



AUGUST, 1974



conservationist





conservationist

Vol. 33, No. 8 August, 1974

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CONTENTS

Cover Story	3
Mallards, A Study In Pink	4
Campgrounds	6
Field glances	9
Shoot Only Squirrels	11
Boating Safety Education	12
Warden's Dairy	14
Backbone, Iowa First State Park	14
Classroom Corner	15

Back cover photo - Late Season Virginia Creeper
by Kenneth Formanek

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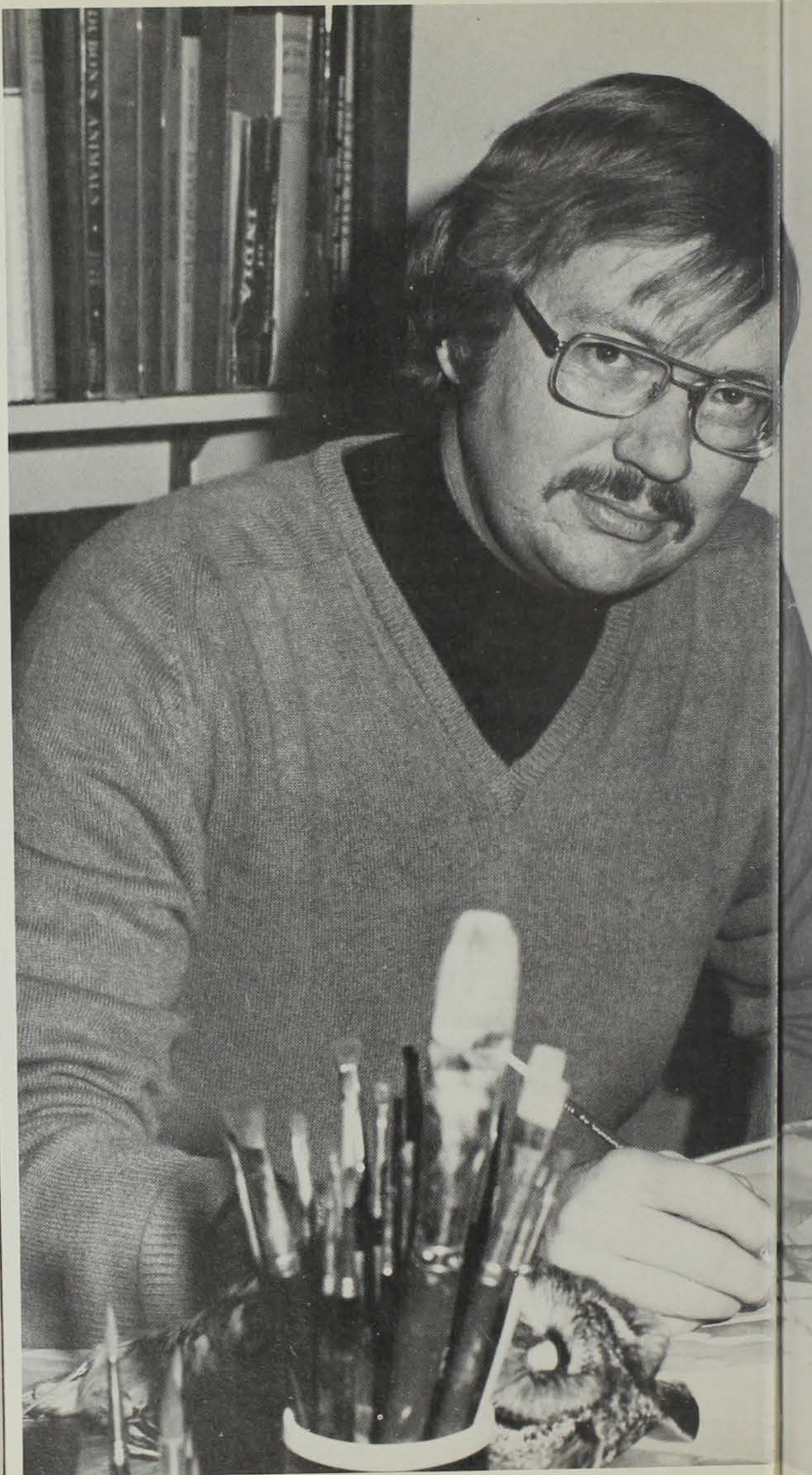
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Published monthly by the Iowa Conservation Commission,
State Office Building, 300 4th Street, Des Moines, Iowa
50319. Address all mail (subscriptions, change of address,
Form 3579, Manuscripts, mail items) to the above address.
Subscription price: one year at \$1.00; two years at \$2.00; four
years at \$3.50. Second class postage paid at Des Moines,
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Cover Story

