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Camping in Iowa's Timber Wilderness



Jack Kirstein Photo.

At Yellow River you can camp in the heart of several thousand acres.

Denny Rehder

True wilderness camping in Iowa is as usual as palm trees swaying on Iowa farmstead. We just don't have any real wilderness areas where the camper can secrete himself among the trees near a sparkling trout stream.

However, the closest thing to an Iowa wilderness will be officially opened to campers this year. The Yellow River Forest of northeast Iowa is at last ready for the enjoyment of the camping clan.

Actually, the primary area of interest is the Paint Creek Unit of the forest. This 3,000 acre tract of native timber is situated in the heart of the spectacular bluffs and scenic beauty of the northeast. Two major trout streams, Big Paint and Little Paint Creeks, flow through the area. The demonstration sawmill of the Forestry Section of the Department of Conservation and the first fire tower in Iowa offer interesting sidelights on the natural attractions.

Those natural attractions are here in force. How would you like to

come out of your tent in the morning and catch some trout for breakfast or be lulled to sleep by the gentle gurgle of that same nearby trout stream? Would you enjoy a hike through acres of native timber with no one close by to disturb you? Have you ever seen a wild turkey keeping a lookout in a tall tree?

This is Yellow River to those who are familiar with its variety and beauty. Inspiring limestone bluffs, clear trout streams, varied wildlife, and lots of elbow room.

We took a test run last fall, camping along Little Paint Creek. The solitude at this time of year with most people home busy with other activities only pointed up the big lure for wilderness or primitive camping.

Sitting there with your head against a log, enjoying the gurgling of Little Paint running along the campsite, hearing the call of a great horned owl, and savoring the taste of that steak you just finished, puts your thoughts and disposition in a mellow frame.

(Continued on page 40)

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CIRCULATION THIS ISSUE 54,000

COMMISSION MINUTES

Des Moines, April 3, 1963

LANDS AND WATERS

A new Concession Contract was approved for Lake Keomah State Park.

Approval was given for a State Park Classification System.

A water ski area was established in Lake Manawa.

Fees for boat rentals in state parks were established at \$3 per day maximum at 75c per hour.

A request from the State University of Iowa to hold a camping workshop at Palisades-Kepler State Park was approved.

Approval was given for a boat harbor to be constructed at Humboldt on the Des Moines River.

A request to hold a Boy Scout Demonstration at Lake Manawa, May 24 to 26 was approved.

Approval was given for administrative order No. 332 which designates the placement of the registration emblem on boats.

COUNTY CONSERVATION PROJECTS

Linn County received approval for an addition to Pinicon Ridge Park consisting of ten acres of land at a cost of \$3,750.

Keokuk County received approval for a development plan for the Bond Hill Park area which will be used primarily as a picnic and outdoor class room for natural science study.

Marshall County received approval for a development plan as a multiple-use recreational area for Timmons Grove Park located on the Iowa River and consisting of 198 acres.

FISH AND GAME

The Conservation Commission presented plaques to three retiring Fish and Game employees. Conservation Officer George Kaufman of Lansing, Conservation Officer Charlie Adamson of Davenport and Superintendent Paul Leaverton of Indianola were honored on their retirement from employment by the Commission.

Employee policy No. 61 and No. 63 were discussed by a representative from the Attorney General's office.

Approval was given to an option for the purchase of 155 acres of land at a cost of \$7,472 located on the south Raccoon River in Dallas County, near Redfield to be used as a fishing access area.

The Chief of Fish and Game gave a brief report on the accidental spilling of approximately two million gallons of oil into the Mississippi River in Minnesota.

Approval was given for the transfer of funds for construction from the Sabula Hatchery project to the Lake McBride Fishery Station.

Approval was given for a departmental rule which would allow the training of dogs and holding of field trials by permit only and under Conservation Commission direction on game management areas.

GENERAL

The appointment of Commissioner Sherry Fisher to the Citizens Committee for the Outdoor Recreation Resources Review Commission Report was announced.

Authorization was given for fisheries personnel to travel to LaCrosse and Genoa, Wisconsin; Yankton, South Dakota; and New London, Minnesota to pick up fish for Iowa.

Authorization was given for District Fish Managers to enter border states in performance of their work.

Authorization was also given for creel census and survey work in boundary waters necessary to cross state boundaries.

Authorization was also given for biology work in Fairbault, Minnesota.

Authorization was given for Dave Vollink to participate in duck banding work in Canada, June through August.

Travel to the Midwest State Park Association at Grafton, Illinois May 19 through 21 was approved.

Approval was given for travel to the North Central States Boat- ing Administrators Meeting at Zion, Illinois.

A report was given on sales of Iowa Fish and Fishing book.

A tentative working agreement concerning the Small Lakes Cooperative program was discussed.

Authorization was given for participation in a wildlife seminar at Ames, in May.

The muskrat often builds bank burrows with underwater entrances. The home burrow may be a complicated structure, with several passages and a nest chamber.

For its size, there is no more savage animal in the world than the weasel which measures only about 10 inches in length. It can worm its way into the runs of rats and mice and hunts its prey by scent.

AT YOUR SERVICE

The office of the Game Warden did not originate in the United States. As early as the English kings claimed sovereign rights to the forested lands of England, a game keeper or protector was appointed to guard the king's game from the eager poacher. The commoner was not allowed the right to hunt on such lands, and all such lands were owned by some lord or another. Hunting and fishing was a royal prerogative.

Not too long after America became the land of the free, the need for a game protector or warden was recognized, but with one decided difference. This warden was appointed to protect the game for the people, to see that it was wisely used and fairly distributed. At first wardens were politically appointed. They were usually outdoor men but untrained for work as conservationists, and conservation, as well as protection, was a pre-eminent need.

As dedicated, farseeing men entered the wildlife field, conservation became a science and the game protector or warden became the conservation officer. As history writes itself in America the game warden is taking his place along with the Marshal Dillons and Wyatt Earls of earlier days.—From *Utah Fish and Game*.

Black or White

How many of you fishermen can tell the difference between a black crappie and a white crappie?

Now don't be silly, you say. That's like asking what color was Napoleon's white horse, who is buried in Grant's Tomb, and what time does the 7 o'clock train leave for Chicago.

If you think color is the determining factor in crappies, you're wrong. Indeed, the male white crappies are often darker than the black crappies. The way to differentiate is to count the number of spines on the dorsal fin, the big fin on the back. The white crappie has 12 spines; the black has seven or eight. What's more, white crappies usually live in muddy, turbid areas—one of the few fish that will live with carp. The blacks prefer deep, clean water.

Class dismissed for today's school of fish.

—From Russ Graham in the Cedar Rapids Gazette

An Age Record for Tagged Walleye

by

Kenneth D. Carlander

Iowa Cooperative Fisheries Research Unit

Dr. John R. Camp of Britt, Iowa, caught a 6.5-pound, 25.5-inch walleye bearing tag number B-2632 at Clear Lake on November 8, 1962. The fish was tagged and released into the lake on April 20, 1956. This is the longest time span from release to recovery we have on tagged walleye in Clear Lake. Since the walleye was 21 inches long when it was tagged, it was probably 6 or 7 years old at that time.

