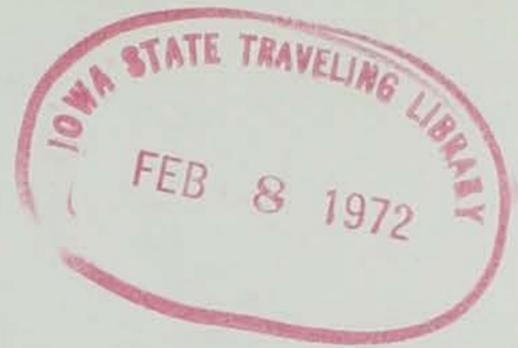




JANUARY, 1972



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# conservationist



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# conservationist

David R. Evans, Editor  
Roger Sparks, Managing Editor  
Wayne Lonning, Photographer  
Jerry Leonard, Photographer

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Ed Weinheimer—Greenfield, Vice Chm.  
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Les Licklider—Cherokee  
Dr. Keith A. McNurlen—Ames  
John G. Link—Burlington

### Iowa Conservationist

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## Forum



Dear Sir:

I could not pass up the chance to show you a perfect albino pheasant. This bird was shot some twenty years ago about three miles southwest of Cedar Falls.

I was one bird shy of my limit and the time was about 4:20 p.m. on the last day of the season. When the bird got up I was so surprised we didn't shoot immediately, but dropped him a second or two later. You will note there is not a dark feather on him.

Sincerely,  
Charles H. Cox  
Davenport

Dear Editor:

Your article in the November issue on pheasant management was most interesting to me. You stated that the first hunting season was 1925. I bagged my limit that year near Allison, Iowa in Butler County. I have only missed three seasons since then — two years while in the service during World War II and in 1970 when a recent back operation kept me out of the fields. (Even '70 wasn't a lost year as I did send my old Lab into a few weed patches along the road and scratched a few roosters.

I have watched the pheasant hunting in northern Iowa go to a peak and then fall off due to the improved methods of farming eliminating the cover needed for nesting and winter protection.

I have hunted the same farm now in Union County for about fourteen years and there seems to be more each year. This year the older son of the farmer came out with his pickup to get me when he thought I would have had enough. I asked this young man why his father never used any herbicide to kill the giant foxtail (that makes walking real hard work) and was told, "I tried to get dad to use it and I wanted to tear out the hedge rows but dad said pheasants and quail have to have cover and I don't think the increased yield would pay for what we would lose." Wasn't that a marvelous philosophy?

Power to the conservationists, I've enjoyed many years of hunting and hope for another ten or fifteen. I have a boy in his twenties who hunts with me. My hopes are that when he reaches the other end of the road that he can look back and say "Happiness is hunting in Iowa."

Yours truly,  
Joseph E. Wintz.  
Des Moines

## Commission Minutes

November 16, 1971

Approved the following land acquisition items: Badger Creek Watershed, Madison County, Flowage Easement over 50 acres; Yellow River Forest, Allamakee County, quit-claim deed by the Chicago, Milwaukee, St. Paul and Pacific Railroad to approximately 2.75 miles of abandoned right-of-way through the Yellow River Forest; Volga River Lake, Fayette County, 66 acres.

The following County Conservation Board projects were approved: Bremer County, Seven Bridges Park Addition, 20 acres; Cerro Gordo County, Shell Rock River Green Belt, 85 and 28.36 additional acres; Iowa County, Iowa County Park, 92.84 additional acres; Johnson County, F. W. Kenyon Park, 100 additional acres; Webster County, Rossow Prairie, acquire 40 acres; Pocahontas County, Sunken Grove Island, development.

Authorized the director to sign a management agreement addition with Greene County Conservation Board for Spring Lake State Park.

Adopted the following permanent rule as presented to regulate the use of registration applied for cards by snowmobile dealers. This rule implements Chapter 190, Acts of the 64th G.A., which provides that the Commission shall make available said cards to dealers and further provide that the cards be used on each machine that is sold by a dealer.

Restricted the speed limit in all camp areas in state parks to 15 mph and reduced the speed limit from 35 mph to 25 mph in the following state parks: Beeds Lake, Bellevue, Black Hawk, Clear Lake, George Wyth, Green Valley, Lake Anita, Lake Macbride, Lake of Three Fires, Lake Wapello, Ledges, Nine Eagles, Pikes Peak, Pilot Knob, Pine Lake, Prairie Rose, Red Haw, Springbrook, Viking Lake, Wapsipinicon, and Wild Cat Den.

Adopted the Five Year Park and Institutional Road Program.

Adopted the following nursery stock price list:

	Per thousand
Conifers	\$25.00
Walnut seedlings	25.00
Walnut seed	10.00
Hardwood seedlings (except walnut)	20.00
Wildlife shrubs	20.00
Wildlife packets	5.00 per packet of 250 plants

Approved the cooperative rehabilitation agreement between the Conservation Commission and the Department of Social Services.

Award the contract for the construction of a water control structure at Lower Gar Lake Outlet, Dickinson County, to the Fagre Construction Company of Estherville in the amount of \$22,472.50.

Approved the following project proposals by local agencies requesting federal assistance from the Land and Water Conservation Fund grants-in-aid program: Bettendorf City Park Board, Pidgeon Creek, acquisition 20 acres; Johnson County Conservation

(Continued on Page 13)

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# HUNTER SAFETY CLINIC



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Photos by David Evans

# HUNTER SAFETY CLINIC

Although the sky was overcast and it rained, Iowa's first hunter safety clinic was a success. Or to put it more directly . . . it went over with a big bang.

After completing the course and taking an examination, 139 youngsters received certificates.

The Young Hunter Safety Clinic was established by National Shooting Sports Foundation. In Iowa the clinic was co-sponsored by the Des Moines Tribune and the Des Moines Chapter of the Izaak Walton League.

Other groups cooperating in this project were the Iowa Conservation Commission, New Pioneer Gun Club, Des Moines Rifle and Revolver Club, Des Moines Archery Club, Pioneer Muzzle Loader Club, National Rifle Association and the Ankeny Izaak Walton Chapter. The clinic was held at Camp Dodge October 23, 1971.

It soon became apparent to the youngsters and their parents that there is more to safe gun handling than meets the eye. The clinic was composed of five instructional stations. Each featured instructions in some area of firearm use. Each youngster toured all five stations which were manned by volunteer instructors.

The stations dealt with basics of gun characteristics and ammunition types, gun safety in the home and field, farmer-hunter relations, comfort and survival in the field, archery demonstrations, and actual firing on the rifle range.

