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No. 2

me 23 February, 1964

IPS FOR TOP CROW SHOOTING

Denny Rehder

e avid shotgunner would like a challenging feathered target all round, but when the hunting seasons close, too many put their away. They are missing a chance at one of the finest forms of unning available—crow shooting.

iy crows? Find another year-round target that can offer the enge of crow shooting. The birds are fast, wary, elusive and hard t. They are numerous and easy to locate; they come in readily led correctly; and they offer excellent off-season sport.

The Blind

e first step is to find a good blind site on a flyway leading to or the roost. You don't shoot the roost for a good reason—the birds I scatter and break into smaller flocks. Roost-shooting was cervone of the factors in diminishing the size of some Iowa roosts over 10,000 birds down to 2,500 birds or less. You do pick a blind hat offers good concealment from the air. Birds have eyesight far for to man and lack of concealment to hide the most necessary on will easily spook the target.

range or build the blind so that you do not shoot through an arc er 180 degrees. Forget the birds coming from behind; they can lled back.

st hunters will need a few decoys to start the action and pull the s from their line of flight. A great horned owl decoy with a e of crow decoys is usually sufficient to start a melee. However, eperienced caller can stuff an old black sock with rags, throw it in the open, and call in more crows than most gunners could ever

Calling

ere are three basic calls needed for successful crow shoots. (Don't excited over the electronic outfits that sell for over \$100. Most ers will tell you that the electronic call only works once for any flock of crows.) The first is the distress call used to attract the by telling them one of their fellows is in a jam and really needs Don't confuse this with the call that tells the other birds to out of the area; commonly known as a snappy, sharp "caw! caw!

is "come-on" call is blown just enough to attract the birds to the area. If they are in sight, calling will be held to the minimum sary for authenticity and results. If the birds are not in sight, caller must work at least ten minutes before giving up on that ion. This first call is the one most used by crow hunters. It should acticed a great deal to build up the caller's confidence and skill.

E second call is the "come-back" call that turns the crows and s them back. A good "come-back" call will bring many birds and that have already been under fire. Most good predator calling ds can offer a good imitation of this call. This is a call telling main body of birds that one laggard has found something they come back to see. Although the first call will always account lost of your birds, the "come-back" can usually supply 10 per cent ur total kill for the day.

e last of the three calls takes advantage of birds that have been ed. This is the "mourning" call that says sympathetically, "Poor v, this just wasn't his day." Crows are very social, and the sugon that a few crows are back there mourning less fortunate ades may bring a number of birds back to get in on the ceremony.

Take Two Calls

od callers will always take more than one call with them on a
(Continued on page 14)



George Tovey Photo,

Iowa Conservationist

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CIRCULATION THIS ISSUE	40,000

COMMISSION MINUTES

Des Moines, January 9

FISH AND GAME

Two options were approved for the Big Marsh area in Butler County consisting of 37.5 acres of land at a total cost of \$3,000 and 16 acres including a set of buildings at a total cost of \$10,000.

The Commission gave approval for the plans and specifications for a new residence building at the Mt. Ayr Fish Hatchery in Ring- be used for picnicking. gold County.

The Chief of Fish and Game gave a report on the plans of the Corps of Engineers for river channel straightening of the Skunk River in Lee County.

LANDS AND WATERS

A construction permit was granted for Bowers to construct a boat house and launching track on Lake Okoboji in Arnolds Park.

A construction permit was granted for an underground telephone cable crossing of Brown's Lake in Woodbury County.

granted to the Twin Lakes Res-County.

City of Storm Lake to build a at Dallas, Texas. toboggan slide in the City Park and pass onto the lake.

Forest Nursery at Ames was ap- ucts as needed. proved.

at Wild Cat Den State Park at a cost of \$2,186 and for a well at western states when available. Union Grove State Park at a cost of \$3,503.50.

porting an invitation for the National Watershed Congress to hold its 1956 meeting at Sioux City.

Bend area with R. L. Grovenor.

A construction permit was granted at Sioux City for fill on the river front area to the Peaney to be an animal of the deep south a plasterer's trowel, that it serves hearing is acute and they are s Company of Minnesota subject to by many, it is found as far north as a prop when the beaver is sitive to ground vibrations. the approval of the Attorney Gen- as Vermont, New Hampshire and gnawing a tree or waddling about nose and front feet are well s eral.

The construction permit was approved for the Highway Commission for a driveway at Pine Lake State Park.

A report was given on the possible abandonment by a power company of power dams at Humboldt and Rutland on the Des Moines River.

Benton County received approval for the acquisition of 25 acres of land at a total cost of \$2,500 as an addition to their Hoefle Recreation Area along the south bank of the Cedar River. It will be developed for fishing, camping and picnicking.

Delaware County received approval for the acquisition of 30 acres of land at a total cost of \$375 as an addition to their 136acre Fountain Spring Creek Park Area to be used principally as a forest preserve.

Palo Alto County received ap- color. proval for the acquisition of 5 and camping.

the Highway 18 safety rest area to by Reece.

for a management agreement with Company of Des Moines. the Iowa State Conservation Commission, for the care and mainte- tion mean to you and your family? honorary chairman of the Citizel to Scherme nance of an 89-acre tract of land lying along the south bank of the able to citizens willing to work to conservation director of the Izal trak But Cedar River. Called the Palisades help meet growing outdoor recrea- Walton League of America, a league of America, Access area, it will be used as a tion needs in their communities chairman. Sherry Fisher of United air as fishing access. This is a renew- and states. able, 25-year agreement.

GENERAL

The Commission approved travel to the North American Wildlife Conference at Las Vegas, Nevada; the State Foresters Meeting at A construction permit was Milwaukee, Wisconsin; a sports show at Kansas City, Missouri; the toration Association to install Great Lakes Park Training Instilights in a state-owned area ad- tute at Angola, Indiana; the Asjacent to Twin Lakes in Calhoun sociation of Conservation Engineers at Lansing, Michigan; and Permission was granted to the the Missouri Basin Inter-Agency say that, in their extensive tree tails are true. They do smack I

which would cross the shore line granted for Jack McSweeney, Area Forester and one truck driv-Plans for new refrigeration in er to travel to Prairie du Chien, the tree storage cellar at the State Wisconsin, to deliver forest prod-

Bids were accepted for a well was granted for the fisheries sec- sary labor. tion to pick up trout in the mid-

goat; it is an antelope. Although when cut down by beavers will fall They can distinguish between Approval was given to negotiate it goes by the name of goat, it is in any direction. a land exchange in the Winnebago more closely related to the cham- There are many stories about not able to define objects. I

New York.