Usually biologists determine the age of fish from rings on the scales and the ages so determined usually tie in with other information on the age of fish at least during the first few years of life. In older fishes the rings may be close enough together that some rings are missed in the reading perhaps not separated in their growth. Out of the 3,079 walleyes from Clear Lake for which ages have been determined by scale examination, only 2 were judged as being 12 years old and only 3 others as over 10 years. Unfortunately no scales are available from this tagged fish, but its age suggests that the maximum ages of some of the other walleyes were underestimated, since several of them were larger.

In checking through the records

to be sure that this was the longest time span on record, we found another which was almost as long. A 14.0 inch walleye tagged A-4, 1953 was caught on June 4, 1959, after 6 years and 2 months compared to 6 years, 5½ months for Dr. Camp's fish. Since the fish was smaller, it was probably only 3 to 4 years old when tagged and thus 9 to 10 years old when caught. At least eight other walleyes were caught over five years after tagging.

During the 1956 spawning season 527 walleyes were tagged and released including the fish recaptured by Dr. Camp. Of these we have reports of 45 taken in 1956 including six caught in 1957 and released again, 37 in 1957 in 1958 including sixteen caught in nets or by electric shocker, released again, three in 1959, and one in 1960, and then one in 1962.

The fact that large walleyes remain in Clear Lake as long as these tag records indicate suggests that the species is not being overfished. These records suggest rather that the walleyes are not over-caught. There are a few fishermen, however, who catch walleyes quite regularly and there are times when the walleyes really strike they apparently did last fall. Fishermen that try many methods and fish regularly may learn techniques and the times which result in good success.



A toad may be ugly, but to the gardener he's worth \$20 a year.

SONGSTERS OF THE LILY PAD

Carol Buckmann

visit to a lake on a spring or summer evening finds the air filled with sounds. The water lilies and lily pads along the shore, and one hears a deep prolonged series of bass croakings and grunts. The king of the lily pads, the bullfrog, is exercising his vocal powers, drowning the cry of any competitor.

Emerging from hibernation in the spring, he stretches his limbs and utters his low bass bellowing. Frogs are easily induced to sing, but like solitude and won't sing any ordinary froggy serenade. He prefers to sing solo. One often hears a bass voice croaking on one side of a lake answered by another frog from the opposite shore. Seldom a bullfrog chorus. The bass voice to some seems to say "jug-o-rum, jug-o-rum". But the message he relates, the frog is the master of American pond in voice and size, sometimes reaching eight inches and ten pounds.

Voracious Eater

Feeding on logs or floating lily pads, bullfrogs inhabit shorelines, pools, ponds and choked creeks. From his perch, the bullfrog keeps a constant vigil for insects, water beetles, crayfish and other choice morsels. If none of these favorites is about, he occasionally takes a fish, water rat, tadpole or other frog.

He has the reputation for being the greatest fly killer in the universe. When he sees the prey, he shoots out his tongue, fastened to the front of the mouth and flips the prey back into his throat so it's almost impossible to see. Bullfrogs, as well as other frogs and toads, protect themselves from enemies by ejecting a poisonous secretion that is an unpleasant astringent in the mouth of a surprised eater. Its natural enemies,

water snakes and cottonmouth moccasins, are immune to the secretion.

During May or June, the spawning season, female bullfrogs lay around 20,000 eggs in a large gelatinous mass. In other frogs, the eggs grow into tadpoles or pollywogs, becoming frogs in two months. But bullfrogs remain in the tadpole state about two months, reaching seven inches in this stage.

Leopard Frog

Another songster of the lily pads is the leopard frog, the most common American frog species found everywhere except the Pacific coast. This frog frequently takes an overland vacation trip from its pond. If apprehended on this occasion, it objects by ejecting the offensive liquid and stages a determined fight for freedom.

In captivity, leopard frogs resign themselves and utter a musical purr when water is poured on them. They have a pleasant voice produced by vocal pouches which swell behind and under the ears.

Leopard frogs, like other frogs, change their skin frequently. The old suit begins to open on the back of the head. Then it's pushed back over the eyes, using the front feet. Then pulling the skin over the back, it is kicked off with the hind legs. Frogs accomplish this by stretching their legs back and forth until the skin is worked loose.

These frogs are green, striped with two bronze folds of skin. Between the folds, the body is spotted with brown or olive-green dots encircled by a fine yellow or white line.

Each different frog species has a unique croak and different story. Take the pickerel frog, for example. This fellow is used extensively as pickerel bait but its skin secretion makes it unfit for any dinner table except a pickerel's and even other frogs die when confined in its presence.

(Continued on page 38)

IOWA MAMMALS

Eldie Mustard
Game Biologist

LONG-TAILED WEASEL

Mustela frenata

Identification: Iowa's most common weasel, the long-tailed weasel, is a slim, short-legged animal about the size of a gray squirrel. In summer the upper parts are brownish and under parts are yellowish-white. Tip of tail is always black. Males are larger than females and range in length from 14-23 inches, including 4½-7-inch tail. Weights of males vary from 7-14 ounces.

Range: Throughout Iowa.

Habitat: Anywhere, but favors swamps, woodlands, prairies, and farming areas.

Reproduction: Breed in late summer with 4-9 young usually born in spring. Gestation period is variable, from 205-337 days, which indicates delayed implantation as is characteristic of many of the weasel family. Nest is made of fur, feathers, and bones of prey in a den which may be in a stump, a rabbit hole, or a pile of rocks.

Habits: Mainly nocturnal, but occasionally active in daytime. It has a keen sense of smell and can easily trail its prey, which it usually kills by a bite at the base of the skull. A persistent and fearless hunter, its food consists largely of mice, but will also take mammals up to rabbit size and includes moles, shrews, ground squirrels, pocket gophers, rabbits, a few birds, and rarely insects. As is true of the other weasels, it can emit a strong, offensive musk when unduly riled.

Status: Although more valuable than the smaller least and short-tailed weasels, the long-tailed weasel is not too important as a fur species in Iowa. While it may at times kill poultry, it is still a valuable asset to the farmer because of its mouse and rat killing ability.

SHORT-TAILED WEASEL

Mustela erminea

Identification: About the size of a large chipmunk, this weasel has a white coat in winter and brownish upper parts with whitish under parts in summer. The tip of the tail is black. Males are 8.5-14 inches long with a tail 2.2-4.2 inches. They weigh 2.5-5 oz. Females are about 20 per cent smaller. They can be distinguished from the larger long-tailed weasel because its tail length is always more than 44 per cent of length of head and body.

Range: Northern one-third of state.

Habitat: Brushy, rocky areas, field borders, and open woodlands.

Reproduction: Females are bred in summer and there is about a 10-month gestation period with most embryonic and fetal development occurring during the last month of pregnancy. The 6-13, usually 4-7, young are born in

spring in a cavity under a rock or log, or in a chipmunk den lined with fur, feathers, and other debris.

