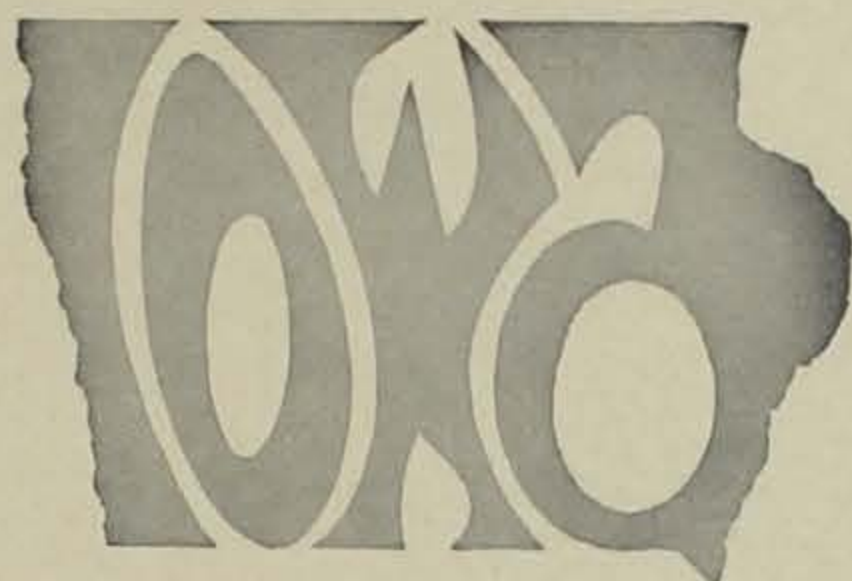
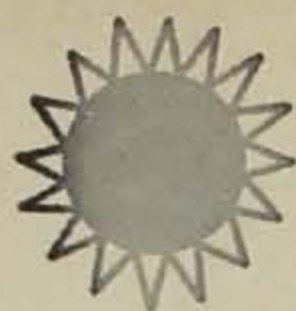


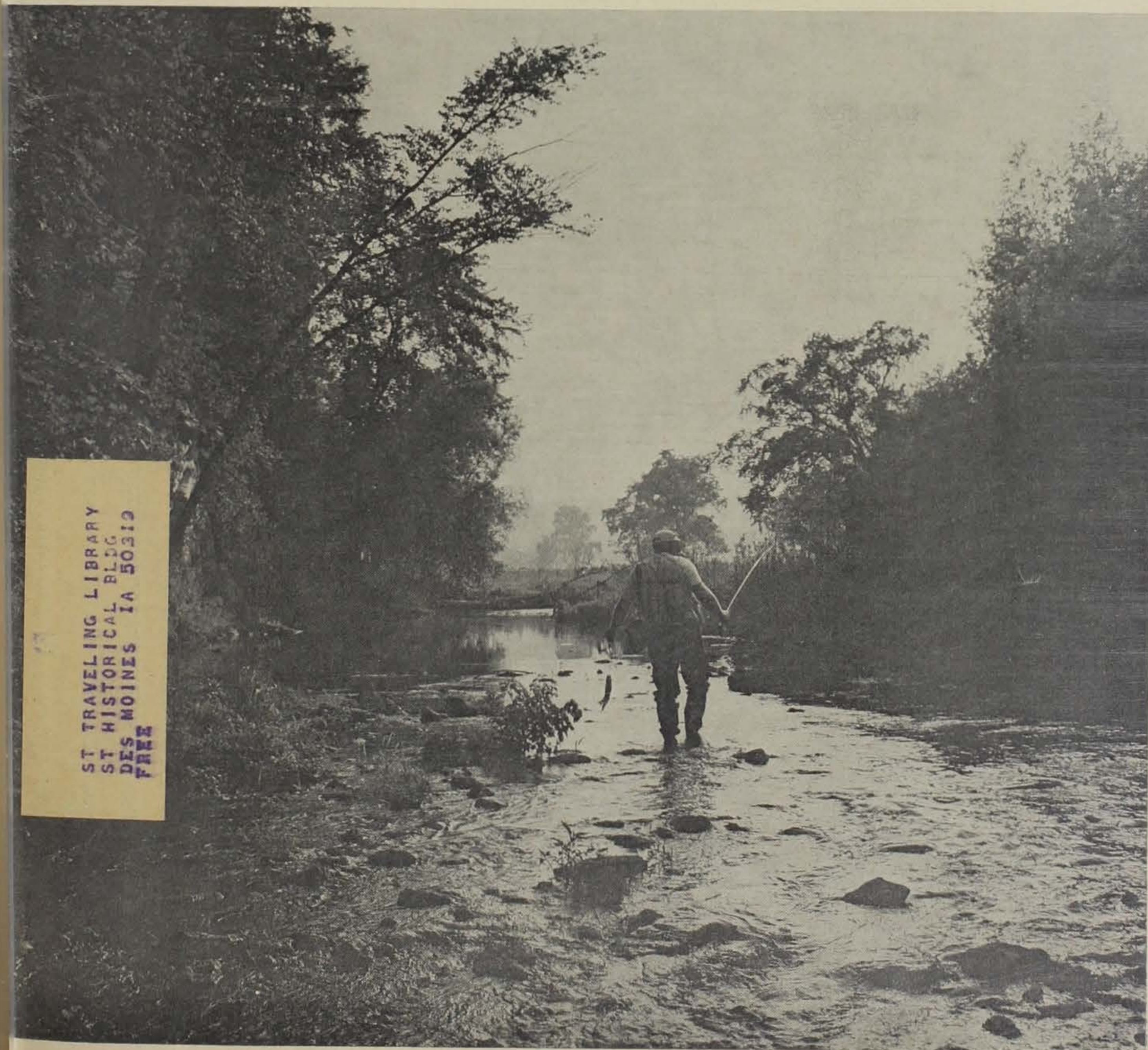
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CONTENTS

Commission Minutes	2
How to Avoid Outdoor Motor Thefts	3
Iowa Girl Named Miss Let's Go Boating	3
The Phenomenon of Migration	4
Migration Calendar	6
Conservation Careers	7
Fort Atkinson	8
Trout Fishing in Iowa	10
Campfire Cookery	11

About the Cover . . .

Trout Fishing in N.E. Iowa

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COMMISSION MINUTES

January 26, 1971

Approved departmental rule permitting special water activities on Green Valley Lake, Union County. Approved departmental rule providing for annual permit and rental fee schedule for state owned riverbed, lake bed, and waterfront lands, for submission to the Legislative Rules Review Committee.

Adopted personnel policies concerning family employment, outside employment, grievance procedures and work procedures.

Approved the following land acquisition options: Big Creek Lake, Polk County, 73 acres; Volga River Lake, Fayette County, 52 acres and 132 acres; Brushy Creek, Webster County, 149 acres; North Twin Lakes, Calhoun County, lands between lots 22 and 23 and 29 and 30 of the Long Beach Subdivision No. 1 as a gift from the Twin Lakes Restoration Association.

