

Texas Game and Fish

SEPTEMBER

1961

20 CENTS



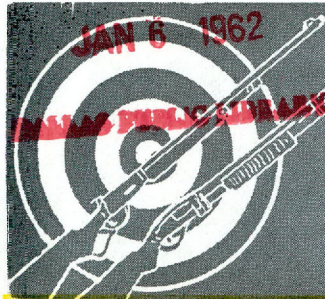
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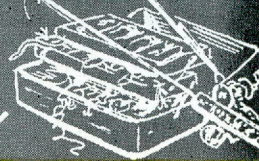
Photo by Curtis Carpenter

A WHOLE FLEET of man-of-wars move in through the pass off Port Isabel with their blue sails glistening in the sun light and tenacles dangling below. In this photograph there are at least 75 of the beautiful, but dangerous, sailing jellies.

How many can you count? Ordinarily they are more scattered. But at certain times of the year like this July day the currents will move numbers of them together. Fishermen casting from the jetties find it difficult to miss them with lines.



Long shots Short casts



SOUND FAMILIAR?: A recent survey has indicated that Mr. Average Hunter is a laborer or craftsman in the middle income bracket, 40 percent of whom come from a farm background. Forty-six percent of the hunters served with the armed forces, 90 percent began hunting before age 18, some 90 percent could recognize a common tree, but only 43 percent could identify ducks they shot. Significantly, about one-half the persons surveyed said bagging ducks game was not the consideration of the greatest importance to them, that they were content simply to be in the outdoors.

CANADA DRY: "A lot of gloom and a little optimism" summarizes some reports of duck breeding conditions in Canada, and the word "dry" seems to describe Canada right now. There are some ducks but they are far apart. In Saskatchewan, most of the pot holes have been dry for a long time and the farmers are raising hay instead of ducks.

VALUABLE VULTURES: Turkey vultures are important as scavengers. The bacteria of some animal diseases, such as hog cholera and anthrax, are destroyed by passing through the vulture's system.

NO TAX ON PACKERS: A federal court in New Orleans, La. has ruled that the Internal Revenue Department cannot levy social security and unemployment compensation taxes against seafood packers for boat captains and crewman who work as independent contractors.

SPORTSMEN UNITE: Sportsmen's Clubs of Texas has announced that it now lists 100 local clubs with more than 90,000 individual outdoorsmen and conservationists represented. SCOT is affiliated with the National Wildlife Federation, and is only five years old.

FUN IN THE FOREST: A record 100 million recreation visits are anticipated in the national forests during 1961. The 186 million acres of the National Forest System are valuable national assets. Under multiple use management, these public lands are not only producing water, timber, forage and wildlife, but a place where the American public can enjoy the out-of-doors. Recreation visits to the forests are increasing about 12 percent annually. About one third of the visitors will camp and picnic, while others will hunt, fish, photograph the scenery, swim, ski, and hike.

NATURAL ALLIES: The merger of the organization, Nature Centers for Young America, Inc., with the National Audubon Society has now been completed. Established in 1959, Nature Centers for Young America, Inc. set out to encourage preservation of natural areas and their use as educational centers. This program is now carried on by the Nature centers Division of the National Audubon Society.

PARKS PREXY RE-ELECTED: Dr. Clarence Cottam, director of the Welder Wildlife Foundation of Sinton, Texas, was re-elected president of the National Parks Association during its 42nd Annual Meeting, held recently in Washington, D.C. Dr. Cottam, who will serve for an additional one-year term, also has his supporting officers re-elected.

NUTRITIOUS FISH: A 50-nation conference sponsored by the Food and Agriculture Organization of the United Nations will be held in Washington, D.C. in September. Articles summarizing the world's knowledge on nutrition and public health attainments in fishery technology will be presented. Main topics for discussion will include the role of fish in the world nutrition; the chemical composition of fish and fishery products; fishery products in animal nutrition; possibilities for increasing fish consumption.

Texas Game and Fish

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The Cover



Most hunters should recognize this month's cover subject. It's the eastern gray squirrel, *Sciurus carolinensis*. Whenever possible grays den in hollow trees, but also construct "summer houses" of leaves, twigs, plant fibers, bark, and grass high in trees. Their range in Texas is limited primarily to the eastern counties where they are extremely popular game for hunters. They feed on nuts, grapes, grasses, mulberries, insects and amphibians, usually twice a day—early morning and late afternoon—and are inactive during midday.

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	R. G. Mauermann, Region 5; Rockport Area

Reorganization:

Essential of Progress

THIS MONTH the Game & Fish Commission begins its work under a new organization plan. It is not the first reorganization within the operating routine of the department. Certainly, it won't be the last. As progress is made reorganizations are inevitable to bring about the greatest efficiency.

It was just a year ago that the Game & Fish Commission invited the Texas Research League to make a complete study of its entire work program and come up with recommendations for improvement. This request was made by the Commission members because they felt that a greater efficiency was needed to carry on the expanded work of the department and the increasing pressure of both the population and the renewable resources of the state.

After a long study of operations within the state and of other state organizations the Research League made a recommendation which in effect will decentralize the work of the department. In doing this the operational functions of the department will be much closer to the man who hunts and fishes.

Five regional offices, efficiently staffed now have been set up in as many sections of this large state.

With 254 counties covering 168,648,320 acres of land, 2,448,648

acres of inland water and and something like 3 million acres of seaward area, the division of the state into five regions for management is a step toward much closer work with those who will benefit from the change-over.

The natural resources of Texas are varied and the natural regions are pretty well defined. Because of the immense size of the state some of the newly created regions will in fact be much larger than some other entire states.

Add to that the fact that wildlife is on the move; that watersheds extend from one geological region to another and even more important, people themselves move about a great deal, and you can begin to understand the problem of wildlife management.

Fortunately through the years the Game Commission has put together a fine personnel. The list of employees is made up of well-educated, experienced men and women who are dedicated to their task.

This year's hunting prospects are a typical example of the success of their work. A quarter of a century ago it was recognized that unless this could be done, wildlife in the state soon would be depleted. Game had been practically shot out of many areas and fishing greatly dissipated.

Now Texans can boast of some of the best hunting and fishing to be found anywhere in the United States. There's hardly a county among the 254 in the state that doesn't have some deer population. In some there are too many deer.

This doesn't mean that the entire work of the group has always met success, or that the job is anywhere nearly finished. It is a never-ending task, as long as population increases and leisure time becomes greater.

Then there is the problem of available land for carrying this increased load. Wildlife now has become a crop; landowners are willing to let it be harvested for a fee. That fee must be kept in reason.

Our reorganization now is off the ground. This doesn't mean that everything for the next few months will be perfect. It means we all have a great deal to do to make the new program work efficiently for your benefit.

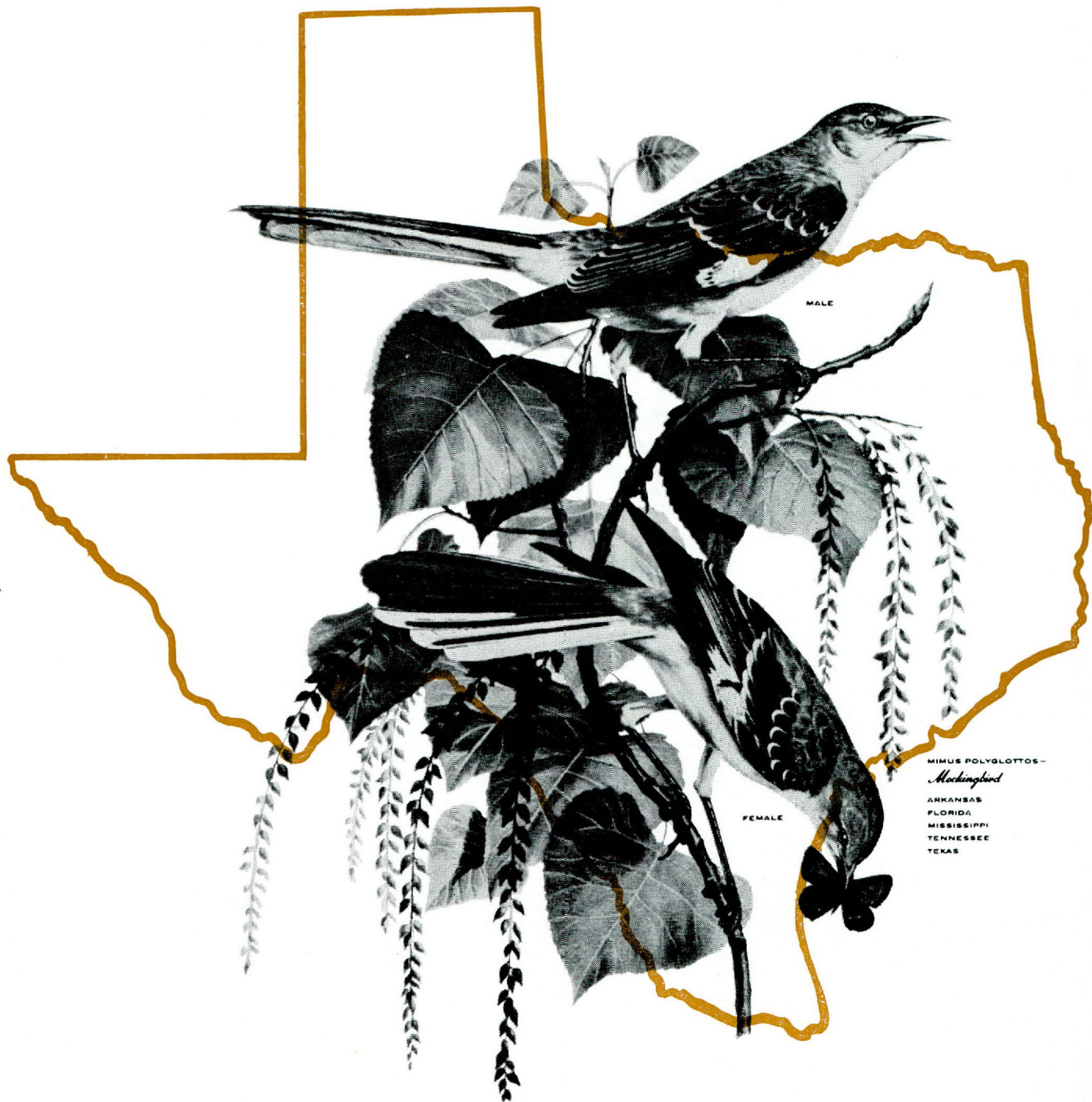
You can be helpful in this by passing along suggestions; by cooperating with the new workers within your area. They will be much closer to you now. They'll be able to understand your problems better, and you will be able to understand their work better.

All in all, this reorganization should bring about a degree of efficiency that will make us all proud. **

by **HOWARD D. DODGEN**

Executive Secretary

Game and Fish Commission



MALE

FEMALE

MIMUS POLYGLOTTOS—
Mockingbird
 ARKANSAS
 FLORIDA
 MISSISSIPPI
 TENNESSEE
 TEXAS

Mr. Mocker:

by I. W. BIGLER

Texas Braggart

HE SPORTS A MODEST ash-grey coat with darker wings and tail, both dashed with white markings. But right there the mockingbird's modesty ends. He could be

better described as the aristocrat of birdland.

No other bird has gained so much fame for impersonations. The mocker is famous throughout the world for

its unique ability to imitate the sounds of other birds. He runs the gamut of the scales in bird notes; he warbles, he whistles, he trills and he calls. One bird naturalist said he heard a

mockingbird imitate the songs of 32 different birds in ten minutes. At times he sounds like a long-playing record of bird calls.

The mocker lives primarily in the eastern, southern, and midwestern United States and up and down the length and breadth of Texas. With his friendly manner, his adaptability and his tuneful song, Mr. Mocker proudly carries the distinction of being our State bird.

His latin name is *Mimus polyglottus leucopterus* and is a member of the *Mimidae* family which makes him related to the brown thrasher and the cat bird. He is a rugged individualist in his own right.

Localities play an important part in the mockingbird's repertoire as he imitates birds of the area and certain other neighborhood noises. He loves to sing and his favorite perch is the top of a high tree, a telephone pole or TV antenna. He bursts forth in song so vibrant, so gay, so full of life that he occasionally flings himself into the air singing all the while. Moonlight nights are his forte: he will find a favorite perch and hold forth all night long, much to the consternation of some light sleepers.

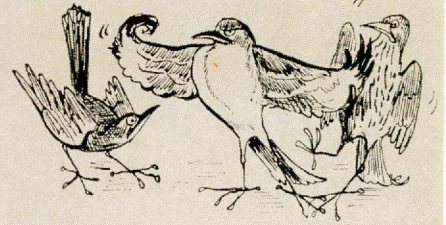
Fearless and stout-hearted, mockingbirds are sometimes a pesky tease to dogs and cats. One authority reported a mockingbird and his boxer dog kept up a running feud for months until the bird apparently tired of the game and thereafter ignored the dog completely.

He grows from nine to eleven inches long, having a long slender body and long slender tail. Males and females are almost alike in coloring, but the female has a little less white in her feathers. The birds build their nests in thickets, low trees, or bushes, and lay four to six pale, greenish-blue or bluish-white eggs spotted with brown.

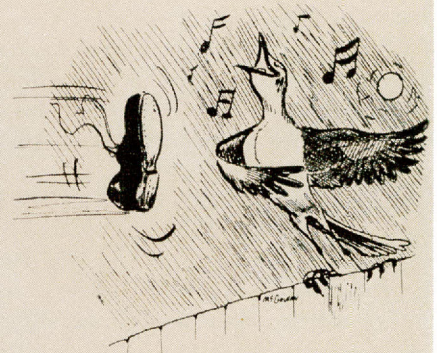
Mockingbirds feed on insects, wild fruit and weed seeds. They are more helpful than harmful to man, but sometimes they damage fruit. But for every pear, peach or berry the mocker tastes, he will more than compensate by the bugs and insects he eats plus a merry song to make your day bright.

It is most appropriate the mockingbird is the State bird. He is an American and as Texan as Texas.

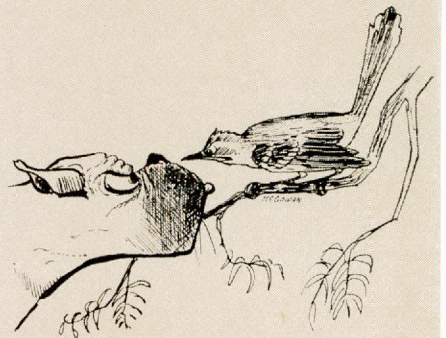
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CONSERVATION

Close Home

THE LONG-PLANNED reorganization program of the Game and Fish Commission became effective September 1, with the establishment of five regional offices, staffed with key personnel.

This program recommended by the Texas Research League, after nearly a year of intensive study of the department operation. The survey was sought by the commission in an effort to meet the demands of increasing human population and wildlife problems.

It was made possible by the appropriation of the 57th session of the legislature, which had to give its approval to the general program.

Under the new set-up, the main office of the commission will remain in Austin, with H. D. Dodgen continuing as executive secretary.

Regional offices are being opened in five Texas cities. Each will be completely staffed, in an effort to bring activities of the commission closer to the field and the demands both of people and conservation.

In addition to the five offices, personnel will be distributed through the various areas for carrying out the work program.

Initial steps also have been taken to develop a six year program intended to assure the growing popula-

tion of a continuation of wildlife efforts.

It was pointed out by the Research League that two major problems existed in the operation of the game department: There was a lack of effective supervision and coordination, particularly in field forces, and that a long range planning program had not received adequate attention.

Under the reorganization, planning now will be carried out in the Austin office. Through coordinators it will be passed on to the field personnel for activation. Reports from the field will be passed up the line in the same manner.