Books on the Outdoors

Fish and Fishing is the title of "Action for Outdoor Recreation for a 224-page book by one of Amer- America" - summarizes principal ica's foremost wildlife experts, findings and recommendations of Iowa's Maynard Reece.

thoroughly covered. Full-color il- mission (ORRRC). lustrations show common baits, both artificial and natural; plus a case histories what can be accom weekend text and illustration treatment that plished through citizen leadership in enjoying shows the amateur how to even of vigorous community, county and thy wait bait a hook properly. Valuable in- state outdoor recreation program and of formation on the use of different and suggests specific projects to the offers types of fishing equipment is given effective citizen action. how to bait cast, fly cast, etc.

catch is also covered in detail with 1001 Connecticut Ave., Washing a enjoya

book, however, is the wealth of copy free by writing to the con watry and illustration be it photographic or mittee. Reece's paintings. More than 200 of the 500 illustrations are in full- gress five years ago to survey ou park in s

acres of land at a total cost of is devoted to the identification, lo- The ORRRC Report emphasize a \$1,000 on the West Nishnabotna cation and "how-to-catch-'em" in- that while America's population River near the town of Macedonia formation on the fresh-water spe- will nearly double by the yellow miles to be used as fishing access with cies in North America. This also 2000, outdoor recreation demar then wind limited facilities for picnicking includes fish found in both salt and will triple: fresh water. All eighty species of The Citizens Committee for Il le Mississ Palo Alto County received ap- North American fresh-water fish ORRRC Report (CORC) was a the view proval for a development plan for are shown in full-color paintings tablished last year to work it was rive

Linn County received approval published by Meredith Publishing tions.

How much does outdoor recrea- served as chairman of ORRRC, with the

A practical guide is now avail- Committee. Joseph W. Penfol er and seem

last year's report of the Outdoo re you ti The "how" of catching fish is Recreation Resources Review Com andoors

The booklet also illustrates will uning of

It is published by the Citizm mer's has Cleaning and cooking the day's Committee for the ORRRC Report addition of recipes for plain or fancy eating. ton, D. C. 20036. Readers of the or the day The biggest attraction of the Conservationist may obtain by the oute

ORRRC was established by Corthag Iou door recreation needs of the Ame both the A large part of Fish and Fishing ican people over the next 40 year e or the

public understanding of the F cally on a The book retails at \$7.95, and is port's findings and recommend with one

Laurance S. Rockefeller, will be many Iowa Conservation Commission Walle The guide a 36-page booklet, a member of the CORC Committe let in the

Animal Superstitions

BEAVERS

There are a lot of "old wives ger by striking the water tales" about animals and to the soundingly. interested observer many would The mud for its lodge is conseem true, such as one about bea- ried in the beaver's front pat vers. It has been said that trees cut and no one has ever seen one car by the beavers always fall toward rying mud on its tail or using the water. The story goes on to as a trowel. The other tails abo felling operations, they have water with it resulting in a repel Travel authorization was also gained the reputation of cutting loud enough to warn other be trees so they always fall toward vers to dive under the water the water, thus saving beavers the safety. While gnawing a tree, the effort of hauling logs.

intelligent, industrious animals and support when the front paws ! An emergency travel authority this would save a lot of unneces- full of mud and it has to walk

Actually, most trees along the banks of streams or lakes have a Permission was granted for trav- tendency to lean toward the wa- moles are blind. This one is esset el to the Aquatic Weed Control So- ter and will fall toward the water tially true. Moles have eyes, I A resolution was adopted sup- ciety meeting in Chicago, Illinois. no matter what the beavers' de- in many species the skin sires. Trees growing some distance grown over the eyeballs so [1] The mountain goat is not a true from the water are straighter and they are almost completely of

> how beavers use their tails. It is near blindness does not seem generally thought a beaver will handicap the little animals in Although the opossum is thought carry mud on its tail, use it as darkness of their burrows as the on its hind legs, and that it warns plied with sensory hairs.

other beavers of impending da

squat on their hind legs support This seems logical. Beavers are with the tail. It is also used as a the hind legs.

MOLES

Then there's the old saying the

bright light and darkness but

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the fish

3 Park

WINTER PARK HOPPING

Carol Buckmann

you tired of winter and sitindoors, watching television viddling your thumbs while ing of a hike in the woods, ekend of camping, or just enjoying the outdoors?

y wait for summer; plan a end of winter park hopping. r offers an entirely different of scenery equal in beauty to er's lush greenery and, with I dition of a few warm clothes, s enjoyable.

the dubious who want to the outdoors but don't relish intry air, an auto trip is the A good place to start is east Iowa's Pikes Peak, a ark in scenery and activity oth the see-it-from-the-car or the rough, adventurous

Northeast

ew miles from McGregor, the op winds through the hills kes Peak, the highest point Mississippi River. Looking the view of the Mississippinsin river confluence is clear rth, one sees the bridge from hich the big river is famous. lease are in full swing. fishermen dot the mighty Even the winter indoorsman adequate hills and snow. s venturing out for a try and ds his dislike for chilly

s is trout fishing country and r trouting in the fast-movle treams can be rewarding to and igler familiar with the water. r activity in any park. The war rails at Pikes Peak, one lead-Pictured Rocks and one to "isconsin River mouth, do not as tiring when there's a nip air.

ew miles from Pikes Peak on way 13 is the Yellow River complete without a drive m gh the snow-covered hills. the car and take a walk Paint Creek as, in winter's chances are high for spotdeer or other wildlife foragstopping to drink.

weekend of winter camping enicking; parks are open all for both these activities.