Habits: This persistent hunter may be seen at any time of the day or night. Food items include many types of mammals, especially mice; birds; cold-blooded vertebrates, insects; and earthworms. It is a fearless creature and may attack dogs or men if they interfere with its kill. This weasel may kill more than it can eat, but will store excess kills for later use. They do not suck blood.

Status: While there is a trapping season for weasels in Iowa, they are not of great importance as furbearers. Their greatest value is their rodent catching ability and in this area they are an asset to any farm. Occasionally weasels will raid chicken houses, but the good they do in destroying rodents outweighs this feature.

LEAST WEASEL

Mustela erminea

Identification: The smallest of our carnivores, the least weasel, is all white in winter, with perhaps a few black hairs in tail and has brown upper parts and whitish under parts in summer. Males are larger than females with lengths varying from 7¼-9 inches with tails 1½-1¾ inches. They weigh 1½-2½ ozs. and are about the size of a medium chipmunk.

Range: Throughout most of Iowa.

Habitat: Open woodlands, grassy areas, and brushy areas.

Reproduction: Least weasels appropriate a mouse nest and line it with their fur or make a nest entirely of mouse fur. This den site is usually below ground. Young may be born any month with litters ranging from 3-10, usually 5. There may be more than one litter a year.

Habits: An efficient mouser, various mice form the bulk of the least weasel's diet. Travels on surface or may even burrow in snow. Also travels in mouse runways, hunting its favorite food.

Status: Fur may be used for trim, but primary usefulness is the least weasel's mouse-catching ability.



IOWA CAMPING DIRECTORY — 1963

COUNTY PARKS

(Camping Free Except Where Marked.)

KEY
Facilities are listed: T-toilet, W-water,
C-camping, B-boating, F-fishing, and H-hunting

BENTON COUNTY	Permit from office at Hannen Park or any County Cons. Bd. member.	FLOYD COUNTY	Idle Wild	2 mi. N., ¾ mi. W. Floyd	T,W,C,F,H
Hannen Park	4 mi. S.W. Blairstown, by permit, \$1 per night	FRANKLIN COUNTY	Toft Park	½ mi. N.E. Dows	C,F
Fry-Benton City	5 mi. east Vinton, by permit \$1 per night	Mallory Park	4½ mi. S., 2 mi. W. Hampton	T,W,C,F	
Minne Estema	6 mi. north Vinton, by permit, no charge	Robinson Park	1 mi. N., 1 mi. E., ½ mi. N. Hampton	T,W,C,F	
Hoefle Area	2 mi. east Vinton, by permit, no charge	Latimer Recreation Area	in Latimer	C	
Wildcat Bluff	2 mi. south Urbana, by permit, no charge	Handorf Park	8 mi. E. Hampton	T,W,C	
		Galvin Park	S. edge Sheffield	W,C,F	
BLACK HAWK COUNTY		FREMONT COUNTY			
Black Hawk Park	1½ mi. north, 1 mi. west off T,W,C,B,F	Pinkey Glenn	Tabor	W,C	
	218, Cedar Falls	Manti Park	4 mi. S. W. Shenandoah	T,C,F	
Thunderwoman Park	East & north edge Finchford T,W,C,F	GREENE COUNTY			
Siggelkov	County rd. No. 281, between T,W,C,F	Highway Park	3 mi. W. Jefferson	T,W,C	
	Dunkerton and Fairbank	Henderson Park	1a. 17, 1 mi. S. Jefferson	T,W,C,B,F	
		Squirrel Hollow Park	6 mi. W. Rippey	T,W,C,B,F	
BREMER COUNTY		HAMILTON COUNTY	(\$1 per night, \$.50 elec., 3 day limit)		
Alcock Park	West edge Frederika T,W,C,B,F	Briggs Woods	3½ mi. S. Webster City	T,W,C	
Brandt Park	North edge Denver C	Bells Mill	4½ mi. N. E. Stratford	T,W,C	
Seven Bridges Park	3 mi. S., 3 mi. E. Readlyn T,W,C,F	HANCOCK COUNTY			
North Woods Park	1½ mi. N. Sumner T,W,C,F	Concord Park	½ mi. S. Garner, \$1 per night	T,C	
BUCHANAN COUNTY			night		
Fontana Park	Hwy. No. 150, 10 mi. N. In- T,W,B,F	Ellsworth Park	N. edge Crystal Lake, \$1 per	T,W,C,B,F	
	dependence		night		
Cutshall Area	6 mi. N. Jesup T,W,C,B,F	Ell-Township Park	2½ mi. S. Garner	W,C	
Buffalo Creek Area	Hwy. No. 20, 8 mi. E. Inde- T,C,F	Highway No. 111 Park	W. edge Crystal Lake	T,C	
	pendence	HARDIN COUNTY			
CARROLL COUNTY		Flowing Well Park	Hwy. No. 359, 5 mi. S. Alden	T,W,C,F	
Swan Lake	3 mi. S.E. Carroll; \$1 per T,W,C,F	Bigelow Park	5 mi. N.W. Alden	C,F	
	night—\$.25 elect.	Steamboat and			
CASS COUNTY		Tower Rock Park	4 mi. N.E. Eldora	T,W,C,B,F	
Cold Springs	1 mi. S. Lewis, \$1 per night T,W,C,F	Sylvan Hill Park	5 mi. N. Steamboat Rock	T,C,F,H	
CEDAR COUNTY		Mann Wilderness	6 mi. N. Steamboat Rock	C,F	
Massillon Area	N. edge Massillon T,W,C,B,F	Roadside Park	Hwy. No. 20 W. edge Iowa	T,C	
CERRO GORDO CO.			Falls		
Linn Grove Park	S. edge Rockwell T,W,C	HOWARD COUNTY	(no fee, permission needed from County B		
Wilkinson Pioneer Park	S. edge Rock Falls T,W,C		member, executive officer, or law enforcement		
CHEROKEE COUNTY			agency in county.)		
Martin Access	4 mi. E. Larrabee, ¾ mi. S. T,W,C,F	Florenceville Park	9 mi. N. Cresco	T,C	
Larson Lake	8 mi. E., 1½ mi. Cherokee T,W,C,F	Vernon Springs Park	2½ mi. S.W. Cresco	T,W,C,B,F	
Steineke Access	Hwy. No. 31, 3 mi. S.W. C,F	Lidtkke Park	1 mi. N. Lime Springs	T,C,B,F	
	Quimby	Louvar Area	½ mi. W., 1 mi. N. Saratoga	C,F	
Meriden Roadside Park	Hwys. No. 3 & 59, 1 mi. W. T,W,C	Davis Corners Park	9 mi. W. Cresco	T,C	
	Meriden	Steamboat Rock	2¼ mi. S., 1 mi. E. Cresco	C,F	
CHICKASAW COUNTY		Iowa River Access	1 mi. N. Lime Springs	C,F	
Chickasaw Park	2½ mi. W. Ionia T,W,C,F	Lylahs Marsh	3½ mi. N.W. Elma	T,C,B,F	
Haus Park	NE edge N. Washington T,W,C,F	Lake Hendricks	1 mi. N. Riceville	T,C,B,F	
Howard Woods	3 mi. S. Ionia, 5 mi. W., C,F,B	JACKSON COUNTY			
	½ mi. S.	Horseshoe Pond	S. edge Maquoketa	T,W,C	
Twin Ponds	2 mi. S., 3 mi. E. Ionia T,W,C,F	Miles Roadside Park At Miles		T,W,C	
CLAY COUNTY		Joinerville Park	Hwy. 64, 6 mi. W. Maquoketa	T,W,C,B	
Oneota Park	1½ mi. E. Spencer, Hwy. W,C,F	Bellevue Roadside Park	Hwy. 52 & 67, 4 m. N. Bellevue	T,W,C,H	
	No. 18				
Kindlespire Park	4 mi. E. Hwy. No. 71, 10 mi. T,C,B,F,H	JONES COUNTY			
	S. Spencer	Picture Rock	5 mi. S.E. Monticello—after	C,F	
CLAYTON COUNTY			July 1		
Joy Springs	2 mi. W., 1 mi. S. Strawberry T,W,C,F	LEE COUNTY			
	Point	Croton Civil War Park	3 mi. S.E. Farmington	C,F,B	
Frieden Park	8 mi. N.W. Elkader C,F	Wilson Lake	4 mi. E. Donnellson	C,F	
	(canoeing)	Chatfield Park	U. S. 218, 2 mi. N. Keokuk	C,F	
Turkey River Park	1 mi. S. Elkader T,W,C,F	Green Bay Access	8 mi. N. Ft. Madison near	C,F,B	
	(canoeing)		Wever		
Bloody Run	2 mi. W. Marquette C,F	LINN COUNTY	(group or family—period up to one week, \$2; pe		
Frenchtown	3 mi. N. Guttenberg W,C,F		needed from hdqs. at Central City)		
DUBUQUE COUNTY	(10-day limit)	Buffalo Creek Parkway	½ mi. W. Coggon—after	T,W,C,F	
Massey Park	9 mi. S.E. Dubuque, \$1 per T,W,C,B,F		June 1		
	day at concession stand	Pinicon Ridge	1 mi. N. W. Central City	C,F,H	
Mud Lake Park	10 mi. N. Dubuque T,W,C,B,F	Wakpicada Recreation	1 mi. S. Central City	C,F,H	
Bankston Park	6 mi. S.W. Holy Cross T,W,C	Area			
FAYETTE COUNTY		Jay G. Sigmond Park	Waubek	T,C,F	
Twin Bridges	3 mi. N. Maynard T,W,C,F	Lewis Access	3 mi. S. Center Point	C,B,F,H	
Gouldsburg Park	5 mi. N. Hawkeye T,C,F	Matsell Bridge Access	2½ mi. N. Viola	T,C,F,H	
Goeken Park	Hwy. No. 150, 4 mi. N. West T,W,C	Mt. Hope Access	1 mi. W. Stone City	T,W,C,F	
	Union	Wickiup Hill	2 mi. W. Toddville	C,F,H	
		Chain Lakes Access	1½ mi. SE Palo	T,W,C,F	