In the new line of authority, Howard Lee, formerly director of the marine fisheries division at Rockport, has become assistant director for field operations.

E. A. Walker, former director of the wildlife management program, now is assistant director of program planning and supervision.

W. J. Cutbirth Jr. will be assistant director for administrative.

Lee will be in direct supervision of the field offices, through regional directors.

Here a number of titles also will be changed. Wardens will henceforth be known as conservation officers.

Former warden supervisors will be known as conservation chiefs.

The following appointments of personnel and location of regional offices follows:

REGION 1—SAN ANGELO

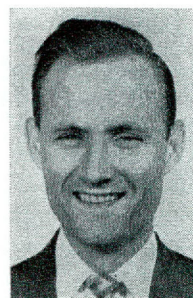
Henry Burkett—Regional Director
Leo Lewis—Inland Fisheries Supervisor
P. B. Uzzell—Wildlife Supervisor
Norell Wallace—I&E Supervisor
Charles Ezzell—Chemist, San Marcos Lab.
Woody Pond—Conservation Supervisor

Conservation Chiefs:

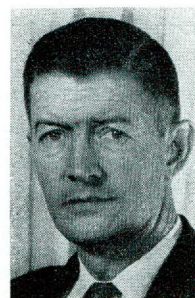
Alfred Fromm—Amarillo
Ted Wheelis—Lubbock
Edgar Sturdivant—El Paso
W. T. Rinchart—Midland

REGION 2—WACO

A. W. Lewis—Regional Director
Wm. H. Brown—Fisheries Supervisor



J. D. Archer



T. D. Carroll



C. L. Friou



T. Leary



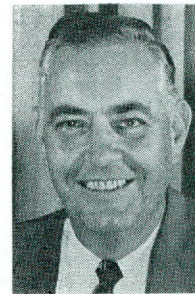
J. Marks



J. B. Phillips



A. J. Springs



M. Toole

Al Jackson—Wildlife Supervisor
 Frank Etheredge—I&E Supervisor
 Charles Ezzell—Chemist, San Marcos
 Charles Edmonson—Conservation Supervisor

Conservation Chiefs:

John Wood—Brownwood
 Morris Stallcup—Ft. Worth
 C. T. Pittman—Wichita Falls
 Jack Gregory—Temple
 Eugene Willmann—Kerrville

REGION 3—TYLER

John Carfisle—Regional Director
 Charles Gray—Fisheries Supervisor
 Houston Green—Wildlife Supervisor
 Charles Ezzell—Chemist, San Marcos
 Charles Burnett—Conservation Supervisor

Conservation Chiefs:

C. D. Kornegay—Palestine
 J. B. Weaver—Lufkin
 A. A. Stein—Dallas
 John Shaddix—Texarkana

REGION 4—SEABROOK

J. R. Singleton—Regional Director
 John Tilton—Inland Fisheries Supervisor
 Ernest Marsh—Wildlife Supervisor
 R. P. Hofstetter—Coastal Supervisor
 Rudy Marek—Chemist
 Bob Cross—Conservation Supervisor

Conservation Chiefs:

W. A. Gentry—Beaumont
 Joe Brower—Houston
 Murrell Hopkins—Bryan
 W. D. (Ed) Henry—Victoria

REGION 5—ROCKPORT

R. G. Mauermann—Regional Director
 Kenneth Jurgens—Inland Fisheries Supervisor
 Ernest Simmons—Coastal Supervisor
 Tom Moore—Wildlife Supervisor
 Roy Spears—Chemist
 Herbert Ward—Conservation Supervisor

Conservation Chiefs:

Robert S. Evins—San Antonio
 Harvey Schoen—Edinburg
 M. B. Mullinax—Corpus Christi

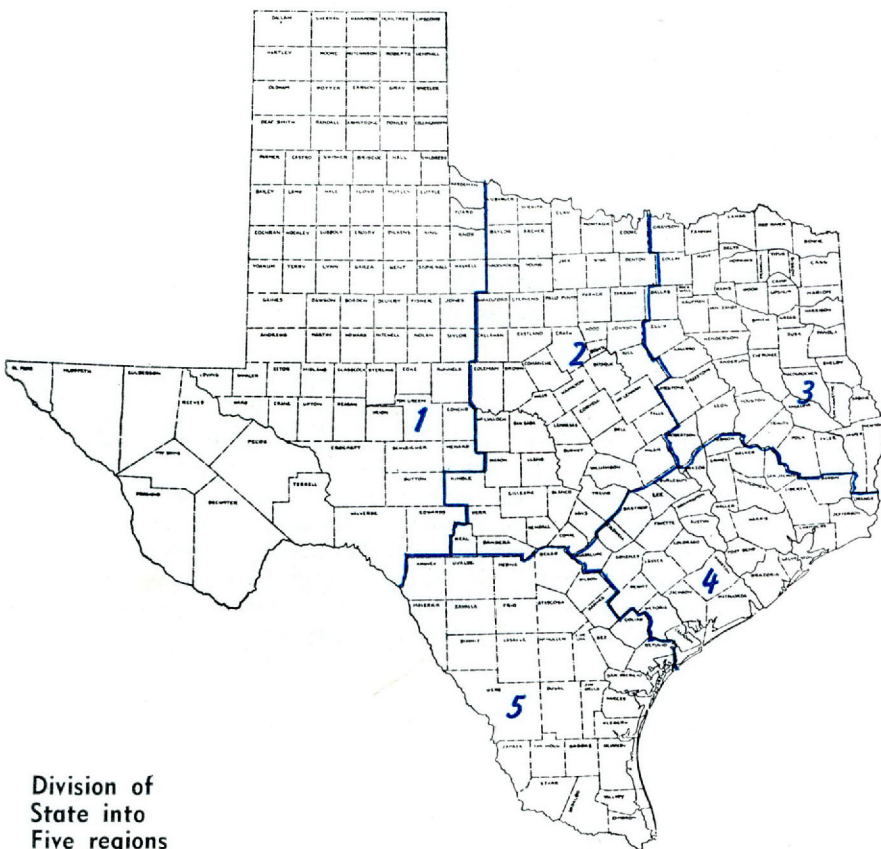
Coordinators also have been named to serve in the program planning division. They are T. D. Carroll, of Information & Education; Terrance Leary, coastal fisheries coordinator; A. J. Springs, wildlife coordinator; Marion Toole, inland fisheries coordinator and J. B. Phillips, law enforcement coordinator. C. L. Friou will remain in charge of the fiscal division. Joe Marks continues as engineer. James Archer is personnel director.

Although offices are now being activated in all of the regions, their full operation will be somewhat slowed down until new leases can be signed through the Board of Control, and the new offices equipped with furniture.

A number of new assignments also has been made of important personnel both in enforcement and field assistants.

“This is one of the most important steps ever taken by the game commission,” says Frank Woods, chairman. “Through the years the game department has done an effective job but a modernization of the program was needed. Accordingly we asked the Texas Research league to devise a reorganization that would be effective. After long study and many conferences we now have this program.

“There will be some places where we may have to revise or make changes according to needs. But basically it is a forward step. It will be a little slow in getting going at first because of the great number of man-power changes that are required. It also comes at a time when our fall hunting season is just beginning. We feel sure, however, the sportsmen of Texas will cooperate in every way possible in carrying out this effective plan of complete reorganization.” **



Division of State into Five regions

AMARILLO

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
1	6:19	7:14	6:41	6:31	7:08	5:52	7:37	5:35
2	6:20	7:13	6:42	6:30	7:09	5:52	7:38	5:35
3	6:20	7:11	6:43	6:28	7:10	5:51	7:39	5:34
4	6:21	7:10	6:44	6:27	7:11	5:50	7:39	5:34
5	6:22	7:08	6:44	6:25	7:12	5:49	7:40	5:34
6	6:23	7:07	6:45	6:24	7:13	5:48	7:41	5:34
7	6:23	7:06	6:46	6:23	7:14	5:47	7:42	5:34
8	6:24	7:04	6:47	6:21	7:15	5:46	7:43	5:35
9	6:25	7:03	6:48	6:20	7:16	5:45	7:44	5:35
10	6:26	7:01	6:49	6:19	7:17	5:45	7:44	5:35
11	6:26	7:00	6:49	6:17	7:18	5:44	7:45	5:35
12	6:27	6:59	6:50	6:16	7:19	5:43	7:46	5:35
13	6:28	6:57	6:51	6:15	7:20	5:42	7:47	5:35
14	6:29	6:56	6:52	6:13	7:21	5:42	7:47	5:36
15	6:29	6:54	6:53	6:12	7:22	5:41	7:48	5:36
16	6:30	6:53	6:54	6:11	7:22	5:40	7:49	5:36
17	6:31	6:51	6:54	6:10	7:23	5:40	7:49	5:37
18	6:32	6:50	6:55	6:08	7:24	5:39	7:50	5:37
19	6:32	6:48	6:56	6:07	7:25	5:39	7:50	5:37
20	6:33	6:47	6:57	6:06	7:26	5:38	7:51	5:38
21	6:34	6:45	6:58	6:05	7:27	5:38	7:51	5:38
22	6:34	6:44	6:59	6:03	7:28	5:37	7:52	5:39
23	6:35	6:43	7:00	6:02	7:29	5:37	7:52	5:39
24	6:36	6:41	7:01	6:01	7:30	5:36	7:53	5:40
25	6:37	6:40	7:01	6:00	7:31	5:36	7:53	5:41
26	6:37	6:38	7:02	5:59	7:32	5:36	7:54	5:41
27	6:38	6:37	7:03	5:58	7:33	5:35	7:54	5:42
28	6:39	6:35	7:04	5:57	7:34	5:35	7:54	5:42
29	6:40	6:34	7:05	5:56	7:35	5:35	7:55	5:43
30	6:41	6:33	7:06	5:55	7:36	5:35	7:55	5:44
31			7:07	5:53			7:55	5:45

AUSTIN

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
1	6:07	6:54	6:24	6:17	6:45	5:44	7:10	5:30
2	6:08	6:53	6:25	6:15	6:46	5:43	7:10	5:30
3	6:08	6:51	6:25	6:14	6:46	5:42	7:11	5:30
4	6:09	6:50	6:26	6:13	6:47	5:41	7:12	5:30
5	6:10	6:49	6:26	6:12	6:48	5:40	7:13	5:30
6	6:10	6:48	6:27	6:10	6:49	5:40	7:13	5:30
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12	6:13	6:40	6:31	6:03	6:54	5:36	7:18	5:31
13	6:14	6:39	6:31	6:02	6:55	5:35	7:18	5:31
14	6:14	6:38	6:32	6:01	6:55	5:35	7:19	5:32
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19	6:17	6:32	6:35	5:56	7:00	5:33	7:22	5:34
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21	6:18	6:29	6:37	5:54	7:01	5:32	7:23	5:35
22	6:19	6:28	6:37	5:53	7:02	5:32	7:24	5:35
23	6:19	6:26	6:38	5:52	7:03	5:31	7:24	5:36
24	6:20	6:25	6:39	5:51	7:04	5:31	7:25	5:36
25	6:21	6:24	6:40	5:50	7:05	5:31	7:25	5:37
26	6:21	6:23	6:40	5:49	7:05	5:31	7:25	5:37
27	6:22	6:21	6:41	5:48	7:06	5:30	7:26	5:38
28	6:22	6:20	6:42	5:47	7:07	5:30	7:26	5:39
29	6:23	6:19	6:43	5:46	7:08	5:30	7:27	5:39
30	6:23	6:18	6:43	5:45	7:09	5:30	7:27	5:40
31			6:44	5:44			7:27	5:41

Sunrise . . .

Sunset

Texas hunters look to the sun as their guide to legal shooting hours. The following sunrise and sunset charts are from ten general weather stations over the state, compiled by Hoye S. Dunham, meteorologist in charge of the Austin weather bureau. They are listed according to Central Standard time zones except El Paso, which is Mountain Standard. Interpolation for your town from these key stations will give satisfactory times.



BEAUMONT/PORT ARTHUR

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
1	5:53	6:39	6:09	6:02	6:30	5:29	6:54	5:16
2	5:53	6:38	6:10	6:01	6:30	5:29	6:55	5:16
3	5:54	6:36	6:10	5:59	6:31	5:28	6:56	5:16
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6	5:56	6:33	6:12	5:56	6:34	5:26	6:58	5:16
7	5:56	6:32	6:13	5:55	6:34	5:25	6:59	5:16
8	5:57	6:30	6:13	5:54	6:35	5:24	6:59	5:16
9	5:57	6:29	6:14	5:52	6:36	5:24	7:00	5:17
10	5:58	6:28	6:15	5:51	6:37	5:23	7:01	5:17
11	5:58	6:27	6:15	5:50	6:38	5:22	7:02	5:17
12	5:59	6:25	6:16	5:49	6:38	5:22	7:02	5:17
13	5:59	6:24	6:16	5:48	6:39	5:21	7:03	5:18
14	6:00	6:23	6:17	5:47	6:40	5:21	7:04	5:18
15	6:00	6:22	6:18	5:46	6:41	5:20	7:04	5:18
16	6:01	6:21	6:18	5:45	6:42	5:20	7:05	5:19
17	6:01	6:19	6:19	5:43	6:43	5:19	7:05	5:19
18	6:02	6:18	6:20	5:42	6:43	5:19	7:06	5:19
19	6:03	6:17	6:20	5:41	6:44	5:18	7:07	5:20
20	6:03	6:16	6:21	5:40	6:45	5:18	7:07	5:20
21	6:04	6:14	6:22	5:39	6:46	5:18	7:08	5:21
22	6:04	6:13	6:22	5:38	6:47	5:17	7:08	5:21
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24	6:05	6:11	6:24	5:36	6:48	5:17	7:09	5:22
25	6:06	6:09	6:25	5:35	6:49	5:17	7:10	5:23
26	6:06	6:08	6:25	5:35	6:50	5:17	7:10	5:23
27	6:07	6:07	6:26	5:34	6:51	5:16	7:10	5:24
28	6:07	6:06	6:27	5:33	6:52	5:16	7:11	5:25
29	6:08	6:04	6:27	5:32	6:52	5:16	7:11	5:25
30	6:09	6:03	6:28	5:31	6:53	5:16	7:11	5:26
31			6:29	5:30			7:12	5:27

BROWNSVILLE

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
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3	6:11	6:47	6:23	6:14	6:39	5:47	7:01	5:38
4	6:11	6:46	6:23	6:13	6:40	5:46	7:02	5:38
5	6:11	6:45	6:24	6:12	6:41	5:46	7:02	5:38
6	6:12	6:44	6:24	6:11	6:41	5:45	7:03	5:38
7	6:12	6:43	6:25	6:10	6:42	5:45	7:04	5:39
8	6:13	6:42	6:25	6:09	6:43	5:44	7:04	5:39
9	6:13	6:41	6:25	6:08	6:43	5:43	7:05	5:39
10	6:13	6:40	6:26	6:07	6:44	5:43	7:06	5:39
11	6:14	6:39	6:26	6:06	6:45	5:42	7:06	5:40
12	6:14	6:38	6:27	6:05	6:46	5:42	7:07	5:40
13	6:15	6:36	6:27	6:04	6:46	5:42	7:08	5:40
14	6:15	6:35	6:28	6:03	6:47	5:41	7:08	5:40
15	6:15	6:34	6:28	6:02	6:48	5:41	7:09	5:41
16	6:16	6:33	6:29	6:01	6:48	5:40	7:09	5:41
17	6:16	6:32	6:29	6:00	6:49	5:40	7:10	5:42
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19	6:17	6:30	6:31	5:59	6:51	5:39	7:11	5:43
20	6:17	6:29	6:31	5:58	6:51	5:39	7:12	5:43
21	6:18	6:28	6:32	5:57	6:52	5:39	7:12	5:43
22	6:18	6:26	6:32	5:56	6:53	5:39	7:13	5:44
23	6:19	6:25	6:33	5:55	6:54	5:39	7:13	5:44
24	6:19	6:24	6:33	5:54	6:54	5:38	7:14	5:45
25	6:19	6:23	6:34	5:54	6:55	5:38	7:14	5:46
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31			6:37	5:49			7:16	5:49