Backbone

out 38 miles southwest of Peak on Highway 13 is one State Park, another out-



Pilot Knob State Park near Forest City offers complete winter activity with skiing, tobogganing, ice skating and the like. The view of the frozen countryside from the tower encompasses several square miles of northern lowa.

and seem inconspicuous from revealing rocky staircases, caverns the experienced and the nov- sades-Kepler and any park with PLE.

> lake is kept clear especially for is the time. skaters. There is a warming house and electricity for night skating.

Pilot Knob is the only park with g is another invigorating a ski run. Sledding, bob-sledding and tobogganing are also popular. Standing on snow-covered Tower Hill discloses a panoramic view for 35 miles encompassing numerous towns where thin willows of chimney smoke circle toward the sky.

Beeds Lake is another popular t. A trip to northeast Iowa winter playground where ice skating and ice fishing are leading sports. Fishing here is a year around sport with panfish and walleves especially hungry in the winter.

Ledges State Park, near Boone, is intriguing any time of the year. i't leave out the possibility If you've never hiked along its snowy trails or seen the park dressed in winter from a high vantage point, you've missed much of Ledges' beauty.

Take along . . .

ing park for winter beauty. guide and field glasses. An animal so-called intelligent animals.

ally on a sunny day. Look- The trout hatchery at the park is track guide and a tree identificaopen all year where continuous tion book for identifying trees Me lette crossing to Wisconsin activities including hatching and from their bark are helpful. Take the many islands far below rearing young fish for future re- a jug of hot coffee or chocolate and some sandwiches, they'll taste The road winds through the park good after or during a winter hike.

In a few weeks, flowers begin he ak. But chances are, at each and the "backbone," a high ridge peeking their heads above the he occupants have forgotten of rock closely resembling a huge ground while woodchucks and air as they land king-sized backbone with boulders and rocky their hibernating allies begin movand walleyes. Fishing is ex- humps forming its vertebrae. ing about after a long winter's It in the Mississippi and its Sledding and tobagganing are en- snooze. But flowers and animals aries at all seasons but win- joyed at this park as well as Wau- aren't the only signs of life; warm e fishing is a real delight to bonsie, Dolliver Memorial, Pali- weather to a park means PEO-

So, if you want to be alone with If over-all winter recreation is nature, see the hills dressed in the fish start hitting, dis- what you're seeking, Pilot Knob, white, follow the maps left by winnear Forest City, is one answer, ter's wild creatures, and enjoy This is the only park where the your favorite park in privacy, now

PORCUPINES

One of the oldest and most widespread notions is that porcupines, often misnamed "hedgehogs," can shoot their quills into you.

quills at all. During molting, in "dial." the spring and early summer, the and when the animal shakes himhairs and quills are so light they of the game was effective. have little momentum and usually An old quill may be attached so loosely to the tail that when a when he's angered, the quill may travel five feet but he has no control over its direction.

It is also said that porcupines are stupid. This is not true. Laboratory experiments show the animal to be very adaptable and it The bird population differs con- can learn the way through a maze siderably in winter so bring a bird that proves entirely too much for

Skeet, An **All-American Sport**

Joe Fargo

While most of our sports do have roots in foreign lands, the sport of skeet shooting is totally American.

William H. Foster developed what he called "clock shooting," about 1915, just for a pleasant pastime and as practice for hunting. Foster, C. E. Davies and his son, H. W. Davies, used to shoot hand trap in a field near Ballard Vale, Mass., to keep their shooting eye sharp.

To achieve variety in target angles, they moved to different positions and the circular "clock" evolved. The trap—the target throwing device—was placed at 12 o'clock and set to throw target over 6 o'clock. Two shots were taken at each "hour," making 24. The 25th shot (there are 25 shells in a box) was fired on an incoming They have no ability to shoot target from the center of the

The new game caught on and quills and hair become very loose few changes were made over the next 10 years. Foster had joined self vigorously, some may be dis- the National Sportsman Magazine lodged and fly to the sides. Both staff in Boston and his promotion

In 1923, shortly after the size do not travel more than three feet. of the circle was reduced from 25 yards to 20, a hen farm was built in the field adjoining the Ballard porcupine gives it a quick flip, say Vale shooting ground. This meant that the shooters could no longer fire in the direction of the henhouse.

> The problem was solved by placing another trap at 6 o'clock that threw targets over 12. Then, both angles could be fired from one side of the circle.

That farmer who raised chickens (Continued on page 15)

THE FUNDAMENTALS OF FLY FISHING-PART I

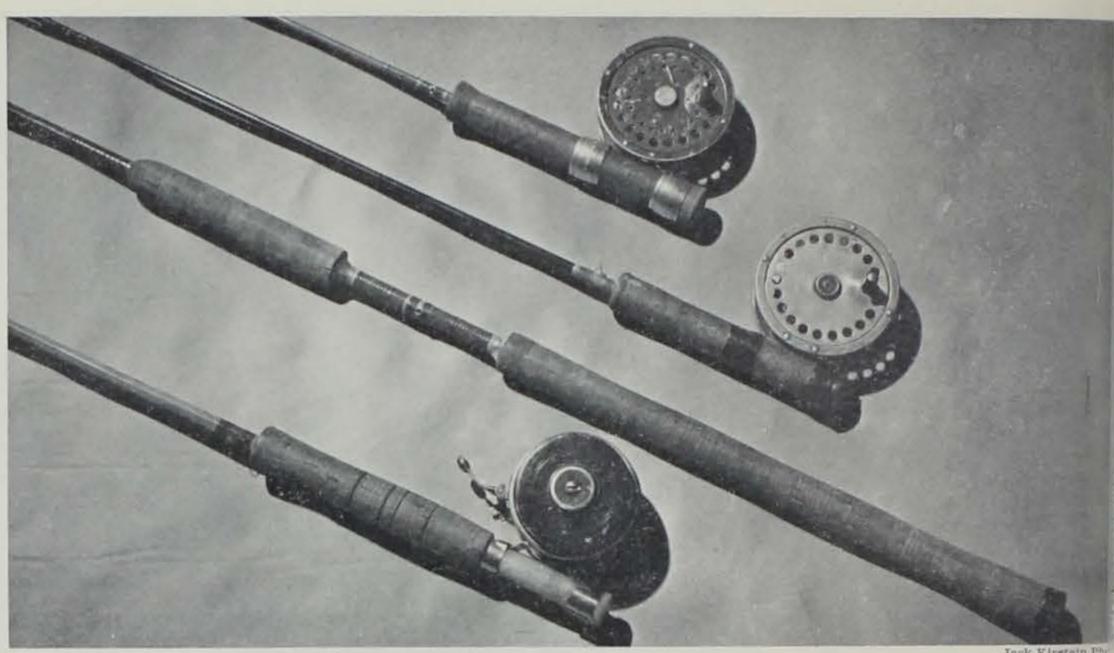
EDITOR'S NOTE: This is the first in a series of articles on fly fishing fundamentals. Later articles will cover lures and flies, fishing techniques, and tips on fly fishing for popular Iowa fish species.