MASON COUNTY

County Park W. edge Knoxville, \$1 per night T,W,C,B,F

PIONEER COUNTY

Pioneer Park Hwy. No. 2 Between Clarinda and Shenandoah T,W,C,F

POLK COUNTY

Center Park 8 mi. W. 14 mi. N. Des Moines T,W,C,B,F

Richaqua Wildlife 10 mi. E., 15 mi. N. Des Moines C,H,F

Leslie River Access 10 mi. E., 5 mi. S. Des Moines C,H,F

THIA COUNTY

Ark Park 4 mi. E. Traer, 2 mi. E. off U. S. No. 63 T,W,C,F

WINNEBAGO COUNTY

Roadside Park 1 mi. N. Thompson C
Woden Gravel Pit 2½ mi. N., ½ mi. W., ½ mi. S. Woden C,F

Hogsback Park 2 mi. N., 1 mi. W., Lake Mills C
Moen Slough 1 mi. W., 1 mi. N., 1 mi. W., ½ mi. N. Lake Mills C,H

WRIGHT COUNTY

Oakdale Park 1½ mi. S., 1 mi. E. Renwick T,W,C,F
Sportsman Park 1 mi. S., 1½ mi. W. Eagle Grove T,W,C,F

Bingham Park 2 mi. S.W. Rowan T,W,C
Pikes Timber Park 3½ mi. S., 2½ mi. W. Belmont T,W,C,F

Lake Cornelia 4 mi. N., 2½ mi. E. Clarion T,W,C,B,F

STATE PARKS

Algonquin ½ mi. S. W. Algona T,W,C
Strawberry Point Iowa 410, 4 mi. S. W. T,W,C,F,B

Hampton 3 mi. N. W. Hampton T,W,C,B,F
Bellevue U. S. 52, S. of Bellevue T,W,C

Lake View T,W,C,B,F
Clear Lake Iowa 106, 2 mi. S. Clear Lake T,W,C,B,F

Lehigh Iowa 50 and 121, 3 mi. N. W. T,W,C,F
Lehigh

Defiance Iowa 9 and 245, 1 mi. S. W. Estherville T,W,C

Danville 4 mi. S. W. Danville T,W,C,B,F
Cedar Falls U. S. 20, adjoins Cedar Falls T,W,C,F

Creston 2½ mi. N. W. Creston T,W,C,B,F
West Okoboji W. side of West Okoboji T,W,C,B,F

Keosauqua Iowa 1, adjoins Keosauqua T,W,C,B,F
Indianola Iowa 349, 5½ mi. S. W. Indianola T,W,C,B,F

Brighton Iowa 78, 3 mi. W. Brighton T,W,C,B,F
Oskaloosa Iowa 371, 5 mi. E. Oskaloosa T,W,C,B,F

Solon Iowa 382, 2½ mi. W. Solon T,W,C,B,F
Bedford Iowa 49, 3 mi. N. E. Bedford T,W,C,B,F

Drakesville Iowa 273, 6 mi. W. Drakesville T,W,C,B,F
Boone Iowa 164, 3 mi. S. Boone T,W,C,F

Onawa Iowa 165, 2 mi. W. Onawa T,W,C,F
Maquoketa Iowa 130, 7 mi. N. W. Maquoketa T,W,C

Wild Cat Den

McIntosh Woods U. S. 18, ¾ mi. E. Ventura T,W,C,B,F
Nine Eagles 3½ mi. S. E. Davis City T,W,C,B,F

Oak Grove 4 mi. N. W. Hawarden T,W,C,F
Oakland Mills Iowa 133, 4 mi. S. W. T,W,C,F

Palisades-Kepler U. S. 30, 3½ mi. W. Mt. Vernon T,W,C,B,F
Pammel Iowa 92 and 162, T,W,C,F

Winterset 5 mi. S. W. Winterset

McGregor 4 mi. S. E. McGregor T,W,C
Forest City 4 mi. E., 1 mi. S. Forest City T,W,C

