



This lonely looking kayak and its passenger, Roger Zimmerman of Victoria, almost disappear in bay swells during the Texas Water Safari.



- VITAL INFORMATION: The National Rifle Association, in cooperation with the U. S. Public Health Service, has developed a nationwide firearms safety training program which includes home firearms safety. A complete packet of instructional material on this subject may be obtained from the NRA at 1600 Rhode Island Avenue, N.W., Washington 6, D. C. This NRA Home Firearms Safety Program is designed to provide proper education and training in safe gun handling for every member of the family.
- SAFETY FLASH: A "May Day Rocket Flare" for personal survival and safety is now available from the Genrus Engineering Specialties Company, 5034 Wisconsin Avenue, N.W., Washington 16, D.C. Said to have been under development for four years and tested by all branches of the military services, it is a pen-type launching device capable of launching special pyrotechnic flares to an altitude of 200-250 feet.
- NATURAL REMEDY: The Air Force and the Dept. of Justice have established a Federal Prison Camp at Eglin Air Force Base in Florida and expect to use the 250 minimum custody prisoners there to carry out fish and wildlife conservation projects, as well as real property improvement and maintenance work on the 400,000-acre base. Similar camps have been located at Maxwell Air Force Base since 1930 and Donaldson Air Force Base since 1958.
- MAD HATTERS: Ever wonder how skeet shooting got its start? Historians of the sport say it began in England in 1750. Shooters wore top hats, and a live pigeon was placed under the hat. At a signal, the shooter raised his hat to release the bird, then replaced his hat and took his shot.
- OLFACTORY ODDITY: Some kinds of fish have a strongly developed sense of smell to help them find food. If they like the smell of an object, they go after it. If not, they avoid it. Strangely enough, catfish are pleased by smells that other fish and animals find objectionable.
- DECOY FOR DOLLARS: A new conservation symbol, "Thirsty the Duck," has been adopted by Wetlands for Wildlife, Inc., a sportsmen's group dedicated to the preservation of the nation's vanishing wetlands and waterfowl habitat. Thirsty is pictured as a puzzled and disgusted drake mallard, wearing a sun helmet and canteen and standing on a patch of sun-cracked mud. Models of Thirsty will be distributed in the form of small coin banks. Money raised from their sale will be used to buy wetlands that will be turned over to state and federal waterfowl agencies. For information write: "Thirsty the Duck," 757 North Broadway, Milwaukee, Wisc.
- TICKS TIPS: Fishermen, campers and outdoorsmen should beware of the danger of ticks. To prevent bites, dust with sulphur or an insect repellent before going into the woods. If ticks are found on the body or clothing, they should be removed immediately, by daubing with alcohol, kerosene, gasoline, or a strong nicotine solution. If the tick head is buried in the skin, do not try to pull it off. The head is likely to break off and remain buried in the skin, with the possibility of infection. Ticks have been known to carry Rocky Mountain Spotted Fever. There is available a serum for prevention of the disease, and persons who expect to camp or stay in timbered areas for an extended period of time would do well to consult their physicians.
- \$TAMP\$ FOR CONSERVATION: Five species of tropical American songbirds are featured on the new National Wildlife Federation sheet of 50 "Songbird Stamps." The stamps may be obtained from the National Wildlife Federation, 1412 Sixteenth Street, N.W., Washington 6, D.C. for one dollar per sheet. Included on this year's stamp sheet is a statement drawing attention to the fact that chemical pesticides are poisonous and should be used with extreme care to avoid losses of fish and wildlife. The National Wildlife Federation, the world's largest conservation organization, is supported in large measure by contributions in exchange for wildlife stamps, which it has been issuing since 1938.

JULY, 1963

ame and Fish

CURTIS CARPENTER	Editor
ANN STREETMAN Assoc.	Editor
NANCY McGowan Art	Editor
JOAN PEARSALL Edi	t'l Asst.
ETHEL SPECK Circ	eulation

TEXAS GAME AND FISH is published monthly by the Texas Game and Fish Commission. Subscription price \$2 per year, \$3 for 2 years, and \$5 for 5 years. Single copies of current issue 20 cents each. Add 2 per cent Texas Sales Tax.

Subscriptions to TEXAS GAME AND FISH are available from the Austin offices, and branch offices. Checks and money orders should be made payable to STATE GAME AND FISH COMMISSION, Editorial and Advertising Offices, Walton Building, Austin, Texas. Second class postage paid at Austin, Texas.

Postmaster: If undeliverable, please notify TEXAS GAME AND FISH on form 3579 at the Walton Bldg., Austin, Texas.

TEXAS GAME AND FISH invites republication of material provided proper credit is given, since the articles and other data comprise factual reports on wildlife and other phases of conservation.

Produced by

Information and Education Branch
T. D. CARROLL Coordinator
Tom Diltz Audio-Visual Chief
C. W. Shaw Illustrator
ARVID LARSON Photographer
Ron Perryman Photographer
ADELINE JOHNSON Darkroom Tech
Louise Kreidel Business Assistant

The Cover



Wade fishing along Texas' clear Guadalupe River affords a scenery treat as well as an overflowing stringer. The Edwards Plateau area has at least a dozen major streams originating in or rushing across its miles. Spotted black bass, largemouth black bass, catfish, sunfish, carp and gar are awaiting tempting morsels. See related article in this issue. Photo by Dan Klepper. OFFICIAL MAGAZINE OF THE GAME AND COMMISSION DEDICATED TO PROTECTION AND CONSERVATION OF NATURAL RESOURCES; AND TO IMPROVEMENT OF HUNTING AND FISHING IN TEXAS.

IULY, 1963

Vol. XXI, No. 7

In This Issue Never Out of Style by HOWARD D. DODGEN Anglers a-Wade by DAN KLEPPER Edwards Plateau rivers and streams provide good wade fishing. by W. R. LONG New catfish cradle system boosts fish hatchery success. Coastal Science by ERNEST SIMMONS Planning and research insure better fish and fishing for Texans. Home on the Waves by RUSSELL TINSLEY Houseboats are taking Texas lakes. Carp in Comfort by CLIFFORD FARMER You don't need to apologize for carp fishing. Trial by Water by CURTIS CARPENTER Hunger, fatigue and angry water harassed tough Texans. A Winner by ED HOLDER Southeast Texas fishermen go for "white perch." End of the Line by L. A. WILKE A railroad caboose makes a good fishing cabin. by ERNEST SIMMONS Don't make the odds tougher. Snaggletooth Sport by CURTIS CARPENTER Gar fishing's for kids, too. by NORREL WALLACE Capitalize on a carp's sweet tooth. Lonely Kayak Inside Front Cover Long Shots 1 What Others Are Doing 28 Guns 25 Tackle Talk 29 Junior Sportsmen Inside Back Cover The Catfish's Whiskers Back Cover

IOHN CONNALLY, GOVERNOR OF TEXAS

TEXAS GAME AND FISH COMMISSION

Ben F. Vaughan, Jr., Chairman Howard D. Dodgen, Executive Secretary W. J. Cutbirth, Jr., Assistant Executive Secretary

Howard Carney, Atlanta Morris Higley, Childress Carl L. DuPuy, Lufkin

COMMISSION MEMBERS

Frank Wood, Wichita Falls H. A. Walsh, El Paso J. F. Corley, Houston

W. O. Reed, Dallas

Howard T. Lee, Field Operations W. J. Cutbirth, Jr., Eugene A. Walker, Program Planning Administrative Service COORDINATORS

T. D. Carroll, Info-Ed. A. J. Springs, Wildlife J. B. Phillips, Law Enforcement Joe Marks, Engineering Terrance Leary, Coastal Fisheries Marion Toole, Inland Fisheries C. L. Friou, Fiscal James Archer, Personnel

REGIONAL DIRECTORS

John M. Carlisle, Region 3;

Henry Burkett, Region 1; San Angelo Area A. W. Lewis, Region 2; Waco Area Tyler Area
1. 2;
R. G. Mauermann, Region 5; Rockport Area
R. G. Mauermann, Region 5; Rockport Area

Never Out of Style

FISHING MODES and equipment change but the basic pleasures of the sport are constant. Retreat from usual surroundings, enjoyment of nature, challenge of man over fish, companionship of friends and family—these pleasures are as valuable today as they were a century ago.

A man enjoys getting up in the quiet, pre-dawn innocence, donning old overalls and sagging straw hat and stepping onto the river bank or lake side in time to hit the rascals before the first soft sun rays twinkle on the water. In a setting of cool green and awakening wildlife noises, he can see some troubled situations in better perspective than he did back home. But when he feels a strike, all his responsibilities are momentarily lost in the piscatorial world at his feet.

Or a guy sometimes likes to wait until the Saturday sun is climbing high to round up the wife and children, hook on the boat and head for the open water. The gay crew, sporting sailor caps and picnic baskets, roars off for a day in the outdoors. There will be plenty of hook-pricked fingers and noisy moments of fellowship, and possibly a full stringer of fish to fry on an open fire.

And a fellow revels in setting out with a veteran fishing buddy, boat and tackle in tow, to put some notches on his rod and brags in his repertoire. In this comfortable company, he enjoys the challenge of giving his finny targets the right bait at the right time and playing them in.

Regardless of the type of fishing—solitary, family, buddy—the pleasures of the sport await a man on the inland rivers, creek banks, lakes, and the coastal waters of the bays and Gulf.

HOWARD D. DODGEN

Executive Secretary

Game and Fish Commission



This quiet stretch of the cypress-lined Guadalupe River invites any city-weary fisherman.

Anglers a-Wade

by DAN KLEPPER San Antonio Express-News

TROUT FISHERMEN who seek their quarry in the cold streams of the North and Northwest don't have a thing on a great many Texans. We, too, have available to us some

of the finest wade fishing waters in the nation. The only differences are the temperature of the water and the fish found in it.

These streams-clear, cool, gush-

ing through crevices of limestone, boiling over boulder-strewn rapids, meandering between banks lined with gnarled live oaks and magnificent cypress trees—are found in a portion of Texas called the Edwards Plateau, particularly in that area known as the Hill Country.

The rivers and creeks of this region are fed by one of the greatest spring territories in the United States. Some of the larger ones include Barton Springs at Austin, San Marcos Spring, and Comal Spring at New Braunfels.

There are others . . . hundreds of them, helping to create some of the most prolific—yet relatively untapped—fishing grounds in the state.

Most Texas anglers are either completely unaware of the tremendous potential these streams offer, or prefer to stick with the many large reservoirs to be found throughout the state.

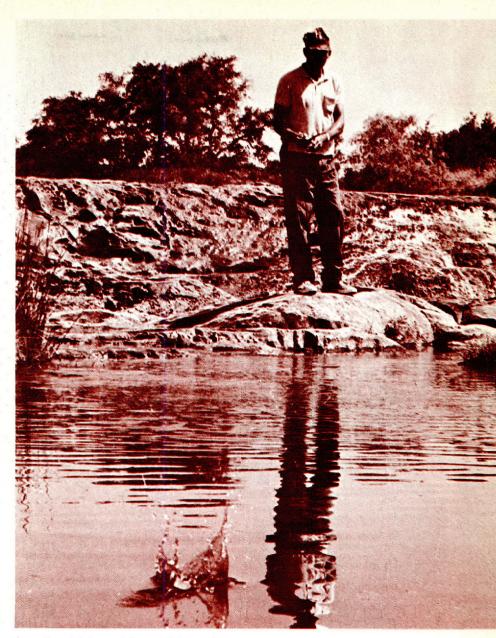
The average fish taken from a clear-water Texas stream is not as large as one caught in a big lake (although I've seen seven-pound black bass come from the Llano River, South Fork), but the pure enjoyment of spending a few hours alone or with a companion wading a section of such a stream more than makes up for the smaller fish.

Take a look at some of the rivers and streams that either originate in or traverse the Edwards Plateau country. Most are fed by springs, and all are noted, in part, for scenic beauty.

—The Nueces rises in Edwards County and flows 315 miles to Nueces Bay on the coast. The river is clear throughout a large part of its journey, especially where it cuts through deep canyons in the Hill Country. The Nueces leaves the Balcones Escarpment, which divides the Edwards Plateau from the Coastal Plain to the south, in northern Uvalde County and enters the Plain, more commonly called the Brush Country.