Bill Tate Assistant Supt. Fisheries

Is fly fishing a vanishing art in Iowa? We certainly hope not, for fly fishing is the most effective method for taking fresh water fish. In addition to catching fish, mastery of the fly rod provides a satisfaction unknown to masters of other fishing methods. Most anyone can learn enough in a few hours practice with a capable instructor, or even by reading, to be able to catch fish. A wide variety of foods eaten by many species of fish can be simulated by lures used with the fly rod. The "long" rod can also be a "killer" when used with bait. With the rise in popularity of spinning in Iowa, fly rods have been collecting dust. This is unfortunate, since flies and poppers which are so attractive to both game and panfish cannot be fished effectively with spinning gear.

The Rod

bamboo was almost universally to the fisherman. used for fly rods. There were still a few steel, or beryllium copper rods in the early 40's. Soon after time has almost replaced it as rod are still making quality bamboo expensive bamboo rods made in this country. Fibre glass rods are you can afford!



These rods from the top are 5' 9" ultralight spinning rod with a single action fly reel attached with reel seat rings. This is a three piece rod. The butt section is bamboo which gives the rod backbone; the other two sections are fiber glass. A 4' 3" one-piece fit glass fly rod with single action fly reel attached with tape. A 9' two-piece fiber glass steelhead rod without reel seat. This rod used with the "belly winder" for long casts. The 7' two-piece bamboo fly rod with an automatic fly reel in a conventional fly r

no ideal all-round fly rod. The delivery of the forward cast. If sible. Adhesive or friction ta choice of a rod should be based one has to select one rod for all his can also be used for a light, ine Prior to World War II, split upon the types of fishing available fly fishing, a 71/2 to 8 foot medium pensive and effective "reel seal

Rod Length

the war, fibre glass started replac- is one consideration. Sporting ing bamboo, and at the present goods stores normally stock 7-9 foot fly rods. The distance cast material. A few manufacturers with any given rod and line com- and smallmouth streams, a 4 to 7 to 45 feet, tied to heavy monofil bination depends upon the speed foot fly rod is ideal. Short accurate ment spinning line. The weight rods. There are no longer any in- developed at the rod tip. Most casts are often essential for suc- the "torpedo head" is used to pi persons cannot swing an 81/2 or 9 cess on small streams. Short ac- pel the leader and fly. The ca foot rod fast enough to cast prop- curate casts are practically impos- is stopped before the line strik available in various qualities from erly! A 71/2 or 8 foot rod should sible with a 9 foot rod! A short the water to straighten the lead poor to excellent. Buy the best rod be the choice for most fishermen, rod can be used under the tree and present the fly. Rod action, or its relative stiffness, canopy found over many of the Fly rods are made in a variety should also be considered. A light productive spots along our small of lengths, weights and actions, or soft action rod bends or flexes streams. The overhead limbs and for various types of fishing. Other throughout most of its length, and bank side weeds are not caught on methods of fishing, such as spin- is best for casting wet flies. The the backcast. If you don't "build ning and bait casting, depend upon medium action rod bends for about your own", some of the "ultra the weight of the lure to pull the half its length and can be used light" spinning rods can be used line from the reel during the cast; with both wet and dry flies. With as a short fly rod. With a little in fly fishing, the weight of the dry flies, the angler must "wait experimenting, a fly line of the line pulls the fly through the air out" the slower action during the proper size and weight can be during the cast. The type of flies backcast. The dry fly rod has a found to bring out the action of or lures you intend to use deter- fast tip action, which helps keep your particular rod. The reel seat mines the type of line and rod the backcast high and aids in "rings" can be used to secure a

which will propel them. There is straightening the leader on the fly reel as near the butt as pe action rod is a wise choice. By For fishing large streams wi having two or more reels each flies, a heavy rod of the type bu with a different line, a variety of for steelhead or salmon fishing In the choice of a flyrod, length flies and small poppers can be cast. be used. Casts of well over 1

Special Purpose Rods

For fishing Iowa's small trout and "Torpedo head" fly lines of

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of fres

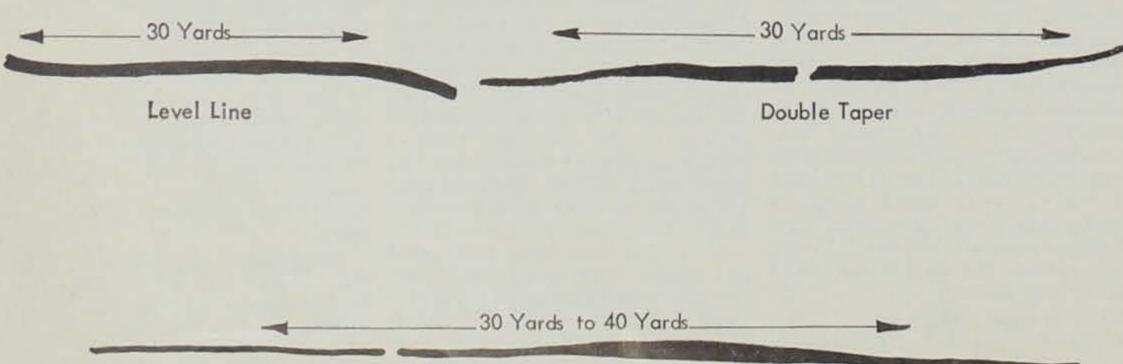
bother

feet can be made with a belt ty spinning reel or "Belly Windel

Fly Reels

The fly reel is not used for ca ing and is merely a rack for ho ing the line. The line is stripp from the reel prior to castil There are two types of fly re available, single action and au matic. The single action reel simple in construction and ligin weight. The reel spool tul only once for each turn of 1 handle. The single action reel satisfactory for all fly fishing. T automatic reel contains a clo spring mechanism that rewinds line on the reel spool when a lease lever is tripped. The au matic is heavier than the sin action reel and feels "out of plan on a light fly rod. This well helps balance a heavy rod, and particularly useful to keep exc line from engaging oar loc tackle boxes and other gear wl fishing from a boat.