Approved staff recommendations to designate the study segment of the Upper Iowa River as a natural river and recommend to the secretary of the interior that the study segment be added to the federal system, subject to the completed state master plan, and inform the secretary of other conditions concerning the river.

The following County Conservation Board Land Acquisition Projects were approved: Keokuk County, Belva-Deer Recreation Area, 360 acres; Shelby County, Elk Horn Creek Recreation Area, 59.55 acres.

The following County Conservation Board Development Plans and Revisions were approved: Carroll County, Swan Lake Development Plan Revision, Water Supply; Crawford County, Dow House Historical Area, Development Plan; Scott County, Scott County Park Development Plan Revision; Sioux County, Big Sioux Park Development Plan Revision.

Approved a maintenance and management agreement with the Buchanan County Board of Supervisors for 11.49-acre tract of land, which is a part of the Troy Mills Marsh Area which lies northeast of the Wapsipinicon River and authorized the director to sign this agreement and forward it to the Executive Council.

Approved the following projects for submission to the Bureau of Outdoor Recreation: Muscatine County Conservation Board, Salisbury Bridge Recreation Area, Development; Keokuk County Conservation Board, Belva-Deer Recreation Area, acquisition, 120 acres; City of Carroll, Carroll Municipal Park, Development; City of Indianola, Indianola Community Tennis Center, Development; City of Spirit Lake, Memorial Park, Development; Shelby County Conservation Board, Elk Horn Creek Recreation Area, Acquisition, 59.55 acres; Town of Slater, West Side Park, Acquisition, 13.6 acres; Sac City Park

How to Avoid OUTBOARD MOTOR THEFTS

The problem of stolen engines has grown steadily with the increased number of outboards used by the public. More than 500 thefts were reported to Evinrude in 1969, and that's just one manufacturer. Multiplied industry-wide, motor thefts probably approached \$1.5 million.

Portability is one big reason why thousands of boatmen prefer small horsepower outboards. Apparently this feature attracts the thief as well. Small motors are also easier for a thief to dispose of because they don't require controls and steering connections.

Two-thirds of the motors reported last year were under 25 hp. Almost half of the total 500 stolen were in the 6 to 9.5 hp range. About 1/10 of the motors stolen were over 50 hp.

If your motor is stolen, it is probably gone for good. The recovery rate is low, especially for smaller motors. Stolen motors of higher horsepower are somewhat easier to spot because they are often taken without their electrical connections.

Carelessness is one big reason for motor thefts. Outboard owners should take the same precautions with their rigs that they do with their automobiles.

To protect your boat and motor against theft, Evinrude offers the following suggestions.

1. Record all serial numbers on the boat and motor and register them with the manufacturer. Keep a copy of these numbers for yourself.
2. Use a lock to secure your motor to your boat. Special locks are manufactured for this purpose and are a big deterrent to thievery. They are

made of durable metal and cannot be broken or sawed through. Chains and bicycle type locks can be used, but chains can be cut and bicycle type locks don't protect transom bracket bolts that could be tampered with.

3. When trailering your boat, don't leave it unattended. At night, wrap the trailer safety chain around a tree or post and secure it with a lock. Never leave equipment lying loose in your unattended boat. Don't think your rig is safe parked in your garage. Thieves have been known to pull right into driveways, hook-up and drive off.
4. If your motor has electric starting, never leave the key in the ignition. Protect manual starting motors by removing a spark plug or connector.
5. Report all thefts immediately to local authorities, your marine dealer and the manufacturer.

Here are some suggestions to protect yourself against the "good deal" on a motor:

1. Be suspicious of anyone who is quick to sell a motor at less than its reasonable market value.
2. Purchase a used motor from an established dealer or from someone you know. When you buy, get the motor's registration card issued by the manufacturer. It is issued only once to the original buyer.
3. Be suspicious if the motor is missing any of its electrical connections. Many times thieves in their haste to get away, cut the wires and connections.

Board, South Park, Development; Town of Hull, Westside Park, Development.

Authorized the director to sign a resolution authorizing the Highway Commission to temporarily close sections of the state park road at Springbrook State Park for grading, drainage and paving the Conservation Training Center Road and a resolution authorizing the State Highway Commission to temporarily close sections of the park road at Lake Anita State Park for paving purposes.

The Highway Commission offered \$226,000 as replacement cost in exchange for the right-of-way across Elk Creek Marsh in Worth County, and request a transfer of jurisdiction from the State Conservation Commission for

the 22.3 acres necessary for their I-35 crossing through the area. Conservation Commission accepted the settlement offer on Elk Creek Marsh and authorized the chairman and director to sign the real estate contract and inter-agency transfer of jurisdiction.

Approved a spring muskrat trapping season March 1—April 25, 1971, on the following game management areas, (trapping by permit only): Ingham Lake (East and North Sloughs only), Emmet County; Little Swan Lake, Christopherson Slough and Spring Run (Lily Lake only), Dickinson County; Eagle Lake, East Twin Lake and West Twin Lake, Hancock County; Harmon Lake, Winnebago County; and Silver Lake Marsh, Worth County.



Iowa Girl Miss Lets Go Boating

Donna Dougherty, a 24-year-old airline stewardess from Sioux City, Iowa, has been chosen "Miss Let's Go Boating — 1971" according to the Let's Go Boating Committee.

Although she grew up in the nation's heartland, Donna has always been fascinated by boats and boating.

"When I was a little kid, out there in Iowa," said the blonde-haired, blue-eyed Donna, "there were two things I wanted to do more than anything else. I wanted to fly in an airplane, and I wanted to sail around the world. Well, as a stewardess, I fly all over the world, so that's taken care of; now in my spare time I can concentrate on the boating part."

Although flying takes up most of Donna's time, her plans definitely call for a long cruise sometime in the near future.

"Sometimes when we're caught in a holding pattern over a city like San Francisco, or New York," she says wistfully, "I look down at all the boats on the Sound, or the Bay, and then out into the distance where the shoreline fades away. I know the islands are out there, and places I've never been. I may have been there in an airplane, but it's just not the same as going in a boat. Someday soon. . ."

When she isn't stewardessing, Donna appears at Boat Shows as representative of the Let's Go Boating campaign. She has also appeared in magazine and television commercials.

"I enjoy the flying," she says, "but if it came to a point where I had to make a choice . . . I still know that all those islands are out there somewhere!"

The Phenomenon of Migration

by B. J. Rose
Assistant Supervisor of Game
South Dakota Department
of Game, Fish and Parks

For centuries, man has been intrigued by the seasonal arrivals and departures of birds. The Bible refers to this phenomenon and several migratory bird species; and Aristotle, the Greek philosopher, noted that some birds traveled to warmer regions for the winter months. However, he believed that many other species passed the winter in hibernation. Supposedly, these hibernating birds sought out hollow trees, caves and even the mud marshes in which to await spring.