—The Guadalupe, one of the most beautiful rivers in the state, rises in its north and south forks in the west central part of Kerr County and flows eastward through the Hill Country. It leaves the Escarpment near New Braunfels and crosses the Plain to San Antonio Bay. The Guadalupe is approximately 250 miles long.

-The Colorado, one of the longest rivers in Texas, begins in Dawson



A small pool below a fall on a Colorado River tributary promises some angling action.

County near Lamesa, enters the Hill Country in San Saba County, leaves the Escarpment near Austin and empties into Matagorda Bay on the coast. It is about 600 miles long.

—The Blanco, 64 miles long, begins in Kendall County and flows through Blanco and Hays counties to join the San Marcos River.

-The San Marcos begins near the City of San Marcos in Hays County and flows into the Guadalupe River.

The San Marcos is 59 miles long and offers excellent fishing. Many log jams, however, prevent most anglers from reaching some of the best fishing holes.

-Cibolo Creek rises in Kendall County and flows southeast to join the San Antonio River. The springfed Cibolo, a perennially flowing stream, is 96 miles long.

-The Frio, which rises in the

• Continued on Next Page

northeast part of Real County, flows through the magnificent Frio Canyon country and eventually unites with the Atascosa at Three Rivers. The Frio is spring fed in its north part and is 200 miles long.

The James, a relatively short (37 miles) but very pretty river in the Hill Country, rises in southeast Kimble County and flows northeast to join the Llano River.

The Llano, a famous fishing stream in Texas, is formed in central Kimble County by its North and South Forks and flows east to empty into the Colorado. The Llano is about 100 miles long; the North Fork, which rises in Sutton County, is approximately 40 miles long, and the South Fork, which begins in Edwards County, is 55 miles long.

The Medina begins in the northwest part of Bandera County and flows southeast to the San Antonio River. The river, which is about 116 miles long, is very scenic along its

upper part.

The Pedernales, 106 miles of extremely beautiful water, rises in the southeast corner of Kimble County and flows southeast into Lake Travis on the Colorado River.

The San Saba begins near the Schleicher-Menard County line and flows east into the Colorado River. It is about 100 miles long.

All these streams can provide the angler with either good wade fishing, float fishing or, in many instances, both. Prominent game fish species found in the rivers include the spotted black bass, largemouth black bass, catfish and many varieties of sunfish.

For the angler who wants plenty of action without much table meat tremendous concentrations of carp and gar are found in some of the deeper holes in the rivers.

These waters are not always easy to fish. Too many anglers ignore the tiny pools of swirling waters just below or above rapids and spend too much time working wide, deep stretches of water that very often are almost devoid of fish. The smaller pools, on the other hand, usually harbor a spotted bass or two, no matter how shallow the water appears to be.

Some of the best places to fish for the largemouth bass are the quiet pools that are heavily laden with underwater ferns and moss.

The pools should be fished cautiously, slowly and quietly. I prefer to make long casts with light spinning or casting gear. (Fly fishing equipment will produce equally man quite often will have good topwater action even during the middle of a warm day.

The rivers and streams of Texas are open to the public. Access can be gained through private land-where permission has been granted by the



Sam Maclin of San Antonio hoists a stringer heavy with sunfish and bass taken on the James.

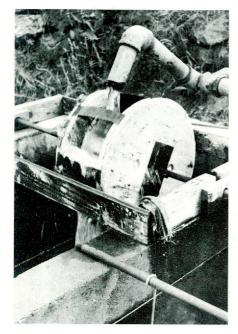
well.) It is my contention that, once the angler is able to see a fish, the fish probably has seen the angler, and it will be a difficult fish to catch.

Small spinners, spoons and topwater poppers usually will produce strikes in the clear streams. A fisherlandowner—and via public highway crossings.

But fishermen should remember that only the stream beds are owned by the state. Lands bordering our rivers are private, and trespassers can be prosecuted.

TWO of the problems of raising channel catfish in Texas State Fish Hatcheries are the necessity for constant paternal care of the eggs and the high mortality rate of the very young fish. An experiment including a "fishcubator," designed by Glenn Caddel, superintendent of the Tyler hatchery, promises to partially solve these two problems.

In this experimental hatching proc-



Water flows onto a paddle wheel, which in turn produces power to rock the fish cradle.

ess, the fertilized eggs are placed in a dual-trough system in which the eggs are protected from fungus and silt damage by a water-troubling device and the newly hatched fish are protected from insect, frog and crayfish predation as well as fish cannibalism by isolation.

In natural environment, after the female channel catfish deposits the eggs in the nest, the male guards the spawn, agitating the water by fanning his tail over the eggs, thus supplying oxygen and preventing the settling of silt. His presence also drives away predators for the five to seven days necessary for the eggs to hatch. He also protects the eggs from the female, who would sample a meal of her own offspring if she could lure or drive him away from his station.

In the new system two concrete troughs are used. Into one trough a supply of clear water flows. In that

Rockabye Catfish

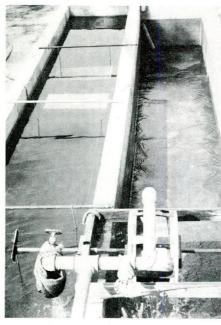
By W. R. LONG

I & E Officer, Region III

trough is a power-generator, which resembles the waterwheels of yesteryear's grist mills. It is a wooden wheel with metal fins fashioned from a discarded wire spool. The flowing water turns the wheel.

Connected to this wheel is a system of wires and steel rods that are attached to a series of canvas trays in the adjoining concrete trough.

The canvas trays might appropriately be called cradles, because



The cradles, located in adjoining concrete trough, are rocked to prevent fungus growth and silt damage to the mass of fish eggs.

into them go the spawn of eggs robbed from nests in the hatchery pens. The turning wheel with its Rube Goldberg attachments causes the canvas cradles to move back and forth in the water. Thus, the eggs are cared for by a mechanical parent in a predator-free environment.

In the first experiment with this hatching process, the cradles hatched out more than 200,000 fry. These

tiny fish were held in the trough, shielded from harm, until the egg-sac inside them was absorbed for food, which occurs in about six days. They were then removed and placed in the growing ponds.

The growing or rearing ponds, about farm-pond size, were drained before spawning season began, carefully dried and then refilled with water that had been strained to eliminate as many predatory species of aquatic and insect life as possible. Caddel feels that it is a system comparable to placing a newborn baby in a carefully cleaned nursery.

Growth rate is rapid in these rearing areas, and the tiny catfish soon attain the size that are called "fingerlings." When they reach this stage they are trapped and moved to the many private lakes and public waters served each year by the Game and Fish Commission.



Glenn Caddel, designer of the rocking system, holds the valuable eggs which after hatching will be released in Texas lakes and ponds.

GOASTAL SCIENCE

by ERNEST SIMMONS Coastal Fisheries Supervisor

THE COASTAL fisheries division of the Game and Fish Commission is like a business in that problems must be foreseen and plans must be made for the solution of them.

Although most people are interested in fishing and many have shown an equal interest in fisheries research, others have simply wondered—what are those people doing . . . what is this research . . . why are they doing it?

The reasons for conducting re-

search are numerous. Some are complex; others are simple. For example, research is often started because people feel that fish are being overharvested and that fishing is declining and want to know why. This real or apparent decline is often attributed to night fishing, using treble hooks, netting, catching small fish or a dozen other methods. A second reason for research is the need to determine the cause of an abrupt decline in commercial landings, as in the case of the sardine in Cali-

fornia. A third reason is that evaluations of changes in the fish environment are needed. A fourth, and it is hoped most important and encompassing, is that people become aware that a resource can be properly managed only if it is well understood.

Some of these motives for research have existed for more than a century. Others are relatively new.

But the actual methods of conducting research have sometimes been misunderstood. The studies are not executed merely by biologists' catching a few fish or examining a few shrimp or oysters or pulling a seine a time or two. And, the studies are not the "ivory tower" type of endeavor often popularly connected with scientific projects. Field and paper work are coordinated to accomplish ground work and answer basic questions.

General studies have been made for at least two years in each bay area and have yielded valuable information on the life found in these bays. Most of the important life history aspects of the major species are now known. The program is changing to include more thorough studies of the major fisheries with emphasis on population abundance. Major fisheries involved are shrimp, fin-fish, oysters and blue crabs.

Shrimp Fishery

The shrimp fishery is the most important fishery in the United States.



Paper and field work are combined in coastal fisheries studies, as in this shrimp project.

In 1959 over 84 million pounds of commercial shrimp were landed in Texas ports with a dockside value of about 25 million dollars.

At present a good portion of the life histories of the three major commercial species is known. Complete descriptions of larval forms, however, are lacking. It is known that spawning of all three species takes place in offshore waters of the Gulf and that larval forms must migrate to bay environments to grow through their juvenile stages. Brown shrimp enter the bays earlier (April) and leave earlier for the Gulf (June) than do white shrimp which enter in June and leave in August. Brown shrimp do not reach the minimum desirable size for harvest (about 4½ inches) in the bays as do the white shrimp. Brown shrimp are generally sought in the Gulf in water depths of more than 12 fathoms, but white shrimp are fished in bays and in the Gulf out to 12 fathoms. Trawling for white shrimp is done in the daytime while more brown shrimp are caught at night. Most fishery regulations are generally based on these principles.

This study of the commercial shrimp of Texas has been continued and expanded to include all the bays and the Gulf of Mexico adjacent to Texas. Extensive knowledge of commercial shrimp present in Texas bays and inshore Gulf and their monthly abundance and size is necessary for any intelligent regulation of their harvest. Accurate basic information is needed so the Commission may begin projects which would increase the abundance and availability of this important resource to all concerned.

The objectives of this shrimp study are as follows: to determine the abundance and size of shrimp in the bays and inshore Gulf, monthly and bimonthly throughout the year; to determine the seasonal growth rate of shrimp; to determine seasonal movement and migration of shrimp; to gain more knowledge of the life histories of shrimp, particularly larval forms; to determine how hydrographic and climatological factors influence the seasonal abundance, size, movement and growth rate of the species of shrimp in the bays and inshore Gulf.



Tools and fish are ready in this flounder tagging program which will provide information on the species such as food and feeding habits, spawning seasons and migration habits.

The overall objective is to accomplish this research so Game and Fish biologists can predict the seasonal shrimp crop of the bays and inshore Gulf according to expected environmental conditions and therefore recommend harvest regulations that will be realistic for the conditions involved and that will provide a management of Texas shrimp resources to the greater benefit of the majority of the people concerned.

Fin-Fish

Fin-fish are also important to the people of Texas and have been studied in detail.

By necessity the first large scale investigations involved physical and biological characteristics of a small area, the history of the fishery and the studies of life histories of a few species.

In this first period biologists discovered or verified spawning seasons, spawning sizes, spawning and nursery areas, habitat requirements and range of sea trout and, in part, redfish in the Aransas Bay area. Also included were spawning seasons and areas for flounder, growth rates of most bay fishes, food and feeding habits of trout, redfish, drum and flounder, some knowledge of migrations of all major species particularly through fish passes and the physical characteristics of the areas involved.

The second period of investigation involved diversification of effort so that, starting with Aransas Bay and the Laguna Madre, it spread to cover the entire coast. The goal in this program was to study physical and biological characteristics of areas, life histories of important species within individual areas, interspecific relations and to determine changes within bays during differing conditions. This phase is complete in some areas and is well underway in others. Much has been learned of interspecific relations or competition, effects of changing physical and biological conditions, flora and fauna of each area and causes of fluctuation in stock. Additional knowledge has been gained on food and feeding habits and growth rates of the major species. Several additional species have been added to the study.

One of the best tools available for these studies is the fish tag. The use of tags yields information on movements and migrations, fishing mortality and growth rates.

Approximately 23,000 fish have been tagged in the past 10 years. Recoveries have ranged from poor on drum to fair on trout and excellent on redfish. Trout recoveries reflected fishing pressure in various locales.

In Cedar Bayou Pass, a hot spot, the tag recovery rate was six per cent; in the upper Laguna Madre it was four per cent and in the lower Laguna Madre it was two per cent. Even allowing for non-returned tags, it was never more than 10 per cent.

Redfish returns remained remarkably consistent for several years and averaged 11 per cent for most areas. In the past two years, however, this percentage has risen to 20-25 per cent.