Many good fish will be saveo the fly fisherman reels in sli line immediately after a fish hooked and plays the fish from (Continued on page 13)



Forward or Bug Taper

Three fly lines represented in diagrammatic fashion.

PLANT ROSETTES

David H. Thompson

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ch kind of plant seems to ly We s. In its first summer a bi- water cress. line B TO

they flower and set seed.

our region the winter ro-

sette habit of growth is scattered winter our landscape is most- through many families of floweraffess trees silhouetted against ing plants and over many types of sky, and the dead stalks of environment. Almost all of them lowers, weeds and tall grasses are viewed in different ways by th or without a blanket of different people, depending on . Some snows lie on the where they grow and on our pernd for only a few days. Others sonal likes and dislikes. By and w one after another and cover large, the majority of them thrive ground with white for weeks in poor soils and in waste places time. Soon the eye begins to where they furnish ground cover er for a glimpse of something and aid in breaking up and enn and growing. Then, in sun- riching the soil. With their hardy oots where the snow has melt- underground parts they survive or where youngsters have fires, floods, trampling and graz-

of fresh green leaves pressed The rosettes of dandelion, plantain and buckhorn are merely lawn nether it is a dandelion in the pests to most people. However, a pansy in a flower border, some of us enjoy a mess of dandeal leaf cluster-called a win- er's pastures, grain fields and hay rosette-is a ring of leaves fields a few of these winter roand a short central stem. The settes followed by their tall sums are narrow at the base, mer stalks are noxious weeds. Cattoward the tip, and spread tle, sheep and horses refuse to eat on the ground with little or no spiny thistles and teasel, the fuzzy ap. This arrangement gives mullein, or the ill-flavored wild exposure to sunlight and close carrot also called Queen Anne's act with the warmer soil be- lace. But, on roadsides, old fields 1. Such plants continue to and waste places their bold flowsometimes faster, sometimes ers add welcome color. In autumn, picked for winter bouquets.

a calendar of its own. There which are cultivated by the thou- but the only way to be sure a line time for growing tall, a time sands of acres. Smaller in size but matches a rod for the type fishing owering, and a time for scat- full of flavor, ripe wild strawber- you want to do is to try it! Most g seed. Among those herbace- ries abound in the forest preserves lines are now made of filament he I lants that live over from one each June. The tender leaf clus- nylon which is braided and imto the next-biennials and ters of winter cress or yellow pregnated and coated with syn- diameter level line, then a quick mials—the winter rosette is rocket make a salad that tastes thetic resins, plastics or oils. There taper to a small diameter line to ially suited for temperate cli- the same as its near relative, the are many types of line that fall which the leader is attached. The

example the hollyhock and leaves. On the other hand, the length of one diameter, then a flies. non plantain, the flower stalk blooming season is closed, often as the days grow shorter but after autumn snows have begun inderground parts and a ros- to fly, by the purple flower spikes of green basal leaves live on of a little mint called heal-all the following year when, which also arise from a ring of basal leaves.

Cook County Forest Preserve.





thistle in a vacant lot, such a lion greens in spring. In farm- The "belly winder" made to wear about the waist can be used for both spinning and fly casting. For fly casting, a torpedo head fly line is attached to the monofilament spinning line.

ART OF FISHING-

(Continued from page 12) broken leaders.

Fly Lines

Although fly lines have been improved in recent years, most of er, even under snow, through- when dead and brown, they are them are far from perfect. A new standard for line sizes has been Strawberries come from rosettes adopted recently which will help, Our wildflower season is ushered level line is the same diameter for poppers or other bulky lures or ng primrose grows a rosette in by the blooming of the hepatica, its entire length. It is the cheapest for long casts with flies. aves from a seed. This lives usually before the last snows of fly line and its price is its only Some lines are made to sink, the winter, shoots up a tall spring. Its delicate white, lavender virtue. It does not cast or "lay some lines are made to float. The the next summer, blooms, or pale blue flowers on their furry out" as well as the various types sinking lines are for fishing wet s seed, and then the whole stems push up from a winter ro- of tapered lines. The single taper flies and nymps; the floating lines dies. In many perennials, sette of three-lobed liver-colored line is constructed with most of its are for casting poppers and dry

taper of several feet to a small diameter, with several feet of reel. Many big fish are now bigger small-diameter level line at the end because wayward loops of line las- of which the leader is attached. soed various obstables resulting in Some of this small diameter line may have to be removed for best results. A tapered line will "lay out" and present the leader and fly better than a level line.

The double taper line has a taper at both ends and can be reversed after one end is worn.

The forward taper, torpedo head or bug taper line has a small diameter running or shooting line for most of its length, then a quick taper to a short section of a larger into a few general categories. The forward taper is used for casting

WOODCHUCKS

Widespread belief has it that woodchucks or ground hogs sleep soundly and without wakening the entire winter or up to Ground Hog Day, February 2. This is not the case for they are sensitive to disturbances such as noise and handling. During warm periods they may even rouse and eat stored food.

Woodchucks have often been referred to as "seven-sleepers." This phrase refers to Grimm's tale of the seven dwarfs who slept for years in a case, or it may imply that the woodchuck is one of the seven mammals to hibernate.

The myth of Ground Hog Day began in early Christian times. Old World animal lore was transferred to the New World with mythical attributes of European mammals passing into New World mammals.