DALLAS

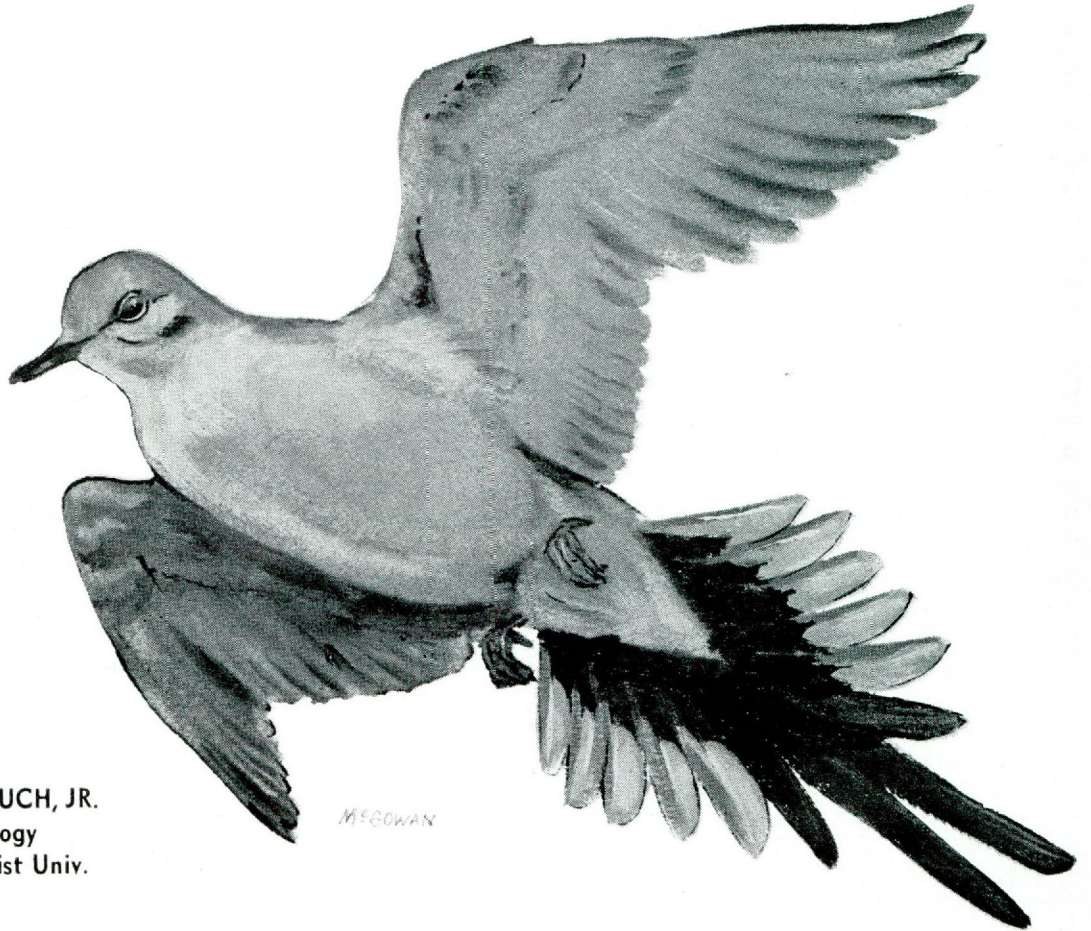
DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
1	6:02	6:53	6:21	6:12	6:45	5:37	7:12	5:21
2	6:02	6:51	6:22	6:11	6:46	5:36	7:13	5:21
3	6:03	6:50	6:23	6:10	6:47	5:35	7:13	5:21
4	6:04	6:49	6:23	6:08	6:48	5:34	7:14	5:21
5	6:04	6:47	6:24	6:07	6:49	5:33	7:15	5:21
6	6:05	6:46	6:25	6:06	6:49	5:32	7:16	5:21
7	6:06	6:45	6:25	6:05	6:50	5:32	7:17	5:21
8	6:06	6:43	6:26	6:03	6:51	5:31	7:17	5:21
9	6:07	6:42	6:27	6:02	6:52	5:30	7:18	5:21
10	6:08	6:41	6:28	6:01	6:53	5:29	7:19	5:21
11	6:08	6:39	6:28	6:00	6:54	5:29	7:20	5:22
12	6:09	6:38	6:29	5:58	6:55	5:28	7:20	5:22
13	6:09	6:37	6:30	5:57	6:56	5:27	7:21	5:22
14	6:10	6:35	6:31	5:56	6:57	5:27	7:22	5:22
15	6:11	6:34	6:31	5:55	6:57	5:26	7:22	5:23
16	6:11	6:33	6:32	5:53	6:58	5:26	7:23	5:23
17	6:12	6:31	6:33	5:52	6:59	5:25	7:24	5:23
18	6:13	6:30	6:34	5:51	7:00	5:25	7:24	5:24
19	6:13	6:29	6:34	5:50	7:01	5:24	7:25	5:24
20	6:14	6:27	6:35	5:49	7:02	5:24	7:25	5:25
21	6:15	6:26	6:36	5:48	7:03	5:23	7:26	5:25
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23	6:16	6:23	6:38	5:46	7:05	5:23	7:27	5:26
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25	6:17	6:20	6:39	5:43	7:07	5:22	7:28	5:27
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27	6:19	6:18	6:41	5:41	7:08	5:22	7:29	5:28
28	6:19	6:16	6:42	5:40	7:09	5:21	7:29	5:29
29	6:20	6:15	6:42	5:39	7:10	5:21	7:29	5:30
30	6:21	6:14	6:43	5:38	7:11	5:21	7:30	5:30
31			6:44	5:38			7:30	5:31

DEL RIO

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
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2	6:21	7:05	6:37	6:28	6:57	5:57	7:21	5:45
3	6:22	7:03	6:38	6:27	6:58	5:56	7:22	5:45
4	6:22	7:02	6:38	6:26	6:59	5:55	7:23	5:45
5	6:23	7:01	6:39	6:25	6:59	5:55	7:23	5:45
6	6:23	7:00	6:39	6:24	7:00	5:54	7:24	5:45
7	6:24	6:59	6:40	6:22	7:01	5:53	7:25	5:45
8	6:24	6:58	6:40	6:21	7:02	5:53	7:26	5:45
9	6:25	6:56	6:41	6:20	7:02	5:52	7:26	5:45
10	6:25	6:55	6:42	6:19	7:03	5:51	7:27	5:46
11	6:26	6:54	6:42	6:18	7:04	5:51	7:28	5:46
12	6:27	6:53	6:43	6:17	7:05	5:50	7:28	5:46
13	6:27	6:51	6:43	6:16	7:06	5:50	7:29	5:46
14	6:28	6:50	6:44	6:15	7:06	5:49	7:30	5:47
15	6:28	6:49	6:45	6:14	7:07	5:49	7:30	5:47
16	6:29	6:48	6:45	6:13	7:08	5:48	7:31	5:47
17	6:29	6:47	6:46	6:11	7:09	5:48	7:31	5:48
18	6:30	6:45	6:47	6:10	7:10	5:47	7:32	5:48
19	6:30	6:44	6:47	6:09	7:11	5:47	7:33	5:49
20	6:31	6:43	6:48	6:08	7:11	5:47	7:33	5:49
21	6:31	6:42	6:49	6:07	7:12	5:46	7:34	5:50
22	6:32	6:40	6:49	6:06	7:13	5:46	7:34	5:50
23	6:32	6:39	6:50	6:05	7:14	5:46	7:35	5:51
24	6:33	6:38	6:51	6:05	7:15	5:46	7:35	5:51
25	6:33	6:37	6:51	6:04	7:15	5:45	7:36	5:52
26	6:34	6:36	6:52	6:03	7:16	5:45	7:36	5:52
27	6:34	6:34	6:53	6:02	7:17	5:45	7:36	5:53
28	6:35	6:33	6:53	6:01	7:18	5:45	7:37	5:54
29	6:35	6:32	6:54	6:00	7:19	5:45	7:37	5:54
30	6:36	6:31	6:55	5:59	7:19	5:45	7:37	5:55
31			6:56	5:58			7:38	5:56

• Continued on Page 23

Powder, Shot *and the* GREY GHOST



by Andrew B. COUCH, JR.
Dept. of Biology
Southern Methodist Univ.

SOME CALL IT THE GRAY GHOST; others, the gray bullet. I think of the mourning dove as the finest feathered challenge in our state. It takes a good shot and the right load to knock them down consistently. Perhaps some age-old questions concerning dove hunting need some answering.

Let's take a look at the hunter in the field. At what distance should he attempt to shoot a mourning dove? What size shot should he use? Which powder load is most efficient?

I have observed for a number of years that in mourning dove shooting, my 12 gauge, reloaded shell with powder equivalent of a commercial field load, had more killing power at all ranges than the shell with a

greater powder load. Doves shot with this light powder load and a pellet mixture of 6's and 7½'s were usually dead or if alive, seldom were they capable of running far enough to escape detection.

In an attempt to learn which is the most effective, shot that passes through or shot that remains in the bird, I made a study using three types of shells: 1) commercial field load with ¾ dram equivalent of powder and 1⅛ ounces of #8 shot; 2) reloaded ¾ dram equivalent of powder and a 1⅛ ounce mixture of 6's and 7½'s; 3) commercial high velocity ¾ dram equivalent of powder and 1¼ ounces of 7½ shot. Sixty-four doves were shot, submitted to X-ray examination and autopsied

to determine the number of shot retained and an estimate of the shot that passed through the body. I discovered that 5 times more 6's are retained than 7½'s in the reloaded field shell with the mixture of 6's and 7½'s. The 6's in the reloaded were retained 10 times more frequently than 7½'s in the high velocity load and 5 times more than 8's in the commercial field load.

In the field, I estimated that only one dove in 10 was alive and mobile when shot with the reload, while with the high-velocity load one bird in 10 was dead or immobile. The number of birds shot to pieces for each load was about the same. Few of the doves were shot in the head, and the small number so shot did not

affect the result. Shot was not found in the heads of the doves that were X-rayed.

Three factors influence the potential of the pellet: 1) velocity, 2) size of the pellet, and 3) density of the target. Velocity (the rate of speed) is controlled by the total weight (number of ounces) of shot and the powder equivalent. A decrease in the total weight of the shot or an increase in the powder equivalent will increase velocity.

The impact or striking force of a pellet is related to the weight and velocity of the individual pellet. The energy of a moving pellet (the kinetic energy) in relation to the impact produced upon striking a bird is responsible for the entrance, and possibly, the exit of the shot. The greater the energy, the more certain is penetration. If the energy is great enough to overcome the density of the substance entered, the pellet will pass through the substance. The pellet will be found in the substance of the bird if the energy is great enough to penetrate, but less than that required to pass completely through the bird. The heavier number 6 pellet does not require as great a velocity as a number 7½ pellet in order to produce the same impact or striking force. Proper balance in the ratio of powder equivalent to total weight of shot and individual pellet weight is necessary if the potential of the pellet is to be satisfactory.

What is the range of a field velocity shell with number 6 shot? Most hunters consider a shot at a distance of 20 to 40 yards to be their best. Twenty yards is far enough to give the pattern time to spread and not so close that a bird is torn to pieces.

I have read articles on the velocity of shot in relation to distance. The information implies that a shot which kills a bird at 70 yards is a lucky one. Don't you believe it. You can be as successful at long range as at short range, have a lot of sport, and kill more birds.

If you want sport, reach out with field velocity number 6's. Calculate the lead in yards rather than inches. It may appear to you that this field load would not be as good at long range as a high velocity 7½. Field testing under hunting conditions in-

dicates it is better.

The reason for the greater range efficiency of the field load is not easily answered, but I believe it involves the smooth manner in which the pellets are pushed through the choke of the barrel. If the velocity of the total number of pellets is too great to pass cleanly through the choke, the pattern produced will be strung out, ragged, and blown. At long range, pattern irregularities are magnified many times. At close range pattern imperfections and irregularities are not of as much importance. The pattern that is blown slightly to one side at 30 yards isn't anywhere close to where you think it is at 60 yards, and you miss the bird. Don't forget that you are dealing with an everwidening pattern and that the bulk of the pellets must go where you aim, not off in the blue. Do not



At long range, pattern irregularities are magnified so that a dove could easily escape.

forget, either, that 7½'s and 8's are much lighter in weight than 6's and that, as a ballistic fact, the velocity of the smaller shot will decrease at a more rapid rate than the 6's. At long range, a 6 pellet at a low velocity will have the energy necessary for penetration; whereas, a 7½ pellet may not penetrate.

Many articles have been written on how far one should lead a flying dove. Most of the notions could be replaced to advantage by an extra box of shells. Hunters who are extremely capable field shots simply raise the gun, look at the bird and shoot. Experience tells them all they need to know. Their attitude is generally that the bird is flying and I'll shoot him right "THERE"—with the shot right on the "T." The most critical thing in this type of shooting is

speed and this is gained by incautious experience.

Some discussion of the crippled and wounded dove is in order, especially in consideration of this recommendation for more shooting and longer shots. Published reports indicate that the loss of mourning doves from crippling varies from 10 to 49 percent.

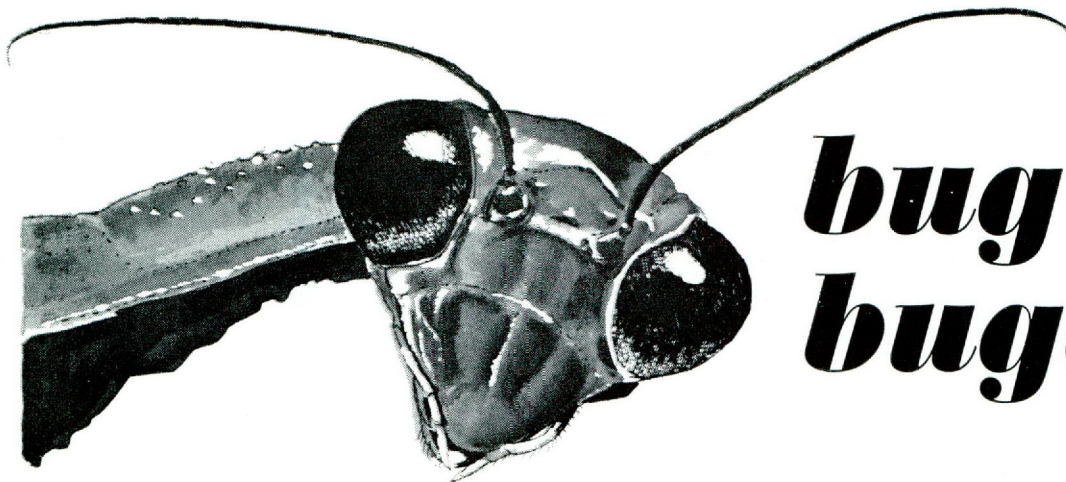
The average hunter does not enjoy knocking a dove down and then not finding it. He often spends a long time looking and will return to the area for "one more look" at every opportunity.

Occasionally, I have "dusted" or knocked feathers from a dove. Mentally, I regarded that dove a loss to infection. However, another of my studies indicates that mourning doves do not readily die of infection from shotgun pellets. Neither do they die, to any extent, from lead poisoning. Twelve mourning doves that were disabled by shooting were placed in cages. They were fed and watered, but their wounds were untreated. Six died within a week; three the first day, two the third day, and one the seventh. After an examination I decided they did not die from infection, but from the malfunctioning of organs.