Eldora Iowa 118, ½ mi. N. E. Eldora T,W,C,B,F
Harlan 3½ mi. E., 3½ mi. S. Harlan T,W,C,B,F

Chariton U. S. 34, 1 mi. E. Chariton T,W,C,B,F
Kellogg 3 mi. N., 3 mi. E. Kellogg T,W,C,B,F

N. W. section Sioux City Iowa 25 and 384, 7 mi. N. T,W,C,B,F
Guthrie Center

Gladbrook N. W. section Sioux City T,W,C,F
Stanton 3 mi. S. W. Gladbrook T,W,C,B,F

West Des Moines 4 mi. E. Stanton T,W,C,B,F
Anamosa U. S. 151, adjoins Anamosa T,W,C,F

U. S. 275, Ia. 2 and 239, T,W,C
Sidney 7 mi. S. W. Sidney

Fairport Iowa 22 and 389, 3 mi. E. Fairport T,W,C

OTHER STATE-OWNED AREAS

(* denotes \$1 per night per camping unit)

Allamakee County

French Creek 8 mi. W. 2 mi. N. Lansing C,F,H
Yellow River Forest 10 mi. N. McGregor T,C,F,H

Benton County

Sweet Marsh 2 mi. N. E. Tripoli T,W,C,B,F,H

Butler County

Magill 6½ mi. S. McGregor C,B,F

Cass County

Spirit Lake 3 mi. S. W. Spirit Lake C,B,F,H
West Okoboji 1 mi. N. West Okoboji T,W,C,B,F

Orleans 4 mi. N. E. Orleans C,B,F,H
W. Orleans 2½ mi. N. W. Orleans T,W,C,B,F,H

Arnolds Park ¾ mi. S. Arnolds Park C,B,F,H

Orleans State Fish Hatchery T,W,C,B,F,H

Lake Park 2½ mi. S. W. Lake Park C,B,F,H
Superior 3 mi. N. Superior C,B,F,H

Clay County

Wallingford 6 mi. E. Wallingford W,C,B,F,H
Armstrong 6 mi. N. Armstrong T,C,B,F,H

Wallingford 6 mi. E. Wallingford W,C,B,F,H

Crawford County

Fayette 1½ mi. E. Fayette C,F,H
Fayette 6 mi. E. Fayette C,F,H

Dallas County

Charles City 10 mi. N. W. Charles City C,B,F,H

DeKalb County

Panora 4 mi. N. E. Panora T,W,C,B,F,H

Dubuque County

Eldora 6 mi. N. Eldora C,B,F,H

Emmet County

Mount Pleasant 4 mi. S. W. Mount Pleasant C,F,H

Franklin County

Cresco 1½ mi. S. Cresco C,F,H

Harrison County

Washta 1 mi. S. Washta C,F,H

Iowa County

Belle Plaine 5½ mi. S. E. Belle Plaine C,B,F,H

Jackson County

Preston 1½ mi. S. E. Preston C,F,H

Jefferson County

Lockridge 4 mi. N. Lockridge C,B,F,H

Linn County

Odessa *Lake Odessa T,W,B,C,F,H

Lucas County

Russell 4 mi. S. Russell C,B,F,H

Mills County

Henderson 2 mi. S. Henderson C,B,F,H

Monona County

Onawa 6 mi. S. W. Onawa C,B,F

Monroe County

Albia 4 mi. S. E. Albia C,B,F,H

Ringgold County

Mount Ayr 4 mi. W., 1 mi. Mount Ayr W,C,F,H

Sac County

Lake View S. W. edge Lake View T,C,F

Union County

Thayer 1½ mi. W. Thayer C,B,F,H

Webster County

Lehigh 2 mi. S. E. Lehigh C,B,F
Moorland 2 mi. N., 1 mi. E., Moorland C,F,H

Winnebago County

Lehigh 6 mi. N. Lehigh C,F

Winnebago County

Bluffton ½ mi. E. Bluffton C,B,F,H
Decorah 8 mi. N. E. Decorah C,F,H

Winneshiek County

Bluffton 3 mi. N. W. Bluffton C,F,H
Cresco 2 mi. S., 2 mi. E. Cresco C,F,H

Wright County

Decorah 4 mi. N. W. Decorah C,F,H
Highlandville 3 mi. E. Highlandville C,F,H

AMERICAN BATS

Roberts Mann

A bat is one of the strangest of all animals. Like the opossum, it is a survivor from prehistoric times and strikingly similar to ancestors found as fossils in rocks formed at least 50 million years ago. During the ages a bewildering variety of bats developed, and now there are nearly 2,000 species, but they all have certain unique characteristics.

Bats are the only mammals that have wings and can fly. Others, such as the flying squirrel, can glide through the air for short distances but bats have remarkable powers of sustained flight. Further, they have specialized ears and other equipment that enables them to navigate, in total darkness, far more accurately than man's aircraft and seacraft dependent upon electronic devices such as radar and sonar.

A bat's wing consists of a thin membrane which joins the long forearm, the greatly elongated fingers, and the hind leg, to the side of the body. The thumb ends in a hooked claw that is very useful. The elbow and the knee bend only backward. On many species, extending from each hind leg, there is also a triangular membrane attached to the tail.