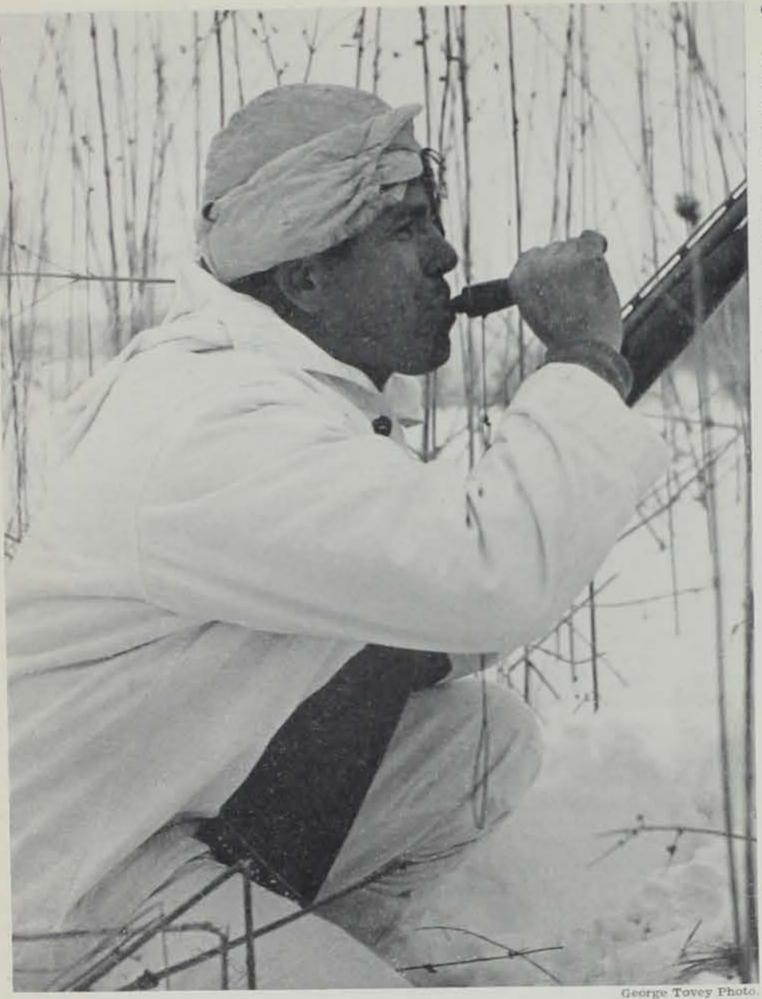
From early Christian times, Candlemas, the blessing of the western Europe as a festival. It ican mammal.

was in the eleventh century that the blessing of the candles became a ritualistic practice. In time, the weather of Candlemas Day, February 2, came to have particular significance.

The common hedgehog of Europe and the badger and bear filled the role of weather prophets. If February 2 was sunny and the animals observed their shadows, back to winter quarters they went for another period lasting six weeks and winter weather continued for that period. But if February 2 was cloudy and the animals did not see their shadows, they became active and an early spring could be counted upon.

When the myth was transplanted in America the woodchuck assumed the role of weather prophet in place of the European hedgehog. The bear and badger dropped out of the picture.

The black bear resembles man candles, has been celebrated in more than any other North Amer-



The good caller can wreak disaster on a crow roost. Much of the sport of crow hunting

PERFOMANCE OF FISHING LINE GOVERNED BY SIX FACTORS

One view as to why two mono- ing out trout when they are parfilament spinning lines which look ticularly wary early in the season. and color.

depends on competent calling during the hunt

fishing performance.

strength, for example, give an in- blood, clinch, and end loop knots. monofilament averages 11 mils in turns of the knot. diameter (one mil = .001 inch). at a lesser diameter.

provides greater deception in seek- ity of the rod is minimized.

alike can perform differently under The second factor, knot strength, actual use is given by a recent varies with line strength. The study of the Du Pont Company, stronger the line, the stronger it The findings indicate that varia- is when knotted. Differences are tions in behavior of all lines can primarily due to the type of knot be traced back to six basic factors: selected and the care used in tying. tensile strength, knot strength, The wind or overhand knot can cut impact strength, stretch, limpness, line strength in half. As much as 100 per cent of the unknotted line The study showed that small strength can be obtained, however, differences in any of these factors when tied using five or more turns could produce striking effects on around the standing part of the line. Du Pont recommends three Measurements of tensile knots, the improved versions of the

dication of the inherent strength The key to tying is in pulling of the line material. The higher the knot up slowly and tight. This the tensile strength the thinner the prevents the tail from pulling line can be made. For example, through and forestalls the build-up standard six-pound test nylon of excessive stress between the

Impact strength, the third fac-Later developments will permit tor, is a measure of ruggedness. the same strength to be equalled It can differ from tensile strength, which is based on a slow pull to Compactness permits sportsmen the breaking point. Impact results to carry extra lengths on their from sudden stress directly on the reels and smaller diameters also line, a condition which occurs from provide less resistance to wind and underwater obstructions or when fast-moving currents. In trolling taking the shock of a heavy strike. and bottom fishing, lighter sinkers In both cases the usual cushioning can be used. The hair-like quality effect of the reel brake or flexibil- to do without water as many ceded the pursuit of hunting

CROW SHOOTING-

(Continued from page 9)

hunt. There are a number of good reasons for this. First, the calle armed with a shrill call and a gravelly call can switch to the other call when the birds no longer respond to the first call. Also the shri call carries well when the air is heavy with moisture, while the lower pitch works well in lighter air.

Two calls are handy, too, when in the excitement of the shooting the call becomes plugged, is dropped or stepped on, or accidentall loaded into the shotgun-which has happened to more crow hunter than would care to admit it.

When calling, don't depend on wind passing through the call to dignerate the job alone. Call from the diaphragm, expelling air through the voc cords. You then are calling from the throat as well as the call itsel This adds an undertone that lends body and substance to the soun Biology 10 coming from the call.