The six doves that lived were not simply specimens with broken wings. Most of them had severe infections in various parts of the body. The wild nature of the caged doves, definitely, did not help in the healing of wounds, yet the birds did not die. The crippling loss at long range would be very low, if my observations have merit.

The characteristics of the individual shotgun also will influence hunting success in relation to the size of the shot and powder load. The gauge, choke, length of barrel, shell type and the direction of pointing control the position and dispersal of the pellets in their pattern.

The next time you are on a mourning dove shoot carry along some different loads and pellet sizes. Don't forget the number 6 field loads! Reach out with a good lead on the long shots and discard the "ten feet too far" notion. Shells were made to be shot and there is nothing I had rather shoot than a mourning dove at long range. **



bug bugaBOO

by CAROLYN SMYRL

ASK ANY insect—it would scoff at man's calling the dinosaur of the insect world the "praying" mantis—in fact, it would probably insist that the name be changed to "preying" mantis. Such is the reputation of the mantis in its own environment.

The awesome little creature is more popular with naturalists who know it best. The naturalists say it makes a most interesting pet for anyone who will keep it well-fed—no small task in itself.

The mantis, which belongs to the same order (Orthoptera) as grasshoppers, crickets, and cockroaches, has a rapacious appetite. Moths, crickets, beetles, flies, aphids, butterflies, bees, and hornets all fall into the list of delectable dishes for the praying mantis. Some have reportedly eaten small lizards and frogs as well. Hamburger and corned beef can be used to supplement a pet mantis' diet, but it will grow better if it is provided with live insects and spiders.

But life isn't just a bowl of insects for the tiny dinosaur. His natural enemies are of formidable variety, including ants, birds, small mammals, spiders, and man. To this list, at least for the male mantis, his mate's name

should be added, for as in the case of the famed black widow, the female mantis usually turns cannibal at the end of the mating season and eats her mate.

Although the mantis attacks only insects and spiders, it shows remarkable courage when confronted by man or small mammals. The prehistoric-looking insect refuses to back down against such overwhelming odds, yet will flee at the sight of an ant. This can be explained by the earliest meeting between mantis and ants; the ants await the hatching of the mantis with eagerness and devour the mosquito-sized insects the instant they emerge from the egg case. After the mantis' bodies have hardened, this danger is passed, but the initial massacre often takes the majority of the newly-hatched.

The egg case secreted by the female in September or October is really a curious engineering feat. A sticky liquid comes from the end of her abdomen and is beat into a frothy meringue by two appendages from her abdomen. This froth is attached to a twig, weed, or other object two or three feet from the ground, and the eggs are laid in the foamy substance which hardens to a protective

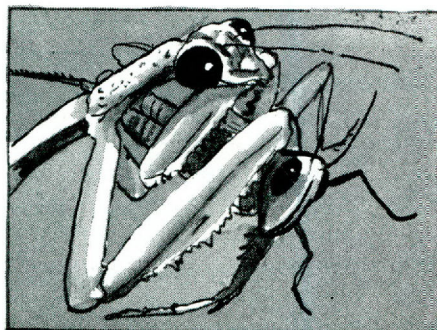
covering about the size of a walnut.

The female hangs upside-down while producing the egg case, never watching what she is making, yet shaping it with circular movements of her abdomen and planting eggs within a central chamber with care. The process takes about two or three hours.

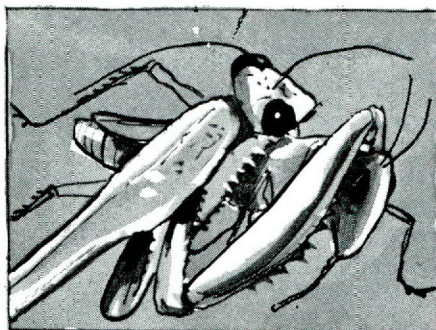
When the eggs hatch in the spring, each mantis looks like a miniature adult without wings as it struggles along a narrow corridor from the inner chamber of the egg sack to freedom. Males grow long wings when mature; females have short ones.

Its natural camouflage and its ability to turn its head from side to side and up and down (a characteristic uncommon in the insect world) enables the praying mantis to trap enough prey to meet its tremendous needs. The Indian mantis has an added advantage in stalking its food. Its underside is brilliantly colored to match flowers on which it sits waiting for its prey to come to the flowers.

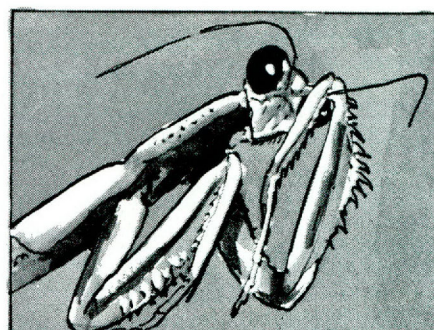
The word "mantis" means prophet; "praying" was added because of the beseeching position its forelegs and body assume while it is waiting for food to come within reach of its lightning-fast forelegs. **



Prey is grasped with the toothed forelegs that form double-edged jaws.



The mantis always attacks the nerve center first to still its victim's struggles.

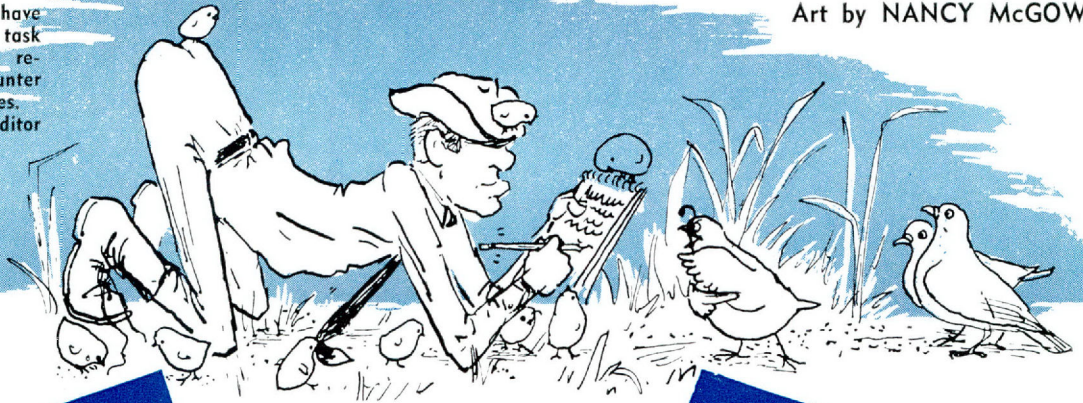


After each meal, the giant insect washes its legs and face like a kitten.

Warden's Duties

Art by NANCY McGOWAN

Our conservation officers have many duties. One important task is aiding biologists in their research. Quite often they encounter some pretty tough challenges.
—Editor



Many wardens conduct 20-mile dove and quail surveys as often as six times a month. They keep accurate records of their counts.

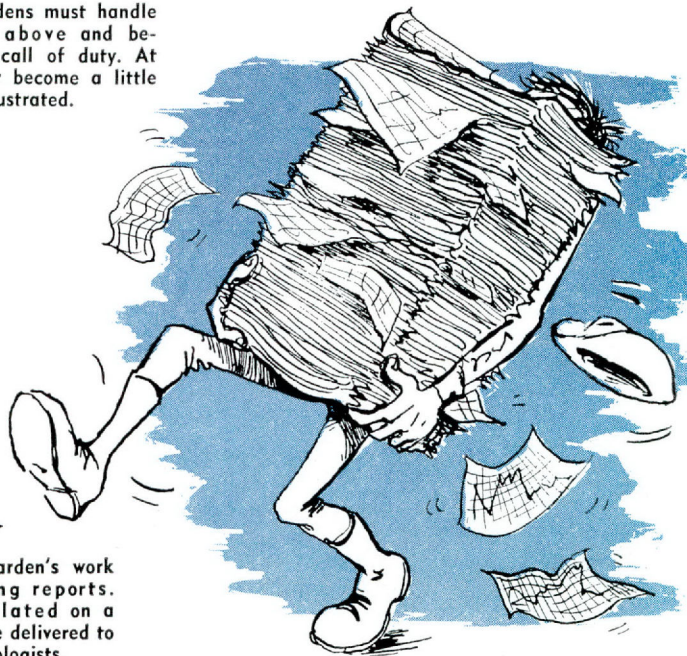
Roads in quail release areas are patrolled to keep down road hunting. When shells are found the warden's work begins.



One method for getting a quail count is to call with an artificial caller and record the replies.



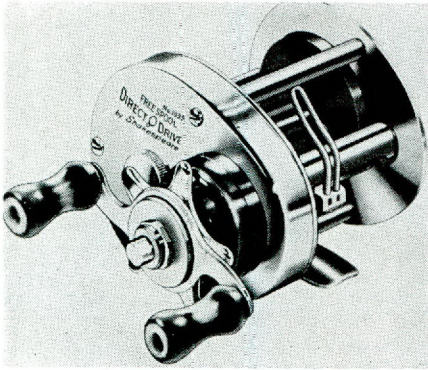
Some wardens must handle situations above and beyond the call of duty. At times they become a little frustrated.



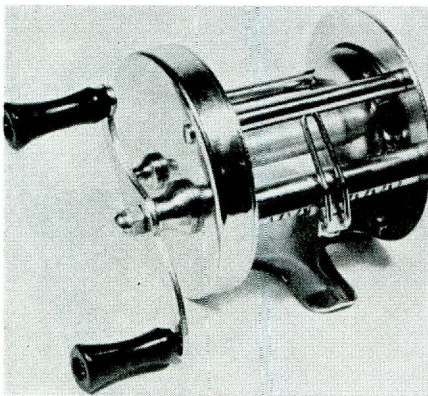
Much of a warden's work involves making reports. Data accumulated on a game survey are delivered to wildlife biologists.

REEL NEWS

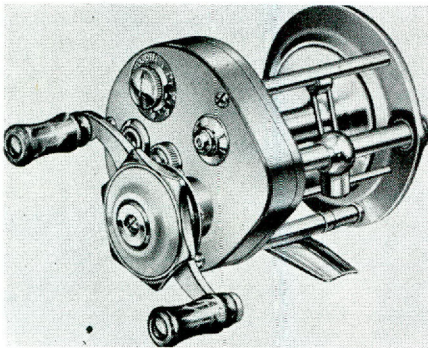
By L. A. WILKE



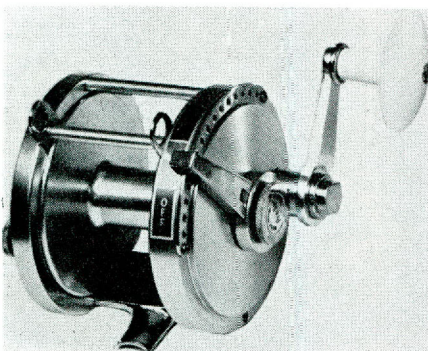
Shakespeare



Horrocks Ibbotson



Pflueger



Fin-Nor

NEXT YEAR'S FISHERMEN will have a wide choice of new reels, which are now beginning to hit the market. Although most of them were introduced at the Chicago Fishing Tackle Show, some of them have been on the market to a limited degree for several months. There have been few basic changes in styling, except toward a more streamlined appearance of spin-casting reels. The conventional reels and opened-faced spinning reels are very much alike in appearance, but they have a number of new features to improve their operation.

Perhaps the most significant change in the open-faced reel is the development of free spool on Pflueger, Shakespeare, and Heddon. Although there have been at least two free spool reels on the market for the last several years, they were premium priced reels, but the new models are getting in reach of the pocketbook of the average fisherman. New controls also have been provided for the spin-cast reels, which will make it possible for a fisherman to feather his cast and thereby use different weight lures without change of adjustment.

In addition to the reels shown on these two pages, a number of other reels also have been developed by the major companies, so there will be a wide choice of size, styles and prices, to meet every need and every pocketbook. The open-faced spinning reels

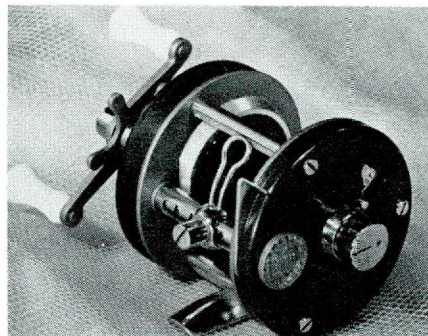
still are in the highest-priced bracket, but greater efficiency has been added to them. The open-face market has developed materially within the last several years, but has been pushed hard by the spin-cast reels. Most retail sporting goods stores now have samples and some of them good supplies of the new reels. They can be inspected at your favorite dealer. Catalogs also are available by writing directly to the company.

Here are some of the new models:

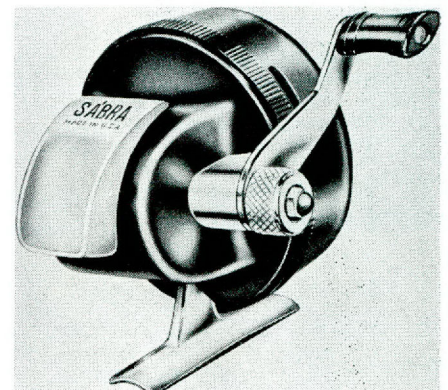
Fin-Nor's new Regal Compact is a quality reel entirely revolutionary in concept. It is a smooth action with powerful positive breaking, and is ideal for Gulf Coast fishing on anything from trout to tarpon. It has a capacity of 800 yards of 20 pound line and sells for around \$100.

The **Martin Sea-O-Matic Model 130** is a heavy reel, which will retrieve approximately 30 inches of line for each turn. It has an anti-reverse lock, an automatic patented bale type pick up, casting brake and drag brake. The reel is rust-proof, and all metal parts are anodized.

Johnson's latest addition to the spin casting reel is the Sabra (Model 130). This is a completely new model with a power shift handle. This actuates the fish beating drag with extended handle control. It is lightweight and comes equipped with 135 yards of 15



Heddon



Johnson

pound test monofilament plus an extra spool of 15 pound braid nylon.

Another saltwater spinning reel is **Rumer 401**, featuring double protection over magnesium. It has a low gear ratio and a large spool for high speed retrieving. Fabricated of Du Pont's new delrin with stainless steel and brass, new **Zebco Model 89** is built to eliminate problems caused by saltwater corrosion. It is a heavy duty reel weighing 13 ounces, with a capacity of 350 yards of 15 pound test mono.

A low price reel to meet the pocketbook of average fishermen is the Model 1810, **Horrocks-Ibbotson**. This is a nickel finished reel with brass smooth cut gears and level line. It has a capacity of 100 yards and weighs approximately 7 ounces.

From **South Bend** comes the new Starlight 7, a low cost spin cast reel, small enough to play panfish but large enough to handle a real catch. It is built of polypropylene, which is virtually unbreakable. It has a simplified breakdown with removable spool, and carries 350 feet of 6 pound mono.

The many users of **Mitchell 300** will find the new Model 330 a very familiar feeling reel, except that the new improved bale will permit a fisherman to cast without touching the line. This completely eliminates the necessity of taking up the line and opening the bale manually.

Newest production of **Bronson** is a rod and reel combination known as Bronson No. 63. The new reel has a

unitized brake control, the reel can be instantly removed from the rod, which is a two-piece light action tubular glass. It comes with 100 yards of 10 pound mono.