Other early writings by "naturalists" contained accounts of swallow flocks congregating in the marsh vegetation. The weight of these birds supposedly bent the reeds until the birds were submerged and that's where the birds passed the winter. It was even recorded that fishermen would find fish and hibernating swallows in their nets.

Later, migration was finally accepted as fact, but out of it grew new fallacies. Early naturalists could understand how larger birds could fly across the oceans, but they could not visualize smaller species making the same trip unaided. They concluded, therefore, that the smaller birds hitched rides on the backs of their larger relatives.

Perhaps the strangest theory of all, published in 1703, presented the idea that birds flew to the moon, taking six weeks for the trip. But finding no food there, the birds went into hibernation.

In modern times, man has extended his range of travels to all points of the earth. We are now aware of the breeding areas, wintering grounds and migration routes of practically all the bird species of the world.

Most of the information pertaining to bird migration has been found through the use of bird banding. Today's banders

affix numbered aluminum leg markers to individuals of each species studied. Locations and dates of band recoveries give the researcher the desired information.

The arctic tern, a streamlined relative of the gull, holds the records for endurance and distances traveled. An arctic tern banded on the coast of Labrador was picked up 90 days later on the southeast coast of Africa, 9,000 miles from Labrador. Another tern was banded on Russia's arctic coast, but was found in Australia, a trip of at least 14,000 miles. Arctic terns nest far north of arctic circle and migrate to the edge of the Antarctic. Their extreme summer and winter homes are 11,000 miles apart, and due to the route followed, these birds probably fly at least 25,000 miles annually. The arctic tern must see more daylight each year than does any other animal species.

There are other examples of long distance migrants. The golden plover, a shore bird seen frequently in the spring, makes a southbound non-stop flight from Nova Scotia to South America. This flight of 2,400 miles over the ocean takes 48 hours. The tiny ruby-throated hummingbird crosses the Gulf of Mexico, a distance of 500 miles, in one non-stop flight.

When applied to birds, the term migration usually refers to a two-way journey or round trip. It has been estimated that over one-third of the world's bird species are migratory to some extent. Those species we may see the year around—permanent residents—are able to cope with the weather and obtain a food supply during the winter months. Some of the non-migratory species are house sparrow, pheasant, gray or Hungarian partridge, black-capped chickadee and

downy woodpecker. Some members of these species probably spend their lives within a few miles of the nest in which they hatched.

Several species migrate only short distances. The more northern members move south into the same areas occupied by non-migratory relatives. Blue jays, robins, meadowlarks and crows exhibit this type of migration.

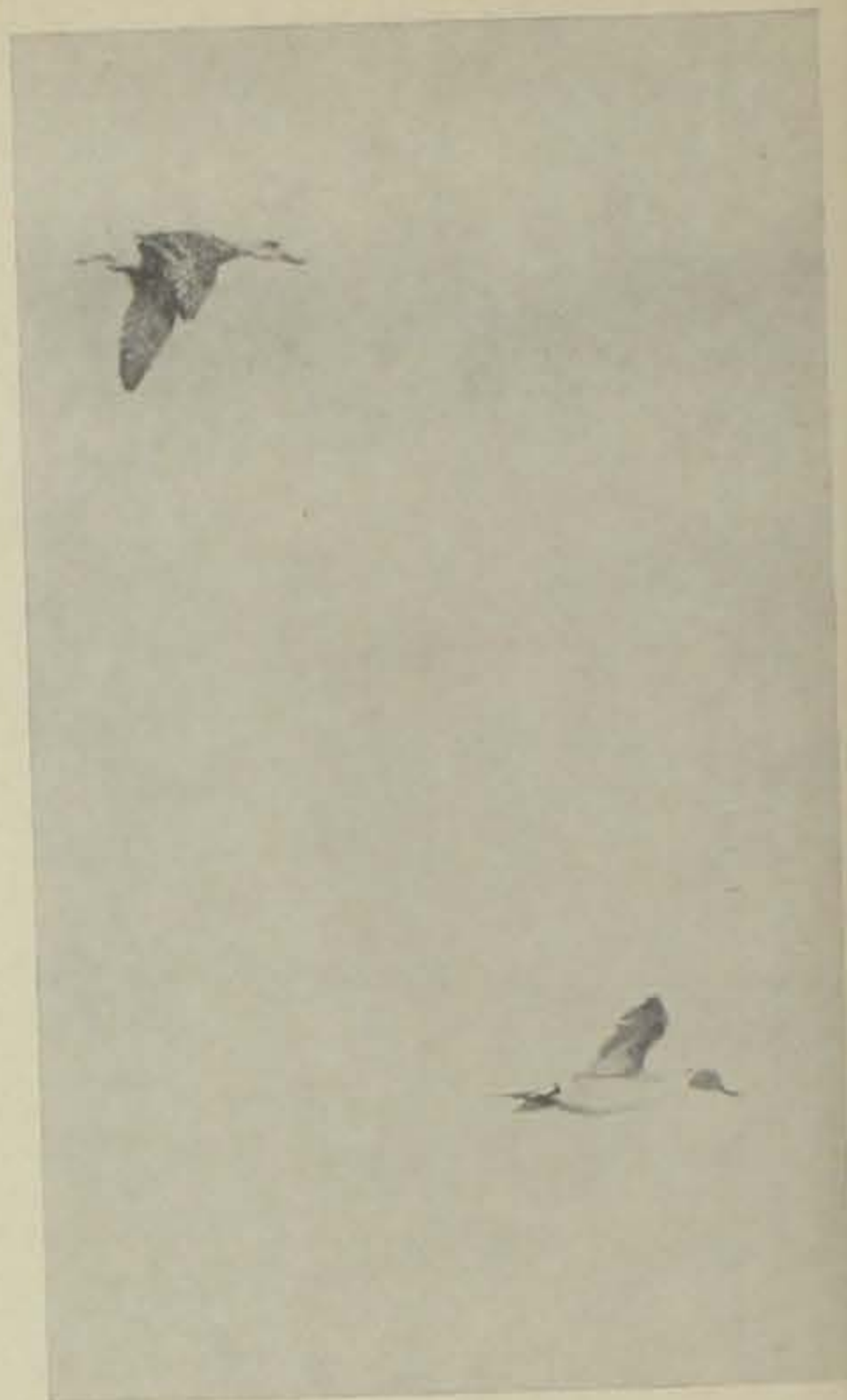
The flight speed of birds in migration varies with the species. Most small birds seldom exceed 30 miles per hour, but most shore birds and waterfowl average between 40 and 50 miles per hour. At these speeds, migrating birds may cover several hundred miles in a day or night.