Demonstrations were given on how to cross fences safely with firearms and how to take themselves and a gun in and out of a duck blind and a boat. The youngsters went through the demonstrations under the watch-

Picture page 3 Kenneth Kakac of Elkhart, Conservation Enforcement superintendent, instructs a young lady on the firing range.

Picture page 4 Under the watchful eye of instructors, youngsters fire at targets on rifle range.

Youngsters learn how to cross a fence with simulated guns.

Conservation Officer Gene Newel of Sioux Center shows a class the different types of guns.



ful eye of instructors.

Naturally, the most exciting event for the boys and girls was firing on the range. The .22 rifles and ammunition were furnished.

Emphasis was placed on good sportsmanship and conduct in the field. Parents were asked to take part by accompanying their children to all the stations.







# snow sports

## in county areas

By Roger Sparks

Many of Iowa's County Conservation Boards, to encourage year-round use of their areas, are developing them for winter sports. Many county parks and areas are very scenic with steep hillsides. They make excellent winter playgrounds for skiing, tobogganing and sledding enthusiasts. In addition a number of lakes are cleared for skating.

One of the finest winter sports areas in Iowa is located in Big Sioux Park, adjacent to Oak Grove Park about six miles N.E. of Hawarden in Sioux County. Winter recreation is encouraged by the Sioux County Conservation Board and this scenic area is heavily used. Tobogganers and skiers enjoy the steep hill overlooking the Big Sioux River, the nice run down to and along the river, and particularly the facilities. A tow rope with a timer which shuts off automatically allows visitors to use it any time, day or night. Electric heaters and a fireplace warm visitors at a handy chalet.

In Greene County, Hyde Park and Seven Hills Forest are both popular areas for winter fun. Open until 10 p.m. the toboggan and sled runs are complete with tow ropes which eliminate most of the work. Spring Lake in Greene County is popular with ice skaters. Hyde Park is about eight miles southwest of Churdan and Seven Hills Forest lies two miles southwest of Jefferson. Spring Lake is a State Park now under management of the Greene

County Conservation Board and is located five miles northwest of Grand Junction.

Pinicon Ridge Park in Linn County has a large skiing area, warming house, toboggan and sled runs. This is a large area located about one mile northwest of Central City. Snowmobiles are allowed on designated trails.

Scott County Park accommodates sledders and tobogganers and has some skiing. A snowmobile concession and rental is popular and the area has fine snowmobile trails. An area is cleared on the lake for skating. This 1,270 acre park is three miles east of Long Grove.

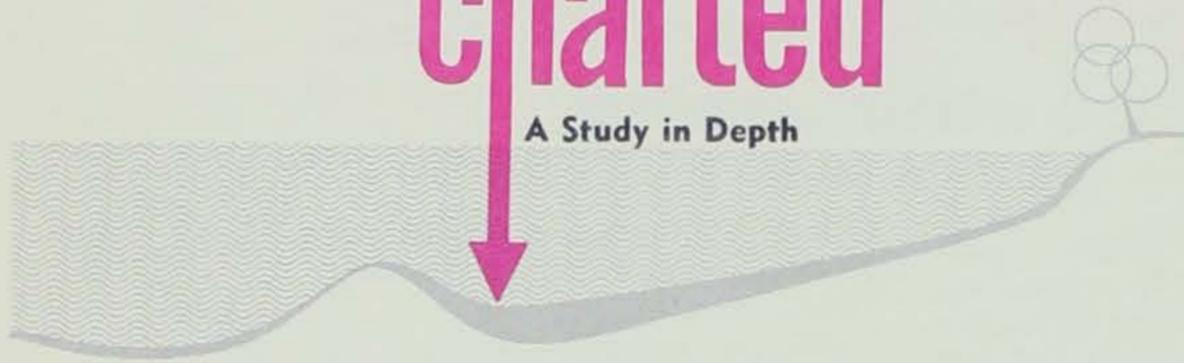
Black Hawk County Conservation Board has more designated snowmobile routes in their many fine areas than any other county. Black Hawk County Park, located just northwest of Cedar Falls has a lot of winter sports appeal. Long snowmobile trails from Washington Union Park to Black Hawk Park get plenty of use. Hickory Hills, seven miles north of Dysart is popular with snowmobilers and also has a small ski run and sledding. Future plans call for a warming house there. Several other areas in Black Hawk County are open to snowmobiling.

John F. Kennedy Park (Badger Lake) added a special "launching chute" to its toboggan run. This structure is twenty feet high and gives the sledders a steep take off. At the bottom of the hill the

(Continued on Page 12)

# Iowa Lakes Charted

A Study in Depth



By Earl T. Rose, Limnologist

**EDITOR'S NOTE:** Earl T. Rose, Iowa Conservation Commission limnologist wishes to give credit for assistance in developing the program to the Wisconsin and Minnesota Departments of Natural Resources; to Tom Brown, limnology assistant; and to the engineering staff of the Iowa Conservation Commission.

A State Conservation Commission program is now underway to chart the depths of Iowa's natural lakes. The process is called hydrographic or contour mapping, and will show shoreline configurations, locations of major inlets, outlets, location of reefs, shelves, drop-offs, vegetation beds and siltation rates. Significant adjacent shore features will be included such as roads, public accesses and lake management installations (fish traps, control structures, navigation buoys, etc.).

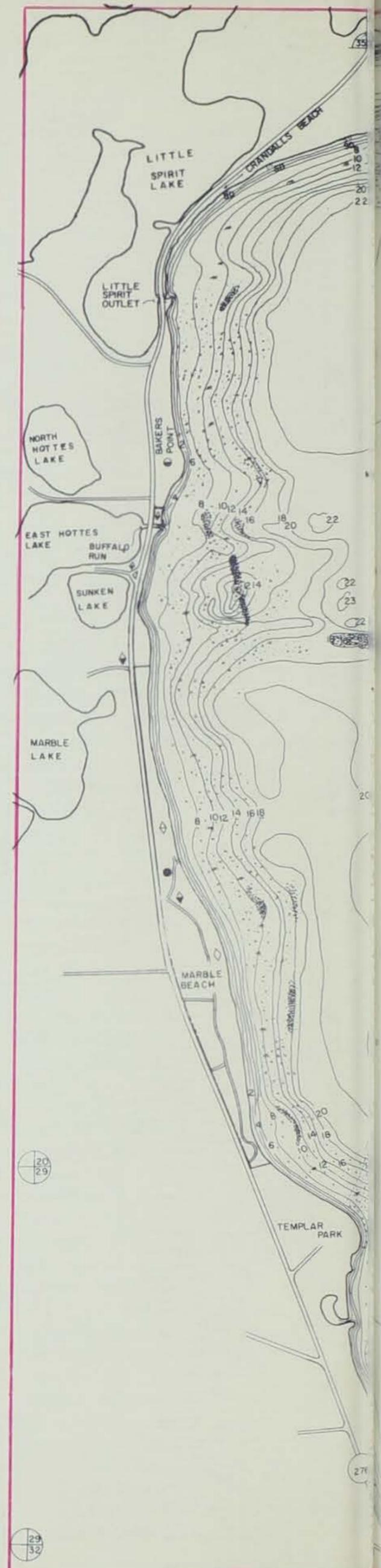
These maps will eventually be made available to the public to serve as boating and fishing guides. They will also be of value to fisheries management aiding in numerous projects such as rough fish removal, measuring of