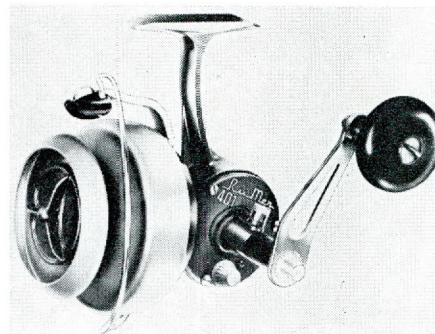
The new **Quick** microlight No. 265 is a lightweight spinning reel, which can be changed over easily for either right or left hand cranking. It has a pushbutton release spool, self-lubricating bearings, and a saltwater-proof finish throughout. It has a line capacity of 175 yards of 6 pound mono.

An oldtimer has been improved by **Pflueger**, with a free spool for the **Supreme** reel. The handle does not turn during the action, which makes it possible to use extremely light lures. The spool is engaged automatically when starting the retrieve. It has an adjustable star drag. The reel weighs 8 ounces, has a line capacity of 180 yards of 15 pound nylon.

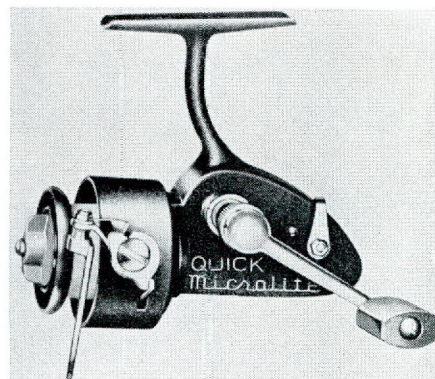
A new free spooling line direct drive reel also has been developed by **Shakespeare**. This new reel has a push-button operated free spool and star brake crank. Like all Shakespeare reels, it has a no back lash casting control. It has a capacity of 165 yards

of 15 pound mono, or 100 yards of 15 pound braided line.

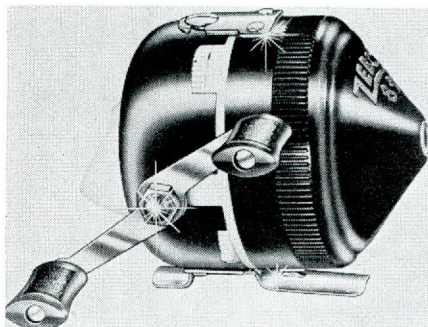
Heddon has announced a new free spool reel, to be known as the Heritage model. This carries several unique features, including stationary line guide during the cast.**



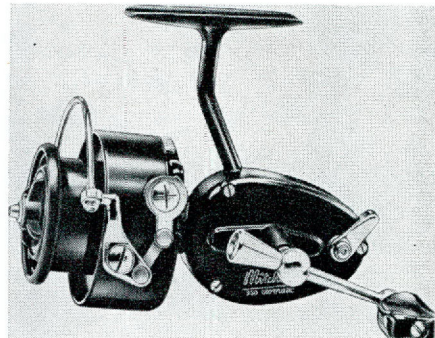
Rumer



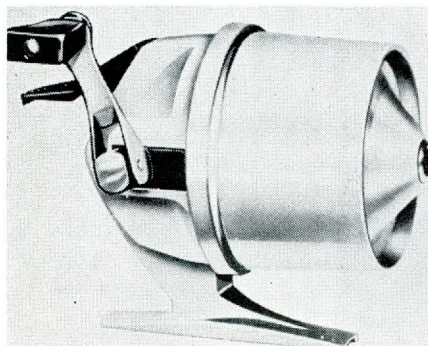
Quick



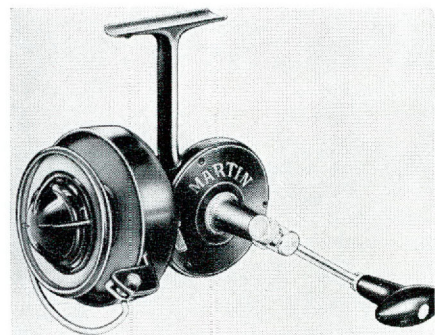
Zebco 89



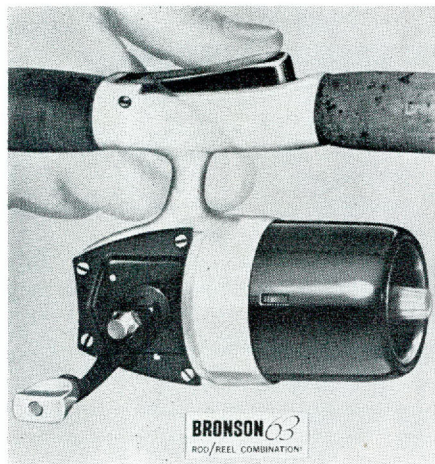
Mitchell



South Bend

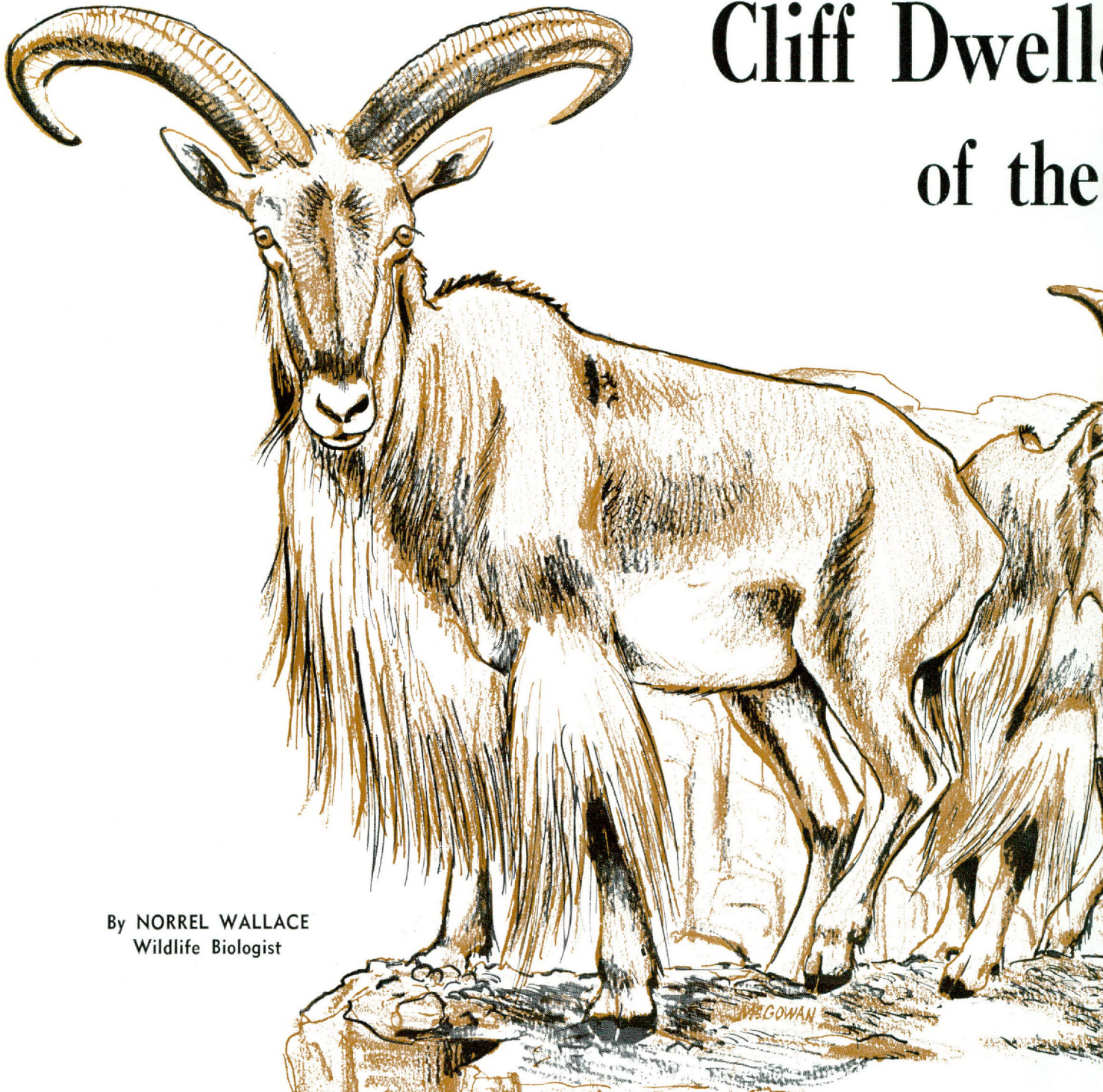


Martin



Bronson 63

Cliff Dwellers of the



By NORREL WALLACE
Wildlife Biologist

ARE YOU TIRED of hunting in the same old worn-out pattern every year? Do you feel you need some new uncrowded territory to wander in and a new game animal to test your hunting skill? If you do, you have something to look forward to.

Three years ago the Texas Game

and Fish Commission released two herds of aoudad sheep in the Palo Duro Canyon south of Amarillo with the hope that they would reproduce and become numerous enough to be hunted by adventurous Texans.

The aoudad is not new to the ranks of desirable big game animals, but

many hunters have yet to hear of one. Just to make sure everyone knows what we are talking about, let's look briefly at the origin of the aoudad (pronounced aw-dad) sheep and find out how they came to the U. S. and to Texas.

Aoudad sheep are native of the

Palo Duro



attraction. As the sheep reproduced beyond the capacity of the zoos, the surplus sheep were sold to private individuals who were interested in starting their own herds of wild aoudads. The Texas Game and Fish Commission was impressed with the success the aoudad was having as a big game animal in New Mexico, and in a trade with a New Mexico rancher, who had a private herd, the Texas Game Department obtained 44 aoudad sheep of mixed sex and age. In 1957 these sheep were released in the Palo Duro Canyon at two sites, one near Claude and another near Silverton.

A mature aoudad ram will weigh from 185 to 275 pounds on the hoof, and its horns could easily measure 12 inches around at the base. Measurements of outside curl and maximum width will usually exceed 24 inches. A head like that pretty well makes him a trophy animal. Is the meat worth keeping? You bet! There is no offending goat smell, and aoudad meat outranks most game animals for flavor and quality.

Shortly after the release of the sheep I was assigned the responsibility of keeping tab on this small population. Were they satisfied with their surroundings? Did they have plenty of food to eat? Would coyotes, bobcats, and eagles be a problem? Would the scant number of deer in the Canyon compete with the aoudad for food? Many questions were answered before the release, but many, many more were not answered. Now, three years later, let's see how the answers stack up. Are they satisfied with their surroundings? Apparently they are. There is still some of the original herd within two miles of the point of liberation. Other sheep have moved as much as 30 miles looking for a place that satisfies them. Movement doesn't appear to be caused by lack of food or water, presence of predators, or any other undesirable factor. They appear to be merely looking over their new domain very much in the same way curious humans might do if transplanted on another continent. As far as food availability is concerned, I doubt that there is a shortage of desirable food in the Palo Duro. Many canyon walls and mesa tops are so steep that domestic ani-

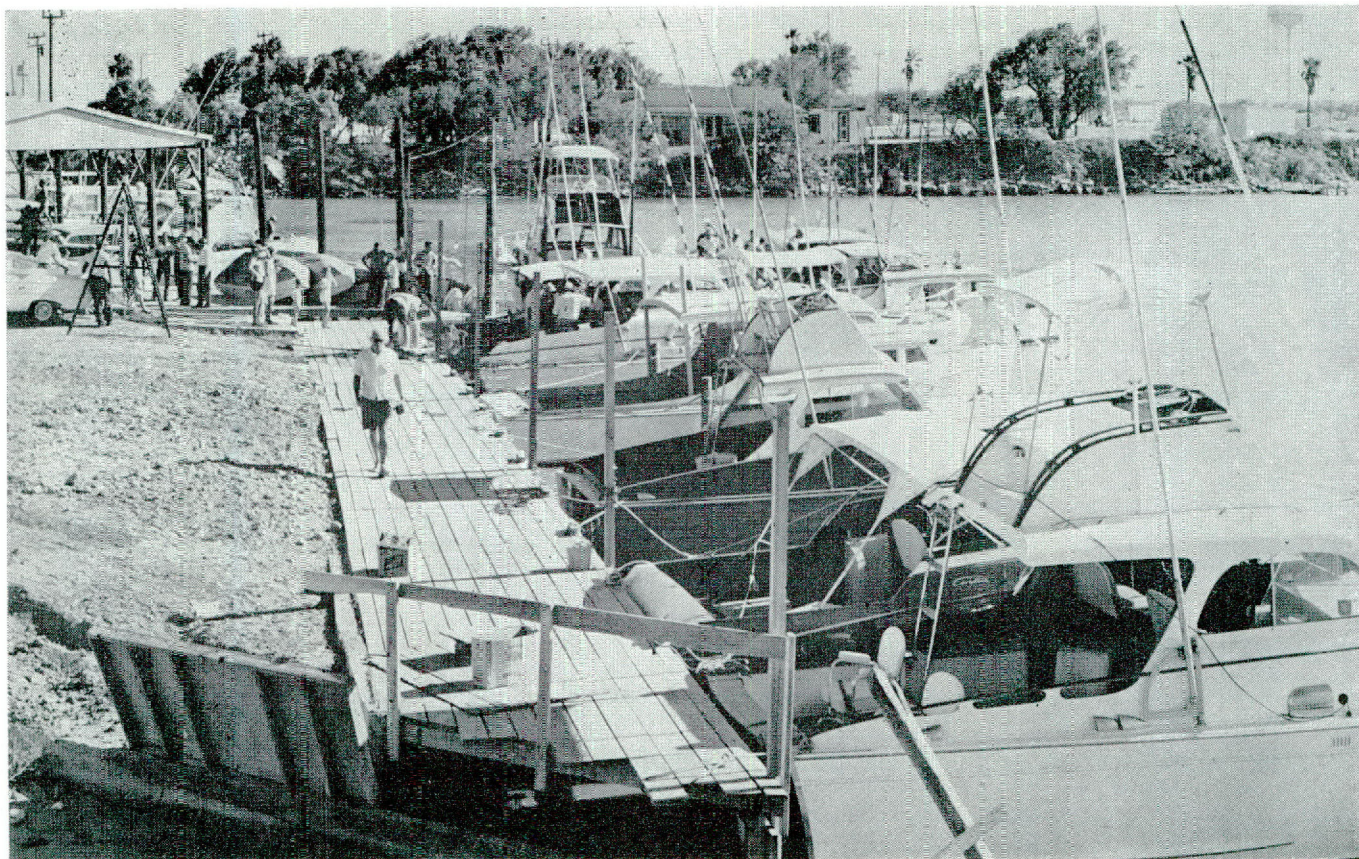
mals have never reached them and they are covered with vegetation of all types in its most virgin state. These areas are reserved exclusively for aoudad sheep and other wild animals.

Are predators (coyotes, bobcats, and eagles) a hindrance to the sheep? I haven't found any evidence that they are. On one occasion I watched a pair of golden eagles fly within a few feet of a bunch of grazing aoudads without either eagle or aoudad giving the other a second look. A neglected baby aoudad would no doubt be a choice dinner for any predator, but references say they are seldom left unattended by their parents. The young are not only safeguarded by their ability to move about well at a very young age, they are protected by aggressive parents who will do battle in their defense.

Probably the most pressing question that has not been answered is how many sheep are in the Canyon now after three years of freedom. I don't know. No one does. A calculated guess would put the total around 200 sheep. This sounds like a lot of sheep for one area doesn't it. Its not so many though when you consider the area we are talking about is roughly 400,000 acres of the roughest terrain you can imagine. If our estimate is fairly close, that would be one sheep for every 2,000 acres. Hunting an aoudad in such sparsely populated game range would be a challenging venture, but the chances of success would be very slim indeed.