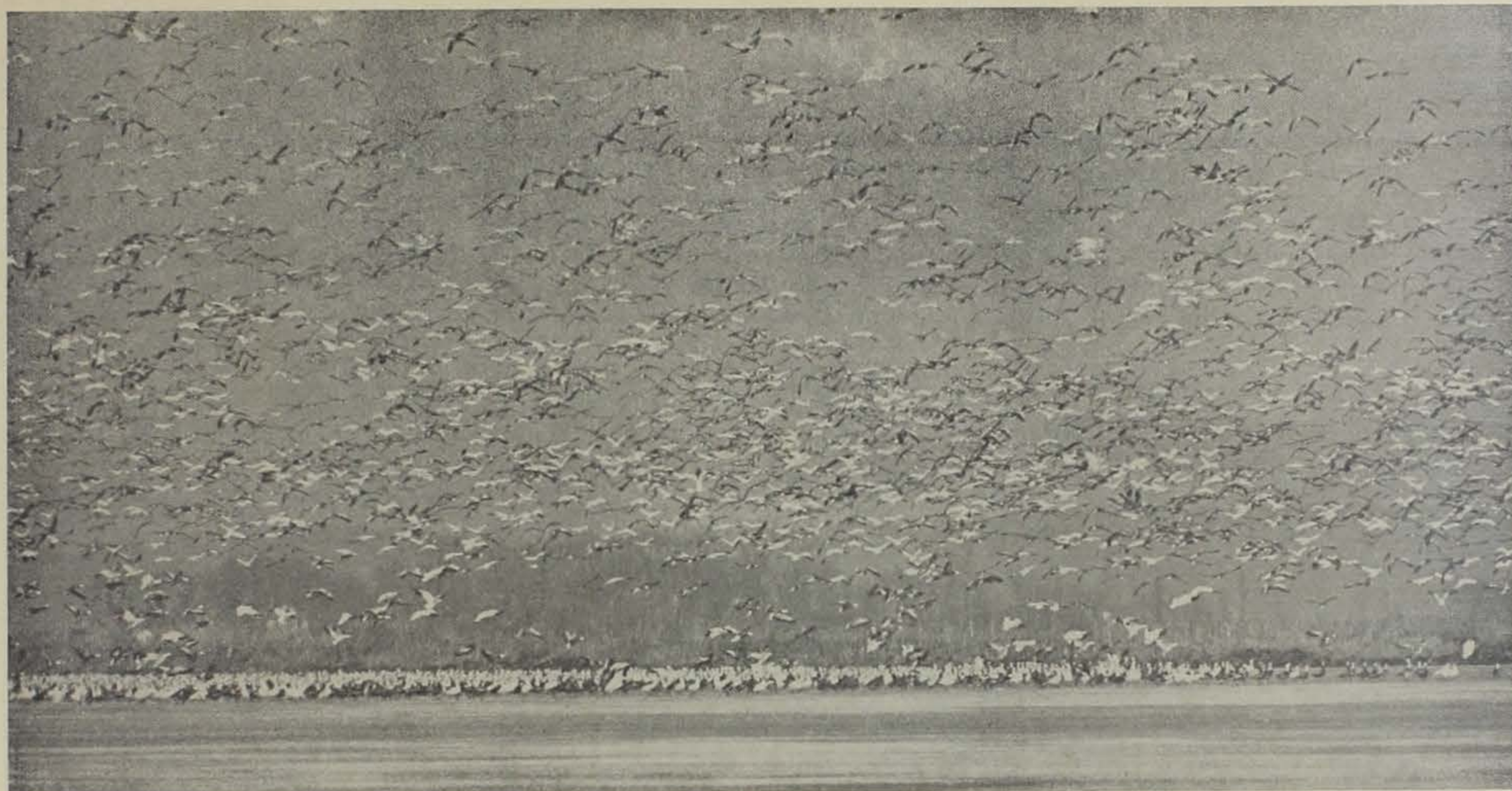
Some birds migrate either by day or by night and some do both. Ducks, geese, cranes, blackbirds, robins and waxwings are a few that travel by day, in flocks. Some of these species will also migrate during the night, however. Swallows travel by day in loose flocks, but will assemble in roosts for the night.

Those using the nocturnal migration period are shore birds, rails, flycatchers, orioles, many sparrow species, warblers, vireos and thrushes. This list includes the majority of small birds. Steady night-long migrations have been observed, but the major portion of the nocturnal flights occur between 8 p.m. and midnight and 4 a.m. to 6 a.m.

The majority of birds migrate at altitudes of less than 3,000 feet. Scientists in England, using radar, have shown nocturnal migration at altitudes of 5,000 feet, sometimes to 10,000 and occasionally to 16,000 feet. In September, 1959, small land birds arriving in Britain from Scandinavia were traveling at a height of 21,000 feet!

Everyone understands that migration occurs. The arrival of a robin or can-





ada goose in northern areas is a sign to many people that spring is near. But why do birds migrate? It is obvious that the migratory habit enables a species to enjoy the summers at the northern latitudes, but escape the rigors of the cold winter months. This enables some species to occupy two different areas during periods when each presents favorable conditions.

Migration is not simply a method of escaping cold, however. Experiments have shown that insect-feeding birds kept in outdoor pens are able to withstand sub-zero temperatures. Migration is more closely related to availability of food. The disappearance or hibernation of insects, the covering of weed seeds by snow, or the freezing of water where foods are obtained are some of the factors inducing migration. Another food-related factor is that the short winter daylight hours may be insufficient time for some species to obtain enough food to sustain them.

The influx of snowy owls in certain years is not due to a colder winter in the north, but from a shortage of lemmings or other prey. Bohemian waxwings, red crossbills and evening grosbeaks also appear in large numbers in some winters in the Midwest. The birds are able to withstand the northern winters, but failure of a fruit or seed crop causes the southward wanderings.

While many North American birds fly hundreds of miles to find suitable wintering grounds, others are able to move to a warmer climate by moving down the side of a mountain range—vertical migration. It has been estimated that a journey 4,000 feet down a mountain slope is a rough equivalent to a southward journey of 1,200 miles. In the Rocky Mountains, chickadees, rosy

finches, juncos and other species move to lower elevations to spend the winter.

Perhaps the most amazing aspect of migration is a bird's ability to navigate over unknown country yet find its way to the same wintering or nesting grounds. Birds apparently have an efficient homing instinct which enables them to return to the same nest box or nesting area after a trip of hundreds or thousands of miles. The term "homing" may be described as the return to a given area, but this does not necessarily mean a straight line course. Some species follow a very circuitous route to arrive in an area annually. The theory that the older birds lead the younger is perhaps acceptable to explain the travels of some species, but fails to explain the travels of those species in which the adults migrate ahead of the young.

Hundreds of experiments have been conducted to test the homing ability of birds. Many of the released birds were never seen again, but some achieved astonishing records. A European swift, transported 155 miles, returned in four hours. A layman albatross transported 3,200 miles from its home on Midway Island in the Pacific Ocean, returned within 10 days. A manx shearwater released at Boston's Logan International Airport flew 3,050 miles across the Atlantic, returning to its burrow on Skokholm Island off Wales, 12½ days later.