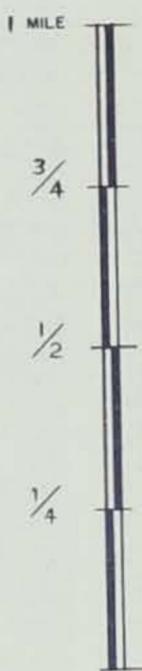
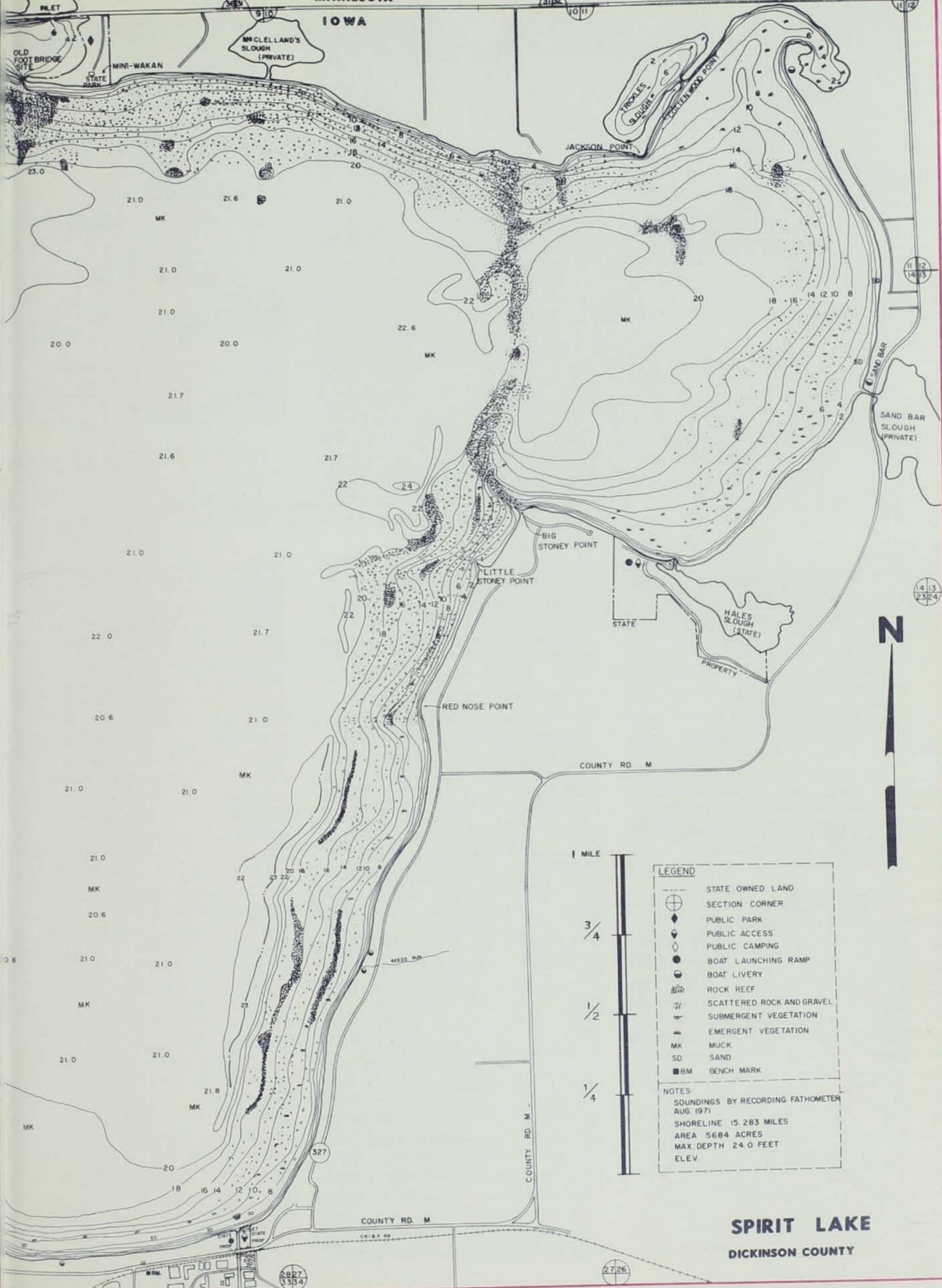
siltation, and water sampling analysis.

## Mapping Methods

There are many methods by which contour maps may be made. Previously, calibrated drop lines were used to determine depths. This procedure is slow and very expensive. Most modern procedures utilize aerial photographs for the outline of the lake, adjacent roads and so forth. Instead of drop lines most depth finding is now done electronically from a rapidly moving boat utilizing the sonar principle developed for naval use during World War II. These instruments are known as echo sounders, fathometers or depth recorders. All involve the transmission of supersonic sounds from the surface area through a device called a transducer to the bottom. These sounds are reflected back to the transducer and transformed to electrical impulses which inscribe the depths on a continuously moving chart.