A pair of gadwall quietly settle "In Through The Mist" on the front of this month's cover.

The detailed study of gadwall is by wildlife artist Jim Landenberger of 2031 Northgate Drive, Cedar Rapids.

Landenberger's watercolor painting won the 1974 Iowa migratory waterfowl stamp design contest held by the State Conservation Commission. The design will be featured on the 1974 Iowa Migratory Waterfowl Stamp.

The winner of the second annual contest, Jim Landenberger, 36, is an artist who specializes in feather-by-feather detail in his bird paintings. A modern day Audubon style wildlife painter, Landenberger works also as a staff artist for the Cedar Rapids Gazette.

The annual Iowa Duck Stamp Contest is held early each year to select a new design for the stamp to be issued the following year. Designs may be done in any media and must be original work. The contest is open to resident Iowa artists only.

Design judging is based primarily upon anatomical accuracy, composition and suitability for a stamp. Contest regulations and entry

forms are available from the State Conservation Commission after the first of the year. □

GADWALL

(Anas strepera)

"Gray Duck", as the gadwall is often called, is a common migrant through Iowa. It is a medium sized, grayish-brown duck. The gadwall is the only surface feeding duck to have a white rear wing patch. This patch is particularly noticeable during flight or when springing from water.

Yellowish feet, along with a noticeable deep reed-like voice, are other characteristics that mark this bird.

Seen as individuals or in small flocks, gadwall frequent Iowa's marshy lakes and inland ponds, feeding primarily on vegetable matter.

A few gadwall do nest in the pothole lakes of northern Iowa. Their nests are usually hidden in clumps of grass on high ground. Seven to twelve buff colored eggs are laid in a down lined cup-like depression.

— Ken Formanek



Hen mallard sporting nasal saddle, pink tail and radio transmitter.

MALLARDS

...a study in neon pink



By **BOB RUNGE**
Contributing Editor

In recent years many waterfowl biologists have favored a duck hunting season regulated by a point system of limit determination. The purpose is of course to direct the hunter's attention to species and sexes of ducks which are more common. In the case of the

mallard, it is generally believed that there is always a portion of the drake population which may be harvested without affecting the reproductive capacity of the mallard population as a whole. It, therefore, would stand to reason that the hunter should be

encouraged to shoot drakes rather than hens. As a result, the point system was designed to allow four or five drakes to be taken whereas only two hens comprised a limit.

Recently there has been some thought directed to the possibility that

the "excess drakes" actually are a biological necessity which provides a ready pool of males for those hens whose first nesting has been unsuccessful for various natural reasons such as flooding or predation. The hen is able to mate again and reneest even if her previous drake is no longer in the area or is perhaps moulting and unresponsive. If this theory is correct, the point system, as it is presently set up, may need readjusting.

A study on this matter has been initiated by Dale Humburg of Clear Lake who is conducting the program as a two-year masters degree project. Humburg is a graduate student at Michigan State University and is working with the Conservation Commission for the purpose of this study.

Humburg's objective in the first season is to describe the hen-drake interaction during nest initiation and early incubation. Ventura Marsh near Clear Lake was chosen for the project



and Dale began trapping mallards this spring as soon as they had settled into the area. The trapping was done with wire maze traps and decoy hens to capture drakes and nest traps to capture hens. The birds were then marked and immediately released. Seventy-two drakes and seven hens were captured in all.