So far things look promising for the aoudad, but right now all we can do is wait. If reproduction picks up and aoudad sheep become a common sight in the Palo Duro Canyon, Texas hunters will be told when, where, and how they can hunt the exotic aoudad. A sheep hunt won't be a 30-minute wait in a blind surrounded by a pile of shelled corn for bait. Pick-up trucks and even jeeps will have to be parked far from the hunting areas. For a welcomed change sportsmen can look forward to some wilderness hunting. Hunters can backpack into isolated areas, pitch camp, smell woodsmoke and spend a few days trying to bag a game animal that ranks second only to elk in big game stature. **

southeast region of Africa and the Atlas Mountains on the northwest edge of the Sahara desert. For centuries, Arabs and natives have been hunting this animal for wool and meat. Several years ago some American zoos trapped and imported aoudad sheep for an added tourist



Gulf Game

By L. A. WILKE

WEATHER AND FISH cooperated to make this year's International Fishing Tournament at Port Isabel one of the best in the 23 years since its origin.

Robert Relay of Aransas Pass, was the grand champion in the men's sailfish division. Doyle Wells of Port Isabel caught the largest sail, which weighed 51 pounds.

Relay's sails weighed 45, 32 and 28 pounds each for a total of 525 points, against 516 $\frac{3}{4}$ for Tommy Caldwell of Corpus Christi, who was in top place in the offshore division for men.

George Etz of McAllen got the largest marlin; Mrs Don Sheldon of Donna caught the largest tarpon; Pope Neoll III, of Harlingen got the first tarpon.

Other winners were J. C. Pittman, South Carolina, first place men's tarpon division; Jim Taylor, McAllen, largest fish caught, Mrs. Bud Moore, Houston, offshore women's division:

• Continued on Page 28



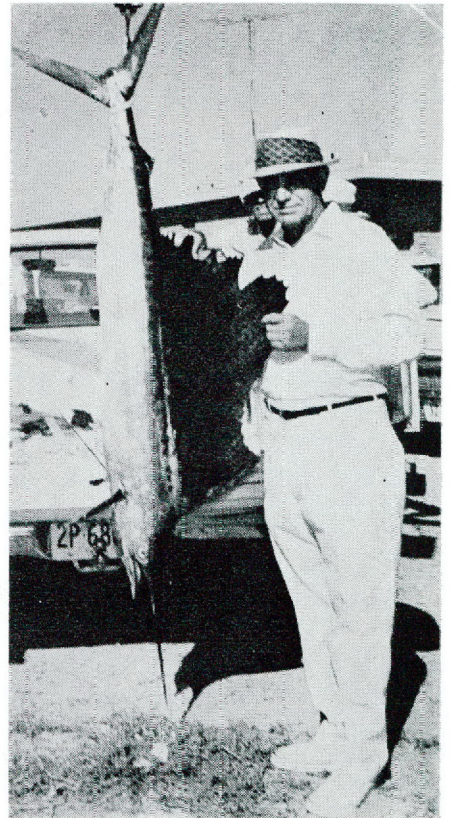
John M. Mathews, Port Aransas and Tommy Caldwell of Corpus Christi, with his prize winning sail.



Doyle Marek and Kenneth Ehman didn't quite get in the money with this 41 pound sail.



Dr. O. H. Jahn of Houston and Bruce Reiter of Port Aransas got a nice sail the first day.



Fred Maly of San Antonio took the writers special award for landing his 31 pound sail on 12 pound line.



Mrs. J. B. Stahlman of Houston found her 42-pound ling wasn't enough fish for a prize winner.



Mrs. Bud Moore of Houston landed this sail for tops in the woman's sailfish division.



Sailfish Galore

at Port Aransas Roundup

By CURTIS CARPENTER

OLD TIMERS at Port Aransas call their city the "Sailfishing Capital of the World." Could be. At least it proved itself during the Deep Sea Roundup held there July 11, 12 and 13. Even with white caps topping every Gulf wave, 82 sails were landed during what turned out to be a two-day event. According to the records, this was the greatest number of sailfish caught during a tournament since 1952 when 64 were boated.

On the first day, after the Roundup had been called off because of the weather, one boat landed 14 sails. Eleven of these were tagged and released; the remaining three were released but without tags.

The strong winds of the first day killed a little of the Roundup spirit. However, on the second day with howling winds still tossing the sea about, a number of determined contestants brought in 57 sailfish. It wasn't unusual to see 3 and 4 flags flying on the outriggers of a single boat. Many of the sportsmen reported seeing schools of the colorful acrobats. Harding Black of San Antonio, who caught the longest sail of the tournament (7-feet, 9-inches) complained of taking too much time with his big fish. "I should have brought him in faster," he remarked. "Then I could have gotten back out after another. They were all around the boat."

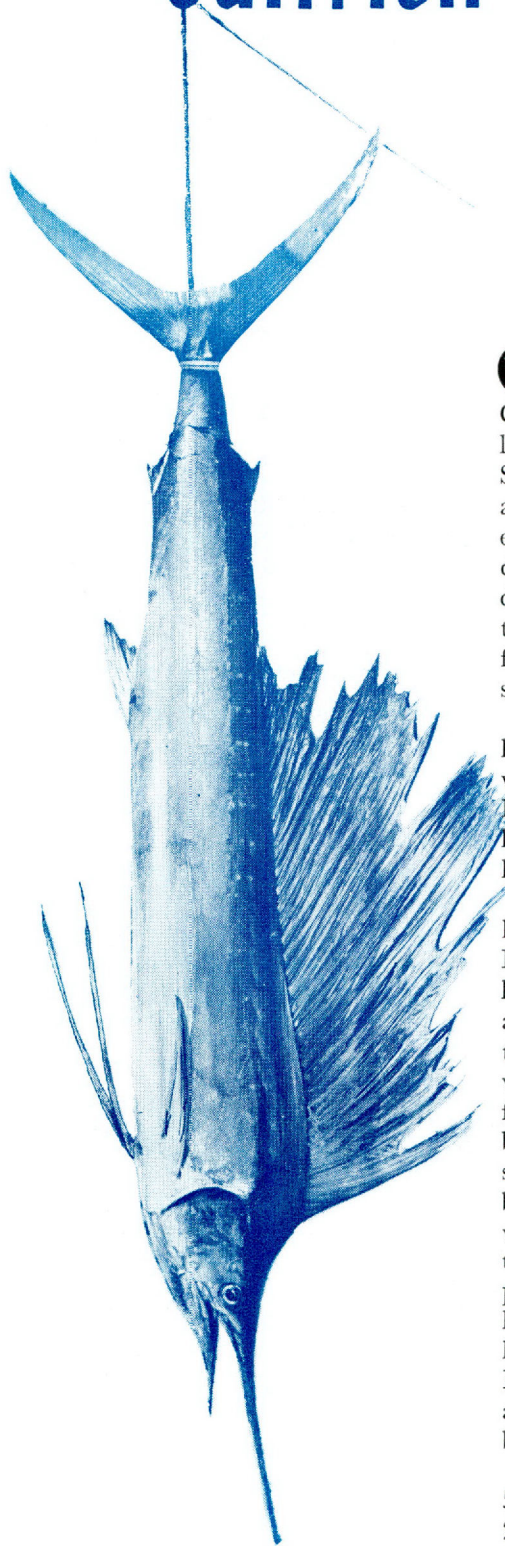
C. W. Belcher of Port Aransas with 5,971 points became champion of the 26th Deep Sea Roundup. His five sails, three the first day and two the second, put him far in front of his closest challenger, Otto Koehler of San Antonio, with 4 sails and 4,602 points. Just behind Koehler was Reyford McNabb of Corpus Christi with 4,263 points.

Several outboarders braved the

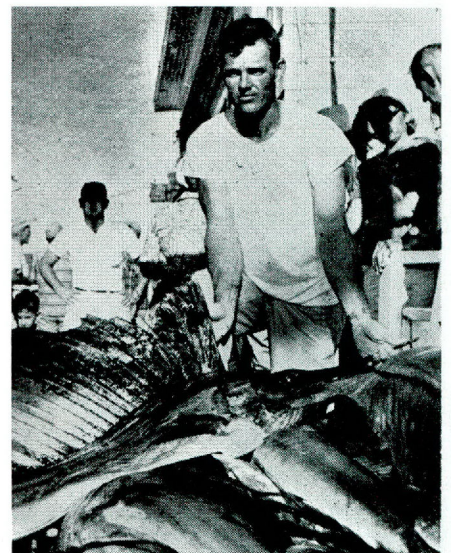
rough seas during the tournament. Harry Boek of San Antonio caught a 7-foot, 4½-inch sail and a 17-pound king to give him top spot in the outboard division. The largest king taken during the event was a 19½-pounder landed by Paul Millsapps of Houston. However Mrs. Billie Parker of Corpus won the trophy in that division with 125½ pounds of kings.

Only one tarpon was caught. But for its size, 3 feet, 6½ inches, it was about the most valuable fish caught in that area for some time. It won for Mrs. R. L. Perkins of San Antonio trophies for the first, the biggest, the most tarpon of the Roundup, and the largest tarpon for a woman.

Other winners for the two days were J. W. Moates, Fort Worth, dolphin; Mrs. Harvey Ringer, Hallettsville, bonita; Tommy Caldwell, Corpus, wahoo; John Stockmeyer, El Paso, barracuda; Ben Vaughn, Jr., Corpus, shark; and Mrs. Reyford McNabb, Corpus, ling. **



"They were all around the boat!"



C. W. Belcher shows one of the five sails which gave him 5,971 points to win.



Sails were stacked high on the wharf. Mrs. Kyle Vick of Rockport landed a 44-pounder.

Wayne Bockmon, Ft. Worth, kept his fish moist for the photographers. He won only admiration.

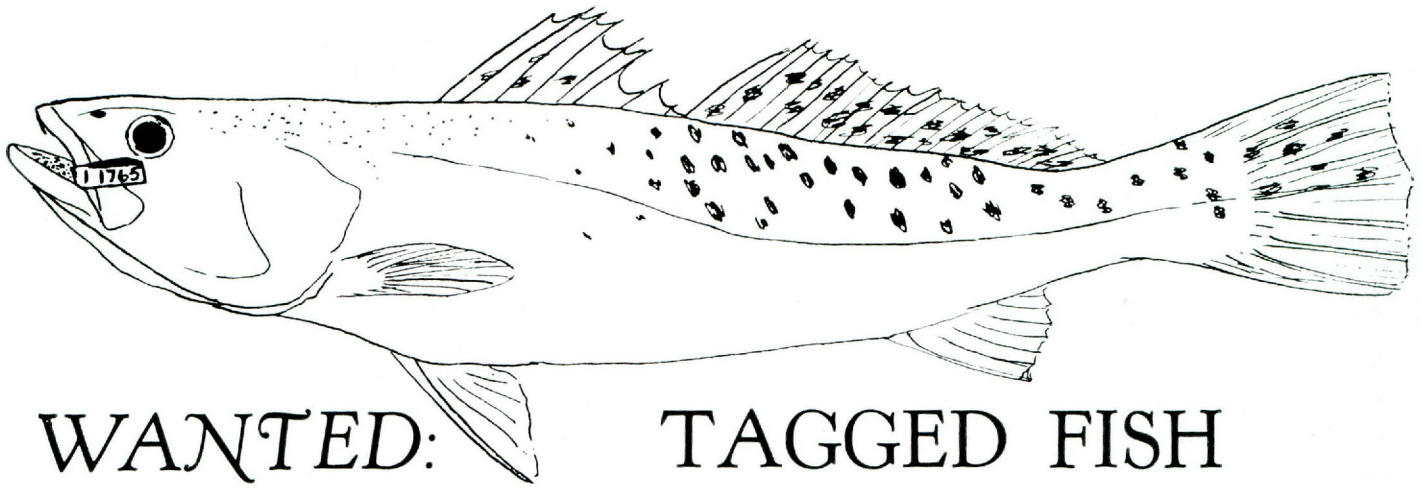


Dockside was lined with returning boats as contestants unloaded their catches.

57 sails were boated the second day!

Even the children had fun during piggy perch time each morning at ten.





WANTED: TAGGED FISH

EVER HAVE THE THRILL of finding a tag on a fish you've just landed? Ever wonder when and why that particular fish was marked? Well, Texas saltwater fishermen who follow through and report their tag and catch data then are due to receive more surprises in the weeks to come.

Last month four Texas lure companies began sponsoring a program whereby they each will send a sample lure to the fishermen who return their saltwater fish tags along with the catch data to the Game and Fish Commission. The sponsors of the program are Bomber Bait Co., Doug English Lure Co., Hump Lure Co., and Padre Island Co. In addition to the lures each fisherman receives the information on his tagged fish; that is, when and where it was tagged and how large it was at that time.

Fish are tagged by biologists of the Game and Fish Commission for study purposes, but tagging alone is useless without returns. By learning when, where and how large the fish was when it was recaptured the biologist can trace migration patterns, learn more of growth rates and from large numbers of returns can even learn something of the size of the fish population and of losses from natural and fishing mortality.

Although the department is anxious to recover its tagged fish, there are no provisions by which it can offer a reward for fish tags. Many sport and commercial fishermen have returned fish tags without thought of a bonus; but in other states where a reward is offered the word gets around, and the fisherman looks at his fish more carefully.

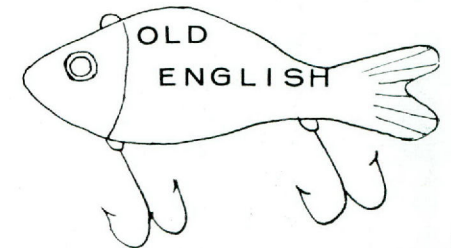
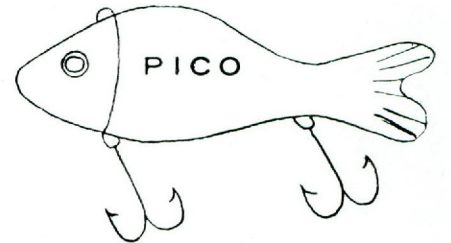
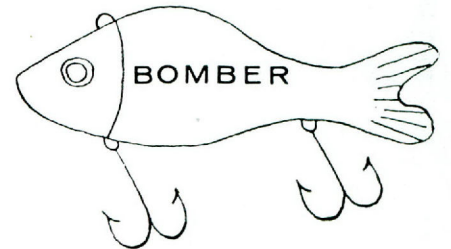
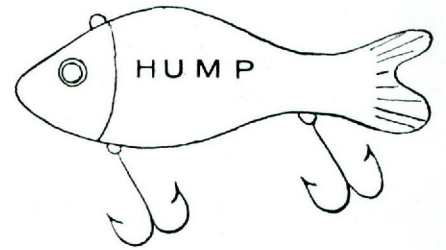
The tag, usually a metal clip at-

tached to the fish's lip or a plastic disc attached near the dorsal fin, bears an identification number by which the history of that fish can be traced. On receipt of tag and catch data at the Marine Laboratory of the Texas Game & Fish Commission in Rockport, biologists forward the name and address of the cooperating fisherman to the lure companies sponsoring the program. The lures are then sent directly from the manufacturer to the fisherman.

The type of lure sent by the lure maker may vary from time to time as the newer models come out. Several of the manufacturers have expressed a desire to send their very latest design so that the fisherman can give it an early try.

The fish to be tagged by the biologist are caught in several ways, usually by net or seine but also by hook and line. Although the net is usually the most rapid method of collecting a number of fish from the same school, during certain periods of the year this method is impractical. In the summer months large numbers of crabs present in the shallow waters tangle in the nets and seem to relish eating the synthetic webbing. When the water is warm, fish do not survive well in the nets. So, at times the old method of hook and line is the biologist's best method of collection.