Poor Eyesight

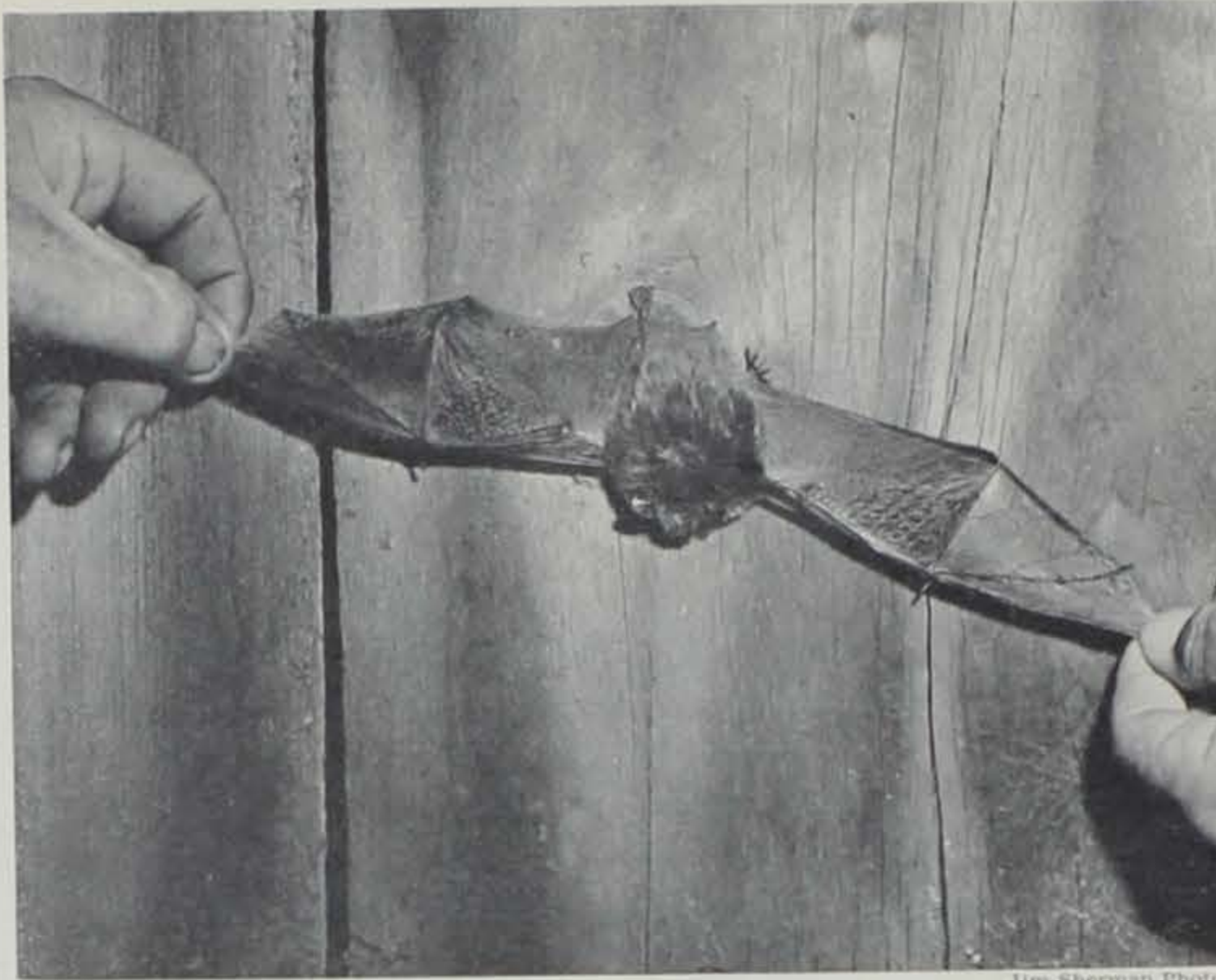
Bats are not blind but their eyesight is poor and it is the unique sound equipment that enables them to hunt for food at twilight or at night when flying insects are more plentiful. They emit ultrasonic beeps and evaluate the echoes detected by their marvelously adapted ears. Apparently a bat recognizes an echo that bounces back from an insect, changes direction and captures the prey—all within a split second.

In a laboratory, when deprived of hearing in only one ear, Little Brown Bats avoid large obstacles but are unable to catch small insects. When deafened in both ears they blunder about with no sense of direction. With normal hearing but both eyes taped shut, they can catch insects and fly through a maze of dangling threads without touching one of them.

Bats are distributed over most of the earth but most kinds inhabit the tropical or subtropical regions. However, 12 species occur in Illinois and one of them, the Silver-haired Bat, ranges from ocean to ocean and from Mexico to the northern limit of trees in Canada.

Many Kinds of Bats

There are two main groups. One comprises the large fruit-eating bats, such as the flying fox which may be 12 inches long and have a 5-foot wingspread, found only in tropical regions of the South Pacific. Most bats are in the other group and the great majority are insectivorous. However, in the American tropics, there are some kinds which also eat fruit; some



Look closely the next time you are in an old building or barn. You may get a chance to meet this little brown fellow.

that prey on rodents, frogs and smaller bats; a few that catch little fish; and the highly specialized vampire bats that live on blood they secure from other animals.

The bats in the United States, all insect eaters, are of two general types. In one they tend to be solitary; to roost in trees; and to migrate southward in autumn. In the other they tend to live in colonies; to be nonmigratory; to hibernate in caves or abandoned mines during winter; and to roost in buildings, caves, or hollow trees the rest of the year. Carlsbad Caverns in New Mexico are inhabited by hundreds of thousands of bats.

Those in Illinois mate during autumn but the young are not born until late spring or early summer. A female usually produces only one but in certain species she may have two or more. Suckled by the mother and carried with her until too heavy, they grow rapidly and some kinds are able to fly when only three weeks old.

Scientists in search of better electronic devices hope to discover how a bat distinguishes between echoes from an insect and those from an obstacle.

SONGSTERS—

(Continued from page 35)

The acrobat of the lily pond is the wood frog with the unique ability to turn in midair so, upon landing, it's facing its enemy. This most terrestrial and smallest of the frogs has excellent protective coloration and reaches 1 1/2 inches.

Differing from the terrestrial wood frog, green frogs are almost entirely aquatic. Their voices resemble a dog's bark, which they utter before submerging.

Tree Frogs

When a frog is mentioned, most people think of water and lily

pads. But tree frogs perch precariously on trees where they are barely distinguished from bark and foliage. The adhesive pads on their toes enable them to climb vertical surfaces easily.

Although it's hard to see this two-inch frog, it makes up for its small size with a tremulous voice which breaks the summer evening or announces approaching thunderstorms. Heard for half a mile the songs begin in mid afternoon, lasting through the night. The common tree frog call is especially resonant after a thunderstorm, voicing its contentment approximately 22 times a minute.

Tree frogs come out of hibernation in May and proceed to the nearest pond where the undersized male sits on a lily pad. With translucent vocal sacs blown out to resemble a balloon, he croaks and sings, refusing to be disturbed even by a glaring flashlight.

The tiniest member of the tree frog clan, the chorus frog, measures about 3/16 of an inch, making it the smallest vertebrate in the United States.

\$20 a Year Toads

Frogs aren't the only amphibious songsters heard on a still evening. The cry of the toad is tremulous, plaintive and somewhat haunting. It starts as a soft melodious sound, then another call, and another, starting and stopping abruptly until soon the countryside is alive with these croaking sounds.

On larger bodies of water, where there is a large concentration, this incessant croaking is a deafening roar, lasting until dawn.

Fat-bodied and warty, toads aren't particularly attractive in most human estimation. They've been subjected to misunderstandings, mistreatment and attacked for centuries despite the fact they are one of the farmer's most beneficial friends. Each toad does

Color Changes in Fish, Frogs and Lizards

David H. Thompson

Proverbially, the chameleon changes its color to suit even mood or situation. Hence the word is also an expression of contempt for a person who is fickle and changeable in character.

That little lizard which is peddled at circuses or sold in pet shops under the name of "chameleon" is not the true Chameleon of the Old World tropics but the Anole, a native of the warm humid regions of our southeastern states. It is able to change from green to brown, or reverse, with some intermediate colors. Ordinarily it is pale green when quiet, warm or after it has been in the dark. In bright light or at low temperatures it is brown. Contrary to popular belief a brown anole may be found on a green leaf or a green one on brown bark.

All of our common frogs exhibit differences in skin color. In a hour or two a little Tree Frog can change from a vivid grass green through a pattern of alternating blotches of gray and green, to pale ashy gray with dark markings. Just as in the lizards, the responses do not necessarily harmonize with the frog's surroundings.