Drakes are lured to wire traps, while below hens are snared in nest traps.



Photos By The Author



The marking was done in three ways. Plastic nasal saddles were attached to the duck's bill. These saddles are marked with symbols and can be seen on the bird with the aid of binoculars. For in-flight identification, the birds were sprayed with varying combinations of orange, blue, green, and pink paint. An individual bird then could be referred to as the "pinked tailed, orange on the right wing drake", or some other pattern. The nasal saddles and non-toxic paint do not harm the birds in any way.

Fourteen of the ducks, including all seven hens, were radio-equipped with the aid of a tiny transmitter which was attached to the birds' back. The duck could then be radio-located throughout the experiment.

Once a nest was found and the hen marked, Humburg and associates determined who her mate was and after she had incubated fourteen days they removed the eggs and forced her to reneest. The eggs removed were artificially incubated back at headquarters. It was then critical to determine who the bird would mate with the second time. She had the option of returning to her original drake or selecting one of the various others frequenting the area. Of the seventy-two drakes originally marked, sufficient data was obtained on about thirty which remained on Ventura Marsh.

The results are not totally conclusive, nor were they expected to be. The most important conclusion was that the mallard breeding system is very flexible. There was great variance between the seven hens as to how long it took each bird to reneest and which drake was chosen for the second mating. The figures have been carefully recorded, however, and next year Dale Humburg will be out poling around Ventura Marsh in his little boat trying to find more answers.

This type of project is a time consuming undertaking as are most biological studies. The reward for Dale Humburg and others like him is simply a better understanding of waterfowl and their ways. In addition, the public is benefited by the safeguard that research provides to wildlife. □

CAMPGROUNDS:

Federal, State, County, City, & Private

By **WILLIAM D. MILLER,**

Media Coordinator, Iowa Association of Private Campground Operators (IAPCO)

Iowans have seen a tremendous growth in the number of camping families, the number of camping "rigs", and camping facilities in the last 20 to 25 years. Iowa is not unique in this regard—the same thing has been happening all over the United States and Canada. The growth of the recreational industry has been truly phenomenal, and trends indicate that the growth will continue until the recreational industry including all products and services connected with recreation, has become the largest in North America.

The campgrounds have experienced their share of problems, as any member of the Iowa Association of Private Campground Owners will readily attest. Some of the biggest problems center around what type of campground to build, where to locate it, who should manage it, and how to derive the charges in mode of the camping public.

It seems that literally everyone has entered the campground business. The Federal Government is in it with its large federal parks, the individual states are in it with their state parks; but it wasn't until the last 10 to 15 years that the counties, cities, and private businessmen entered the arena.

As with any industry, when new operations begin, confusion reigns, and everyone suffers: the tax payer, the private campground owner, and unfortunately the ultimate loser—the camper. There were no immediate solutions to the growth problems, and every problem hasn't been solved as yet. However, we now have the advantage of evaluating the past, and then some solutions become apparent.

There appears to be a need for many types of campgrounds, from the free ones operated by some counties and cities, to the huge parks run by the Federal

Government. There is a need for the private campground, as well.

Essentially, all of the parks cater to the same clientel, however, the very

Photos By Ken Formanek



nature of Grand Canyon or Yellowstone dictates that these areas should be run by the Federal Government. These areas, and many others, belong to all Americans; and consequently should be held in "escrow" for not only the present generation, but future generations as well. The Federal Government owes something to the tax payers, however. The government is only the manager/caretaker of this legacy and as such is charged with a responsibility to maintain as much of the natural environment as is possible. The land was bought with tax money that helps to support and maintain, as well as to protect the area, but a charge should also be assessed to pay for any improvements that are added to the area for the use of the public, excluding those just driving through to enjoy the scenery. It seems reasonable to say that no tax payer is terribly upset when he is informed that a few cents out of his tax dollar is being spent to purchase areas of natural wonder for not only him and his family, but for his children's children, as well. On the other hand, he might get a little upset, and rightfully so, we believe, when his tax money is spent "to develop" these natural wonders. Roads, bridges, and essential items like ranger stations, etc. are acceptable to the tax payer, but expenditures involving shower facilities, camping pads, elaborate shelter areas, stores, and complete little cities, without charge for their use proportional to the costs, tends to be a bit annoying.