The best way to learn calling is to listen to a lot of crows and to a mana to imitate them. The more time spent in the field practicing you will calling, the more success you can expect during your hunts,

Shooting Tips

A few things should be remembered as far as the actual shooting is concerned. You will help your hunt a great deal if you get the fir bird coming over your blind. This indicates to those following the the first bird saw something and dived at it. Another good practiis to set a limit of ONE SHOT PER BIRD! This can make a big di ference in your percentage of hits in one hundred shots. It also e courages the hunter to take good clean shots rather than pumpir one bird until it hits the ground. This may sound like conservation of ammunition, and it is! You needn't worry about taking along to many shells when you get into a good crow shoot. In fact when you start talking about getting a couple hundred birds on a hunt, economi will probably limit your shooting activity.

Most good crow hunters use No. 9 shot in skeet loads. Crows a easy to kill when they are hit, but as in all shotgun shooting t object is to place a good pattern of shot on the target. The larg shot sizes are sometimes used from 8's up to 6's. The favorite, how ever, remains the 9's.

So if February seems to be a transition from armchair adventu Light can to fishing fun, try crow shooting. Added to your calendar of sporting tra activities, crow hunting can offer a keen challenge for off-seas

The fourth factor, degree of stretch, affects the ability of the line to transmit the feel of a strike to the fisherman. Too much stretch can reduce the angler's ple visited the new Spirit La ability to set the hook promptly; Fishery after opening to the pl too little can leave the angler un- lic on April 4, 1963. Included Williams protected against the extra heavy several thousand school childr strike. Proper adjustment of this boy and girl Scout groups, chur control of this boy and girl Scout groups, chur control of this boy and girl Scout groups, chur control of this boy and girl Scout groups, chur control of this boy and girl Scout groups, chur control of this boy and girl Scout groups, chur control of this boy and girl Scout groups, chur control of this boy and girl Scout groups, chur control of this boy and girl Scout groups, chur control of this boy and girl Scout groups. property also minimizes the build- sponsored camps, civic clubs a up of compressive forces which women's organizations, plus can warp or crush the spool.

More than anything else, this visit during one day was on De property is determined by line di- cation Day, June 29, 1963. ameter. The thinner the line for Visitors from 42 of the 50 sta 1 any pound test, the more flexible it and the District of Columbia W will be. Even a small reduction represented in the guest regis in diameter reduces the tendency at the new building. Foreign v of monofilament to spring away tors included those from Austra from the reel when uncoiled, a Canada, the Canal Zone, East factor which was blamed for rica, Egypt, England, Fran snarls and tangles in early mono- Germany, Ireland, North Afr filaments. When tied to a limp Norway, Nova Scotia, Peru, i line, lures can be made to wiggle Vietnam. Comments such as "lo sooner on reeling in, a point which ly, beautiful, terrific, wonder can spell the difference between etc.," were found written bes taking a fish and losing it.

Opossums are the only pouched Golden eagles have wingspre mammals in North America. The of from six and one-half to se female has a fur-lined pouch on and one-half feet. her belly in which the young are carried.

other desert dwelling animals have. fishing.

41,000 Visitors to Spirit Lake Hatchery

An unofficial total of 41,286 pi hundreds who "just dropped i Limpness is the fifth factor. The largest number of people

the names of many tourists.

Trapping is one of the old occupations of man. It is o The peccary has never learned than agriculture and even l

Teacher Summe Ton

mary is eachers start pl 764. If ours of forget a evation (the dates fo

BloLOGY 1 BIOLOGY 1 Bolley 105, (cestry, is manag y schedu

> late hour OF SIX session diversit brook S C since outdoo d trips Pasoned

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the m is spear

eachers-Plan for Summer Credits

Tom Ballard

bruary isn't too early for teachers and student teacho start planning for summer l '64. If you need three or nours of on-campus credit, forget about Iowa Teachers rvation Camp.

e dates for these three week o es are:

DLOGY 105—June 7-June 27 DLOGY 104—June 28-July 18 DLOGY 105—July 19-August 8 ology 105, rocks, minerals, soil and management, water contion, will be offered twice; forestry, ecology, fish and fe management, Biology 104, ly scheduled once. You can three hours of credit for either e or six hours if you enroll or wo sessions.

3 diversity of the area near gbrook State Park, the home seasoned Iowans. "I didn't Iowa, Cedar Falls.

know we had so many interesting areas in Iowa!" is a typical reaction. Teachers discover biological and geological resources that can be found in their own school yard resources they can use in the classroom for almost any unit from music to social science to

"Learn by doing" is still the theme at ITCC. Many field trips, useful collections, a shop to build classroom projects, and most important of all, field experience in conservation education all give Iowa teachers the needed confidence to teach conservation themselves when they return to their schools.

Scholarships are available in most counties. You will be surprised to find out just how many organizations in your own city, town, or county have already given financial help to local teachers in past years.

For more details write to Mr. 'CC since 1950, offers camp- Bernard Clausen, Director, Iowa in outdoor Iowa Laboratory Teachers Conservation Camp, Sciield trips that will surprise ence Department, State College of



Teachers at the Iowa Teachers Conservation Camp at Springbrook State Park learn some of the Intricacies of modern fish management as well as a liberal education in the vast field of conservation.

ICING TURTLES

Tom Moen Fisheries Biologist

ere are as many ways to sea turtle as there are recipes turtle soup. The common per" can be trapped with mesh traps of various deis commonly taken in seinperations, and by professional for concentrations of hiberg turtles under snags and anks of the small streams. of the methods often overd is spearing through the ice.

Snow, frost and a "rough" freeze SKEETcan cancel your intended hunt as often as two years out of three.

ing shallow water out to a depth sport. of about four feet. Most of the turtles will congregate in one pionships, regional matches and 14 and 20. The beginner may break fairly localized area, usually as- the National Skeet Shoot, skeet is only 6 or 9 his first time out, but sociated with or adjoining the one of the shooting events at it doesn't take long to get the appears to bring them out of the ing Union competitions. s thick. A four to five foot colored feet and legs really gives Station 7 by the low house. h of one-half inch rod with a him away. You then plunge the point, an ice chisel, and a spear through the ice and the two traphouses and you have to length of rope complete the turtle, chisel a hole around the be fast to catch that clay sailing sary gear. This type of tur- spear to bring the turtle to the almost over your head. unting is available for only surface, let him snap those jaws ort period of time following shut on the rope and you're off to of skeet by refiring at Stations 1, rmation of the first ice cover. find another.