A German researcher, Gustav Kramer, showed that birds, traveling by day, are able to orient themselves by the position of the sun. Working with starlings, he found that caged birds, during the migration period, aligned themselves in the direction they would normally fly if unconfined—northeast in spring and southwest in the fall. The birds were able to orient themselves in a constant direction

as the sun arced the sky. He was able to trick the birds into facing another direction by "moving the sun" through a system of mirrors. On cloudy days, when the birds could not see the sun, they were unable to align themselves properly.

Another German, E. F. G. Sauer, proposed that nocturnal migrants obtain their direction from the constellations. He used a round cage with a clear plexiglass top that permitted a direct view of the night sky. The caged birds appeared to orient themselves by the stars, but became bewildered when clouds obscured the sky. Later, Sauer tested his theory by using an artificial night sky in a planetarium. The cage was placed so that only the dome of the planetarium was visible. The birds took their direction from the stars, but were easily tricked when the artificial sky was shifted.

Science still has much to learn about the migration phenomenon. Further studies, particularly, will be made to better understand and manage our migratory game species. But more importantly, it is hoped the day will never come that Man will not pause to watch and wonder as a wedge of migrating geese cleaves the sky on a spring morning. Nature's parade across the country costs nothing to watch. The only ticket needed is an appreciation of her unmatched pageantry.



Reprinted from South Dakota Digest

Migration Calendar

Name of Species	Average Date of Arrival	Average Date of Departure	Name of Species	of Arrival Average Date	of Departure Average Date
Gadwall	March 15	November 4	Golden-Crowned Kinglet	April 2	November 16
American Pintail	March 5	November 16	Ruby-Crowned Kinglet	April 10	October 8
Green-Winged Teal	March 12	November 8	Cedar Waxwing	March 7	October 12
Blue-Winged Teal	March 18	November 4	Migrant Shrike	March 28	October 26
Wood Duck	March 20	October 26	Red-Eyed Vireo	May 6	September 21
Redhead	March 18	October 25	Black and White Warbler	April 27	September 24
Canvas-Back	March 18	November 3	Tennessee Warbler	May 10	September 17
Lesser Scaup Duck	March 9	November 21	Nashville Warbler	May 6	October 2
Buffle-Head	March 25	November 6	Eastern Yellow Warbler	May 3	September 12
Ruddy Duck	April 5	October 28	Magnolia Warbler	May 12	September 14
American Merganser	March 20	November 12	Myrtle Warbler	April 20	September 10
Turkey Vulture	April 1	October 18	Ovenbird	May 5	September 25
Eastern Red-Tailed Hawk	March 12	November 16	Grinnell's Water Thrush	May 7	September 15
Red-Shouldered Hawk	March 14	October 16	Louisiana Water Thrush	April 23	September 1
Broadwinged Hawk	March 24	October 28	Northern Yellow-Throat	May 7	September 29
Swainson's Hawk	April 14	September 25	American Redstart	May 8	September 25
Rough-Legged Hawk	October 16 (from north)	March 25	Bobolink	May 1	September 28
Marsh Hawk	March 1	November 14	Eastern Meadowlark	March 10	October 20
Eastern Sparrow Hawk	March 14	October 12	Western Meadowlark	March 12	October 18
King Rail	April 17	September 25	Yellow-Headed Blackbird	April 14	October 9
Virginia Rail	April 24	October 15	Red-Wing Blackbird	March 12	November 17
American Coot	March 25	November 20	Orchard Oriole	May 10	August 2
Killdeer	March 10	November 4	Baltimore Oriole	May 1	September 7
American Woodcock	April 9	October 28	Rusty Blackbird	March 21	October 17
Wilson's Snipe	March 25	November 25	Bronzed Grackle	March 14	November 11
Upland Plover	April 16	August 31	Eastern Cowbird	April 10	August 24
Eastern Solitary Sandpiper	April 23	October 10	Scarlet Tanager	May 8	September 15
Greater Yellowlegs	April 10	September 25	Eastern Cardinal	Permanent resident	
Herring Gull	April 4	November 12	Rose-Breasted Grosbeak	May 1	September 21
Bonaparte's Gull	May 1	October 4	Indigo Bunting	May 6	September 27
Common Tern	April 28	September 20	Dickcissel	May 16	September 6
Mourning Dove	March 24	October 25	Eastern Purple Finch	March 24	October 16
Yellow-Billed Cuckoo	May 16	September 25	Pine Grosbeak	November 2	March 30
Black-Billed Cuckoo	May 12	September 22	Common Redpoll	October 22	April 12
Barn Owl	Partially migratory		Northern Pine Siskin	April 24	October 16
Eastern Screech Owl	Permanent resident		Eastern Goldfinch	Permanent resident	
Great Horned Owl	Permanent resident		Red Crossbill	Irregular winter visitant	
Northern Barred Owl	Permanent resident		White-Winged Crossbill	Irregular winter visitant	
Long-Eared Owl	Permanent resident		Red-Eyed Towhee	April 14	October 17
Short-Eared Owl	Permanent resident		Grasshopper Sparrow	April 28	September 27
Eastern Whip-poor-will	April 26	September 18	Eastern Vesper Sparrow	April 2	October 23
Eastern Nighthawk	May 3	September 25	Eastern Lark Sparrow	April 21	July 30
Chimney Swift	April 18	September 16	Slate-Colored Junco	Winter Visitant	
Ruby-Throated Hummingbird	May 7	October 1	Tree Sparrow	March 30	October 24
Eastern Belted Kingfisher	March 27	November 18	Eastern Chipping Sparrow	April 1	October 18
Northern Flicker	March 20	October 22	Clay-Colored Sparrow	April 18	October 12
Red-Bellied Woodpecker	Permanent resident		Field Sparrow	April 11	October 12
Red-Headed Woodpecker	May 1	November 20	Harris' Sparrow	May 9	October 7
Yellow-Bellied Sapsucker	April 3	October 15	White-Crowned Sparrow	May 6	October 9
Eastern Hairy Woodpecker	Permanent resident		White-Throated Sparrow	April 26	September 30
Northern Downy Woodpecker	Permanent resident		Eastern Fox Sparrow	April 6	October 10
Arkansas Kingbird	May 8	September 8	Song Sparrow	March 20	November 9
Northern Crested Flycatcher	May 8	September 15	Lapland Longspur	October 23	March 18
Eastern Phoebe	March 18	October 14	Eastern Snow Bunting	November 6	March 10
Eastern Wood Pewee	May 7	October 1			
Prairie Horned Lark	Partially migratory				
Tree Swallow	April 5	October 1			
Bank Swallow	April 20	September 21			
Rough-Winged Swallow	April 19	September 4			
Barn Swallow	April 20	September 24			
Cliff Swallow	April 24	September 18			
Purple Martin	April 8	September 3			
Northern Blue Jay	Permanent resident				
Black-Capped Chickadee	Permanent resident				
Tufted Titmouse	Permanent resident				
White-Breasted Nuthatch	Permanent resident				
Brown Creeper	Permanent resident				
Western House Wren	April 26	October 5			
Eastern Winter Wren	April 4	September 30			
Short-Billed Marsh Wren	May 6	September 25			
Catbird	May 1	October 3			
Brown Thrasher	April 16	October 1			
Eastern Robin	March 8	November 12			
Wood Thrush	May 3	September 22			
Eastern Hermit Thrush	April 10	October 10			
Olive-Backed Thrush	May 10	September 24			
Eastern Bluebird	March 8	October 30			
Blue-Gray Gnatcatcher	April 15	September 1			