If a federal park has all the improvements mentioned above, then it is IAPCO's contention that the Federal Government owes its employer, the tax payer, a return on his investment. IAPCO doesn't suggest that one should be charged a proportional amount "to look" at the Grand Canyon, Yellowstone, Gettysburg, the Okefenokee Swamp, or the Everglades, but the user should expect to pay for any improvements he used, such as roads, water, sanitation facilities, or camping facilities.

State parks are somewhat like federal parks, only on a smaller scale. They were created with tax money, they are perpetuated with tax money, and the state is obligated to protect this



Private campground may offer snack bar and children's playground.
(Photos from Cutty's, near Des Moines)

legacy for future generations. The state parks have user fees, and rightfully so, to help pay for the improvements added for the convenience of the user and the looker. Most state parks in Iowa are free, and allow the "looker" an opportunity to see the nearby scenic sights and get away from it all without an additional charge. If a camper desires to stay in a state park he expects to have to pay for the use of the flush toilets, the hot showers, the pure

drinking water, and the graded camping area. The fees are reasonable and fair, and the camper is afforded some privacy as most camping areas are closed to other than registered campers.

State parks and federal parks are quite similar; not only in their operation, but in their primary function, that of serving as a guardian of the taxpayers investment in a legacy.

Continued next page ◊



IAPCO would see nothing wrong if federal and state parks generated a profit. The profit should not, however, be derived from the basic charges of "looking" at the legacy, but rather from the use of improvements, such as ski lifts, camping facilities, etc., and the profits should be used to improve the area, retire debts, or better still, to obtain more areas for future development and use.

The county and city campgrounds are different than either the federal or state campgrounds. Some county parks and even some city parks are free to the user. They were constructed on available lands, without great deliberation about the feasibility of constructing a campground at this location. All of us are taxpayers, and we find it hard to accept that our tax money is being spent to purchase lands, put in improvements, furnish the necessary attendants, and carry out the garbage without a fee being charged to the user. We hasten to add that not all county and city parks fall into this free category, however, those county and city parks that charge for these facilities are still costing the taxpayer money! The fact that they charge a user fee is a step in the right direction, but they just haven't gone far enough.

Compare the county or city parks that are free to those that charge. You will notice a difference in the cleanliness of the two and a decided difference in the improvements. The roads will be kept up, bridges will be repaired, grading will be done, garbage cans will be properly taken care of, and the restrooms and drinking water supplies will be in better condition in the parks that charge than in those that are free. There is a saying: "Things that are free are usually not appreciated and are often misused". To charge a fee that is too low is just about the same as having a free park—people just won't respect it.

When a need exists for some product or service, someone will evaluate the need and open a business to fill that need. Such was the case in the campground business, and consequently the private campground came into being.

Private campgrounds exist in nearly every size, shape, and description.

THE IAPCO MEMBERS ARE:

Adventureland Campground - Altoona 50009
Cedar Lakes Recreation Area-RR, Tipton 52772
Cenla Campgrounds-Rt. 3, Spirit Lake 51360
Circle T Campground - Rt. 3, Atlantic 50022
Clair View Acres - Delhi 52223
Crows Nest Campground - Spirit Lake 51360
Davenport KOA - RR, Stockton 52769
Davis Corners KOA Campground - Rt. 3, Lime Springs 52155
Des Moines West KOA - Rt. 2, Adel 50003
Dulin's Cedar River Camping Area - Rt. 2, Vinton 52349
Gerk's Resort - Spirit Lake 51360
Hickory Ridge - Knoxville 50138
Hidden Valley KOA - Rt. 4, Newton 50208
J-W Park Campground - Rt. 1, Garnaville 52049
Kochs Meadow Lake Campground - RR 1, Tipton 52772
Lakeside Manor Park - Rt. 2, Davenport 52804
Lake Wilderness - Box 9, Burlington 52601