(Continued from page 11)

nearby probably never knew that have to break one, then the other. On small ponds or lakes one can he influenced the format of what walk the entire shoreline check- is today a major international of the flying targets but any score

deeper water. A day of sunshine Olympic and International Shoot- hang of it.

water along shore. So, with spear much like Foster's half circle. with an open bore is best. Events and chisel we start looking for a There is a high traphouse at the dark, muddy-gray spot on the left and a low house at the right. gauge guns but it's best to learn bottom. Usually your approach Shooting starts at Station 1, by with the 12 gauge. will bring about some movement the high house, shots are fired at 3 latter requires clear ice, that will let you know that the targets from each house singly. g enough to be safe, but not hazy gray shape is alive. Once The five-man squad continues than about three or four the turtle starts moving, the light- around the circle, taking turns, to

Station 8 is right between the

The squad finishes their "round" 2, 6 and 7 but this time—doubles.

Both targets, from high and low houses, are thrown at once. You

Championship shooters miss few over 20 out of 25 is considered Besides club events, state cham- good. Most shooters score between

Since skeet targets all are brokperienced turtle hunters who deeper water into the shallower The modern skeet field looks en at about 22 yards, a shotgun are fired with 410, 28, 20 and 12

> Skeet shooting was used to train aerial gunners during World War II but it is a civilian sport. Hunters shoot skeet today to sharpen their skill and thousands of shooters follow the sport for the competition itself. - Winchester News Service.

> The crappie is found from Vermont and New York westward through the Great Lakes region and Mississippi Valley to the Dakotas and south to Texas.

> Snakes probably are unable to detect air-borne vibrations. This means that a rattlesnake has never heard its own or another's rattle.

> Probably the earliest known metal spring traps were those employed for the catching of human beings in about 1750 or earlier.

> The smallness of the mouth of the Rocky Mountain whitefish requires the use of hooks of very small size.

The berry of the mountain ash is a favorite food item of the Rocky Mountain marten.



he comes!" Icing for turtles is strictly dependent on the each year. If the freeze is right, a few turtle hunters can ome a lot of turtle.



Snappers will clamp on anything; even another snapper's tail. Some hunters will come home with a train of five or more turtles.

An Oasis in Iowa for Waterfowl

Jack Kirstein

Early Iowa was a waterfowl paradise, with the thousands of small marshes, ponds, and lakes producing broods of migratory waterfowl in abundance. In contrast to this, present day Iowa affords less each year in the way of wetlands due to the tiling and draining of land for agriculture.

As one effort to induce local nesting of ducks and geese, the Conservation Commission has acquired and established three fine waterfowl refuges on the Missouri River. This system of refuges consists of three cut-off Missouri River ox-bow lakes and lies entirely within the boundaries of the state.

They are Snyder Bend, 4 miles southwest of Salix; Louisville Bend, 5 miles southwest of Onawa; and California Bend, 5 miles southwest of Modale.

California Bend, the first refuge was acquired in 1956 and comprises some 500 acres. Snyder Bend acquired in 1961 is of nearly the same size. Louisville Bend, just completed in 1963, is the largest, covering approximately 700 acres.

The refuges are located approximately 25 miles apart and were so picked to induce local traffic of waterfowl between the individual refuges.

Commission employees in the game section supervise these areas. They have planted forage crops on two of the areas with about 20 acres of wheat on Snyder Bend and 40 acres of wheat on California Bend.

It is impractical to plant forage crops on Louisville Bend because of the low-lying land.

All of the refuges are inviolate from the 15th of September until the end of the waterfowl season. Hunting of any kind is prohibited at all times, but public access is permitted during the portion of the year which is not included in the inviolate season. During these months, the areas provide fine camping, boating, fishing, and picnicking for the general public.

areas at any time.

The purpose of the refuge system is to provide good field shooting of migratory birds during the hunting season in areas adjacent to the refuges themselves.

Ducks and geese have taken to the areas naturally. The refuges were picked because of the normal resting habits of waterfowl both in the fall and on their annual spring trek north. In 1963 Snyder Bend attracted approximately 18,000 ducks and 2,500 geese in season. Louisville Bend held about 17,500 ducks and 9,000 geese.

In 1958, California Bend held the areas.



Snyder Bend.



Louisville Bend.

record with an estimated 45,000 ducks and 18,000 geese.

main and use the areas after the hunting season, sometimes staying until well into the month of December.

the hunting prospects on nearby gift. lands for these residents.

no public access by land, although ducing large numbers of off-spring this is now in the process of being at frequent intervals. For this reaacquired. To reach the areas, ac- son, rabbits were thought to poscess is by boat from the Missouri sess a creative power superior to River itself.

In the past years, those who have used the areas report good panfishing with crappies in abundance particularly in the spring.

increased sport and enjoyment for sidered a bad omen to hear a dog hunters and fishermen and will howl at the moon. The bad luck geese, and California Bend was add greatly to the population of is supposed to come usually in the host to about 9,000 ducks and 1,200 migratory waterfowl each year in form of death to some member of the Missouri Flyway and other your family or some friend. The

RABBITS

Tradition says if one carries a Many of the migratory birds re- rabbit's foot, he is sure to have good luck. This is heard in many parts of the south as well as the midwest. The animal's left hind foot is preferred as the lucky Because of the no hunting as- charm and the person who kills pect of the area, it is also a refuge the rabbit can gain greater benefor many deer and pheasants who fits from the foot than one who No trapping is permitted on the can be expected to add greatly to purchases it or receives it as a

> One reason for this superstition At the present time there is is that the rabbit is prolific pro- Changing Your Addres that of other animals and have become associated with success and prosperity.

DOGS

There are several superstitions These Iowa oases should provide about dogs. For instance, it's conowl hooting signified the same die in about a day.

thing and if you heard either dog baying at the moon or I owl hooting you would prepare the worst, or so that story go

There is also the old belief the a dog crossing a hunter's pe means bad luck unless the hun hooks his two little fingers togetl and pulls until the dog is out sight. And, if as the saying go you feed gunpowder to dogs. will make them fierce.

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Deprived of its food, a mole 1

season lakes. fisherm

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