The speed of sound in water is around 4,800 feet per second\*with





**LEGEND**

- ⊕ STATE OWNED LAND
- ⬠ SECTION CORNER
- ◆ PUBLIC PARK
- ◊ PUBLIC ACCESS
- ◇ PUBLIC CAMPING
- BOAT LAUNCHING RAMP
- ⊙ BOAT LIVERY
- ⊞ ROCK REEF
- ⊞ SCATTERED ROCK AND GRAVEL
- ⊞ SUBMERGENT VEGETATION
- ⊞ EMERGENT VEGETATION
- MK MUCK
- SD SAND
- BM BENCH MARK

**NOTES**

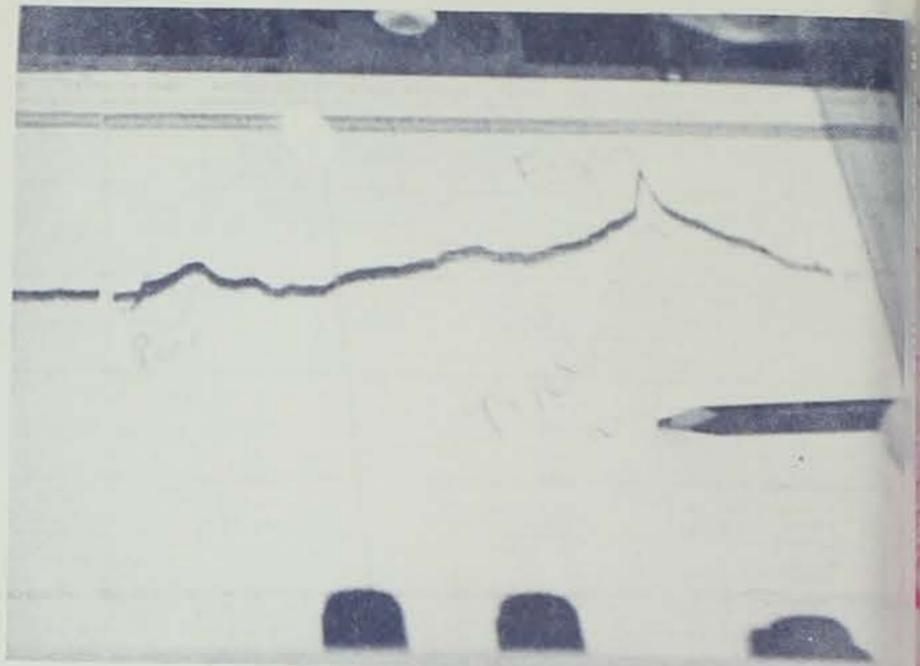
SOUNDINGS BY RECORDING FATHOMETER  
AUG. 1971

SHORELINE 15.283 MILES  
AREA 5684 ACRES  
MAX. DEPTH 24.0 FEET  
ELEV.

**SPIRIT LAKE**  
DICKINSON COUNTY

2827  
3334

2726



Fathometer registers bottom profile along one transect.

Setting up transect stations and guiding boat by use of walkie talkie.

Determining lake elevation.

← Transects are predetermined in office by use of protractor and ruled to scale.

some variation due to salinity and temperatures. The fathometer receives and records the depths as the boat moves along straight paths called transects stretching from one side of the lake to the other. The continuous line inscribed on the calibrated chart represents an exact profile of the lake basin along that transect. The information from this chart is then plotted on a map which when all transects have been run and plotted gives an accurate account of the depths and bottom of the lake.

Before any field work is done the transects are drawn on an outline tracing of an aerial photo. Transects are drawn in at 400 foot intervals along the short axis of the lake and each transect is numbered. A point is then selected from which all of the opposite shore can be readily observed with a transit. This is the control point from which the precise angles to each of the transect shore stations are established by use of an ordinary protractor. The angle from the control point to each transect station is recorded starting from an established 0°00' line which is 9°50' from the outlet structure at Hot-

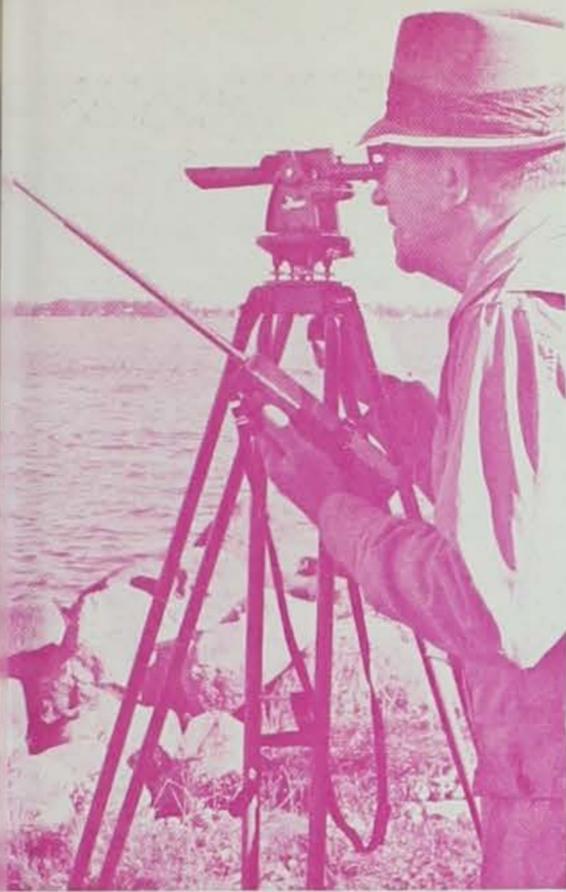
tes Lake (Buffalo Run). This 0°00' line is drawn parallel to all of the transects and all transect station angles on the west side of the lake were determined from this line.

The field work now begins. A transit is positioned at the control point, sighted on Buffalo Run and the horizontal circle set at 9°50' as determined in the office with the protractor as the angle from the 0°00' line. A secondary reference line at Station 41 (Templar Park lagoon) was also checked for further accuracy. A crew member then traveled by boat toward Station One at the northwest part of Spirit Lake and was guided by walkie-talkie to its precise location by radio from the control point transit which was set on the exact angle for Station One. Large fluorescent flags were attached to the boat to facilitate directing him to each of the stations where he placed a numbered stake. All 47 stations on the west side of the lake were so marked with numbered stakes. The control point was then flagged with large markers and the sounding operations were properly prepared for.