Lighthouse Marina Campgrounds - Whiting 51063
Newport Mills - Olin 52320
Omaha - Council Bluffs KOA - Crescent 51526
Onawa KOA - Onawa 51040
Paradise Valley - Garnaville 52049
R & R Campgrounds Inc. - Box 400, Osceola 50213
Red Arrow White Oak Camp - Rt. 1, Milford 51351
Roxie's Camping - Rt. 4, Newton 50208
Shady Hills - Tama 52339
The Oaks Recreational Area - Rt. 1, Unionville 52549
The Wan, Wan, Rae - Rt. 4, Box 25A, Jefferson 50129
Twin Anchors - Colo 50056
Twin Lakes Trailer Court - Rockwell City 50579
Walden Pond - Castalia 52133
West Liberty KOA - PO Box 336 W. Liberty 52772
Wild Country Campgrounds Inc. Tipton 52772
Whispering Oaks KOA - Story City 50248
Willow Inn Campground - Ventura 54082

For a free IAPCO Brochure giving details about the facilities at, and directions to each IAPCO member campground, write to Joyce Ruth, IAPCO Secretary, Whiting, Iowa 51063.

They range from a few acres operated by Mom and Pop, to the large luxury campgrounds operated by huge corporations, including the large franchise operators spread across the land.

Private campgrounds normally have sprung up near national parks and state parks to handle the overflow crowds, or along major highway systems to accommodate the camping family as they travel.

A logical question springs up when one thinks about some campgrounds. Why would there be a need for a private campground with the federal government, state government, counties, and cities already in the field? The answer is just as logical as the question. There must be a need for the type of service offered by a private campground and in sufficient volume to make it profitable, or else they simply would not exist.

A private campground usually fits into one of two broad classifications. One is an overnight campground situated by a major highway or interstate; thus the bulk of its customers are overnighters on their way to a destination area. The destination area could be another type of private campground where the customer will spend several days or perhaps weeks.

Regardless of the classification, private campgrounds have the following things in common: They purchased their land with their own money, and probably borrowed some to go with it. They have invested hours of their time in building a campground with the facilities the camper desires. They respond rapidly to changes in the needs of the customer, without having to wait for city, county, state, or

federal funding committees to meet and allocate funding.

This flexibility in operation allows the manager to concentrate on overnight trade, weekenders, summer weekly vacationers, or the seasonal camper. This flexibility comes about because the private campground owner is intensely interested in accommodating his customers.

Most private campgrounds accept reservations to insure the camper of a spot to camp over holiday weekends (nearly all campgrounds do require a non-refundable deposit or prepayment accompanying reservations).

The security at a private campground is quite good. The investment made by the owner dictates a high degree of security. That is a necessity to protect the investment, and consequently the campers enjoy the security. A private campground, by its very nature, can control who enters or stays at the campground.

The private campground undergoes yearly inspections by the State Health Department to insure that the public is protected. This inspection is a requirement for licensing.

The rapid growth of the recreational industry and, consequently, the growth of campgrounds throughout North America have presented the camping family with many choices. They can pick and choose where they want to go, what they want to see, and where they want to stay. They can take an inexpensive vacation, or they can spend their time in luxury. Even with the sudden arrival of the energy crisis, the camping family is doing his part by camping. By turning off his home, leaving his second car there, and living nearer nature, he will use about 25% of the energy he would use if he stayed at home. □



Found along streams, ponds and lakes across the entire state, the crayfish is an often forgotten source of fun for Iowa fishermen. A fresh water crustacean, the crayfish is a relative of the lobster and just like his sea-dwelling cousin the ugly little fellow is quite good to eat. In the southern states, crawdads are common tablefare and many recipes are used in their preparation. Most often they are boiled similar to the lobster. Many times only the tails are used.

Crawfish may also be used as an effective bait for catfish and smallmouth bass. Many fishermen remove the large pincers before hooking them through the upper tail. The bait should be fished slowly on the bottom for best results.