Drum returns have always been low even under extremely heavy fishing pressure in the lower Laguna Madre where five per cent of an estimated population of 12,000,000 pounds was harvested in 1961.

The returns showed that movements have been haphazard. Forty per cent of all recovered trout were recaptured within one mile of the site of tagging; 79 per cent moved less than 30 miles, 3 per cent moved as much as 50 miles. Redfish moved farther, but 80 per cent moved less than 20 miles while 2 per cent moved more than 100 miles. Drum were frequently recaptured within a few yards of the site of tagging although 5 per cent moved 90-100 miles and one moved 240 miles in one year.

Recent data indicate that for every trout caught four or five die of natural causes. Many are consumed by larger trout. This heavy natural mortality indicates a need for additional fishing pressure on trout.

One of the major problems facing coastal research workers concerns the fact that fish may be plentiful in a bay and still be hard for the average fisherman to catch. A recent survey showed that large trout were abundant in a ski basin where people had been fishing for weekslargely without success. Very little can be done to remedy this situation. Smaller trout, however, can be concentrated in selected fishing spots by building reefs. These reefs, when used, can accomplish a major goal, avoid waste and make it possible for the average fisherman to go out and catch a mess of fish.

Certain aspects of life history study need more attention. While the tagging program has been successful, it is being modified so that it is more systematic and less scattered. Diurnal migrations are not well understood and require more attention as an aid to making fish available. Natural mortality rates need a great deal of attention. Fishing mortality rates have only lately been available for study. Nothing is known of the fecundity of the various fishes. Very little is known of conditions in the Gulf where many bay fishes spend part of their lives. Improvement of habitat is needed in some bays and in practically every bay there is a need to make the available fish more accessible to the average fisherman.

Oysters

Oystering has been a secondary industry supporting fishermen during periods of poor shrimping. In recent years the trend has been toward an increase in the number of fishermen and a resulting increase in production. This trend will probably continue and the oyster fishery will become increasingly important.

There also has been increased interest in private leases, particularly during periods of low oyster production from public reefs. Much of the interest has come from out-of-state fishermen who have had experience with oyster leases in other areas. This may provide a welcome stimulus to local interest in private oyster beds. The marine function must be in a position to provide assistance in the location and establishment of successful leases.

Increased diversion of water from the bay watersheds to serve industrial needs in the growing coastal communities may have profound effect upon oysters and marine resources in general. This may provide stability to the bay environment, but the stability may not be desirable. Relocation of major oyster areas may be necessary to meet these changes in bay environment.

Of course, oyster and shell resources are tied closely together, but what benefits one resource may not benefit the other. However, it has been found that both resources can live together within a bay area if proper management is provided. Public acceptance of a coordinated program for overall oyster and shell management has not been obtained and will be necessary for any future program.

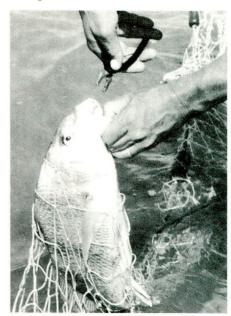
The effect of other industries also must be considered. Pollution will continue to be a major problem in many areas. Oil wells, pipelines and channels will continue to pose problems relating to oyster management. Continual studies of each type of problem will be needed.

Blue Crabs

In recent years a large commercial crab fishery has been developed along the Texas coast. Commercial landings rose from 206,000 pounds in 1958 to 564,000 pounds in 1959 and rose again to 2,000,000 pounds in 1960. The value of this fishery has already surpassed that of the oyster fishery.

In September of 1961, a coordinated program of compiling blue crab data was begun. Field biologists submit regular reports on abundance, size range, distribution, spawning condition and other factors relating to this fishery. Little if any additional field work is anticipated, for collections will coincide with those already being made for shrimp and fish.

The needs of the coastal fisheries program have become the goals. These goals are being reached under a well defined 6-year plan. The major theme in saltwater research is, and will continue to be, better fishing, shrimping, crabbing and oystering along the Texas coast.



Approximately 23,000 fish including drum have been tagged in Texas Game and Fish Commission research projects during the last 10 years.

Home on the Waves

by RUSSELL TINSLEY

IMAGINE, if you can, a lake cabin where the scenery is continually changing. Impossible? Not if you own a houseboat.

Perhaps that favorite old song, "Home, Home on the Range," should be changed to "Home, Home on the Waves." For today, on man-made impoundments throughout the state, the houseboat has become a conspicuous fixture.

This upsurge in popularity is reflected in the wide variety of houseboats available, craft suited to fit every pocketbook. For the budget-minded there are simple homemade houseboats, sans the frills and luxuries, and for the well-heeled there are big, elaborate jobs, complete with built-in toilet facilities, generators, refrigerators, stoves and lush beds.

But a person doesn't necessarily have to own a houseboat to enjoy its comforts and joys. One of the newest fads is renting houseboats. Many lakeside camps now offer houseboats for hire, for a day, weekend or maybe even a week. It is a different and fascinating way to spend a vacation.

Consider, for example, the weekend two families of us spent recently on Granite Shoals Lake in Central Texas. We reserved one of the houseboats for rent at Cottonwood Resort. For a \$25 fee we rented the boat for 24 hours, including everything from gasoline to ice and fuel for the gas-operated stove. We cruised around the lake, soaking up the fresh air and drinking in the scenery. Occasionally, we'd drop our lines beyond the craft and troll for bass, or maybe pull into a cove and anchor, to swim and play cards. Nightfall didn't bother us, for accommodations were as near as the sheltered cove where we put in to sleep.

The slow, lumbering houseboat is ideal for trolling. It moves at just the right speed to present a trolled bait. And the family has the entire

boat to lounge in while the menfolks try their fishing luck.

I know one fellow who carries a handy 12-foot john boat on the deck of his houseboat. When he pulls into a cove for the family to play, he launches the small boat and plugs for bass. This houseboat carrier arrangement appeals to the entire family, from mother to youngsters.

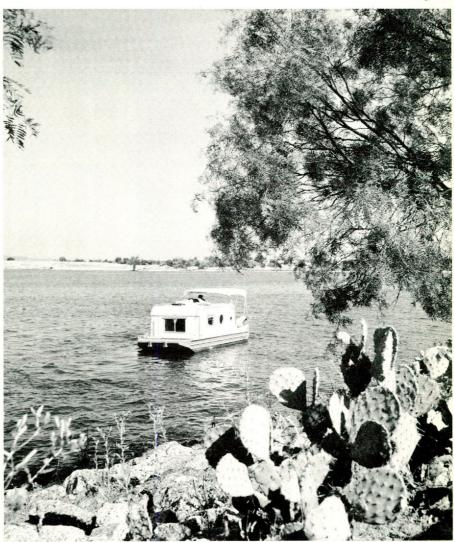
A houseboat is tailored for leisurely living. Aboard the vessel, crew members take things slow and easy-like. They have no alternative. A houseboat is built for comfort, not speed. One struggles along at a maxi-

mum speed of about 10 m.p.h. under normal power. Most are powered by ordinary outboard engines, the size depending on how much power and speed desired. Something in the range of 18 to 35 h.p. is average.

Scott Outboards is one manufacturer which has recognized this boom in houseboats. Scott now has a motor geared down and designed particularly for pushing heavy loads such as a houseboat.

Houseboats come in all shapes and sizes. I once saw one made entirely of structural steel and tin. Another

Continued on Page 27



The living's easy on a houseboat—tranquil, scenic surroundings and food just a hook away.

16 THIS is a lazy man's fishing!" T. D. said as he reeled in the slack line and leaned his casting rod against the raft's rail.

"Lazy and relaxing!" I said as I assembled my rod.

"Call back 20 years and we'd both be wading swift water some place and casting our arms off," he commented, pulling a package of cigarettes from his shirt pocket.

T. D. shifted his heavy frame in the folding chair as he searched for a match, and I watched the trembling of his hands while he sheltered the blaze from the wind. T. D. Weatherby was no longer the strong giant he had been when we fished mountain streams together in the

when he had to but applying even, experienced pressure.

"He's stubborn!" T. D. commented.

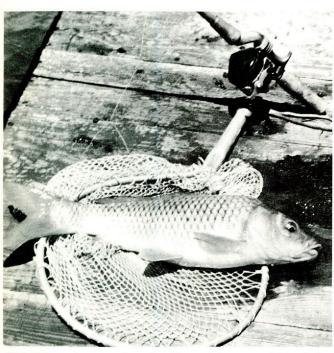
There was no letting up as the fish continued to give battle on the light rod. It came to the surface and rolled. I caught a glimpse of its broad tail, so I picked up the net and waited. Finally, T. D. worked the fish in close and I slipped the net under it and brought it, flopping, to the floor of the raft.

"A carp that size fights like a roped bull," T. D. said, grinning as I opened the trap door and rolled the five-pounder into the live well.

"My turn, now," I said, picking up my rod.

Carp in Comfort

by CLIFFORD FARMER



With light equipment and comfortable conditions, carp fishing is fun.

forties, I realized, but none of the weakness showed in his face when he caught the fresh, warm taste of the smoke.

We heard the reel at the same time and turned to see the tip of his rod bent sharply over the rail and his line running out. Staying in his chair, T. D. swept up the rod and applied pressure on the reel spool. The fish turned and he gained back some of the line, then it was off on another run. Back and forth it sawed the line through the water and I watched with interest as my companion kept his rod arched high, giving line

We were fishing on a raft in Lake Kemp, an old empoundment on the Wichita River in Texas, where we both owned cottages. I had originally put out the raft for crappie fishing. Brush piles around it made a fine hiding place for crappie and bass, and during the spring season we caught many fish there. Later in the summer, carp would move in and, at first, we moved our fishing elsewhere, trolling in the lake or wading and casting below the dam.

Two years ago, I had a lung operation which left me pretty weak. My doctors urged me to be out-of-doors as much as possible but to go easy on strenuous exercise. About that time T. D. had a warning that his "ticker" wasn't what it had been and he had to slow down. No more fly fishing and wading for us, maybe no more fishing at all.

Then, I thought of the raft and the carp that gathered around the brush piles when the crappie moved out. With chairs on the raft, it would be easy to do some fishing and at the same time be out in the sunshine. The idea appealed to T. D. and that was how we turned to fishing for carp the lazy way.

It is the usual thing to apologize when you say you have been fishing for carp. I do not offer that apology. I like to fish for carp—my way.

The way we do it, carp provide great sport. We use light spincast equipment, a minimum of lead and put our feeding bed a good casting distance from the raft. In this way, the carp are hooked with considerable line out and they have a chance to show off their stubborn, powerful fighting against the lightweight rods.

I recommend this type fishing to anyone who can no longer stand up against fast water—or to anyone who wants to take it easy while fishing.

Contrary to common opinion, carp are not easy to catch. Of course, a carp is not in the same class with a trout or bass; in no way, can it be called a game fish. But, it is a stubborn fighter. It does not give up like a crappie, neither does it sulk on the bottom. Try a five-

pounder with light tackle and you'll see what I mean.

At first, a fisherman usually misses many more carp than he hooks. But, here are the techniques T. D. and I use to cut down on the number of missed strikes.

First of all, as I've said, we plan to be comfortable. We use folding chairs on the raft or in the shade of a tree, wherever the fishing is good. We always use a landing net. We use small hooks, for the carp's mouth is small. I prefer a No. 6 single, or a No. 10 treble hook, even for large carp, with just enough bait to completely cover the hook.

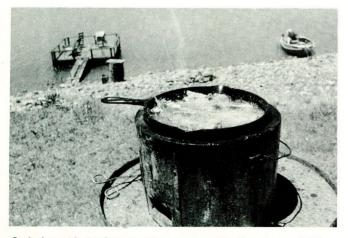
We have found that a minimum of lead should be used, just enough to give casting weight. A heavy weight attached to the bait signals danger to a fish and you lose many customers that way. With spinning or spincast equipment, a monofilament line of 6- or 8-

pound test is about right.

If you use a casting outfit, use light line and light-weight rod of six or six-and-one-half foot length. The spincast reel also will work nicely with this rod, and I like it because of the slip-drag. The drag should be set below the breaking strength of the line to take care of the sudden bursts of speed this fish develops when fighting the hook. Many times, I have thought a carp was licked and ready for the net when it would take off on a fresh run.