Conservation Careers

by CHARLES H. EDELEN
Personnel Officer

"Conservation employment is extremely interesting, rewarding and satisfying; however, the hours are long, the work is hard and demanding, and pay and benefits are not outstanding." That statement has been made many times to hundreds of people. It is not intended to drive people away, but rather to indicate to prospective applicants what conservation work is and what it is not.

Many people applying for work have the misconception that a typical conservation employee works a forty-hour week, hunts, fishes and camps a great deal, has few if any problems to cope with and is highly paid. They also think that conservation employees live with "Mother Nature" and are seldom bothered by crowds. Their ideas are far from reality.

Most conservation employees work long hours in all types of weather, and often under unpleasant conditions. The majority of these people find little time to hunt, fish or camp because those activities are normally performed in the seasons when their work loads are heaviest. Pay levels and benefits for conservation jobs are gradually becoming competitive, but in past years quite low.

With the ever increasing interest in recreation, our parks, public fishing and hunting areas, forest and lakes are not as serene and peaceful as in former

years. Public and private recreation areas are getting more use than ever before.

It is difficult to explain where people get the misconception about conservation employment. Possibly it originates with conservation employees themselves. People working in conservation, exhibit dedication to their work, and give people the impression, by their courtesy and concern, that their job is easy, relaxed and pleasant. Each conservation employee is considered a professional in his area of work, and "pros" make their work look easy. Although the conditions are sometimes tough and adverse, most employees realize the importance of their occupation, and take pride in their work.

Because of limited budgets, low job turnover and keen competition, the conservation field is relatively difficult to get into. The following information may assist those interested in this line of work prepare for conservation employment.

Typically, conservation related jobs are available through city, county, state and federal governments. Lately, private companies are employing conservation and resource personnel. Employment in this field is surprisingly varied and quite diversified. Positions include foresters, fish and wildlife managers, biologists, law enforcement officers, park managers, skilled tradesmen, biology aides, administrators, area maintenance men, and many, many more.

Employment procedures and salaries vary with the employing agency. Some agencies require special training, advanced education, ability to pass a qualifying examination and other requirements. The Iowa Conservation Commission positions are covered by the Iowa Merit System and each position requires specific qualifications. The ability to pass an examination may be necessary to help select the best qualified applicants for the position and interviews and reference checks are also used in the final selection. Professional positions of foresters, fish and game managers, researchers, and recreation planners require formal education at the college or university level. Other positions, such as law enforcement officers, skilled tradesmen, and skilled technicians require some post-high school training or experience to qualify. Maintenance and ing a high school education, are normally more plentiful and easier to start in. In addition, most conservation employing agencies have numerous seasonal positions available during the summer months. An interested applicant can gain valuable experience and determine if conservation is his proper field by working in seasonal or summer conservation jobs. Late winter and early spring is the ideal time to apply for summer work. Summer employment with the Iowa Conservation Commission is handled on the local level; applications should be made to local park officers, fisheries managers or game managers.

The best way for an applicant to prepare himself for a conservation career is to first find out as much about his area of interest as possible. Many books and pamphlets are available, and visiting first hand with conservation employees is a good idea. After deciding what you want, prepare yourself for the position by obtaining the proper education or experience necessary to qualify, then make yourself presentable and apply. Most all conservation jobs are public relations oriented—a sloppy dressed or poor communicator limits his chances.

Employment information is available and plentiful. Libraries, state and federal agencies and some private companies can provide you with excellent career information on conservation. The Iowa Conservation Commission will send you a booklet entitled "Career Opportunities" and other information about our agency at your request. Write: Personnel Officer, Iowa Conservation Commission, 300 4th Street, Des Moines, Iowa 50319.



Fort Atkinson

BUGLES IN THE EVENING

By David Evans

Harsh military commands once echoed in the spring air at Fort Atkinson in northeast Iowa. And flying columns of tough horse soldiers pounded out on peace-keeping missions in the "Neutral Ground."

But Fort Atkinson has changed greatly since its days of glory in the 1840's when it was an important military post. Now, voices of children are heard as they play among the ruins. Visitors from all over the country stroll across the parade ground where infantry and cavalry once passed in review with flags flying.

Located on a bluff north of the town of Fort Atkinson, the post overlooks a tranquil valley in Winneshiek County.

The quiet charm and beauty of the area enhance the historical significance of the fort. A museum is located in the restored barracks and hospital. Attractive and well-lighted displays include implements, tools, weapons and clothing of the period, an Indian canoe, photographs of soldiers, old letters, maps and drawings of the fort. Ascending to the second floor, one can almost believe he has entered an 1840 barracks. A tableau recreates a barracks scene with two dragoon officers, two enlisted men, equipment, weapons, furniture and other fixtures.

A state preserve today, Fort Atkinson is one of the most unique forts in history . . . it was established primarily for the protection of the Indians.

Fort Atkinson was born out of necessity. It was built to protect the Indians from each other and the white man. To fully appreciate the saga at Fort Atkinson, one must turn back pages of history to 1825 when a peace treaty was signed by the Indians and government. This treaty established the famous "Neutral

Line" to mark the southern boundary of the Sioux lands and northern boundary of the Sac and Fox. Generally, the line ran from the mouth of the Upper Iowa River near New Albin to Hawarden on the Big Sioux then down to the Missouri River. Unfortunately it didn't work very well. The Indians ignored this rather vague boundary and continued fighting.

These brush fire battles were building into an all out war of massive retaliation so the government established the "Neutral Ground"—a strip 40 miles wide with the Neutral Line as its center. It was sort of an early day Demilitarized Zone. And like the present

DMZ, its value was sometimes questionable. When Chief Black Hawk's band sought refuge within the "buffer zone" they were clobbered by the Sioux. An impressive wooden topographic map two stories high shows the area involved.

There was more trouble ahead for a government that was trying to act as a peace-mediator. The Winnebago tribe had agreed to move from east of the Mississippi to the Neutral Ground. Because of the hostile Sac, Fox and Sioux, only small bands came. The Sioux in particular didn't like this incursion of what they considered their best hunting lands. Finally in 1840, Brigadier General Henry Atkinson, commander of



Jefferson
troops to
into the
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However, the fort served a vital purpose. Many times soldiers marched and rode out in a "show of force" to awe restless tribes. Vigilant patrols swept the countryside with some units staying in the field for 70 consecutive days. Expeditions from the fort provided knowledge of the area and officers completed some of the first maps of the Iowa territory.