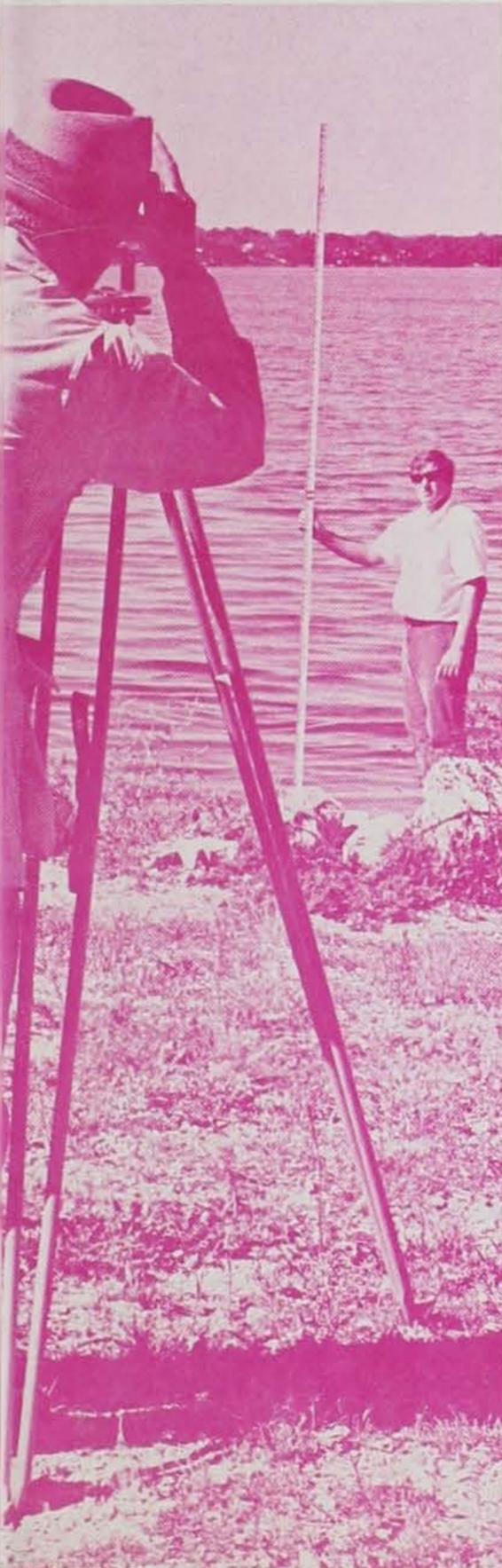
The boat was then equipped with fathometer, transit and field

map station angles from the control point. The crew proceeded to Station One where the transit was set up and sighted back to the control point marker. The horizontal scale of the transit was then set at the same angle as recorded for this Station One from the control point (37°15'). The telescope was then swept back to 0°00' on the scale, and a target sighted on the east shore for the running of the boat with fathometer operating over the selected transect. As pointed out in the photo the C = B principle in each control flag with each stations' angle and sweeping back to 0°00' from each station, all transects will be aligned exactly 400 feet apart and parallel to each other as predetermined.

Now the actual transect is ready to be "run." The driver aligns the boat with stern as close to shore station as possible and bow in line with the selected target areas on the east shore. When all is ready the driver is given the "go" signal and the boat is operated at steady speed directly to the target area on the opposite shore. As it travels the depths are automatically recorded on the chart with a line inscribing the exact basin profile for this transect. When all transects have



Boat equipped with fathometer and adjustable transducer.



been run, much time is then devoted to sampling bottom types, identifying aquatic vegetation, checking reefs, rock piles and noting them on the field map. The actual plotting of the depths now begins in the office.

#### Charting the Lake

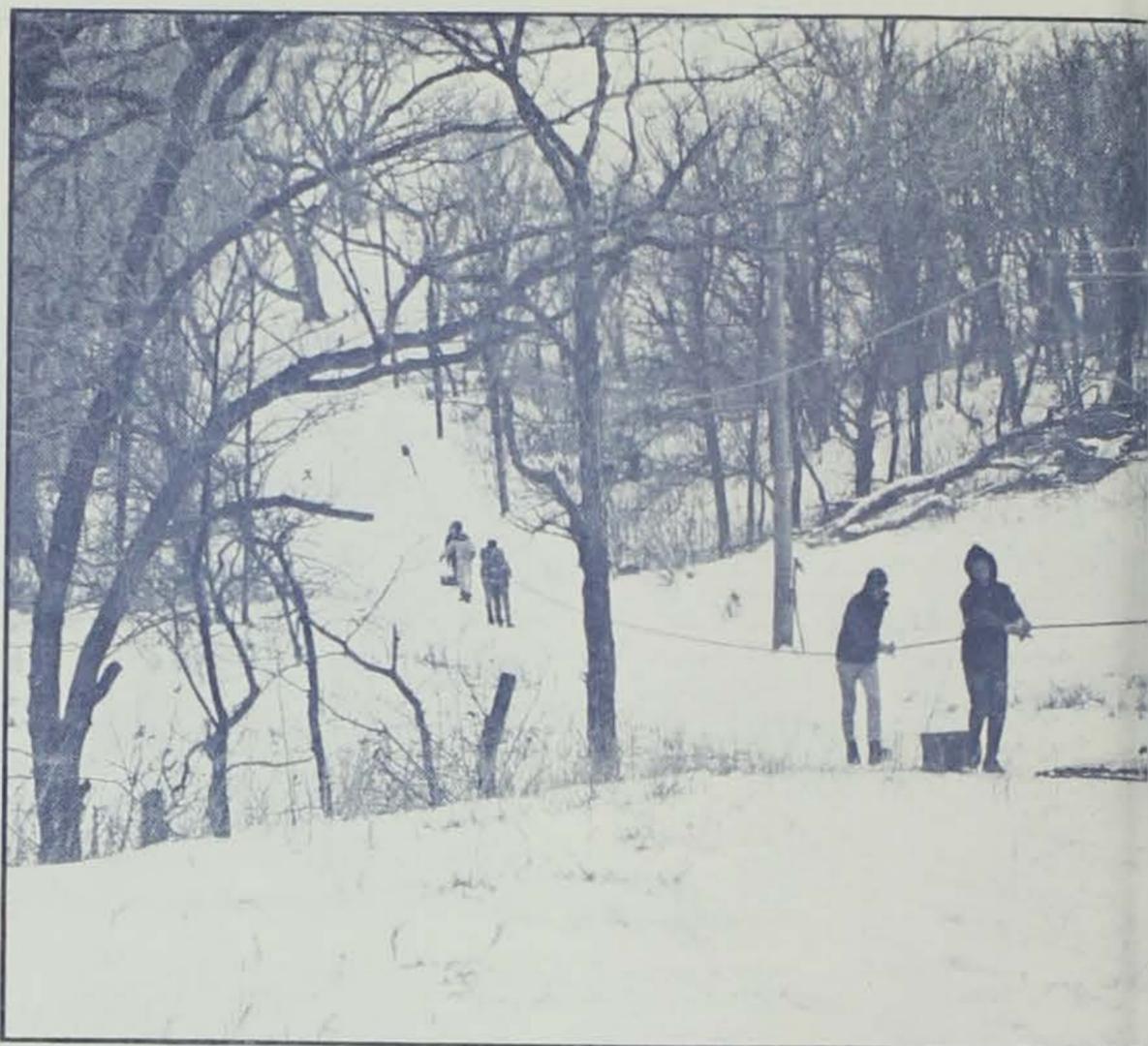
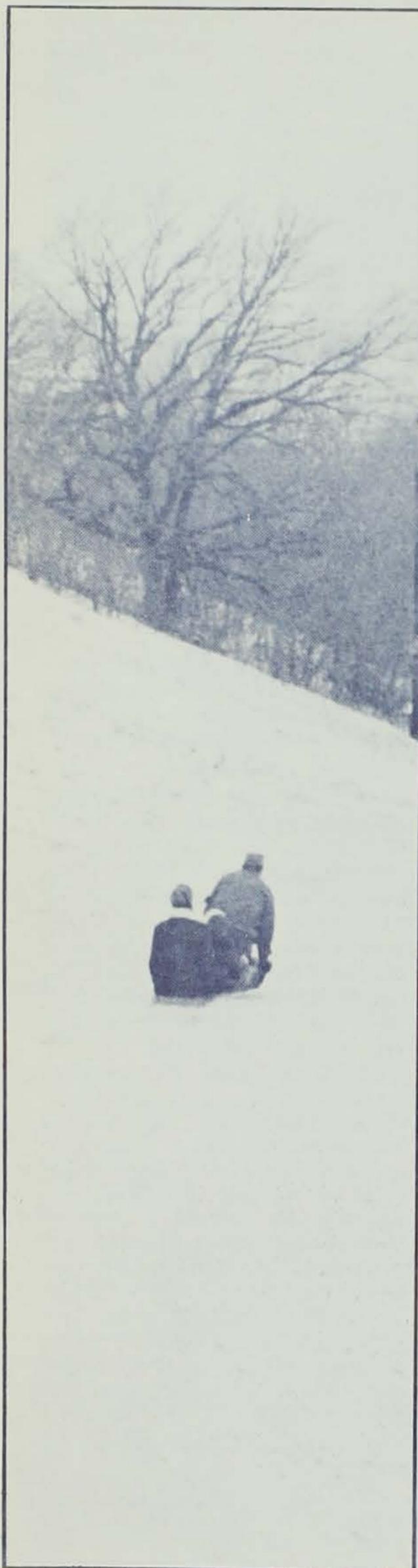
Transferring of depths as recorded on the chart to the field map is done by a nomograph developed by the Minnesota Department of Natural Resources. It was made from a piece of formica with ends slotted to receive the chart paper. Each transect's depth profile is aligned by location of the nomograph on the map so the vertical extensions of the start and completion of the profile coincides with the start and end of the transect line of the map. A large T-square is used to align the run's end of the chart profile with the end of the transect on the map. Thus, all of the vertical extensions on the chart will intercept the precise locations of the depths to be recorded on the amp transect. After all of the transects have had their depths plotted, contour lines are drawn between points of equal depths. Bottom types, reefs, rock piles, beds of vegetation, navigation hazards and buoys are charted and the field map sub-