My Lake Kemp raft which is used for various kinds of fishing throughout the year is fastened to a cable so it can be pulled from the bank out into the lake. In this way, various depths of water can be fished. We have two brush piles, one in shallow water and the other in 20-foot water. In between, the bottom is kept free of brush, and in this clear spot we put out grain in burlap bags to attract feeding carp.

The raft is 10 by 12 feet and has a rail 18 inches high. This structure serves as a guard rail and is also handy as a rod rest when we want to fire up our pipes and enjoy the easy chairs between bites. We have a large umbrella which can be clamped to the rail, and during hot days this man-made shade is welcome. The raft, floating on empty oil drums, is attached to the cable with two U-bolts and can be pulled out to the desired fishing spot. We lock the raft to the cable when



Cooked outside in deep, popping grease, carp rib cuts are delicious.



Author Clifford Farmer keeps an eye on his carp rig while he relaxes.

we leave to keep it from being blown onto the rocks by high winds.

Sometimes we cannot fish on the raft because of high wind, and then we look in sheltered coves for our fishing. When we locate a good spot, we carry our folding chairs and tackle and set up shop.

My wife likes to fish for carp and we frequently make a picnic of it, taking along sandwiches and a thermos bottle of coffee. We locate our chairs in the shade as near the water as possible, and put our rods out on rodholders. We can enjoy a lazy afternoon, taking care of the rods when the reels sing out their signals that a fish is on the line.

I might point out that our rod holders are sidedelivery rake teeth, purchased from our local farm machinery dealer. They are made of spring steel and have two teeth that we anchor in the sand. The bend for attaching the teeth to a hay-rake frame is a good place to hold the rod handle. A piece of two-inch gas pipe driven in the sand also makes a good rod holder.

When we get ready for a round of carp fishing, we take along some sweet dough bait or a can of whole grain yellow corn. We never use any other bait. With the hook covered with bait, we cast out and let it settle to the bottom. We do not move it, for to do so would drag the bait off the hook.

Our dough bait is made of equal parts wheat flour and cotton seed meal, mixed with blackstrap feeding molasses, no water added. This mixture can be kept frozen for months, but freezing tends to dry it out so, when it thaws, I add some cooked oatmeal to the mixture. This is excellent for catfish as well as carp.

Fishermen, when first angling for carp, usually try to hook them too soon. Carp taste the bait before taking it in their mouths, and when they do take it, they often hook themselves on the first run.

I have known of 30-pound carp landed on rod and reel. My record is 12 pounds. Most of our catch is in the four- to six-pound class, but that is large enough to give us plenty of fun with our light tackle.

You may ask what we do with the carp we catch.

• Continued on Page 30

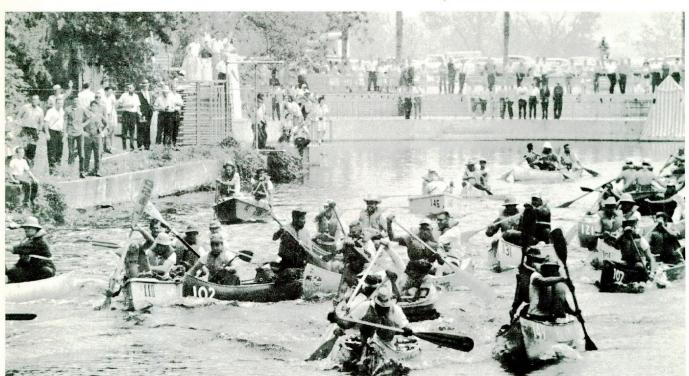


On signal from Safari officials boat crews whisked their boats from preparation area and slipped them into the San Marcos River.

by Water

Trial

by CURTIS CARPENTER



In a trial run to give contestants a feel for their race, a mixture of craft slid through the water at the starting line of the Texas

Water Safari. Boats side-swiped, collided and bounced off each other, but no tempers flared amid the confusion of flashing oars and men.

FIFTY-SEVEN boats, of all sizes and shapes, cluttered the springfed lake at the head of the San Marcos River April 29. Ahead of them lay one of the toughest aquatic races in the nation—the Texas Water Safari.

The boats left in waves at 30-minute intervals and were clocked in at each camp site along the route—Austwell, Mills Wharf, Ingleside. The rules were rough. All rations

and equipment to be used had to be in the boats at the starting line. Nothing could be purchased along the way. Propulsion could come only from paddles, sails, oars, or a combination of them. Portaging was allowed on the river leg.

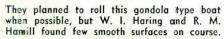
Only a few hundred yards from the starting line, contestants had their first bitter taste of trouble. Those with heavy, bulky craft knew as they shoved, tugged and pried their boats over the rapids and falls that they would never make it. Those who had scouted the rivers were prepared and zoomed over the obstacle like professionals and sped far into the lead.

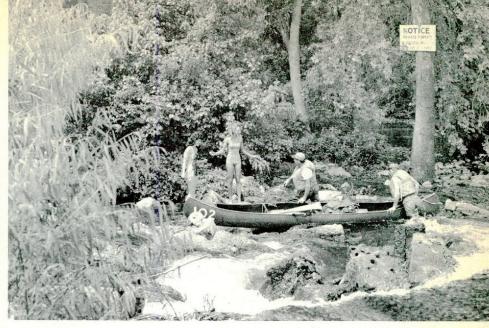
Fifty or more dams across the picturesque rivers stood like walls to scrape and slow the teams. Low bridges and swift rapids, especially at night, loomed out of the darkness

• Continued on Page 18



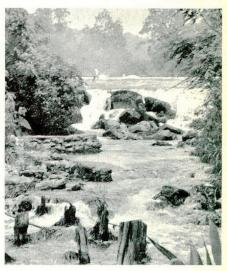
This Pasadena crew ran into trouble at the first rocky falls. They, like many contestants, didn't make it to coastal waters.



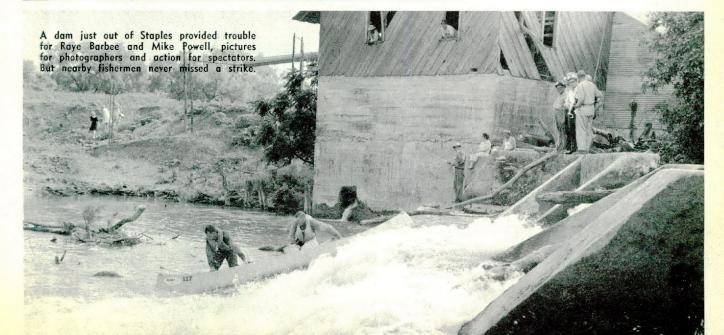


Not all the distractions along the obstacle course were as attractive as these two aqua maids cheering the teams on at the first falls. Jimmy Jones (center) and Lynn Maughmer (right) ploughed on through river and bay troubles to cross the finish line at Corpus first.





When the last boat had pounded across the rocky falls, two swans in the returning silence completed the picturesque river scene.





Fred Halamicek and Wiley Barry set the pace in the river leg, leading all the way to the mouth. They were disqualified, however, at Austwell after arriving there second behind the hardy crew in 102.

The only husband-wife team was the W. J. Watermans of San Antonio. Mrs. Waterman was the only woman who entered. They didn't reach their destination, but they gave the grueling course a good try.

The winners of the race looked fresh and energetic as they glided along the tree-lined San Marcos River. But by the time they reached coastal Austwell, river trials had taken a toll in their freshness.







This bedraggled scene was typical of camping along the way. Food and strength were scarce. Fred Hurd and Sam Hare appeared to be going under as heavy seas engulfed them near Mills Wharf. Their sailing skill earned them second.



Maughmer and Jones in 102 were more than 30 hours ahead in total elapsed time as they plowed through the waters near Austwell, heading for many struggles along the tough bay course.





Hurd and Hare are clocked in just minutes ahead of the men in 102 at this leg of the race. By sundown, 13 more boats had slid in.





After a short rest, the tough Texans, Jones and Maughmer, are off again. They walked some four miles this way, reaching Ingleside just minutes before the deadline for that checkpoint.



Continued from Page 14

or from around a blind turn to chill the spines of the tough Texans and sometimes send them splashing into the churning water. Sharp stones chewed scars into the sides and bottoms of the boats, tore away boot soles and frequently, flesh from aching feet. Throw lines, tied along the banks during a rise, held their rusty hooks just above the moving water and grabbed at the paddler without warning.

Finally the river journey lay behind and the bay battle ahead. Three boats kissed the shores at Austwell, the first bay checkpoint, before 11 a.m. May 3, making a record hard to beat. There the group waited until May 7, as 16 more crews trailed in with their own tales of river experiences

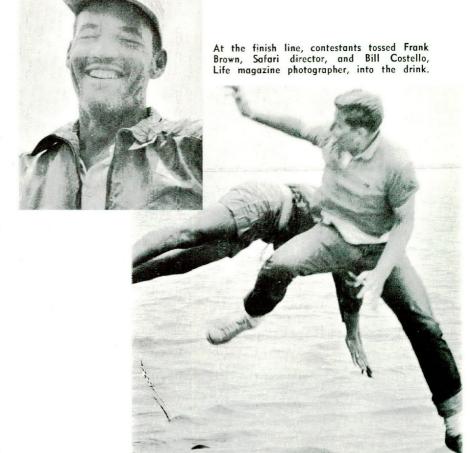
At 5 a.m. May 8, the grueling bay race began. Nineteen boats pointed

• Continued on Page 30

Lynn Maughmer (left), a proud winner, is typical of the fine quality of men who made the race successful. Sam Hare (right), a second place winner, still had energy to laugh at the golden finish line at Corpus Christi.



Archie Clark and Vernon Byrd were leading from Mills Wharf to Ingleside when strong winds flipped them. They tried to shove their boat ashore, but exhaustion got them.





IF YOU POLLED Southeast Texas fishermen, asking their favorite fresh water fish, some would cast their ballots for the bass, some for the bream, and others for the catfish.

But the winner would probably be a fish known to many of them as the "white perch"—or crappie, as it's known in most other areas of the state.

The popularity of the crappie in Southeast Texas is evident to anyone who takes a spring cruise down some of the winding, twisting rivers or bayous of the area, or anyone who visits some of the numerous river-bottom lakes that lie along either side of the big rivers.

For every boat that's moving along the shore with bass fishermen in it, there are two or three boats silently tied to brush piles or tree tops, with cane poles or fly rods resting on the gunnels—tempting the plentiful white perch.

Southeast Texas is blessed with many miles of water that is perfect for crappie. It's loaded with brush, limbs,

logs and stumps.

For example, there are hundreds of old river-bottom lakes along the Neches, Angelina and Sabine rivers where crappie always seem to be fairly abundant. These lakes are flooded every year or two by the main rivers, which tends to restock them. Then there are the main rivers, themselves, which often offer good fishing when the water is at a normal level.

One of the favorite crappie fishing spots of the area is Dam B Lake, which backs water up the Neches and Angelina rivers. Its 17,000 acres of water inundated many old lakes and sloughs, which are ideal places for

crappie.

Limit catches at Dam B certainly aren't the rule, but they are common enough not to cause much comment. This is especially true during the spring spawning season. That's when the crappie move into shallow water often less than two feet deep—and will take a minnow the instant they spot it.

Of course, this spring spawning period, which usually

A WINNER

by ED HOLDER Port Arthur News

starts about mid-February and continues into early April, is also the best time to catch crappie from other Southeast Texas lakes and rivers.

Such places as Taylor's Bayou, just west of Port Arthur, and its feeder streams, Hillebrandt Bayou and Rodair Gulley, are usually top crappie fishing places in early spring. Turtle Bayou, near Anahuac, is another

popular slough.

All these various areas have a few points where fishing is usually best. And it isn't always easy for a newcomer to learn where these spots are. Some of the places are nothing more than submerged stumps, logs, pilings or brush piles. Many of the fishermen who know them do their best to keep the locations secret.

Some fishermen even plant their own brush piles in the more heavily-fished lakes, such as Dam B. They sink bundles of brush to the bottom and mark them by triangulation from trees or other objects on the bank.

In this way, there is no tell-tale rag or tin can . . .

or even a brush top... to betray their spot.

But in spite of these hot-spots, which yield a lot of fish every year, there are many other places, unmarked

and seldom fished, where crappie can be caught.