SHOOT ONLY SQUIRRELS



By **CHARLES OLOFSON**
Hunter Safety Officer

It has been a long hot summer. You're getting tired of fishing, the days are getting shorter, the nights are cooler and the smell of the early fall is in the air. Your dog follows you around more and the rifle is looking better than your fishing rod. These are some of the thoughts that start popping up around the first of September each year. The squirrel season is about under way.

This is the time of the year you pick up your pet gun, feel it, check it over, clean it and make sure it works. You get your hunting coat, hat and leather boots out of the basement, where you last stored them. You get your hunting knife out of the drawer and sharpen it. You think to yourself—"I am ready to go squirrel hunting."

But are you really ready?

Have you made contact with a landowner and asked permission to hunt on his land? Remember, you can be charged with trespassing, if you hunt without permission on privately owned land. Your Iowa hunting license is a license to hunt, not a license to trespass.

Have you sighted in your rifle? Safety and quick, clean kills should be important to you. Remember, during the first part of the squirrel season, leaves make it harder to identify your target. Be certain before you pull the trigger. What is beyond that squirrel? It says right on the box of 22 cal. shells "Dangerous within one mile." There could be livestock or hunters in that same timber where you are hunting, so

know what is beyond your target before you pull the trigger. Do remember the safest way to cross a fence is to open the action of your gun. Keep the muzzle of your gun pointed in a safe direction at all times, and treat every gun you handle with the respect due to a loaded gun. It is your responsibility to be familiar with the state hunting laws, such as transporting firearms in vehicles on public roads and shooting rifles over public roads, railroad right-of-ways and public waters.

Your responsibility is more than buying a hunting license, cleaning your gun and getting your hunting coat out of storage.

Ask yourself one more time. "Am I really ready to go squirrel hunting?"

Boating Safety Education: **WHY?**

By **JAMES E. HORAN**
Boating Safety Coordinator



I think you'll agree the "why" is pretty simple to answer. Have you ever been skiing or towing your daughter on skis and have her disappear from view as another boat crosses the line? Perhaps you've put a lot of things in order to enjoy a weekend fishing trip when the crappie are really biting (chances are it was just a good excuse to get away from it all and do a little serious daydreaming) and just when everything's going right a big wave from some boat that's going too fast and too close almost tosses you over the side.

Maybe you've learned the knack of sailing to a pretty fair degree and on this day you've managed to get a good piece of the wind. Everything's working right now, watch the wind, change your balance just a little, then all of a sudden there it is, another boat right where it's not supposed to be, and the rules clearly state that you have the right-of-way in this situation.

How about the canoe you bought a little while ago. Here it is, the ultimate

in getting back to nature. You bought a book and learned the "j" stroke, stocked up on freeze-dried foods, got a map of Iowa's good canoeing streams and you're ready for a canoeing trip. But first you thought you might put the canoe in the water and practice a little before taking off. So what happens, this game warden (calls himself a Water Safety Officer) stops you in the middle of the lake and wants to see your PFDs (did he say B.V.D.s??). Once you realize what it is you're missing you'll probably become the beneficiary of some undesirable consequences.

The stories go on and on about what some boater did to you or about some safety regulation you didn't know about and still you got a ticket. Maybe even a couple of times you made an error in judgment but it wasn't anything of consequence. When you take a good look at it though, any seemingly inconsequential error on anybody's part can result in death and destruction.

In the last fifteen years we've seen a fantastic increase in the number of boats on the water, the amount of time they stay on the water, and the diversity of different types of boating experienced here in Iowa.

Accident reports give insight into the nature of some boating accidents and drownings. Apparently many people still feel relatively secure while on the water. For example, one report shows that although the family had sufficient personal flotation devices on the boat at the time of the accident they were not being worn or within easy reach. Death occurred by drowning, but was it really? Maybe it should be considered death due to ignorance of simple safety precautions.

Boating regulations require that all pfd's be readily accessible. Yet so often when checking boats for safety equipment we find life jackets stored away under seats, or still contained in the original plastic bags. Even worse, some boaters have their life jackets out



and unpackaged, but they're worthless. The inner plastic bag containing flotation material had been ruptured. If you sit or stand on the pfd's they're going to become ruptured eventually.