mitted to the central office in Des Moines. Because the transects are 400 feet apart some reefs and rock piles may have been missed.

#### Summary

In 1916, all of the natural meandered lakes in Iowa were sounded by the Iowa Conservation Commission. Their maps provide an excellent basis for comparison with present depths and for computing siltation rates. Mapping has been completed on Upper and Lower Gar, East and West Okoboji, Spirit, Center, Silver, Storm, Lost Island, Five Island, Clear and Minnewashta lakes. To date, on the lakes surveyed, siltation does not seem to have been excessive over the past 54 years. Attempts will be made to determine from old field notes whether the soundings made in 1916 were adjusted to mean-sea-level elevations or ordinary high water marks or other datum planes from which accurate comparisons can be made. Present surveys are corrected to outlet control crest elevations with references made to the so-called "ordinary high water mark" or mean-sea-level elevations.

The new maps will be made available to the public just as soon as final decisions are made concerning some minor additions.



### SNOW SPORTS (Continued from Page 7)

snow is removed from the lake so that the run continues out across the ice. Ice skating is also popular here. A warming shelter with a fireplace and heater are available. Snowmobiles are allowed along designated trails. J.F.K. Park is located 4½ miles north of Fort Dodge.

The Hogsback area, three miles northwest of Lake Mills in Winnebago County is popular for snowmobiling, tobogganing and sliding.

O'Brien County's Dog Creek Park also has an excellent slope complete with warming shelter with fireplace and a tow. The park is three miles southeast of Sutherland.

Polk County has Jester Park which offers a large open snowmobile area in the entire north section. There is also a long tobogganing slope with a warming building in the park. Jester is located 10 miles north of Des Moines.

Johnson County has a slope used by sledders and tobogganers and plans to build a shelter and tow in F. W. Kent Park 2½ miles west of Tiffin.

Hardin County has a number of snowmobile trails in its county areas. The Eagle City Area, six miles southwest of Iowa Falls, has about 1½ miles of trails. The Leverton Area, three miles northwest of Steamboat Rock, has non-restricted snowmobiling (no trails.) Reece Park has an enclosed shelter with wood provided for the fireplace. A slope accommodates tobogganers, skiers and sliders at this park located 2½ miles southwest of New Providence.

The above areas do not include all the county areas open to one or more types of winter recreation. They do indicate the growing popularity of snow sports in Iowa.

#### Future Areas

Some future winter sports areas include the Osborn Recreation Area in Clayton County. Activities on the area will include snowmobiling, tobogganing and skiing.

A primary reason for the purchase of 85 acres, Horseshoe Bend Recreation Area along the Little Sioux River in Dickinson County was for winter recreation. The



## Campfire Cookery

By Dick Ranney

The Iowa Conservation Commission is made up of several faces. The divisions of fish and game, lands and waters, and administration are the first three. A fourth and very important part consists of you the public . . . the people of the state. The wise use of our resources requires mutual effort.

We all can do a better job if we understand our problems and work together. It's a lot like pulling taffee. If the batch is too big, one person cannot pull it and it will turn to sugar; however, it will be white and creamy if all of us pull together.