One of the most common ways of finding these scattered places is the crappie fisherman's version of troll-

The boat is paddled slowly and quietly through a brushy area, while fishermen probe openings in the brush tops with their cane-pole rigs. As soon as a crappie is caught, the boat is anchored or tied to a brush top, and the fishermen stay until the action stops.

This type of fishing is especially effective during the

spring spawning period.

The number one bait for crappie in Southeast Texas is, as in most other areas, the live minnow. A few fish are caught on small jigs, but crappie fishing with lures isn't popular.

Just as the minnow is the top bait for crappie, the cane pole is the most commonly used type of tackle.

To this cane pole, most fishermen tie a piece of nylon line, or monofilament, slightly shorter than the length of the pole. A small cork is used to set the depth for the minnow to work and to tell the fisherman when he's getting a strike. Some fishermen like narrow quill-type corks, but most use ordinary round bobbers. A small split-shot lead is crimped to the line about 10 inches from the end.

Most fishermen use a hook made of soft metal. If it gets hooked in the brush, it will straighten before the line breaks, and it can be bent back into shape. Since

Continued on Page[®] 30



With stationary touches, this old caboose makes a comfortable fishing cabin near Fulshear.

End of the Line

by L. A. WILKE

IF YOU are looking for a novel dwelling for your favorite fishing hole, you might try the plan of Mr. and Mrs. Roland O. Beach, 214 Glenwood, Houston.

They bought an old railroad caboose and turned it into a fishing cabin on a bayou near Fulshear, and they gave it the name of Catfish Spur.

It is a fitting name because the bayou abounds in big catfish. They

keep a line set most of the time just a few feet from the back door and usually have plenty of catfish for cookouts when friends visit them over the weekend.

It is an interesting project, but not necessarily economical, according to Mrs. Beach. She found the old (Texas and New Orleans) caboose in a Houston wrecking yard. It cost her \$100 after it had been stripped of most of the metal. But it cost \$200

to have it transported 30 miles to their pecan farm near Fulshear.

That still would have been economical, but they weren't satisfied with just the caboose. They redecorated it on the inside and gave it a coat of bright red paint on the outside to make it look new.

Now they dream of getting a boxcar or two, with an old railroad station and setting up a real railroad yard at Catfish Spur. They are constantly on the lookout for old depot benches and other items of equipment.

"Old boxcars make fine fishing and hunting camps," Beach says. "In the first place they are substantially built. They will withstand all the wear and tear of the outdoors."

These old cars usually are available at salvage yards. These places buy them to remove the metal. Sometimes they burn the cars to get rid of the wood and get the metal.

They can be hauled via heavy truck to locations where they can be developed into hunting and fishing camps, or weekend cottages.

After one gets it on the property, he can spend many weekends getting it just the way he wants for comfort and convenience. That's what the Beach family did with the Catfish Caboose near Fulshear.



Mr. and Mrs. Roland Beach enjoy their flowerand-shrubbery-bordered caboose fishing cabin.

How Not To Catch a Fish

by ERNEST SIMMONS Coastal Fisheries Supervisor

IT is unfortunate, but true, that 85 per cent of all fish are caught by 15 per cent of the fishermen. Why is this so? One indisputable reason is that many fishermen are unfamiliar with the good fishing spots since they may fish only a few times each year. Often times, however, crucial mistakes are made, mistakes which virtually insure an empty stringer.

Let's examine these mistakes by considering some fishermen.

Floyd Brown, boatman for the Game and Fish Commission, spends virtually all his spare time out on the fishing ground. Floyd weighs about 95 pounds with spare leads in

his pockets and often looks a little like a bobbing cork when he's out wading the flats. Yet he is definitely one of the select 15 per cent and he consistently catches good fish when others fail.

Recently Floyd, together with Dr. W. T. Foster and others, was fishing in Aransas Bay near Paul's Mott. All these men were out wading and casting and were making good catches, nothing spectacular but plenty of trout in the pound-and-a-half class. Just about the time things were working to perfection, here came three men in an outboard rig—motor wide open. Finally the boat slowed

and out came a boat pole. Crunch, wham, crunch—checking the bottom—right on an oyster reef. Then whish, kersplash—out went the anchor, all the way to the end of the line, then into the water with a rush of spray. This should have finished the noise for awhile; it did not since the anchor had been thrown in back of the boat, which promptly drifted off the reef and away from where the fish had been.

This same boatload repeated the anchor tossing bit several times, then tried to dig through the reef to get to the grassy area. Of course this sheared the pin and added a bit of swearing to the general confusion.

Floyd and his friends continued to cast for awhile, caught no more fish, then picked up and went home. Since Floyd is a mild-mannered man he had only this to say, "It's a shame people don't know how to fish. They come down here and do like that, then go home grouchy giving the town and the bays a bad name."

This incident, although extreme, actually happened. Had the people in the boat ever watched fishermen trying to scare fish they might have realized the extent of their errors. A fisherman trying to drive or scare fish will beat on the side and bottom of the boat, pound the bay bottom with push poles, splash the water and rev up his motor. These methods are very effective in driving fish but certainly should not be used otherwise.

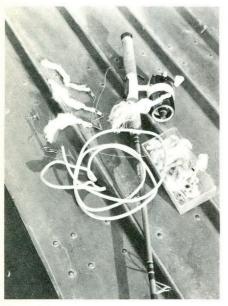
There are times when it's awfully hard to catch fish; they may be somewhere else, they may not feel like hitting or they might want bait other than that which is offered. These factors alone put the odds in favor of the fish. There seems to be little need to increase these odds by failure to use common sense.



Snaggletooth Sport

by CURTIS CARPENTER

ARE YOU sure he can catch one of those dern things?" asked the incredulous father of a young son. "He'll get one," I assured Dick Mullens, a visiting friend.



A spinning rig and nylon strand gar lures, homemade or bought, bring in the poundage.

"That's the reason I suggested going after longnose gar."

Although the size and general appearance of longnose gar have deluded many a doubtful dad, gar fishing is perfect for youngsters or an inexperienced wife. With the right tackle, youngsters can handle even the big ones. Having three boys—five to nine—I'm a witness to kids' success at gar fishing.

One of the outstanding features of

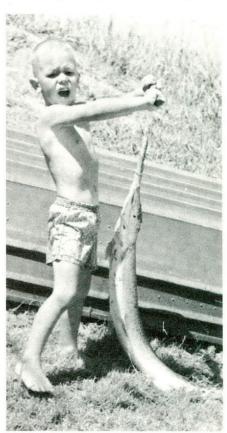
this fishing is that gar lures are hookless. Kids can swing the lures in circles, slap each other in the faces with them and no damage will result. And, since there are no hooks, a young fisherman doesn't lose catches because he isn't expert at setting the hook.

The gar's anatomy and dental design make the hookless lure possible. Instead of hooks, the gar lure consists of a profusion of fine thread-like lines in which the gar's many tiny teeth become entangled. All the child, or wife, needs to do is to hang on and reel in some line now and then.

Not only are gar easy to handle with carefree lures, but they are also easy to spot, as they school and feed on small forage fish. The fish flagrantly gives away its presence with lazy rolls on the surface during which it blows out a puff of exhausted air from its air bladder and gulps in a fresh breath. When feeding, gar quite often use this auxiliary lung. As they do, hundreds of them trouble the surface, sounding and acting somewhat like their larger cousins of the Gulf, porpoises.

Usually the longnose, *Lepisosteus* osseus, feed and school in the same area from year to year. Once you locate a schooling ground you can return time after time to haul in the hefty catches.

The lure used in gar fishing can be made at home as well as purchased at a tackle store. If you prefer to make your own—and it's cheap and simple—buy a coil of plastic-



Youngsters like Stuart Mullens of Houston can land gar as large as this without difficulty.

coated clothes line. Get the kind that consists of a loose plastic tube containing thousands of nylon strands. Although this type has waned in popularity, it still can be found.

Cut the clothes line into seveninch pieces and use one piece to the lure. To make each lure, strip off all the plastic coating, except an inch or so. Be careful not to cut into the nylon strands. If the nylon threads are securely held by the plastic, a sharpened snap swivel can be stuck through the plastic-coated end, which will complete the lure. If the nylon pulls out, double the plastic-coated end and tie it together with a piece of fishing line. Then fasten the snap swivel into the loop just made. The lure is then ready to be tied on the fishing line via swivel.

Use a snap and swivel with leader combination for each lure. The swivel should be large enough to snap over the lure and the leader should be at least 18 inches long. When you catch a gar, you can open the snap to release the lure and fasten on a tearing up the reel. I have been using a spinning reel on gar for several years, and it still has some years to go.

Sometimes, it's best to pinch a split shot or two on the line in front of the lure. If you use an open face reel, this lead is a must for casting any distance. When you're ready, wet the lure and cast it out. Let it settle, then retrieve it slowly.

It's difficult to tell when the fish takes the lure, but it's easy to know you have a taker once the gar realizes it has hold of something strange. You'd better hold onto a half-pint partner at first and show him how to handle the fish. Once he has a feel of the fish and discovers just how hard it can pull, he'll hang on by himself. But one of the big ones

Although Taffy doesn't fully understand the fishing game, she recognizes a winner and sticks close to this one, her master, Barney Carpenter who has proof of angling prowess.

new lure. Once you've done it a couple of times, you'll find it easy.

A spinning rod and reel offers the most fun, and this type of equipment is easiest for the wife and children to handle. If the drag is set just right, a child can handle a big fish without breaking the line or could easily jerk a rod out of a child's hands if the youngster didn't have a good grip on the rod handle.

One thing to tell the little partner is to give the fish time to roll with the bait in its long slender beak. When it twists a couple of times the thousands of nylon threads get

tangled in the teeth, in the same manner that long, fine, wind-blown hair gets snarled in a comb.

Then, when the gar has caught himself, all the youngster has to do is reel him in.

To see a young boy or girl, or even the uninterested wife, thrilling to the sight of schooling gar for the

Gar Patties

If you prepare longnose gars properly, they're some of the best eating fish in fresh water. First, catch the gar as described in the story on these pages. The larger gars, in the eightpound class, are best to use because of the amount of meat. Slit the fish down the back with a big, sharp knife or a sharp hatchet. Remove the meat from the backbone.

Throw this meat into a pot of boiling water, salt down and allow to cook until done. While the fish is cooking, throw some potatoes in another pot and boil them just as you would for mashed spuds. While these are stewing, finely grate several onions, depending on the amount of fish you have.

When the fish is done, mash it, the potatoes and onions all together. Toss in some salt and pepper for flavor. Break an egg or two on the mixture, and sprinkle in a small amount of flour to hold it all together. Take handfuls of this and shape into patties or small cakes. Roll this in yellow cornmeal, being careful all the time not to break or crumble the patties. Drop these patties into the deep fat just like you would fillets of fish and let them fry. Turn them until they are golden brown on both sides.

Throw some lettuce and tomatoes on the plate, a good dressing, a couple of these patties, catsup if you like it, a glass of iced tea—and you'll have a meal fit for a king. If you don't believe me—try it sometime.

first time is reason enough for a man to spend time and effort on the trip. But when a spunky little partner lands a big one and a smile longer than the boated fish sweeps across his sunburned face, usually papa mentally plans the next gar adventure

Berry



Bait

by NORREL WALLACE I & E Officer, Region I

FOR FAST action and a boatful of fish, try mulberry fishing. It's a seasonal kind of fishing available to anyone who has a favorite stream with overhanging mulberry bushes. This includes fishermen in a wide range over the state since the varieties of mulberries in Texas are several. Even West Texas, sometimes erroneously considered barren fish-

ing ground, offers this kind of fishing as well as others.

Carp used to living off the fat of the mulberry bush in summer will grab a berry-laden hook as fast as a fisherman can plunk it in. Specifics of the game are illustrated by accompanying pictures.



Plunk bait gently under the mulberry tree, which is shedding fruit.



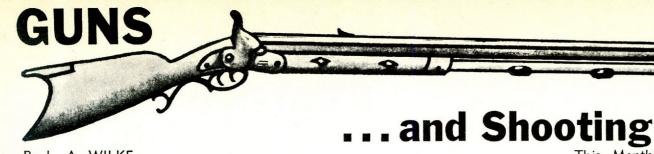
When the fish is subdued, swing catch aboard and repeat the process.