This is where education comes in to play. Because of the nature and number of boating accidents, we feel a course should be made available to Iowans which would develop a basic awareness of current boating situations.

There are more than 150,000 boats or other watercraft in Iowa and no one is more than an hour's drive from some kind of public boating area. Iowa also has many diverse types of boating, most of which are popular on the same water areas at the same time. Boating hazard potential has increased with this increased activity. Again, simple regulations which are really common courtesy apply and help to make pleasure boating pleasurable.

"Awareness" is the key to our program. Since we began offering the

boating course on a limited scale to junior-senior high schools and adult groups last March we have been seeking to create an awareness of common boating situations and simple boating safety precautions. Unlike driving a car, there are no highways to follow or red lights to help with the flow of traffic. In addition, a car comes equipped with all the necessary safety devices for normal driving. Boats, however, do not come equipped with all the material you'll need to meet personal safety requirements. Passenger capacity limits have to be assigned, fire extinguishers and pfd's have to be purchased and so forth.

As we go into another year of experimenting with the boating course we hope to expand it slightly while further developing the quality of the material through feedback from teachers and students. The Water Safety Officers play an important part in the program also. They know best the particular water problems in their areas and therefore can help emphasize

material pertinent to a specific region. This, of course, is not to the exclusion of general principals of boating safety.

The program is voluntary. We want it to remain that way. We hope it will be of such quality and usefulness that it will be in demand in Iowa's schools.

We have a lot of water, we have a lot of boaters and we need a good boating safety education program which will help create an awareness of boating hazards and a willingness to implement personal safe boating practices.

The goals of the adult education program are pretty much the same. The need, however, is a little more immediate - adults are generally both the owners and operators of the boat. Both the Coast Guard Auxiliary and Power Squadron offer very good boating safety education classes. We urge you to sign up for one of them this fall or winter. They will increase your boating knowledge while making your boating much more pleasurable next year. □

FROM THE

Warden's diary



By **REX EMERSON**
Law Enforcement Supervisor

This is starting the third day that I have been sitting on this river bank near a fish trap. It rained a little last night. A sheet of plastic sure came in handy to keep dry. Can't build a fire; the smoke would be seen by the violator. Canned heat was made for this job. Beans and soup can be heated without tell-tale smoke. Nothing worse than cold beans for two or three days. Had a few little catnaps during the night using a boat cushion for a pillow. Didn't know whiskers could itch so much!

7:45 a.m. A car is coming across the field. Looks like a little action is about to start. A gooseberry bush is sure thorny to take cover under, but the river can be seen from here.

7:50 a.m. The car stopped. A man in overalls, blue shirt, and a tan cap got out. He walked the remaining thirty feet to the river bank and looked around for what seemed an eternity. Satisfied that all was clear he got in his boat and went straight out to the fish trap.

8:05 a.m. He dropped a big iron hook attached to a rope over the side and hooked the tail rope of the trap.

The trap was soon in the boat, the lid off and the fish being dumped on the floor of the old John boat.

A noisy blue jay had just discovered me. The noise of the bird was put to my advantage though, as it covered the click of my camera. As the trap slid back into the water I quickly changed locations to a big oak tree located between the car and the violator. On his way to the car with his sack of fish he was surprised to find himself within three feet of a game warden.

A citation was issued for his court appearance the next day. The sack of eight catfish as well as the trap were held as evidence. There were some nice fish in the sack and they got a little heavy as I carried them down the river about a quarter mile to where my boat was hidden.

The fish will be rough-dressed and frozen. They will have to be held until after the court hearing and the date of appeal, which will be another twenty days. After that the county home will get them.