This recipe for taffee is just the right size for one person to handle. If this recipe is doubled — help will be needed. In a heavy pan that won't burn, combine 2½ cups of sugar, 1 cup of water, 2 tablespoons of butter, 3 tablespoons of vinegar, 1 tablespoon vanilla and a pinch of salt. Cook over medium heat until it will set hard when dropped in a cup of cold water. Grease a baking sheet with butter and sprinkle on 1 cup of black walnut meats. Pour the candy over the nut meats but don't scrape the pan. Scraping the pan makes the candy turn to sugar. Be careful when you try to pick up the candy to pull. It will be very hot and you can burn your hands. When it's cool enough to handle, put a little butter on your hands and pull the candy until it is white and creamy. The longer you pull it the better it will be. When it's done, stretch it out on a piece of wax paper and let it cool. Break the candy into mouth size pieces with a knife handle and enjoy the fruit of your labor. Go ahead and double the recipe — it's great to work together. ☆

## COMMISSION MINUTES . . .

(Continued from Page 2)

Board, F. W. Kent Park, acquisition approximately 100 acres; Des Moines County Conservation Board, Franklin Township lake site, acquisition approximately 200 acres; Van Buren County Conservation Board, Bentonsport Riverside Park, development; Harrison County Conservation Board, Harrison County Recreation Area, development; Town of Malvern, Municipal Swimming Pool, development; Adams County Conservation Board, Spring Lake Park, acquisition approximately 27 acres; Sioux County Conservation Board, Big Sioux Park, development; Webster County Conservation Board, Rossow Prairie, acquisition 40 acres; Poweshiek County Conservation Board, Arbor Lake Recreation Area, development; Hardin County Conservation Board, Iowa River Green Belt, acquisition approximately 17 acres (Sylvan Hills Segment).

Approved the following project amendment request: Jackson County Conservation Board, Spruce Creek Park, development.

Approved a management agreement between the Conservation Commission and the City Council of Council Bluffs governing a parcel of land between the city owned land and the Missouri River. ☆



Rex Emerson of Washington, fish and game law enforcement supervisor, wrote the story "Wild Bird Month" that appeared in the December issue of the IOWA CONSERVATIONIST. His by-line was inadvertently left out of the article.



The Iowa Conservationist, as a contribution to the preservation of our natural resources and the protection of the ecology, is printed on 100% reclaimed waste paper.

area is still in the process of expanding snow sports opportunity with ski, sled and toboggan areas and a warming house development planned. Presently the area has a small network of snowmobile trails which double as horse trails in summer, and they will be expanded.

Cerro Gordo County is developing a fine winter sports area which will entertain skiers, tobogganers and sledgers, with a tow and warming shelters. Snowmobile trails are also available. The area is called the Gerk Recreation Area and is located just north of Clear Lake.

The Cherokee County Conservation Board is also cognizant of the need for winter recreation areas and is presently looking for a suitable area for development.

Many County Conservation Boards are recognizing the demand for winter sports areas and facilities. Contact the executive officer through the County Conservation Board office or County Court House for regulations particular to your favorite area. ☆



## FOR SALE IOWA'S FUTURE

### Take Advantage of Cost Sharing Program - Order Trees and Shrubs Now

On nearly every farm there are "waste areas." Planting trees and wildlife cover around ponds, along fence rows, in areas of poor soil conditions and odd corners can make these waste areas productive. They can result in reduced soil erosion, as well as provide esthetic and recreation value.

By using the Rural Environ-

mental Assistance Program the cost is very low — a "dirt cheap" price to pay for soil protection. R.E.A.P. pays as much as 80 percent of the total cost of establishing trees and 50 percent of planting wildlife cover. Cost sharing information can be obtained through the Agricultural Stabilization and Conservation Service (ASCS). Contact your district forester (see order blank). He can give you advice and assistance on what and where to plant.

This nursery stock may be used for erosion control and wildlife cover, but not for windbreak or ornamental use.

Fill out the order blank on the following page and send it to the State Forest Nursery at Ames. Remember, Old Man Winter is entering the backstretch now, and by the time the orders are processed and handled Spring will be here. Many late orders do not get filled, so hurry! Get those orders in now. →

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SEEDLING TREES AND SHRUBS AVAILABLE FOR DISTRIBUTION  
DURING SPRING OF 1972

SPECIES	AGE CLASS	AVG. HT. IN INCHES	250	500	750	1,000
Austrian Pine	2-0	6-10	\$6.25	\$12.50	\$18.75	\$25.00
Jack Pine	2-0	6-12	6.25	12.50	18.75	25.00
Ponderosa Pine	2-0	6-10	6.25	12.50	18.75	25.00
Red Pine	3-0	6-12	6.25	12.50	18.75	25.00
Scotch Pine	2-0	6-12	6.25	12.50	18.75	25.00
White Pine	3-0	6-10	6.25	12.50	18.75	25.00
Norway Spruce	3-0	6-12	6.25	12.50	18.75	25.00
Green Ash	1-0	6-12	5.00	10.00	15.00	20.00
White Oak	1-0	6-12	5.00	10.00	15.00	20.00
Black Walnut (seedlings)*	1-0	6-12	6.25	12.50	18.75	25.00
Multiflora Rose	1-0		5.00	10.00	15.00	20.00
Dogwood	1-0		5.00	10.00	15.00	20.00
Autumn Olive Cardina	1-0		5.00	10.00	15.00	20.00

SPECIAL WILDLIFE PACKET.....\$5.00

The SPECIAL WILDLIFE PACKET contains 250 plants including 50 evergreens, 75 autumn olive, 25 honeysuckle, 25 dogwood, 25 multiflora rose and 50 other plants beneficial to wildlife. Illustrative suggestions for odd areas and farm pond plantings will be furnished with each order.

\*Maximum order for black walnut seedlings will be 1,500 per landowner. A special minimum of 50 has been set for this species with multiples of 50 thereafter until the maximum is reached in order to supply as many landowner's as possible.