Before the bait sinks to the bottom, you'll probably have a strike.



A fish every two minutes is about par under a ripening mulberry tree.

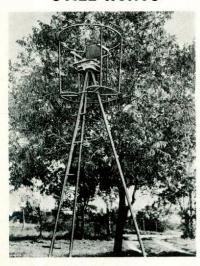


By L. A. WILKE

This Month: .410's

TWO NEW .410 shotguns are on the market this year. Within two weeks two manufacturers announced models of this close-shooting little gun which will be bought mostly for boys and women.

THE SMART HUNTER
STILL HUNTS



Portable Hunter's Stand for all deer hunters, 10 or 15 ft. All steel tubing, swivel cushioned seat with banister gun rest. Good view of game. No odor when above. Excellent for hanging game while drawing. You may select game before killing. Gun rest for perfect shots. Cannot be excelled for varmint calling. Makes hunting leases more desirable. Canvas wind breaker as protection from weather — \$10.00. Model shown \$60.00, 12 ft. \$65.00 & 15 ft. \$75.00. Other models available. Also tree ladders in 5 or 10 ft. sections at 50¢ ft. All types of gun racks for cars, jeeps and pickups-\$2.00 to \$12.95. All prices f.o.b. Sales tax 2%.

HUNTER'S EQUIPMENT MFG. CORP.

Floyd Ogden, owner
201 W. 40th San Angelo, Texas
Dealers Wanted

Perhaps the most intriguing one is the new Noble autoloader, with a price several dollars under \$100.

This Noble No. 80, chambered for

double in both 12 and 20. This .410 is the break-through into the auto field and it will be interesting to watch.



both short and long shells, is recoiloperated, with metal construction of an entirely new process, and weighs about six pounds.

The receiver is electrolytically engraved and the woodwork is of select walnut. The announcement does not state whether the gun may be had in several degrees of choke, or is full or modified. But in any event, it should be a most interesting little gun.

It is our prediction, at this low price it may be bought for use by many bird and rabbit hunters. Noble has been making a high-quality, popular price shotgun, plus rifles, now for about a dozen years. The line was started with a very reliable 12 gauge, then a .410 pump and a 20 gauge. The company also has a

The other .410 is from High Standard, also an old-time reliable gun maker. This one is labeled Flite King Delux-Rib, and a picture indicates it is all of that.

High Standard previously has made a .410 shotgun, but this one is really on the deluxe side and no doubt it will be showing up rather heavily on the clay pigeon circuit where most shooters like good looking guns.

It also sells for a few dollars less than \$100, with the ventilated rib, checkered stock and beavertail forearm. The gun is chambered for both long and short shells and will handle them interchangeably.

High Standard also announced a new 20-gauge, gas-operated shotgun of deluxe features, a new .22 pump rifle and a magnum 12 shotgun.

These guns are all stream-lined and keep up the fine appearance of the entire High Standard production.

Shooters also will be interested in knowing that Remington already has field loads on the shelves in the new plastic cartridges in all gauges. This shell originally was produced in the 12 gauge high velocity but now is available in the short base shell, too.

Bird shooters this fall will find this load and shell excellent for both dove and quail.

RECHAMBER YOUR 30-06 TO NEW 300 WIN. MAGNUM as low as \$27.50. Write for details. We are tooled to chamber for 62 standard and wildcat cartridges.

During this month we will rebarrel your FN or 98 Mauser to .243, 270, 30-06, or 308 and blue barrel only \$27.50. Small additional charge for stock work if fitting is required. Other actions slightly higher. Write for particulars. Specialty of the House: Rebarrel your present action, blue barrel, chamber for .250 Curry Magnum ONLY \$35.00. Stock work extra.

FRANCHISE DEALER for ITHACA & BROWNING & LYMAN SCOPE SIGHTS. SPECIAL THIS MONTH: FAMOUS ITHACA lightweight shotgun ONLY \$80.00. Your satisfaction unconditionally guaranteed.

George W. Curry
1 E. Twohig St.
Home of the .250 Curry Magnum

PRONGHORN ANTELOPE!

Permits available for October hunting on 130,000 acre Brite Ranch, Presidio County, Texas. Buck permits, \$60. Doe permits, \$40. Mrs. Jane Brite White

Box 995 Marfa, Texas

PA 9-4154

Regional



Roundup

Region I - San Angelo

LAKE PAULINE, near Quanah, was chemically treated recently by Region I fishery crews with good success. Fifteen thousand pounds of powdered rotenone were applied by two treatment barges capable of distributing 2,000 pounds of powdered rotenone per hour. Restocked game fish should be of catchable size by 1964.

Bighorn sheep in the one-section rearing pasture on the Black Gap Management Area in Brewster County had three young this year, increasing the herd to 17 head. When bighorn sheep populations reach the pasture's carrying capacity several head will be liberated in areas surrounding the pasture on the Black Gap.

Electro-shocking devices are being experimentally tried by fishery crews in San Angelo with sporadic success. Fish shocking is an important management tool of fishery divisions in other states, and when biologists in Texas perfect similar devices, renovation work will be cheaper and much faster.

Meredith Dam is the new name of the Canadian River Reservoir now under construction north of Amarillo. Changing the name hasn't changed the fishing future of this body of water. Fishery biologists believe Meredith will be one of the best channel catfish lakes in Texas.

Region II - Waco

CONSIDERABLE interest of landowners, sportsmen and personnel of the Game and Fish Commission exists in an experimental gray francolin release in northern McCulloch County. This spring, 192 gray francolins were released at four sites in an effort to determine if these birds would adjust themselves in an area which was selected because of its similarity to their native habitat in India. The birds were raised at the Game and Fish Commission quail hatchery at Tyler and were in fine shape at the time of release. This was the second release of the species in the area. This project will receive special attention by the wildlife biologists to determine the causes for success or failure.

Hardin Bradley reports the shooting preserve record books recorded 7,685 deer were harvested in Mason County during the 1962 hunting season. This is a drop of 282 bucks and 422 antlerless deer from the 1961 season. Forty-seven turkeys and 87 quail were recorded this past season as compared to 105 turkeys and 220 quail in the previous season. The 332 shooting preserve licenses sold showed an increase of six over the previous season and the total acreage leased for hunting increased by approximately 30,000 acres. About 423,000 acres were leased in 1961. During the 1962 open season there were 5,607 persons hunting 11,110 days as com-

pared to 6,148 persons hunting 13,106 days during the 1961 season. Turkey kills have shown a downward trend the past three years. There were 128 turkeys and 459 quail harvested in 1960.

Region III - Tyler

JUST a few years ago the word, "conservation," meant preservation to the people in East Texas. Now a surprising number of individuals are learning that the word more properly means "wise use." Director John Carlisle advises that each month the public is expressing interest by the amount of conservation questions asked by letter and telephone. Requests for informational literature are totaling hundreds.

Studies are being conducted on the Engeling Wildlife Area to determine the browse relationship between deer and livestock. Deer studies are being conducted on types and amounts of food that are popular with the white-tailed deer.

In the Tyler Fish Hatchery, Superintendent Glenn Caddel has succeeded in artificially hatching more than a quarter of a million channel catfish eggs. This is good news to the anglers, for the fish will eventually be delivered to public lakes and farm ponds. Caddel has devised a cradle-rocker system of hatching the eggs, with a water-powered wheel agitating the water—a duty normally done by the male catfish.

In those counties where squirrel season is open, hunters are reporting moderate success to game wardens and appear to be highly satisfied with both the amount and condition of the game that is bagged. In East Texas, squirrel is an important game species. Hunters want to take the animal, but they want to protect breeding stock for another year. Both gray and fox squirrels are taken in most counties in Region III, and in sufficient numbers to make the prospects of a squirrel hunt exciting.

Region IV - La Porte

WILDLIFE Biologist Bill Wright of Silsbee, has been surveying quail breeding populations in the Southeast Texas Regulatory Area. Counts in Hardin, Jefferson and Liberty counties all show the number of breeding birds to be about one-third less than last year. Bill attributes this reduction to the dry spring, the driest on record in 46 years. Dry years in East Texas usually result in a low crop with almost all young birds being from the early hatch. Summer rains may help increase quail numbers by fall.

Wildlife Biologist Clarence Beezley at Sheldon Reservoir also reports that the drouth this spring has seriously cut production of smartweed, millet and other

· Continued on Next Page

Saltwater fingerlings bagged for West Texas

puddle duck's favorite foods. This will probably cause many of these ducks to move around hunting for food more than usual this coming season. When food supplies are adequate, ducks tend to bunch up and stay at one location until spring migration begins.

Region V - Rockport

THE SUPERVISOR of Inland Fisheries for Region V has been hard at work on a knotty problem, the transportation of saltwater fingerlings to new homes in far West Texas. Transportation costs are relatively high when the fish are hauled in hatchery trucks, and some of the small fish don't survive the two-day trip.

In experiments, 20 of the three-inch (fingerling) marine fish have been placed in one gallon of water in a plastic bag. The bag is then inflated with pure oxygen and sealed. The bag is placed in a 10' x 10' x 10' cardboard box which is insulated with one inch of styrafoam. Fish, packaged in this manner, have survived and done well after being sealed 16 hours. Checks are being made to try to raise the number of fish from 20 to 30 per bag. It is believed that flying the fish to their transplant locations in this type package will deliver more fish, in better condition, at a cheaper cost per fish

than has ever been accomplished.

Another Inland Fisheries project that may have farreaching effects is the joint State-Federal experiment in aerial application of herbicide. Biologist Charles Menn, leader of D-J project F-6-R-11 on Lake Corpus Christi, is doing some experimental work in spraying water hyacinths with 2,4-D from a helicopter. In the past there was too much danger of wind drift of the herbicide onto trees, flowers and crops adjacent to the lake. The spraying solution now being used is 2,4-D in an invert emulsion (water-in-oil). This appears to have decreased the wind drift and keeps the spray concentrated on the target area. Menn says that initial results look very promising. If the experiment is successful and if public opinion favors the continuation of this type of work, it is possible that this weed will be completely eliminated from this favorite fishing lake.

Biologists in the lower Rio Grande Valley have already started banding white-winged doves. Ted Clark, project leader, reported that about 2,500 adult birds were banded between April 20 and 30. There are some indications that the doves sometimes lose their band so these birds were "double banded," one band for each leg.

Later in the summer, Clark will take a crew down to Mexico to band nestling whitewings.

Gentle rocking is conducive to sleep. Home on the Waves ——From Page 11 had two stories. Still another had a screened-in back porch and a sun deck. The limits in comfort are dependent only on how much a person wants to spend for his home on the water.

Manufactured houseboats are built, for the most part, on solid hulls. Homemade boats, on the other hand, are floated either on welded barrels in a series or on fiberglass or aluminum pontoons. Some of the better commercial boats look like mobile homes afloat.

In fact, many of the features of the mobile home have been incorporated into the houseboat. The houseboat kitchen, for instance, might have a propane gas stove and a battery-operated refrigerator. Bunks on some are built along the sides. Some floating homes have a fold-up dining table and upholstered chairs. Some houseboats have curtains on the windows and a bathroom complete with shower and marine-type toilet. Everything for modern, comfortable living is available.

The smallest houseboats usually sleep four persons comfortably, and the larger ones sleep anywhere from six to eight. Some are adaptable enough to handle more people. On a small houseboat two to four persons can sleep on the inside, and that many more can rough it up on the reinforced roof, made into a sun deck.

There is nothing quite like sleeping out on the water. The muffled lapping of waves is soothing and relaxing, and the gentle rocking of the boat by wind is conducive to sound and peaceful slumber.

People who own houseboats can moor them at commercial camps where they are accessible at a moment's notice. Many people go out for weekends and simply use their houseboats as cabins, not leaving the moored areas.

• Continued on Page 29

Best FISHING and Times HUNTING Times
TRADE)
FORECAST OF THE DAILY FEEDING TIMES OF FISH AND GAME FOR EVERY DAY OF THE YEAR
JOHN ALDEN KNIGHT, P. O. Box 208, Williamsport, Pa.
Please send copies of SOLUNAR TABLES @ \$1.00 each
Name
Address
State Dealer Inquiries Invited Enclosed \$

BIG BASS



Jack Henry, Game and Fish Commission biology technician, caught this 10-lb., 3-oz. black bass on Medina Lake. He was jigging for white bass to be used in a Commission study.