Whatever method is used, there are saltwater fish being tagged in all areas of our Texas coast and in every month of the year; so, Mr. Fisherman, watch for that fish tag. Send it along with the recorded length, weight (if possible), date and area of catch. Then watch the mailbox for further developments. **



By **TERRANCE LEARY**
Marine Biologist

EL PASO

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
1	6:41	7:30	6:59	6:51	7:22	6:16	7:48	6:01
2	6:41	7:29	7:00	6:50	7:23	6:15	7:48	6:01
3	6:42	7:27	7:01	6:48	7:23	6:15	7:49	6:01
4	6:43	7:26	7:01	6:47	7:24	6:14	7:50	6:01
5	6:43	7:25	7:02	6:46	7:25	6:13	7:51	6:01
6	6:44	7:24	7:02	6:45	7:26	6:12	7:52	6:01
7	6:44	7:22	7:03	6:43	7:27	6:11	7:52	6:02
8	6:45	7:21	7:04	6:42	7:28	6:11	7:53	6:02
9	6:46	7:20	7:04	6:41	7:29	6:10	7:54	6:02
10	6:46	7:18	7:05	6:40	7:29	6:09	7:55	6:02
11	6:47	7:17	7:06	6:38	7:30	6:09	7:55	6:02
12	6:48	7:16	7:07	6:37	7:31	6:08	7:56	6:02
13	6:48	7:14	7:07	6:36	7:32	6:08	7:57	6:03
14	6:49	7:13	7:08	6:35	7:33	6:07	7:57	6:03
15	6:49	7:12	7:09	6:34	7:34	6:06	7:58	6:03
16	6:50	7:10	7:09	6:33	7:35	6:06	7:59	6:04
17	6:51	7:09	7:10	6:31	7:36	6:05	7:59	6:04
18	6:51	7:08	7:11	6:30	7:36	6:05	8:00	6:04
19	6:52	7:07	7:12	6:29	7:37	6:04	8:00	6:05
20	6:52	7:05	7:12	6:28	7:38	6:04	8:01	6:05
21	6:53	7:04	7:13	6:27	7:39	6:04	8:02	6:06
22	6:54	7:03	7:14	6:26	7:40	6:03	8:02	6:06
23	6:54	7:01	7:15	6:25	7:41	6:03	8:03	6:07
24	6:55	7:00	7:15	6:24	7:42	6:03	8:03	6:07
25	6:55	6:59	7:16	6:23	7:43	6:02	8:03	6:08
26	6:56	6:57	7:17	6:22	7:43	6:02	8:04	6:09
27	6:57	6:56	7:18	6:21	7:44	6:02	8:04	6:09
28	6:57	6:55	7:19	6:20	7:45	6:02	8:05	6:10
29	6:58	6:53	7:19	6:19	7:46	6:02	8:05	6:11
30	6:59	6:52	7:20	6:18	7:47	6:02	8:05	6:11
31			7:21	6:17			8:05	6:12

MIDLAND/ODESSA

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
1	6:24	7:13	6:42	6:34	7:05	5:59	7:31	5:44
2	6:25	7:12	6:43	6:33	7:06	5:58	7:32	5:44
3	6:25	7:11	6:44	6:31	7:07	5:58	7:33	5:44
4	6:26	7:09	6:44	6:30	7:08	5:57	7:34	5:44
5	6:26	7:08	6:45	6:29	7:08	5:56	7:34	5:44
6	6:27	7:07	6:46	6:28	7:09	5:55	7:35	5:44
7	6:28	7:06	6:46	6:26	7:10	5:54	7:36	5:44
8	6:28	7:04	6:47	6:25	7:11	5:54	7:37	5:45
9	6:29	7:03	6:48	6:24	7:12	5:53	7:37	5:45
10	6:29	7:02	6:48	6:23	7:13	5:52	7:38	5:45
11	6:30	7:00	6:49	6:22	7:14	5:52	7:39	5:45
12	6:31	6:59	6:50	6:20	7:15	5:51	7:40	5:45
13	6:31	6:58	6:51	6:19	7:15	5:50	7:40	5:46
14	6:32	6:56	6:51	6:18	7:16	5:50	7:41	5:46
15	6:32	6:55	6:52	6:17	7:17	5:49	7:42	5:46
16	6:33	6:54	6:53	6:16	7:18	5:49	7:42	5:47
17	6:34	6:52	6:53	6:15	7:19	5:48	7:43	5:47
18	6:34	6:51	6:54	6:13	7:20	5:48	7:43	5:47
19	6:35	6:50	6:55	6:12	7:21	5:47	7:44	5:48
20	6:36	6:48	6:56	6:11	7:22	5:47	7:45	5:48
21	6:36	6:47	6:56	6:10	7:22	5:47	7:45	5:49
22	6:37	6:46	6:57	6:09	7:23	5:46	7:46	5:49
23	6:37	6:45	6:58	6:08	7:24	5:46	7:46	5:50
24	6:38	6:43	6:59	6:07	7:25	5:46	7:47	5:50
25	6:39	6:42	6:59	6:06	7:26	5:45	7:47	5:51
26	6:39	6:41	7:00	6:05	7:27	5:45	7:47	5:51
27	6:40	6:39	7:01	6:04	7:28	5:45	7:48	5:52
28	6:41	6:38	7:02	6:03	7:29	5:45	7:48	5:53
29	6:41	6:37	7:03	6:02	7:29	5:45	7:48	5:53
30	6:42	6:35	7:03	6:01	7:30	5:44	7:49	5:54
31			7:04	6:00			7:49	5:55

SHREVEPORT, LA./NORTHEAST TEXAS

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
1	5:50	6:40	6:09	6:00	6:32	5:25	6:59	5:10
2	6:51	6:39	6:10	5:59	6:33	5:24	7:00	5:10
3	5:51	6:38	6:10	5:58	6:34	5:23	7:00	5:10
4	5:52	6:36	6:11	5:57	6:35	5:22	7:01	5:10
5	5:52	6:35	6:12	5:55	6:36	5:22	7:02	5:10
6	5:53	6:34	6:12	5:54	6:37	5:21	7:03	5:10
7	5:54	6:32	6:13	5:53	6:37	5:20	7:04	5:10
8	5:54	6:31	6:14	5:51	6:38	5:19	7:04	5:10
9	5:55	6:30	6:15	5:50	6:39	5:19	7:05	5:10
10	5:56	6:28	6:15	5:49	6:40	5:18	7:06	5:10
11	5:56	6:27	6:16	5:48	6:41	5:17	7:07	5:10
12	5:57	6:26	6:17	5:46	6:42	5:17	7:07	5:11
13	5:57	6:24	6:17	5:45	6:43	5:16	7:08	5:11
14	5:58	6:23	6:18	5:44	6:44	5:15	7:09	5:11
15	5:59	6:22	6:19	5:43	6:45	5:15	7:09	5:11
16	5:59	6:20	6:20	5:42	6:46	5:14	7:10	5:12
17	6:00	6:19	6:20	5:41	6:46	5:14	7:11	5:12
18	6:01	6:18	6:21	5:39	6:47	5:13	7:11	5:13
19	6:01	6:16	6:22	5:38	6:48	5:13	7:12	5:13
20	6:02	6:15	6:23	5:37	6:49	5:12	7:12	5:13
21	6:03	6:14	6:23	5:36	6:50	5:12	7:13	5:14
22	6:03	6:12	6:24	5:35	6:51	5:12	7:13	5:14
23	6:04	6:11	6:25	5:34	6:52	5:11	7:14	5:15
24	6:04	6:10	6:26	5:33	6:53	5:11	7:14	5:15
25	6:05	6:08	6:27	5:32	6:54	5:11	7:15	5:16
26	6:06	6:07	6:27	5:31	6:54	5:10	7:15	5:17
27	6:06	6:06	6:28	5:30	6:55	5:10	7:16	5:17
28	6:07	6:04	6:29	5:29	6:56	5:10	7:16	5:18
29	6:08	6:03	6:30	5:28	6:57	5:10	7:16	5:19
30	6:08	6:02	6:31	5:27	6:58	5:10	7:16	5:19
31			6:31	5:26			7:17	5:20

WICHITA FALLS

DAY	SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER	
	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.	RISE A.M.	SET P.M.
1	6:07	7:00	6:28	6:19	6:53	5:42	7:21	5:25
2	6:08	6:59	6:29	6:17	6:54	5:41	7:22	5:25
3	6:09	6:58	6:30	6:16	6:55	5:40	7:23	5:25
4	6:09	6:56	6:30	6:15	6:56	5:39	7:24	5:25
5	6:10	6:55	6:31	6:13	6:57	5:38	7:24	5:25
6	6:11	6:53	6:32	6:12	6:58	5:37	7:25	5:25
7	6:12	6:52	6:33	6:11	6:59	5:36	7:26	5:25
8	6:12	6:51	6:33	6:09	7:00	5:36	7:27	5:25
9	6:13	6:49	6:34	6:08	7:01	5:35	7:28	5:25
10	6:14	6:48	6:35	6:07	7:02	5:34	7:28	5:25
11	6:14	6:47	6:36	6:05	7:03	5:33	7:29	5:25
12	6:15	6:45	6:37	6:04	7:03	5:33	7:30	5:26
13	6:16	6:44	6:37	6:03	7:04	5:32	7:31	5:26
14	6:16	6:42	6:38	6:02	7:05	5:31	7:31	5:26
15	6:17	6:41	6:39	6:00	7:06	5:31	7:32	5:26
16	6:18	6:40	6:40	5:59	7:07	5:30	7:33	5:27
17	6:18	6:38	6:40	5:58	7:08	5:30	7:33	5:27
18	6:19	6:37	6:41	5:57	7:09	5:29	7:34	5:28
19	6:20	6:35	6:42	5:56	7:10	5:29	7:34	5:28
20	6:20	6:34	6:43	5:54	7:11	5:28	7:35	5:28
21	6:21	6:33	6:44	5:53	7:12	5:28	7:35	5:29
22	6:22	6:31	6:45	5:52	7:13	5:27	7:36	5:29
23	6:23	6:30	6:45	5:51	7:14	5:27	7:36	5:30
24	6:23	6:28	6:46	5:50	7:15	5:27	7:37	5:30
25	6:24	6:27	6:47	5:49	7:16	5:26	7:37	5:31
26	6:25	6:26	6:48	5:48	7:17	5:26	7:38	5:32
27	6:25	6:24	6:49	5:47	7:18	5:26	7:38	5:32
28	6:26	6:23	6:50	5:46	7:18	5:25	7:38	5:33
29	6:27	6:21	6:51	5:45	7:19	5:25	7:39	5:34
30	6:28	6:20	6:52	5:44	7:20	5:25	7:39	5:34
31			6:52	5:43			7:39	5:35

GUNS



... and Shooting

By HAL SWIGGETT

This Month: Scatterloads

THE BEGINNING scattergunner must decide first what shotgun will best fit his needs. To do this he will need to understand gauges, shot sizes, patterns, the different kinds of guns and other factors concerning shotgunning.

Gauges, to some, are confusing. Gauge sizes originated many years ago by the number of round lead balls, bore size for the weapon, it took to make a pound. A 10 gauge made 10 balls to the pound and right on down the line. The only deviation being the little .410 which is a caliber and not a gauge.

The smallest is the .410. It is available for both 2½ and 3-inch shells. The 2½-inch shell is primarily a skeet load and the gun chambered for it will not accept the 3-inch shell.

The 3-inch .410 shell holds ¾ oz. of shot and is hardly big enough for general use. With it a good shotgun pointer will get his quail, dove and rail or snipe but is definitely handicapped in a duck blind or on a pheasant hunt. In our opinion no shot size larger than 6 should be used. The small quantity demands a small shot size to make an effective pattern.

One of the more popular gauges in recent years is the 20. It's maximum load carries 1 oz. of shot and

is a good dove, quail, rail and snipe load. Probably no shot size larger than 6 should be used in the 20 gauge.

The 16 gauge, with its maximum load of 1½ oz. of shot sits right in the middle between the lord and master 12 gauge and the fast rising 20. It has noticeably less recoil than the 12, hardly more than the 20. It handles all shot sizes and for the one shotgun man who doesn't get to shoot enough to stand up behind a 12 without flinching the 16 gauge is a fine all around load.

All this leads, naturally, to the 12 gauge. It is tops among the smooth-bore fraternity. With the new short magnum shells it steps hard on the heels of the standard 10 gauge while the lightest loads are hardly more than the maximum 20. It seems to be the nearest thing to the perfect gauge a person can get.

The 12 gauge magnum carrying 1⅝ oz. of shot, same as the standard 10 gauge, and the 10 gauge magnum with its 2 oz. are highly specialized loads. They come into their field long after the average shooter's ability leaves off. They are long range loads for the excellent shot to be used on ducks and geese.

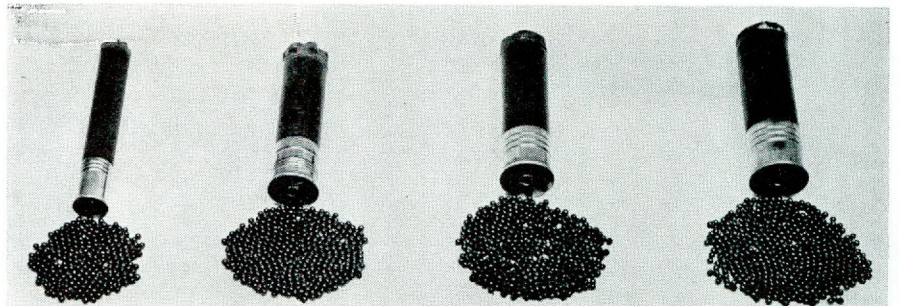
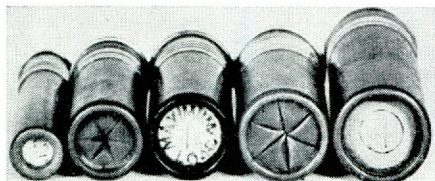
Since ounces of shot probably mean very little to the beginner, let's see

how many actually are in the shells. Long range shooting requires heavy shot so we picked # 4 as the example. There are 270 shot in the 3½-inch, 10-gauge magnum shell. The 12-gauge, 3-inch magnum and the standard 10 gauge each have 219 while the 12-gauge short magnum uses 202. To show why we recommend small shot for the .410 and 20 gauge there are only 99 # 4 shot in the 3-inch .410 shell. The 20 gauge has all of 135. We figure 7½ is the best all around shot so used it with maximum loads in the other gauges. The standard 12 packs 438 shot. There are 394 in a 16-gauge shell and 350 in the 20 gauge. The long, skinny 3-inch .410 contains 263 shot.

One more factor to consider when deciding what gauge you can handle best is the recoil. The following foot pounds of energy are based on the recoil of 7-pound guns and maximum loads. The 12-gauge kicks back a healthy 44 pounds; 31.4 pounds for the 16 gauge and 26.4 pounds for the 20 gauge. The little .410 slaps at you with about 15 pounds of energy from a 6-pound gun.

As you may have noticed, we skipped a new addition to the shotgun line which came out a few years ago. It may well be the all-around deal we have been looking for. I'm

At right are maximum loads of 7½ shot: from left are .410, ¾ oz. 263 shot; 20 gauge, 1 oz. 350 shot; 16, 1½ oz. 394 shot; 12, 1¼ oz. 438 shot. Below shows variation in hulls. From left are .410, 20, 16, 12, and 10 gauges.





The five favorite smoothbores are from top: automatic, pump, over-under, double and single.

talking about the 20-gauge, 3-inch magnum. The gun is a little heavier than the standard 20 but not nearly so heavy as the 12-gauge. It shoots a maximum load that nearly equals the 12 and also handles the regular 20 gauge loads when a light shell is needed. However, a 12 gauge shotgun is hard to beat for all around use.