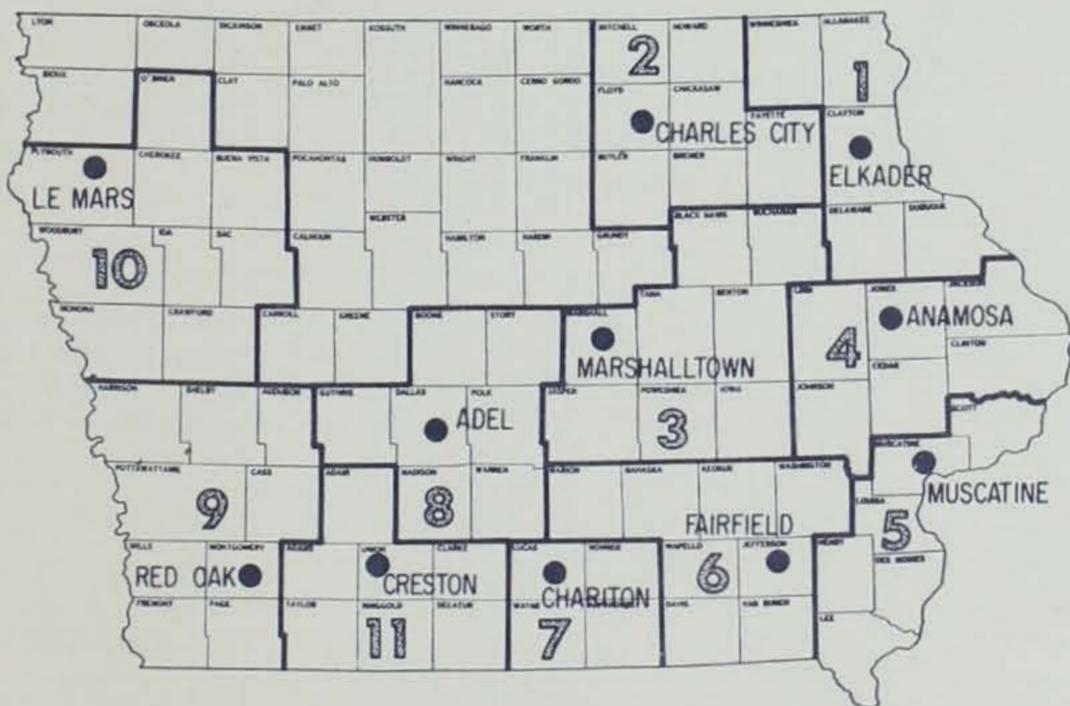
Special Note: The nursery reserves the right to substitute species of a suitable type if a shortage occurs.

TABLES OF PREPAID SHIPPING AND HANDLING (CHARGES) COSTS

NO. OF PLANTS	SHIPPING COST						
250	\$1.50	2,750	\$ 6.10	5,250	\$11.50	7,750	\$15.80
500	2.00	3,000	6.40	5,500	11.80	8,000	16.30
750	3.05	3,250	6.75	5,750	12.15	8,250	17.40
1,000	3.65	3,500	7.05	6,000	12.75	8,500	18.00
1,250	4.20	3,750	7.20	6,250	13.10	8,750	18.50
1,500	4.35	4,000	8.65	6,500	13.25	9,000	18.65
1,750	4.65	4,250	9.20	6,750	13.55	9,250	19.00
2,000	5.00	4,500	10.25	7,000	13.90	9,500	19.30
2,250	5.60	4,750	10.80	7,250	14.20	9,750	19.95
2,500	5.95	5,000	11.35	7,500	14.35	10,000	20.25

Shipping charges for wildlife packets can be figured on the basis of 250 plants per packet.

TO OBTAIN FURTHER INFORMATION OR SPECIAL FIELD HELP, CONTACT YOUR NEAREST DISTRICT FORESTER.



DISTRICT FORESTER ADDRESSES:

- 1. ELKADER . . . . . Box 662, 52043
- 2. CHARLES CITY, . . . . . Box 4, 50616
- 3. MARSHALLTOWN . . . . . P.O. 681, 50158
- 4. ANAMOSA . . . . . Box 46, 52205
- 5. MUSCATINE . . . . . Box 387, 52761
- 6. FAIRFIELD . . . . . Box 568, 52556
- 7. CHARITON . . . . . 1027 North 8th Street, 50049
- 8. ADEL . . . . . Box 175, 50003
- 9. RED OAK . . . . . Box 152, 51566
- 10. LE MARS . . . . . Box 65, 51031
- 11. CRESTON . . . . . Box 2, 50801

Counties not assigned a district forester please contact your Conservation Officer, Soil Conservation Service office (SCS), County Extension Director (CED) or the Agriculture Stabilization Conservation office (ASCS) in your county.

ORDER NO.

LEAVE BLANK

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

**INSTRUCTIONS FOR COMPLETION OF ORDER**

1. Mail your application and remittance to:  
 Nursery Forester  
 State Forest Nursery  
 2404 South Duff  
 Ames, Iowa 50010
2. Payment or Purchase order for the entire amount must accompany order blank. Make a check or money order payable to the Iowa Conservation Commission. (Cash will not be accepted.) Your cancelled check will be your receipt.
3. Claims for adjustment due to shortage or delay in shipment must be made within 15 days from the receipt of shipping notice.
4. No order will be processed for less than 500 plants except:
  - a) One wild life packet
  - b) Walnut in multiples of 50.

**DO NOT ORDER LESS THAN 500 IN MULTIPLES OF 250**

**GENERAL SHIPPING INFORMATION**

(Please Print)

- Ship Prepaid. (If shipping address is different from Landowner's, enter below.)
- When notified by the Nursery, I will call for stock.
- Group or District Forester Pick-up. Please specify by whom \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_  
 Street or Rural Route City Zip Code

KIND OF TREES OR SHRUBS WANTED	AGE CLASS	NUMBER WANTED	COST	APPLICATION INFORMATION
Please indicate an alternate choice of species if your 1st choice is unavailable.				ORDER SUBMITTED BY: PLEASE CHECK BOX
				<input type="checkbox"/> Soil Cons. Service - SCS
				<input type="checkbox"/> ASCS Office
				<input type="checkbox"/> County Extension Dir. - CED
				<input type="checkbox"/> Conservation Officer
			<input type="checkbox"/> District Forester	
			<input type="checkbox"/> Other _____	
		Subtotal _____		
		3% Sales Tax _____		
		Prepaid Shipping Charges _____		
		<b>TOTAL COST:</b> _____		

**DO NOT ORDER LESS THAN 500 IN MULTIPLES OF 250**

THE LEGAL PLANTING LOCATION AND YOUR SIGNATURE IS REQUIRED

These trees are to be planted in \_\_\_\_\_ Quarter, Section \_\_\_\_\_, Township \_\_\_\_\_, Range \_\_\_\_\_, in \_\_\_\_\_ County, Iowa.

*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 live stock grazing. I agree to forfeit for destruction any trees planted or used in violation of the above restrictions.*

SIGNED: \_\_\_\_\_

MAIL ADDRESS - RFD: \_\_\_\_\_

CITY: \_\_\_\_\_

STATE: \_\_\_\_\_

ZIP CODE: \_\_\_\_\_ PHONE NO.: \_\_\_\_\_

**PURCHASE ORDER**

YES  NO

**DO NOT ORDER LESS THAN 500**