What Others Are Doing

by JOAN PEARSALL

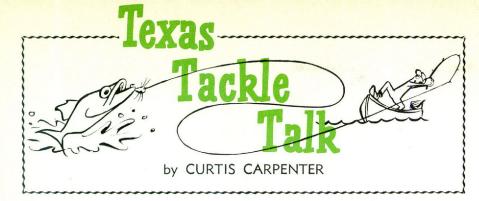
YOU HEARD, BIRD: A device designed to put to flight every species of bird that feeds on grain or fruit is being produced by a firm in Saskatchewan, Canada. Called the Comet bird-scare cannon, it emits a blast equal in sound power to the discharge of 10 shotguns. Main component is an 18-inch megaphone with a compression chamber at its base. A mixture of air and acetylene is detonated by a coil and spark plug unit. Firing intervals can be regulated by a timing device.

WATER WISDOM: Because water pollutants are more complex today than they were when Canada's industrial production was in its infancy, the Ontario Water Resources Commission recently set the following objectives for water quality to cover all surface water courses in the Province. Biochemical oxygen demand, not more than four parts per million; phenol, not more than two parts per billion; iron, not more than 0.3 parts per million; coliform count, not greater than 2,400 per 100 milligrams; oil: should not be present in quantities to create objectionable conditions; no substances should be present in quantities creating offensive taste or odor.

SWITCHED FROM THE DITCH: Idaho has a system of fish screens on several of its rivers and tributaries, to prevent salmon fingerlings from entering irrigation ditches and certain death. The odds against salmon fingerlings ever returning to the waters of their nativity are appalling. They are fair prey to predators from the beginning. But death in an irrigation ditch can be avoided, and a screen prevents countless fingerlings from going astray. By a 1957 state law, the Idaho Fish and Game Dept. may build and maintain fish screens in water courses which carry 125 cubic feet a second or less. The department designs and constructs the screens and obtains leases from property owners where they are installed. This is financed entirely by federal funds under the Columbia River Fisheries Development program.

THE PINCHHITTER: A man in Nebraska was unable to go pheasant hunting last season, because of sickness. His black Labrador dog, however, went off to a nearby field one day and joined two hunters. When one of them shot a pheasant, the dog retrieved it. But instead of giving it to the man the dog sped off with it to his master's barn. When the hunters reported this to the lady of the house, they found the pilfered bird buried under a manger, but they thought the situation so funny they left the pheasant with the dog's master.

PEACEFUL COEXISTENCE: Visitors to a New Mexico game bird farm are amazed to see a large female Cooper's hawk, a sworn enemy of chukars, sitting peacefully on a broomstick in a chukar pen. The chukars don't seem to mind it at all. This all came about because the farm manager got tired of losing quantities of bird feed to sparrows. He decided that the hawk, being fond of sparrows as a natural food, might keep the chukar pens free of the pests. The large hawk headed right for the sparrows, catching them in mid-air. So now the hawk is rotated from pen to pen. Roosting four feet above the chukars, the hawk has not once molested them. And the sparrows are kept to a minimum. As one official said: "It's about like putting a mountain lion in an enclosure with deer to protect the deer from wild dogs-but it works."



SOME authorities claim that white bass (some call them sandies, sand bass and whites) should be given credit for providing more fishing for more people than any other species in this state. This is a big statement, and it may be true. Undoubtedly, white bass are more suitable for the average fisherman using artificials, especially a beginner, than any other fish in the lake.

Get into a school of whites and even the small child with a good lure can literally get tired of catching the little fighters. Fishing for schooling whites requires only a rod and reel and a spoon or small perch-like lure. Light colors usually are more readily taken; however, I have seen times when a solid black diving lure worked best and produced fish more consistently than light lures.

Be on the lookout for these schools near the deep water around dams. A slick-surfaced lake can instantly become a wild, churning scene as a school of white bass surfaces and rips at small shad. A lure tossed into the middle of this confusion can produce some exciting action. A fast retrieve through such a school works best.

At times a school can be spotted by watching for sea gulls. A flock of gulls diving and working the water is an excellent sign that whites are below. If, when the lure is worked on top the action is slow, try dropping the lure to the bottom and jigging it. Toss it a distance out, allow it to settle near or on the bottom and dance it back to the boat. This usually is the best way to catch the larger whites.

Sometimes lifting the spoon high with the rod tip and allowing it to settle quickly will produce when nothing else works. Another way that works is bouncing a jig along the bottom. If the fish are on the top, try tying a small white jig on a floating surface plug, leaving about 18 inches of line between. If the whites are really hitting, it is possible to catch them two at a time by rigging up with more than one jig. A. W. McLaughlin of Marble Falls, realizing that spoons, bucktails and spinners are all good white bass baits, combined the

three and came up with one plug. It has a spinner angled over the top, a spoon hooked on to the spinner and two bucktails (one yellow and one white) with two hooks fastened onto the spoon. He claims he can catch two at a time with this lure.

Regardless of what kind of lure you decide to use, don't pass up a chance to take the whole family out for a try at white bass when they are schooling. This is a fighting fish, more so pound-for-pound than any other bass in the lake. It certainly has earned the reputation it now maintains, and it belongs right at the top of the list of fishes caught most in Texas. Black bass may reign as king of the freshwater game fish, but it rates far below the white bass as choice for all-age fishing.

Home on the Waves ----- From Page 27

Or perhaps a person would rather cast off for a weekend or maybe even a week, to explore a reservoir, never seeing the same place twice. I remember a weekend some friends and I spent on Lake Texoma, cruising from place to place, never once crossing our trail. Each creek and cove held new adventure and new sights.

Some of my most memorable nights have been spent angling for white bass from a houseboat on sprawling Lake Travis in Central Texas. Prior to dusk we usually maneuver our houseboat into place and anchor it securely. Glowing gasoline lanterns attached to the railing cast half moons of light across the rippling waters. Live minnow baits are dangled below the shining surface. The light soon attracts minute insects and bait fish, and the predatory white bass follow. When action slows and fishermen become

weary, we climb into the nearest bunks. Simple and convenient.

The houseboat offers varied possibilities. I recall a time when a pressing workload threatened to keep me isolated for the weekend. But the family yearned to get into the outdoors and away from the house. We discussed the problem and finally thought of a logical solution.

We rented a houseboat and made our way up Granite Shoals Lake. After we pulled into a cove and anchored, the family swam and lounged in the sun while I set up my tyepwriter inside and went to work. That night, after chores were completed, we found a likely spot to spend the evening, broke out the lanterns and fishing tackle and tried our skill on crappie.

The trip worked fine for everybody. I got my work finished and the family had a fun-filled weekend. You can't beat a deal like that.

RUBBER-BAND LINE KIT



Proven Fish - Catcher ---

Use as throw-line from the bank, set it, bait it and run it without a boat.

Will catch all fish --- Use live or cut bait.

THE LEE COMPANY
4306 Utah Ave.
Dallas 16, Texas



Kit contains approximately 50 ft. 70 lb. test nylon line, 20 ft. rubber, 6 Snelled No. 2+O hooks.

One KIT....*1.25 One pkg. (2 lines) of extra Rubber........75

mailed prepaid

Night fishing with lanterns has not caught on.

White Perch a Winner——————————————————————From Page 19 the crappie is a soft-mouthed fish, these soft hooks will easily handle them.

Some fishermen, usually the more experienced, prefer to "tight-line" their fish, without a cork. The fisherman with a tight line can change depth instantly without moving a cork up or down on his line. He can also "seine" with his line, moving it back and forth slowly to cover more area with his minnow. But it takes a special touch to feel a light-hitting crappie on a tight-line.

Although the best crappie fishing is in the active spawning months of spring, many fishermen take good strings throughout the year-even during the cold months of winter.

One method of crappie fishing popular in North and Central Texas—night fishing with lanterns—has never caught on in this area of the state.

However, in recent months, more and more anglers at Dam B Lake have given it a try and the method may prove productive there.

Just as in most other areas of the state, there are two species of crappie in Southeast Texas—the black crappie and the white crappie. White is the most common.

But in this area, both species are known as "white perch," no matter how light or how dark they might be. And, either is a favorite.

Friends ask for seconds when rib cuts are served.

Carp in Comfort——————————————————————From Page 13
We usually find someone who wants them. We give many away, but when they are running large, I save rib cuts and store the meat in the freezer. Carp rib cuts have become a favored food in our house. In this cut are only large rib bones, none of the many small ones that make the rest of a carp so hard to eat.

In dressing a carp to save the rib cuts, I cut the throat between the gills and break the head back and

off to allow the fish to bleed thoroughly. Then, I scale the sides over the ribs and split down the belly to clean in the usual manner. With a sharp knife, I make two fillets by cutting along the backbone on both sides. I trim off the tail area and side above the ribs, throwing away these portions that are bone-laden. The skin is removed with skinning pliers.

We have had outdoor fish fries for our friends, serving carp rib cuts—and they have always asked for seconds.

Only two teams made Ingleside.

their bows east and scooted over the water as the gun fired. The first leg of the saltwater journey ended at Mills Wharf, but the miles from Mills Wharf to Ingleside proved to be the roughest of the coastal heats. A brisk wind of about 18 knots greeted 14 teams as they lined the Mills Wharf shore May 9 at about 5:55 a.m. Several boats started out rowing. Others left under sail. The swells ran high. When the boats reached the waters off Rockport, five-foot waves tossed

them. By the time the lead boats, 121, 163 and 102, neared the mouth of the Intracoastal Canal just south of Rockport, small craft warning had been hoisted.

Only two teams, 163 and 102, made the Ingleside beach before the evening's deadline.

With only hours to go but agonizing effort ahead, the two boats left for Corpus and the finish line at 6 a.m., May 10. With the lure of the finish line and iron-willed strength the two panted into Corpus Christi—Lynn Maughmer and Jimmy Jones,

102, who were first in elapsed time and Fred Hurd and "Big" Sam Hare, 163, who were second. Corpus Christi citizens and many of the safari buddies who dropped out along the way cheered the bearded, ragged winners onto shore just before noon.

Amid the clamor of reunion with families, the winners were showered with prizes totaling more than \$3,000, and trophies.

Memories of narrow escapes and exhaustion were momentarily lost in the triumph of an impossible feat accomplished.

Game Bird Eggs

BOBWHITE QUAIL EGGS 12 Cents Each

CHINESE RING NECK PHEASANT EGGS 20 Cents Each

Minimum Order \$5.00

Postage Prepaid
Please Mail Check With Order

Reechi

QUAIL & PHEASANT FARM

Telephone Number DA 2-4770 Route #2 BUFFALO, TEXAS

Designed and built by a Texas Hunter with years of experience. Heavy Gauge Steel with undercoating on floor. Comfortable and quiet with 4-way seat. Holds 2 hunters. Easy to get in and out of.

YOU CAN'T MATCH THIS BARGAIN!

Call or Write

City Carbonic Co. 1122 E. Commerce CA 3-6313 Seal Press Co. 951 Bitters Road OX 4-3441

San Antonio, Texas





SOUTHERN ANGLER'S AND HUNT-ER'S GUIDE, 1963 edition, 768 pages including black and white photographs throughout and numerous line drawings. Published by Don J. Fuelsch, P. O. Box 117, Albert Pike Station, Hot Springs, Arkansas, \$1.

As the once favorite song goes, "It's in the book." And everything worthy of a hunter's and fisherman's time is in THE SOUTHERN ANGLER'S AND HUNT-ER'S GUIDE. Don Fuelsch is a hard working outdoorsman. He came up with the idea of producing a book, or guide, which would just about cover any subject connected with hunting and fishing in the South. From what was once a thin, fairly incomplete guide, has grown a healthy, complete reference book.

Most of us like to think we are well informed on hunting and fishing. This may be true when it comes to Texas outdoors, but not so once we leave the borders of our Lone Star State. And, I have discovered that right here in my own state there are sportsmen who know a great deal more about some of our hunting and fishing than I do. Many of these people are specialists; others are just naturals. Regardless, they can teach most of us a few things about the sports we treasure most.