Fish of many kinds, on the other hand, change the pigmentation of their skins to match the color of their background more closely. In the 1930's a series of experiments was carried out with the little Silver-mouth Minnow, a common fish of streams and ditches in central Illinois. Placed in a black-bottomed pan they became a dark slaty gray; in a white pan they faded to a pale straw color. When dipped from the black to the white pan, or vice versa, the skin color changed completely within minutes. No matter how often was repeated, they changed quickly as the first time. However, when they were allowed to swim from a black background, a white one, into a pan painted half white and half black, 85 percent of them chose the background.

(Continued on page 39)

around \$20 worth of work a year and consumes a minimum 10,000 garden pests each summer.

Hoptoads are the most common American toads. The eggs are eaten by water beetles, chickadees and other waterfowl. Snail find toads well worth their while. But if toads can outwit their enemies, they reach the ripe old age of 36.

Legends have credited it with producing warts, poisoning children and causing cows to go dry. Out of these misunderstandings, the only magic based on truth is his capability to destroy spiders, ants, potato bugs, beetles and fleas, consuming such enemies until his sides bulge.

COLOR CHANGES —

(Continued from page 38)

to which they were already ac-

the advantage to a fish of being able to match the color of its background was proved by experiments with the little Mosquitofish or Gambusia. For example, when a fish from a white tank were placed in an equal number in a black tank, a penguin quickly devoured three times as many of the former as of the camouflaged dark

the champion of all imitators is the Flounder, a fish which lies on the bottom in shallow coastal waters. Not only does it change its skin color through the various shades of gray but it accurately duplicates the pattern of sand, gravel, stone and shell bottoms. Checkerboard and polka dot patterns are not imitated so exactly. Strangest of all, black, white, blue, green, yellow, orange, pink and shades of brown—not red—are excellently imitated. However, some of these changes take a long time.

The color changes in all of these animals are, for the most part, the result of changes in certain star-shaped pigment-bearing cells in the skin called chromatophores. Different ones contain granules of black, yellow, orange or red pigment. In a dark-colored animal, for example, the chromatophores containing black pigment have the granules scattered throughout the cell. When the skin fades these granules become concentrated into a microscopic dot, leaving the remainder of the cell colorless. This exposes the chromatophores with other colors. Still deeper in the skin are glistering silvery cells that reflect light like a mirror. The control of color changes involves the nerves of the eye, nervous system, hormones in the blood, and so on. The story becomes very complicated.

Another Record Kill for Iowa Deer

Iowa deer hunters observed the open deer season by harvesting a record number of deer. A deer kill of 5,703 deer was reported, with gun permittees bagging 4,281; bow permittees taking 1,422 and non-permittees (landowners, tenants, etc.) claiming 1,000.

Licensed gun hunters had a success ratio of 43.5 per cent which was only slightly below the 10-year average success of 45.7 per cent. Ten thousand permits were issued for the season.

Bow hunters typically have a high success ratio which is above the national average for this type of deer hunting. Success in 1962 was no exception, with the bow hunters reporting a hunter success ratio of 60 per cent during the 51-day season. A total of 2,404 bow per-

mits were issued in 1962; comparison of this with the 10 who bow hunted in 1953 indicates the great growth of this sport in Iowa.

Non-permit hunters (landowners, tenants, etc.) form an important segment of our deer hunters. This group, estimated to number 2,000-2,500 in 1962, claimed 18 per cent of the total hunter deer kill.

Iowa's licensed deer hunters, gun and bow, spent 284,674 hours pursuing whitetails last year. This is the equivalent of 35,584 8-hour days which gives some indication of the recreation derived from Iowa's deer herd. We've had ten open deer seasons, harvested a total of 36,503 deer, and all signs point to a healthy, vigorous deer herd which should, under proper management and no erratic land use changes, provide Iowans with countless hours of diversion and outdoor recreation in future years.

Astronauts, Motorcycles and Bicycles - A Big Camping Year



Last summer saw Iowans on the move, heading for favorite recreation areas all over the state.

Denny Rehder

Seven million park visitors and nearly a quarter-million campers packed popular State Park areas during the 1962 season. It was another big year on the state's forty campgrounds with campers spending over 311,000 camping days in Iowa.

Eight State Parks had over ten thousand campers with Backbone leading the list. The other parks in order were Clear Lake, Beeds Lake, Ledges, Black Hawk Lake, Springbrook, Palisades-Kepler, and Lake Ahquabi.

A quick glance at the records of three areas shows visitors from every state in the Union but Hawaii. Foreign campers represented Canada, Denmark, England,

France, Germany, Malaya, New Zealand, and Norway.

Motorcycles and Bicycles

Two boys from Massachusetts camped at Clear Lake one night. They were riding bicycles to the World's Fair in Seattle. They averaged about ninety miles a day and camped out every night. Needless to say, they were a big attraction at the camping area.

A young man from Illinois caused quite a stir with his unusual camping rig. He pulled a small two-wheel trailer complete with kitchen and sleeping quarters behind his motorcycle. According to the Park Officer, he had some trouble getting started in the morning because so many campers crowded around to see his rig and ask questions.

Palisades opened the camping season in early April and the last campers registered in mid-November. A United Nations attaché from Denmark took some vacation time, bought a car, and started touring the United States. He pulled into Palisades in mid-summer.

Astronaut Visits Iowa

One of the most distinguished guests of the entire camping season was Colonel John Glenn and his family. He pulled into Palisades and upon being recognized by the Park Officer, requested they keep quiet about his presence. The Officer complied and after a friendly visit and picture-taking session the next morning, Colonel Glenn and his family continued their journey. As he wished, his presence went unannounced—the newspapers didn't know he was in Iowa until a few days later.

From Clear Lake came this report of people on the move. "Each summer for the past 8-10 years a group of boys and their leaders

travel from Connecticut to a ranch for boys in Colorado. This past summer there were about 75 boys including their own cook, nurse, and counsellors. All their belongings are carried in car-top carriers and trailers. One trailer is the chuck-wagon—stove, refrigerator, and all kitchen equipment. The group stops here about 8 p.m. They stay overnight, swim the next morning, and take a rest before leaving about noon. They travel according to a pre-arranged itinerary. Mail for the boys is picked up at various points across the country. Each boy is responsible for his own gear, and when they leave the camping area, you can't tell anyone has camped on the spot."

The Younger Set

Some families evidently believe in starting their children early toward a lasting enjoyment of the outdoors. A seven-week-old baby made her first camping trip in May traveling 800 miles with two overnight camp-outs. She was out three weekends following with no unusual effects except a weight gain of 4-5 ounces each trip.

There were other youngsters in evidence on the campground. Here and there you might see a "potty chair" outside a tent, or diapers hanging on a makeshift clothesline. Or if you were a parent, maybe you carried that tired two-year-old asleep on your shoulder back from an afternoon on the beach.

Probably the best approach to Iowa camping we've heard though, is the salesman who took his family on a summer-long vacation. He camped in parks all over the state, leaving his family to enjoy the park while he went out to make his calls. It certainly can be a good life!

