
ASCS Office Bldg., 517 Southgate Ave., Iowa City, 52240	
6. Ingham Wildlife Unit	
SCS Office Bldg., 2109 Murray Rd., Estherville, 51334	
7. Maquoketa Wildlife Unit Perching Rd., E., Maquoketa, 52060 8. Missouri River Wildlife Unit	
SCS Office Bldg., Lindley Bldg., Onawa, 51040	
9. Mt. Ayr Wildlife Unit	
SCS Office Bldg., R.Rt. 3, Mt. Ayr, 50854	
10. Odessa Wildlife Unit	
ASCS Office Bldg., 117 S. 2nd St., Wapello, 52653	
11. Otter Creek Wildlife Unit	
USDA Office Bldg., 203 W. High St., Toledo, 52342 12. Rathbun Wildlife Unit Hiway 34, By-Pass, Chairton, 50049	
13. Red Rock Wildlife Unit Box 423, Indianola, 50125	
14. Rice Lake Wildlife Unit	
SCS Office Bldg., 706-1st Ave., N., Northwood, 50459	
15. Riverton Wildlife Unit SCS Office Bldg., Malvern, 51551	
16. Ruthven Wildlife Unit SCS Office Bldg., Cherokee, 51012	
17. Saylorville Wildlife Unit	
ASCS Office Bldg., 718-8th St., Boone, 50036 18. Sweet Marsh Wildlife Unit	
ASCS Office Bldg., 911 Bremer, Waverly, 50677	
19. Upper Iowa Wildlife Unit	
ASCS Office Bldg., 911 S. Mill St., Decorah, 52101	
20. Wapello Wildlife Unit	
ASCS Office Bldg., 1309 E. Mary, Ottumwa, 52501	

WILDLIFE MANAGEMENT UNITS



CPC-38863 10/76

FROM THE

Warden's diary

By Rex Emerson

"WHO SHOT the mother pheasant?" That was the question that I asked five pheasant hunters one day during the season. They were just ready to drive out of a field where they had been hunting when I stopped to check their licenses and game. They had nine pheasants, all dressed. It is legal to completely dress pheasants, so they were all right that way. After more than twenty-one years at this job you often sense when something is wrong. They were a little nervous and seemed anxious to get my attention on something other than those birds in the cooler. I went along with them and answered all the questions they had, which took about five or ten minutes. By that time I had the guilty one picked out, but as yet I didn't know what he had done. Going over to the cooler in the open trunk of their car I told them I wanted to take a closer look at their birds. With only a five second examination of each bird I found a hen pheasant. That is when I said, "All right, who shot the mother pheasant?" Sure enough the pacer was the one who admitted shooting it. He went in and paid the court \$100.00.

Now you want to know how I could tell the hen from the roosters after they were all skinned and drawn. I've got to have some secrets. Maybe when I retire, I'll tell you. If you're not a "slob" hunter who shoots hen pheasants you won't have to worry about it.

Speaking of "slob" hunters, the trial was held yesterday for a man who was found with five hen pheasants in the trunk of his car. During the pheasant season a farmer had observed a car parked down the road from his place and saw someone throwing something from the trunk into the ditch. His first thought was garbage. (Some people do throw garbage into the road ditches, you know.) The farmer jumped into his pickup truck and drove down there just as the man got back into his car and started down the road. The farmer got a good look at the man and also jotted down the license plate number, color and make of the car. Then he noticed in the ditch the five hen pheasants, which he picked up, put in a bucket and took back to the house. The car stopped again down the road and picked up some other hunters the farmer could not identify. A call came on my two-way radio from the sheriff's office to contact this farmer immediately. As soon as I arrived the farmer told me what had taken place, and gave me the hen pheasants. He went along and showed me the exact spot along the road. After walking the ditch I was satisfied it could not have been anything

else that had been thrown out of the car. We could see the tracks of the car by the edge of the road and feathers on the road and in the ditch. I saved some of these in a plastic bag. We could find nothing else in the ditch, not even the usual beer cans. I took the farmer back to his house, and he indicated that he would testify in court if it was necessary.