It would be impossible to give a fair run down on the contents of Don Fuelsch's guide. You will find something on just about everything that swims in southern waters, including both salt and fresh. Invaluable secrets on how to rig for and how to catch these many species have been re-

You needn't purchase two books if you are a hunter as well as a fisherman. The Guide's coverage of our many game animals is as complete as that of fishing. If you aren't an expert, get this book. If you hold that title—it'll help you keep it.

-Curtis Carpenter

THE COMPLETE ILLUSTRATED GUIDE TO CASTING, by Joe Brooks. Published by Doubleday and Company, Inc., Garden City, New York, 192 pages, \$4.95.

For the person who just grabbed a spinning reel or other rig one day and started casting, letting everything take care of itself in a *que será será* fashion, this book contains a word of judgment. Thumbing through it leaves no doubts in a reader's mind that casting with any kind of rig is

an art with principles of skill. And, Joe Brooks, familiar with international as well as U. S. fishing holes, is just the master to explain the art.

The book teaches the beginner and straightens out the oldtimer with clearly written copy and complementing photographs showing the basic and fancy work in fly, plug, spin and surf casting. The 207 photographs are excellent in detail and action.

Explanations are clear, often making comparisons with the skills of golfing, as shown in the following passage, "There are several ways to hold a fly rod, but to me only two of them give the necessary wrist freedom. The hand may go around the cork grip, with the fingers under and coming up on the inside and the thumb lying lightly along the top of the grip, as shown in picture No. 1; or the rod may be held in much the same manner but more as the right hand would hold a golf club, thumb and finger forming a V, so the thumb is further down on the side of the grip, as shown in picture No. 2."

Although the book comes with no money-back guarantee for the reader's cast-

Fine For Kitchen Or Camp!

THE HUNGRY SPORTSMAN'S FISH & GAME COOKBOOK

More Than 400 Recipes \$1.00 Postpaid
Fish, Big Game, Small Game, Wildfowl,
Turtles, Frogs, Mushrooms, Etc.

EDDIE MEIER Box 3030—Scottsdale, Ariz. ing success, a person who studies it with the equipment in hand will surely add some extra fish to stringer or creel.

-Ann Streetman

CATCH FISH WITH TEXJIGS or return them for money back less postage. Superior for White Bass. Years of testing and thousands of fish caught prove TEXJIGS superior to other lures and even better than live bait. Trial order 3-for-\$1.00 with instructions.

Texas Jig Company, Dept. TG, Box 111, McGregor, Texas

BOBWHITE	Booking Orders Now
OHAH	Mature Quail90c
	6-8 Weeks Old50c
21/10	Started Chicks, 4-5 Weeks 40c
XXX	2 Weeks Old30c [
	MINIMUM ORDERS:
alla.	Mature Quail 20
- F	J. C. COX
1412 No	orman St., Ft. Worth 6, Texas
	/ Telephone After 6 P. M. ne: MArket 6-7843

DEER HUNTERS-

For first time ever the C. T. White Ranch in McCulloch Co. is accepting reservations at \$100 per gun for the entire season only on an exclusive pasture basis. Have pastures accommodating as few as five hunters and as many as fourteen. No meals, lodging or camping facilities provided but campsites are numerous and many are on running water well stocked with fish. Contemplate Commission setting same limit in 1963 as in 1962 which was three deer with at least one being antlerless. Prefer hunters inspect before making reservations. Call—

FRED WULFF

at LY 7-2330 or write P. O. Box 1270 BRADY, TEXAS

for information and appointments.

	TEXAS GAME A	dg., Austin 14,	Magazine
	2% Texas Sales Out-of-State subscribers	□ \$3.06 for 2 Tax Has Been A	\$2.04 for 1 year
Name			
Street or Box	*		
City		Zone	State
	□ New	☐ Renew	val
		eks for Deliverget the Tax!	ery

Letters



to the Editor

Retirement

Editor:

My wife, Mrs. Kocurek, is a retired R. N. She is enjoying her spare time (besides housekeeping) in fishing frequently. These three black bass shown with Mrs.



Kocurek totaled 16 pounds. She caught them in Bowers Lake near Caldwell within approximately three hours.

G. R. Kocurek Caldwell

(It seems Mrs. Kocurek is enjoying a successful retirement-judging from that string!-Editor)

Bass in Stock

Editor:

My wife and daughter subscribed to *Texas Game and Fish* a few years ago as a birthday present, and I really enjoy the magazine and look forward to it every month.

I am enclosing a photo of myself and

six-pound and two-and-a-half-pound largemouth black bass that I caught one after-



noon in February in a private stock tank. I was using a spinning reel.

Charles J. Gerlich Jr. San Antonio

(Congratulations on such fine fishing, and thanks for your comments about *Texas Game and Fish.*—Editor.)

Salty Cat Reeled In



Editor:

I wish to contribute this picture for

your wonderful magazine (left, myself; right, my nephew Jimmy Manitzas). I caught this 45-pound yellow cat March 11, 1963 in the North Concho Lake here in San Angelo. I was using a 20-pound test line, and I was working my lure on the bottom as a jig. My advice to fishermen is keep your bait in the water and, if you have a weak heart, don't try to fight a 45-pound yellow, for he's a bit salty.

Steve Manitzas San Angelo

(He's a prize worth the battle. Happy fishing.-Editor)

Trotline Mossback



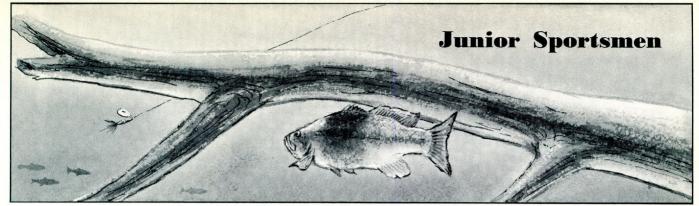
Editor:

Enclosed is a picture of my father, Aaron C. White of Austin and a 21-pound catfish he caught April 12 on West Beach, Lake Travis. He used shad for bait. He caught a 12-pound catfish off the same trot line with the same kind of bait at the same place April 9.

Wishing you the very best of luck with the magazine.

Mrs. B. W. Barton Austin

(It's a fine catch. Thanks for letting our readers share Mr. White's fishing feats.— Editor)



Angling Art

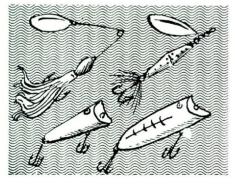
by ANN STREETMAN

LIKE BASEBALL, or top spinning, or arithmetic, fishing requires equipment and maneuvering skill.

The equipment doesn't have to be complicated or expensive. You can have a lot of fun and full stringers using a cane pole, perch hook, sinker, bobber and meal worms. But, perhaps you have an almost new spinning rig passed on to you by a brother or an uncle, or maybe you have a solid, new birthday rig.

Even if you do own new equipment, four basic artificial lures are all you need for bass until you become a veteran of many bass fights and graduate into the old pro class of fishermen who have many multicolored lures which jig and jump in response to an experienced touch. Until then, two small spinners like the Shyster or Piggy Boat, a black and yellow and a yellow and white, and two small top waters like the Chuggar or Skipjack, a black and a yellowish green, will suffice.

The two spinners need only to be retrieved slowly. As the name implies, a shiny blade on the baits spins in water as you retrieve them. As a beginner, you don't need to jerk or pop the baits to give them any special movement, although some experienced fishermen do this. The natural movement of your rod tip will give the lures some additional action. But you should keep the line taut while reeling in a spinner or any other bait.



The top water lures call for more skill than the spinners. The object of the game, of course, is to make a bass think your bait is a tasty grasshopper or other natural delicacy struggling across the water. So, after you've settled the bait in a likely spot, start reeling in very slowly, keeping

the line taut all the time. Reel about six turns and stop. Count to six and reel six more turns, etc. This six and six rhythm should tempt an unwary bass. He may hit on the still count and, if he does, you'd better have the line taut and your body alert! Keep the rod tip angled at about 2 o'clock. Here, again, the natural movement of the rod tip helps. A jerk or two every so often helps.

When the strike occurs, immediately set

FISHING PARTNER

Editor:

This is a picture of my "fishing partner" and his first catch, a 12½-inch, 1¼-pound crappie from 4-H Lake in Gonzales County. It was caught April 12.

He is Robert H. (Tad) Morris, Jr., age 21 months. The crappie was taken on cane



pole and live minnow and the young fisherman was completely unassisted, with the exception of my taking up a little line for him. Although this is his first catch, he has been doing serious fishing since last summer. He thoroughly reads the pictures from every issue of *Texas Game and Fish* and can identify most wild game and several species of Texas freshwater fish.

Robert H. Morris, Sr. (Proud Dad) San Marcos

(Your partner has a catch worthy of anyone's frying pan. We're saving room for him in our fishing tournament coverage for 1983!—A. S.)

the hook by giving the rod a strong jerk toward you. This action buries the hook in the fish's mouth and makes his shaking it loose less likely.

Then reel him in holding your rod tip high. If you're fishing from a boat with an adult, or on a bank very near the water's edge, use a hand net in the final landing. When you have reeled in all but about six feet of line, dip your net into the water and guide the fish into the net, not the net to the fish. When he sees you and makes a last rush for freedom, you'll have him trapped in the net.

Knowing which baits to use when is another important facet of fishing skill. As for the lures just mentioned, you should use the top waters in shallow water along the shoreline when fish are feeding there in early morning and late evening when the water is cool there. In mid-day sunshine when the shallow water is warm, try the deep-running spinners to tempt the bass which move to deep, cool water to feed.

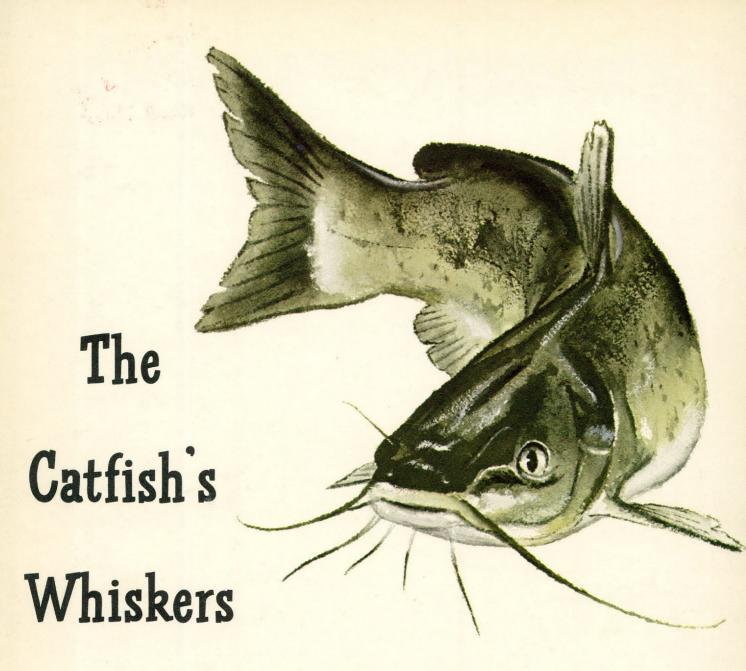
Using live baits on a hook at the times when they would naturally be in the water is a simple but important strategy. According to this principle, earthworms are good just after a shower; crawfish, at dusk and night; and grasshoppers during daylight hours.

Fishing practice with limited equipment is an excellent way for a beginner to become a mature fisherman worthy of his tall stories.

A FULL STRINGER



Eleven-year-old Bill Moore of Kingsville lifts a stringer of crappie and bass he caught on Lake Corpus Christi recently. The fishing partner in the rear of boat is his mother.



Mud and sediment are plentifully stocked with delicacies dear to a catfish's palate. The fish's eyes are much reduced in proportion to its body weight, and sight is subordinate to the other senses in searching the opaque elements for food. The senses of taste, touch and smell are incredibly acute, and are contained mainly in the array of

barbels (whiskers) decorating its face. These accessory tongues are extremely sensitive. The instant a whisker touches a particle of food, the morsel is snapped up by the ready mouth. Each barbel has an assigned area to sift. The longest two naturally probe as far around the fish's head as their length permits. The inside pair work through

mud directly below the mouth, and the outer chin appendages cover the middle ground. An added provision of the freshwater catfish is two more barbels between its eyes. These aerials alert their owner to any edibles settling down from above. Born with a bottomless appetite, extra tongues seem a fitting adaptation for a catfish.