It wasn't only the Indians who caused trouble or brought out the troopers. Actually much of the Army's time was spent running down traders who were illegally selling whisky to the Indians. There was also the problem of repelling land hungry white settlers.

Fort Atkinson was an impressive post. Situated on a commanding bluff, it was surrounded by a 12-foot stockade of logs with gun ports. It had considerable firepower—two six pound cannons and two mountain howitzers. The light howitzers were often taken on patrols and to council as a constant reminder of the Army's strike force.

The original layout of the fort included four barracks, (two of stone and two of logs) which enclosed a parade ground. The barracks were two stories with upper porches. In one there was a hospital and combined chapel and schoolroom. The stone buildings were used by commissioned officers and their families. The noncommissioned officers and their families and two companies of soldiers occupied the other three buildings. Cannon houses at the northeast and southeast corners guarded the approaches. A powder magazine, quartermaster storehouse, sutler's store and guard house were also built. There was a stone quarry nearby, a well and garden.

If the Pentagon is in trouble today because of cost overrun on military systems, it can take some solace from the fact that it also happened back in the 1800's. The cost of construction of Fort Atkinson was \$38,431 or about \$15,534 more than was appropriated. And this was quite a hunk of change back when a dollar went a lot further than it does today. There was a predictable outcry in certain circles about military spending on the frontier.

An Indian agency was established near the post, along with a school, grist and saw mill. The schoolmaster at the agency also conducted classes for the children of the officers.

A frontier outpost is more than stone walls and companies of faceless men. There were a number of interesting individuals associated with the Fort. For instance, Schuyler Hamilton, grandson of Alexander Hamilton, first secretary of the United States, served at Fort Atkinson. Many of the officers and men went on to death and glory in the Civil War. Alexander McGregor, founder of the town of McGregor, operated storage facilities for the government on the Mississippi River at the base of the road

became president of the Confederacy, to the fort. Jefferson Davis, who later built a saw mill on the Turkey River which supplied the fort. Pictures of these and other people connected with the area are displayed at the museum.

After the war with Mexico started, regular Army troops were removed from the fort. They were replaced with the first volunteer companies ever recruited in Iowa. Among these enthusiastic troops was James M. Morgan's Company of Mounted Volunteers. Furnishing their own horses they served 14 months and helped move the Winnebago tribe to Minnesota. That was quite an undertaking as they had to persuade each individual band to accompany the caravan. Between 2,500 and 3,000 Indians, 1,600 horses and 166 Army wagons with assorted loads comprised part of the expedition.

With the Winnebagos gone, the "Neutral Ground" was opened to settlement. As civilization advanced across Iowa, Fort Atkinson was no longer needed. It was abandoned as a military post and the last troops left February 24, 1849. Its supplies were sold and a caretaker appointed. Travelers tore down the stockade for firewood and the buildings were stripped of windows, doors, hinges and other items of value. In 1855 the buildings were sold for \$3,521 and the land put up for sale. Eventually all the structures were destroyed except the southeast cannon house, magazine and part of the stone barracks.

The state acquired the fort and 4.67 acres in 1921 to preserve the site because of its historical importance. The 1955 legislature appropriated \$40,000 for the Iowa Conservation Commission to restore the fort. Reconstruction started in 1958.

Part of the stockade was restored. The east wall still stands while the north was replaced. The west and south walls have been tapered showing where they once stood to preserve realism and help stabilize the remaining buildings. Two cannon houses, the magazine, well and stone barracks on the north and foundations outlining the old quarters are also preserved. A formal dedication marking the completion of the museum and reconstruction was held May 20, 1962.

Fort Atkinson stands today as a monument to the men who served in order to provide a safer life for an Indian tribe. The pageant that surrounded Fort Atkinson included quite a montage—Indians, soldiers, settlers, traders, supply trains, expeditions and councils.

Visit Fort Atkinson in the early evening. Stand under the large soft maple tree on the parade ground and listen and let your mind wander back in time. And if you listen carefully, you may hear the jingle of cavalry bridles, the rattle of sabres and the muted notes of a bugle call. And in the lengthening twilight you may even see a column of dragoons trotting slowly through the gate and into the shadows of history.

EVENING

Jefferson Barracks in St. Louis, ordered troops to get the rest of the Winnebagos into the Neutral Ground. After many parleys, the Winnebagos moved west, but only to the Turkey River. They still feared the other tribes and wanted to be near the trading center of Prairie du Chien. It soon became obvious that a fort had to be established to protect the Winnebagos when they entered the Neutral Ground. General Atkinson decided to build one on the Turkey River and on May 5, 1840, sent a unit to locate a site.

Capt. Isaac Lynde and 71 officers and enlisted men of the 5th Infantry, 15 wagons, tools and oxen arrived May 31, 1840, and started work on the fort. Carpenters, masons and other skilled workers were hired and quarters were built of logs, stone and sawed lumber. The fort was named for Gen. Atkinson.

By the spring of 1841 it was apparent that the "ground pounders" or infantry could not cope with the restless Winnebagos so a call went out for the swift moving horse soldiers. Company B, 1st Regiment of Dragoons arrived June 24, 1841, and took over major patrol duties. The infantry and local laborers continued work on the fort until 1842 when it was completed.

Life was not one big romantic bash in the boondocks for these GIs. Fort Atkinson was not exactly considered "good duty" because of the many hardships. Winters were cold, summers hot, supply difficult and diversions rare.

Fort Atkinson differs from the Hollywood and TV versions of the frontier outpost in that it was never attacked by Indians. Considering its strategic location and strength, it's a good thing they didn't mount an attack. There is no record of battles involving the troops,

TROUT FISHING IN IOWA

by
Gary L. Ackerman
District Fisheries Supervisor



The annual wild trout contribution to the creel is insignificant in Iowa. Northeastern Iowa streams simply do not have the proper habitat in sufficient **quality** and **quantity** that is required to sustain a natural population of recruiting trout. Consequently, the Iowa trout program is almost entirely dependent upon hatchery reared trout.

Iowa trout management is an artificial program usually referred to as "catchable" or "put & take" trout management. Over simplified, trout are raised to a catchable size and then stocked for harvest by trout fishermen.

Annually between 200,000 and 250,000 trout are reared by three trout hatcheries for stocking in Iowa streams. Trout eggs are secured from the U. S. Fish and Wildlife Service National Fish Hatchery located near Manchester, Iowa. These eggs are hatched and the fry are reared at Backbone Trout Hatchery near Strawberry Point, until they are suitable to transfer to the rearing hatcheries. Fingerling trout are reared to catchable size at Big Spings Trout Hatchery near Elkader and the Siewers Springs Trout Hatchery near Decorah, Iowa.