Going down the road I couldn't help but wish that more people would be willing to get involved. This looked like an open and shut case, but we never can take anything for granted, never stop until every possible angle is considered and every shred of evidence is obtained. I called in on the radio to find out who owned the vehicle involved. The reply proved the farmer correct on the color and make of the car and the owner lived eighty miles from the scene of the violation.

It was dark when the local officer and I arrived at the car owner's home. We questioned him at great length. He admitted that he and some friends were hunting in that area at that particular time. He denied that he had any hen pheasants during the day and he didn't see a farmer in a pickup truck. He denied any knowledge of any hen pheasants and he would not tell us who was hunting with him. With his permission, and accompanied by him, we went out to inspect the trunk of his car. Using flashlights we looked that trunk over real good. All we could find was one pheasant feather which we put into a plastic envelope and marked for evidence. We told him he would be hearing from us, and left.

The next day I looked the feather over carefully. I could prove it was a hen pheasant feather, which was a violation in itself, but I wanted to tie it down to one of the five hens we had. The feathers are different on different parts of the bird's body. This one was from one side of the breast and it had been broken off and not pulled out. With the aid of a magnifying glass I found the broken shaft of a feather on one of the birds that matched the feather from the trunk of the car. That was it! Now we had him for sure. A court citation was issued. He pled not guilty and asked for a trial, which was held yesterday.

The farmer testified as to what he had observed. When asked by the defense attorney if the man he saw throwing the pheasants in the ditch and driving the car was in the courtroom, the farmer said, "No." The attorney pointed at the defendant and asked the farmer if he ever saw this man before. The farmer said, "No." I just about dropped my teeth. Evidently the car owner was one of the unidentified hunters in the field, not the driver of the car.

The defense attorney was good and he blew a lot of blue smoke, but with the additional evidence of the broken feather taken from the trunk of the defendant's car and the hen pheasant it came from, we proved it had been in his car, thus proving our charge against him of possession of five hen pheasants. His fine was \$50.00 per bird. I guess we will never know for sure who shot them, or who threw them out of the trunk of the car. Sometimes I get to thinking all hunters are in this "slob" category. Then I stop and remember all the nice people I have met while they were out hunting and they far outnumber the bad guys. If you are one of these so-called "slob" hunters, please stay home. We don't need you. However, there will always be a few bad hunters out there. That's the reason you need me. I'm a game warden.

TURKEY HUNTING (Continued from Page 4)

Your choice of a season to hunt also will not influence your chance of success very much. (Table 2). Harvests and success rates have been very similar in the first and second seasons, with relatively minor declines from the second to the third season (first and second seasons in 1974 were held during the same time periods as second and third seasons in 1975 and 1976). Significant numbers of turkeys have been killed during the third season each year in spite of the denser vegetation and reduced gobbling activity which are found in mid-May, indicating that the dedicated turkey hunter is likely to be successful no matter which season he hunts.

To summarize, your chance of bagging a turkey depends on which zone and season you apply for, and depends mostly on your chance of getting a license. Once you receive a license, the odds are about one in five that you will bag a turkey regardless of which combination of zone and season you choose, but prospects are best if you avoid state lands when selecting a place to hunt. No one

IOWA CONSERVATIONIST/JANUARY, 1977

can predict how hunters will apply this year or how successful they will be, but last year's results might aid you as you mull over your application. Table 3 lists the chance a hunter had to bag a turkey at the time he filled out his application, based on his chance of getting a license and the success rate for hunters in each zone and season. Table values represent the percentage of *applicants* for each zone and season which bagged a bird. Things may not work this way in 1977, but you may want to look at this table while making up your mind.

Now, you've filled out your applicaton, enclosed a check for \$10.00 payable to the Iowa Conservation Commission and have it all ready to mail. Don't forget, it must be *received* in Des Moines between and including the dates of January 28th and February 11th. Now you can go back to day dreaming about the last hunting season and watching TV. It is still nearly 3 months until turkey season opens and you've made the all-important first step. But don't wait too long to get ready - the wild turkey gobbler is a wily bird and you'll need a lot of practice on a turkey call and more than a little luck to bring one home. □