Now it's time to go home, get these whiskers off, and have a hot meal, in that order. □

Backbone- First State

By **DON BLASKY**

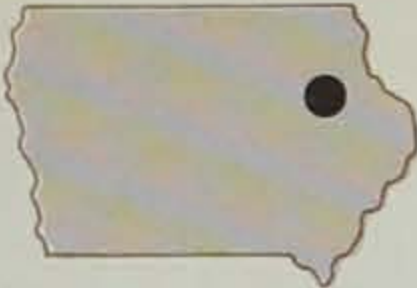


Backbone State Park located in northeast Iowa in Delaware County was Iowa's first state park, purchased from money appropriated by the General Assembly in 1917. The park was dedicated October 1, 1919, and consisted of over 1,300 acres. Since then it has grown to 1,780 acres with the latest acquisition in 1973.

Visitors that are not acquainted with Iowa's beauty spots are due for a pleasant surprise in Backbone Park.

Backbone has about everything anyone would want in the way of outdoor recreation. Some of the most beautiful and rugged foot trails are to be found in the area. One of the most unusual is the trail on the "backbone" itself from which the park gets its name. From this trail one can see the "vertebrae" which closely resembles a huge backbone, spanning more than a quarter of a mile. From this rocky backbone the river can be seen twisting along its base over 100 ft. below. One section of the backbone narrows down to less than 20 ft. wide. A beautiful view of the valley below can be seen through treeless openings on the windswept backbone. Twisted pines survive the scourge of winds and

Iowa's Park



Assistant Superintendant of State Parks



Iowa Conservation Commission Photo

weather which closely resemble the famous Cypress Point trees of California.

There are many rocky staircases and caverns in and about the ledges that are a challenge to mountain climbers that come here to practice.

Beautiful trout streams run through the park and into the lake. A trout hatchery was built in 1925 and trout are stocked weekly in the streams of the area during the summer season.

An outstanding beach and bathhouse facility is located in the south portion of the park. Set among stately pine trees is the bathhouse built of stone which houses a consession and clothes changing area. The consession is operated by Mr. and Mrs. Dale Nodurft who welcome all to the area. It is interesting to note that Mrs. Nodurft's parents, Mr. and Mrs. A. D. Ownby built and operated the first park store in the area in 1921.

Backbone has both a modern and non-modern camp area to offer its visitors. For the not so rugged, 18 family type cabins are available on a reservation and rental basis.

Backbone has everything you could wish for to have a pleasant outdoor experience! □

CLASSROOM CORNER



By CURT POWELL

Administration Conservation Education Center

This month, we have a clever idea brought to us by Oskaloosa High School when a group of students visited the Education Center last spring. It is called "leaf pounding" and is taught by Mr. Dwight Kersch at the Nelson Pioneer Farm at Oskaloosa, Iowa.

Leaf pounding is a unique method of producing a very attractive picture, on cloth, of the leaf or flower you're working with. You need a juicy, fresh plant, a hammer, plastic, a blotter, cloth (white), and a surface to work on. Place the blotter on the hard working surface (such as a table) and the cloth on the blotter. Arrange your leaf or flower on the cloth and cover with the plastic. Pound the leaf or flower gently with the hammer around the edges and then over the entire surface. The plastic protects the leaf and the blotter under the cloth absorbs any excess stain which may come from the cloth. The more colors and flowers involved, the more skill it takes to produce a good picture.

Plants have natural stains and it is this natural stain that produces your picture. It would not be advisable to wash your picture. Since you are using a natural stain, you must also use a "mordant" which sets the stain. Apply the mordant lightly, with a brush, to your picture.

Mordants can be made from materials you might find around the house. These mordants help set the natural stains against exposure to light. Greens are set by, wood ash lye and alum; blues by alum, salt, and distilled water; reds by lemon juice and cream of tartar; violets and purples by lemon juice, cream of tartar and alum; yellows by sal soda and distilled water.

Wood ash lye is made by using ½ cup wood ashes covered with 2 cups of distilled water and strained through a cloth. To make the mordant for green, use ¼ cup wood ash lye and add ¼ teaspoon of household alum. For all mordants, proportions are similar and Mr. Kersch encourages experimentation. I feel Mr. Kersch has a wonderful activity with his leaf pounding. It not only gives you an appreciation of the beauties of the out-of-doors, but also an understanding of how stains were produced in years gone by. □