Rainbow and brown trout are reared to quality sizes. Although the size of a catchable trout is arbitrary, Iowa's goal is fish that average two per pound and range in size from 10- to 13-inches. Rainbows comprise about 70 percent of our annual production. They are effi-

cient converters, easy to raise, and grow to a suitable size in only 16 to 18 months. Hence, they are ready to be stocked in early Spring. Brown trout, however, are more difficult to raise, and grow somewhat slower. Hence, they are stocked at smaller sizes, and generally do not attain suitable size until later in the summer. The typical brown trout stocked average three per pound and range in size from 9- to 11-inches. Brown comprise about 40 percent of our annual production. In addition, brood trout are stocked to provide "trophy" trout for anglers whenever they are obtainable. These may range in size from 1 $\frac{1}{4}$ - to 12-pound and be from 14- to 28-inches in length.

Trout stocking usually begins in early April and extends through late October. Stocking rates and frequency of stocking are variable with each stream. Yet, every effort is made to stock all trout at least on a weekly basis whenever stream, weather and road conditions permit.

During extremely hot weather much of the trout water becomes unsuitable for trout. When water temperatures reach 70 degrees Fahrenheit, trout stocking is stopped and the stream is posted. Some of the streams that normally become too warm are as follows:

Allamakee Co.—Clear Creek, Little Paint Creek, Big Paint Creek.

Clayton Co.—Buck Creek, South Cedar Creek, Maquoketa River.

Dubuque Co.—Bankston Creek, Swiss Valley.

Fayette Co.—Bear Creek, Brush Creek, Glovers Creek, Otter Creek, Mink Creek.

Jackson Co.—Brush Creek, Dalton Lake, Little Mill Creek.

Mitchell Co.—Spring Creek, Turtle Creek, Wapsi River.

Winneshiek Co.—Bohemian Creek, West Canoe Creek.

Temperature factors greatly effect trout fishing, especially true in Iowa, where much of the trout water is marginal. Trout fishing is at its optimum in early Spring from April through mid-June. At this time stream conditions are often most favorable for trout survival hence usually about 60 percent of the trout are stocked in this period. Trout fishing slows somewhat in the summer. Then as the weather cools in fall, trout fishing tends to slowly improve until stocking is terminated in late October. Good brown trout fishing continues throughout the winter. Browns survive in greater quantity because they are more adaptable to the conditions available to them in Iowa streams. Also browns are more wary and difficult to catch so probably more survive the angler than rainbow.

Trout fishing is available in 44 streams located in northeastern Iowa. There exists an estimated 130 miles of trout water, of which, the major portion is in private ownership.

Trout management on private land is



possible only with the continual cooperation between landowners, sportsmen, and the Iowa Conservation Commission. In most cases the Iowa Conservation Commission has only a very flexible written agreement, sometimes only a verbal agreement, between the landowner and the Commission. These agreements are flexible in that they can be terminated by either party at will. We simply make the agreement that the State of Iowa will stock trout on private lands providing these lands be made available to the public for trout fishing only. Consequently because of this delicate balance between factions, stream accessibility constantly changes.

Trout fishermen must use private lands with intelligence, common sense and courtesy. After all, sportsmen are guests of private landowners. And if the public users refuse to respect the rights of private landowners no doubt fewer private lands will be made available to future trout fishermen.

Please use the land and out-of-doors as if it were an irreplaceable commodity or it may well be just that. And please be guided by the following suggestions:

1. Don't litter. The out-of-doors isn't a garbage dump so take it and put it where it belongs.
2. Don't destroy. Everything belongs to someone so use it and leave it exactly as you find it.
3. Close gates and use stiles. These are provided for a purpose so make use of them as they were intended.
4. These areas are for trout fishing

only. Leave the rifle home and if the wife and kids want a picnic, take them to the nearest park.

5. Park your vehicle with caution. Don't block private lanes or public roads. Keep vehicles off private lands. Be extremely cautious not to create a hazard along some of the narrow, crooked roads.

6. Leave the dog home. Most farmers maintain cattle. And one crazy dog can make one mighty unhappy landowner.

7. Respect your fellow man. Need this be explained? If it does, stay home.

SHAKIR SAFARI AWARD



Jens Bruun, Iowa conservation commission fish and game conservation officer receives a Shakir Safari International Award from Harry Harrison, state wildlife administrator. Each year the Shakir Safari International Organization gives an award to an outstanding individual from each state in the field of fish and game law enforcement.



Each kind of domestic meat or wild game has a distinct flavor. Yet people claim that all animals not domesticated produce meat that tastes "gamey." People can identify the taste of pork, beef, chicken, shrimp, pizza and all fine foods so readily available at the store. We have tastes much like our parents who started us on the path of likes and dislikes from the day we were born. The domestic meats are our standard. What would a steak taste like if we had never eaten one? Would we enjoy a pork roast after the first bite? Some of us might back away from turkey, lamb, veal or fish if we had to clean and prepare it for the first time. If we had never had access to these meats, we would probably say they tasted "gamey," or "wild."

Most food was probably tried simply because people were hungry with little thought given to the age of the steak or the year of the wine. But now, although most of us have a choice, our taste in foods are as set in our pattern of life as peaches and cream. We have developed a taste for the food we know and each food taste is filed in our taste catalogue. Beef tastes like beef, pork like pork and so on down the list. Ask someone to describe the taste of a steak. Odds are they will paint you a vivid picture of what a juicy, tender, sweet, salty piece of steak looks like and end up by saying it is delicious. Only people who have tried any given food know what it tastes like. Here is one for you to try on your taste buds. See if it fits in your taste catalogue of good foods. Add $\frac{1}{4}$ lbs. of ground suet, $\frac{1}{4}$ lbs. ground pork to $1\frac{1}{2}$ lbs. ground deer venison, mix them together and salt and pepper. Using an ice cream or melon scoop make meat balls. Place the meat balls in a loaf cake pan and place in the oven at 400° until they start to cook. Turn oven back to 300° and cook about 30 minutes. Turn the meat balls out on a paper towel and let them drain. To make the sauce, start by mixing in a large pan, 1 cup of tomato juice, $\frac{1}{4}$ cup catsup, $\frac{1}{2}$ cup water, $\frac{1}{4}$ cup of white vinegar, 2 tablespoons worcestershire sauce, $\frac{1}{8}$ teaspoon cayenne pepper, $\frac{1}{4}$ teaspoon chili powder, one teaspoon each of salt and dry mustard. Add 1 tablespoon paprika, $2\frac{1}{2}$ tablespoons brown sugar, a dash of minced onion and liquid smoke. Simmer the sauce until slightly thickened. Place the drained meat balls in the sauce and simmer stirring gently until the meat and sauce has cooked for about 30 minutes. Serve with hashed brown potatoes, tossed green salad, bread, butter and coffee.—Dick Ranney



Hepatica (Margo-Frankel Woods State Park)