CAMPING—

(Continued from page 33)

Get up in the morning and take a quiet walk along the creek. You may see a deer coming to water, head cocked, listening for the slightest warning of danger. Or perhaps, you'll glimpse a wild turkey at the far edge of a clearing.

Take a hike to the tops of the bluffs running on the north side of Big Paint Creek. There's a new road under construction here to bring more people up for a look at this beautiful view. From these bluffs you can see the sawmill across the road, the pine plantings along the edge of the camping and picnic area below, and more bluffs and timber across the valley.

First Fire Tower

Another must is a drive from the sawmill south on the narrow winding road that takes you to Iowa's first fire tower. Nearing completion, this tower stands a hundred feet tall, commanding an exceptional view of the surrounding countryside. You could probably see twenty miles around on a clear day, all the way south to Pike's Peak State Park near McGregor, east to the Wisconsin side of the Mississippi, and all the bluffs and scenery in between.

Continuing on this road you will eventually come out on a gravel road that will take you west to Iowa No. 13 toward Waukon and east to Iowa No. 364 toward Waukon Junction and Harpers Ferry.

Where can you camp? The picnic areas along Little Paint Creek and the picnic area across the road from the sawmill and headquarters on the bank of Big Paint Creek. Sanitary facilities are provided along with wood, fireplaces, and picnic tables. You will have to get your water from the hydrant on the west side of the sawmill.

There is a lot of scenery you will want to see, so it is only

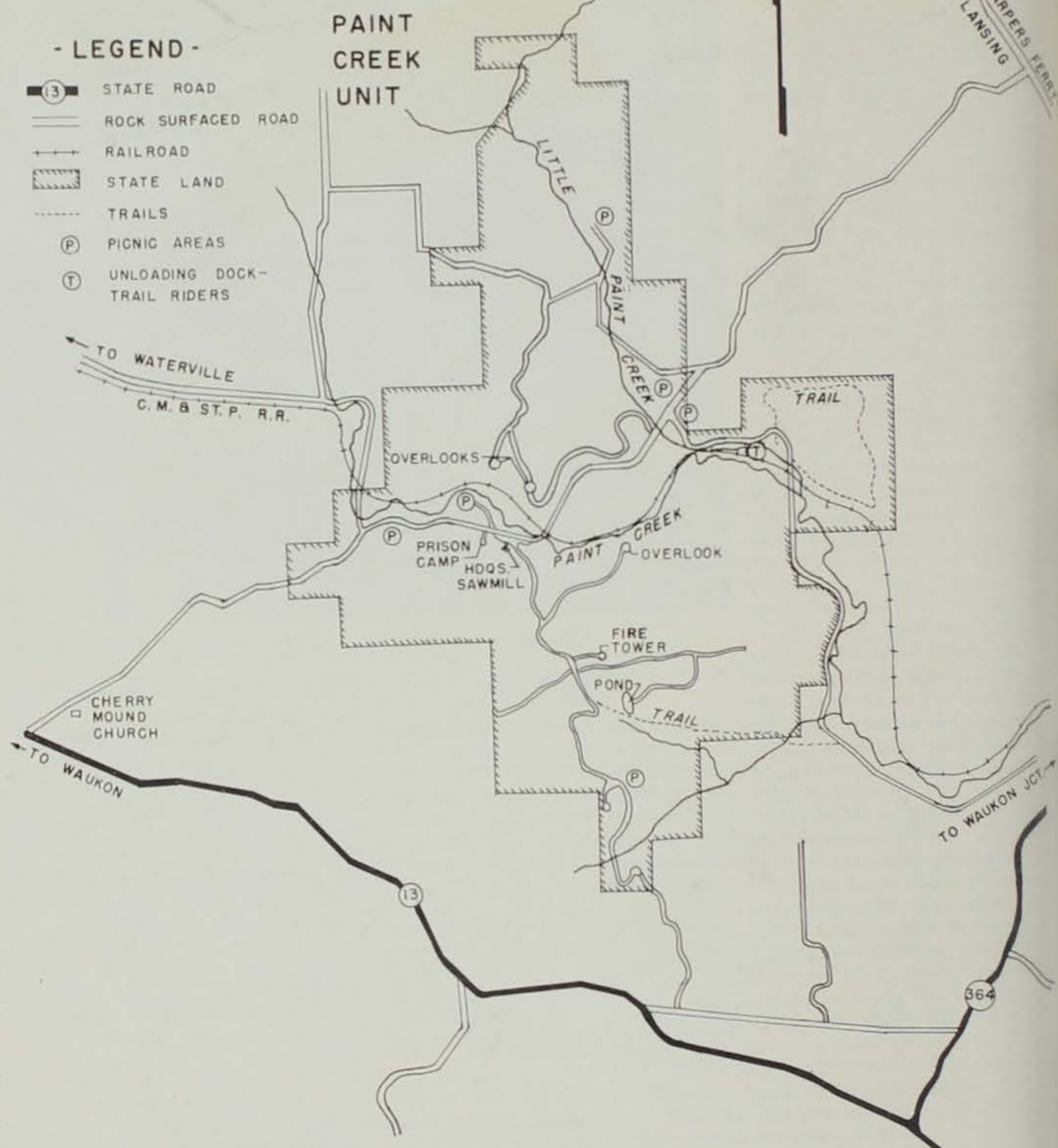


The state's first fire tower is nearing completion at Yellow River.

Jack Kirstein Photo.

- LEGEND -

- 13 STATE ROAD
- ROCK SURFACED ROAD
- RAILROAD
- STATE LAND
- TRAILS
- (P) PICNIC AREAS
- (T) UNLOADING DOCK—TRAIL RIDERS



This map of the Paint Creek Unit of the Yellow River Forest is drawn to a scale of one inch per mile. Campers should see along Little Paint Creek in the northeast part of the Unit. Water is obtainable only at the sawmill. The prison camp will be moved to the new permanent camp in the Luster Heights Unit of the forest area later this spring. The road coming into the area from the north and leading to the two overlooks marked right north of Big Paint Creek is now under construction. Not all the roads shown on the map will be open to the public; some roads are merely for equipment access alone. The trail shown is primarily for trails who will be able to unload their horses at the unloading dock marked with a "T" on the map. However, the forest is full of trails and some interesting and scenic hikes can be taken. To be recommended particularly is a hike north along Little Paint Creek to the "forks" where a spring is located. Camping in this forest area can be a satisfying experience, but each camper is responsible for keeping the possibilities of a forest fire low. Carelessness with fire, matches, and cigarettes is something a responsible camper can well avoid.

logical that you take your camera. And with two trout streams running right by your camp, it would be a little foolish not to take a chance at catching a few trout.

Watch Your Fires!

There is one word of caution, however. Most of us are not accustomed to the increased emphasis that will be found here on fire prevention. You will be camping in a state forest, with a dry year in the making. The fire hazard may be very important before the summer is out, so remember all those fire safety rules you always associate with camping out in the mountains. Be careful of your campfire, your cigarettes, and your matches. A forest fire at Yellow River would leave an ugly scar for years to come.