How many times have you heard the statement "That is the hardest shooting shotgun I ever saw." The gun usually is some oldtimer about to fall apart but happens to fit the shooter. The choke is long gone so it throws such an open pattern that even a bad shot will make kills if the game is within range. The majority of hunters vastly over-estimate the range of their kills so it all boils down to a hard shooting old shotgun because the user gets results.

The secret of shotgun success is in getting a gun that fits you in a gauge and weight that you can handle and with a choke that allows hits on game within your shooting ranges.

First of all decide on the gauge that will best serve your type of hunting. Now, do you want a conventional side by side double barrel? How about the advantages of a double with the single sighting plane available in the over-unders. Maybe you think a pump will be best for your use or the rapid fire of an automatic. If you are a bolt action rifle man you might like the bolt action shotguns and there is always the old reliable single shot if you just want to kill game without much of an investment.

Shotguns are like everything else.

You get about what you pay for. Any of the standard brands will give your money's worth but the best investment is to buy the best gun you can afford.

If you are a duck or goose hunter and most of your shooting will be on passes you will need a full choke barrel. Duck shooting over decoys, pheasants and nearly all general hunting can be handled very capably with a modified choke barrel.

Quail hunters will want a cylinder bore or possibly an improved cylinder.

An all around barrel is out of the question. The nearest is a modified choke or an improved cylinder if you don't intend to take up duck or goose hunting then settle down and learn to shoot it.

If you decide on a less expensive double barrel you will automatically get a modified and full choke set up, which will get you by in most any kind of shooting. With the more expensive doubles you can name your own degree of choke. We would sug-

• Continued on next Page

Model K

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K2.5
2 1/2-Power, \$37.50



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3-Power, \$37.50



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6-Power, \$48.50



K4
4-Power, \$45.00



K8 or K10
8- or 10-Power, \$59.50

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a magnified target**

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- Weaver Patented Fixed-Reticle* with internal adjustments, crosshairs always centered in field of view
- Positive compression O-ring sealing plus nitrogen processing
- Accurate micrometer click adjustments for windage and elevation
- Sturdy construction for dependable performance in the field

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*Except on Model K1



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THE WORLD'S MOST USED, MOST PROVED SCOPES

gest improved cylinder and modified unless you are planning on ducks and geese. In that case stick to the modified and full.

Pump, automatic and bolt action guns can be made into all around weapons with the addition of any of several choke devices. Some require only a twist of the wrist while others use various tubes but any of them go the limit from wide open choke to a pattern so tight that high flying ducks will suffer if you have the ability to hold on them.

The object is to get at least four or five pellets into your target.

First, pattern your gun. Get some four foot square pieces of paper, all the different brands of shells in all the popular shot sizes. Measure off exactly 40 yards. Fire at least five shots from each load you are testing, each shot on a clean sheet of paper. Be sure and mark each sheet with brand of shell and shot size used.

When you have finished shooting,

in that same circle. The improved cylinder will place 35-45 percent of its shot load in the 30 inch circle. You are looking for a load that will place four or five pellets in your target any place in that circle. There should be no bare spots where it could fly through untouched.

While checking your patterns keep in mind the shot sizes used for the various size of game. Usually # 7½ or 8's are used on quail, doves, snipe and rail. Sometimes even # 9's. Rabbits, squirrels, ducks and pheasants usually call for #6 shot while the larger sizes are used on geese, foxes and such. If your gun is shooting a tighter pattern than you can handle and it is a single barrel (pump, automatic, bolt action or single shot) you will do well to get a variable choke. The double barrel user who has a very tight choke has only two outs. He can either become an excellent shot and wait till the birds are far enough out to kill without destroy-

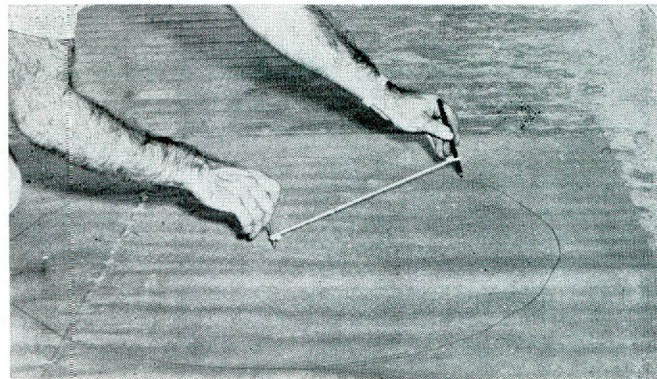
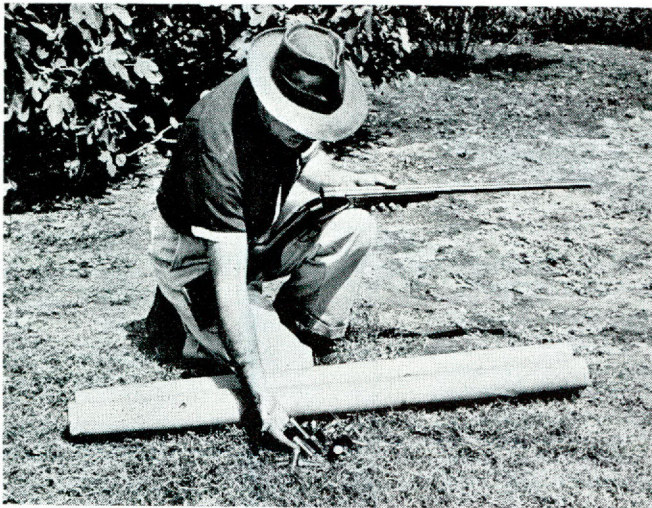
so use the one that patterns best for you. For heavier game 5's and 6's are near enough the same that you want to stick to one that handles best in your barrel.

Shotguns, shells and shot are all intended for the same use but won't take to the same handling. Pick out the one you like best, to heck with what the other fellow does. **

When Fishermen Meet

"Hiyamac."
 "Lobuddy."
 "Binearlong?"
 "Cuplours."
 "Ketchanenny?"
 "Godafew."
 "Kindarthay?"
 "Bassencarp."
 "Ennysizetoom?"
 "Cuplapowns."
 "Hittinard?"
 "Sordalite."
 "Wahchoozin?"
 "Gobbaworms."
 "Fishanonaboddum?"
 "Rhydonnoboddum."
 "Igoddago."
 "Tubad."
 "Seeyaaroun."
 "Yehtakideezy."
 "Guluk."

Dude Rancher



Get paper squares and shells, left, measure off 40 yards, and draw circle around heaviest concentration of shot.

your work is only started. Take all the sheets home and spread them out on the floor, one at a time, draw a 30 inch circle around the heaviest concentration of shot. Count every hole inside the circle and divide by the number of shot in the shell used. The approximate number of pellets per ounce are 585 # 9; 410 # 8; 350 # 7½; 225 # 6; 175 # 5; 135 # 4 and 90 # 2's.

A full choke pattern will have 65-75 percent of the pellets in a 30-inch circle. The modified choke pattern has 50-60 percent of its pellets

ing or use the fairly satisfactory "brush or spreader" loads.

Our favorite load for a 12 gauge is 3¼ - 1¼ - 7½. We use it for quail, doves, snipe, rabbits and ducks over decoys. Only for pass shooting ducks and geese do we move up to the heavier loads of # 6's.

Don't let anyone tell you what brand shells are best for your shotgun, or what shot size for that matter. Try them all then stock up on the one that gives the best patterns with the shot size you need. Seven and one-half 8's will do an equal job

New CUSTOM TYPE RIFLES

'98 Mauser actions fitted with best chromemoly barrels, sporter weight, cal 243, 270, 308 30-06—\$75 ppd. Checkered walnut stocks finished for above \$25. 4X scope and mounts installed add \$35. Sako, 98, FN, complete guns, actions, 12-groove barrels, stocks and scopes available at wholesale to dealers.

4X Triple Inspected Scopes \$28.75

3X-7X Variable Scopes \$38.50

4X-9X Variable Scopes \$59.50

See your dealer or write direct. Jobber for Fi and Sako rifles and barrelled actions.

RAY ROBERTS
 MCKINNEY, TEXAS

Campfires, Campers And Forest Fires

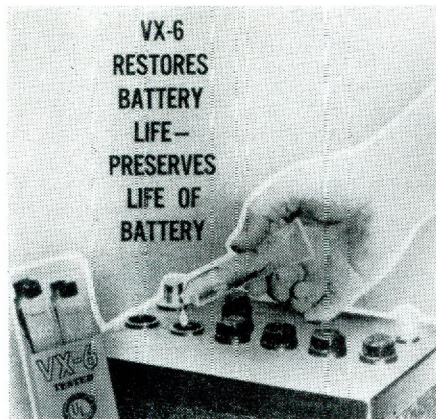
The campfire is a friend to man when he uses it carefully. It will keep him warm, cook his food, dry his clothes, and even add a flicker of friendship to night's darkest shadows. Most people are careful with campfires. They follow state and local fire laws. They build their fires in the right places and at the right times, keep them small, and put them out before they leave. If everyone were that careful, campfires would start few forest fires.

An unattended campfire or a spark from too large a fire can mean the loss of an entire forest. Wildfire damages watersheds destroys timber, and blackens recreation areas. It kills forest animals and often leads to serious erosion damage.

Careful people use the fireplaces provided in some national forests, national parks, state forests, and even on some private forests. Where there are no fireplaces, the careful hunter, fisherman, or hiker makes a safe place for his fire, attends it at all times, and extinguishes it on leaving the campsite. The Forest Service, U.S. Dept. of Agriculture, Washington, D.C., has more to say on this subject. Just write them.—*Winchester-Western*

To Get Ready For Fishing Trip:

1. Get organized.
2. Talk to wife.
3. Get re-organized.
4. Talk to wife.
5. Abandon entire idea.
6. Talk to self.



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100 ft. TROTLINE on winder, 20 assemblies . . .	5.50		6.95
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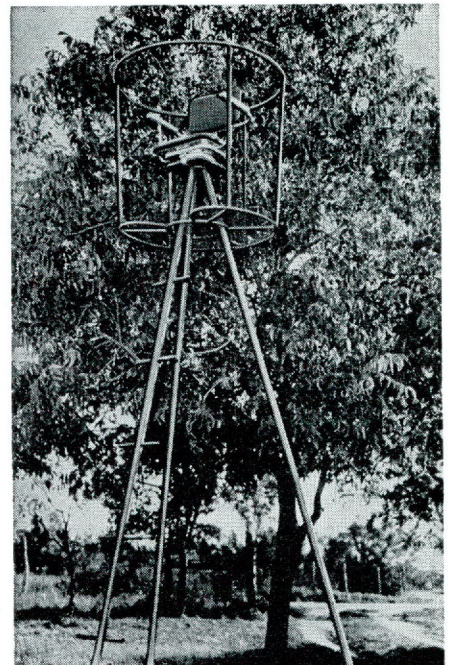
Extras if desired: Roll-up Reel \$1.00; Hook Guard \$1.20 doz.; Brass U-shaped Brad (2 for each guard) 15c doz. Trotlines guaranteed. Ppd.

FREE WITH ORDER: 22-page illustrated booklet tells how, when, where to set trotline, etc.

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Kit contains approximately 50 ft. 70 lb. test nylon line, 20 ft. rubber, 6 Snelled No. 2-0 hooks.

One KIT....\$1.25 One pkg. (2 lines) of extra Rubber.....75 mailed prepaid

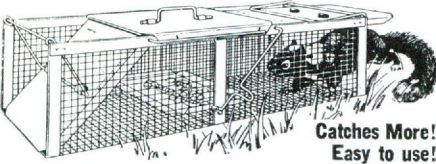
There were over 300 entries

Gulf Game ————— Continued from Page 18

Mrs. Mary Holmes, runner up. E. A. Lewis, Harlingen, men's grand champion bay fisherman, with the largest red fish; Mrs. Zelma Monlux, woman's bay champion; Alice Woods, Padre Island, largest trout, woman's division; Chic White, largest dolphin; Leon Day, Harlingen, largest trout for men.

The tournament lasted August 3 through 6, with more than 300 entries, according to Bob Meade, tournament director. **

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"I've hunted cats all my life and this is the first white-tailed one I have ever seen," were the comments of Lee Duncan when he saw the white spotted tail of the panther he killed in the Mount Ord country south of Alpine.

When Duncan was asked how he located the cat he said, "I took my hounds on their regular morning hunt in the Ord country, had very little hopes of picking up a big cat. After we got down in the pasture I noticed buzzards circling over in Red Haw Canyon and figured a panther had made a path down the canyon killing sheep. Down on the lower end the

• Continued on Page 29

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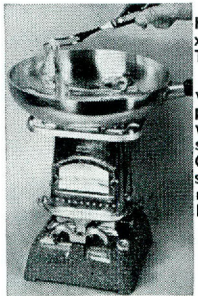
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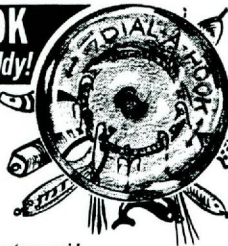
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Holder and complete 200 ft.-30 hook trotline . \$9.85

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M. L. PINKERTON

Box 362 Junction, Texas

dogs picked up a scent and set up a mighty howl, from this I knew they were sight trailing.

"I came up on a freshly killed buck deer that had been eaten on and it showed it was the works of a cat. Less than 500 yards from the kill the dogs treed and when I got there here this baby was. He had gorged himself and couldn't run any farther.

When he dropped to the ground after I shot him I thought I was seeing things. There was a full grown cat, about seven feet long, weighing around 135 pounds with a white tail. If it had been a young one I wouldn't have thought much about it for young ones have spots but this grown one with a white tail and few spots, this is something I have never seen before."

Lee Duncan was born in the Indian Territory (Oklahoma) in 1891. He began his hunting in the Big Bend country in 1932 and has worked for the Sohl Ranch many years. He is among the last of the rapidly disappearing professional predator hunters. To watch him work at his profession, and knowing the many hours he has followed a pack of hounds, one wonders how he has stood up under the strain so long. His remarks, "This old 'dog' is about at the end of the trail for I just can't ride and hunt like I use to."

When asked why he took to panther hunting he said, "Because I like to hunt. A person has got to like what he is doing if he intends to make a success out of it." The hundreds of predators he has hunted down and killed in his lifetime is proof he has succeeded.—Charles N. Hunter, Alpine **

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Rattlesnake Anyone?

If you are one of those intrepid souls who wish to prepare their own delicacy, here is a recipe for rattlesnake steaks you might try:

Ingredients: 5 pounds rattlesnake meat, flour, salt, pepper, Louisiana red hot, fat, and vinegar.

Use only large, healthy rattlesnakes (3 to 5 pounds live weight preferably). Decapitate with ax about 6 inches behind the head. Remove skin and viscera, cut the body diagonally into 1-inch thick steaks. Soak in vinegar 10 minutes, remove and sprinkle with hot sauce, salt and pepper. Roll in flour and fry in deep fat. Serve immediately. Serves six.

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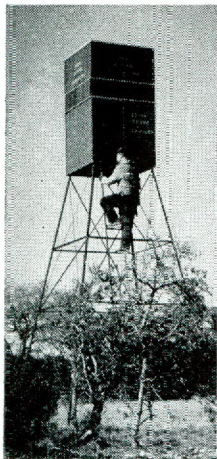
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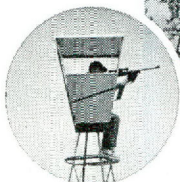


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What Others Are Doing

by JOAN PEARSALL

CROWDED OUT: In West Germany, limits are imposed on the numbers of boats which may be operated on Bavarian lakes. For example, there is a limit of 350 boats on one lake measuring 17 by 2 miles. This would amount to something around 21,000 acres of surface area, or about 60 acres per boat. The number is controlled through a license roster, a boat license being good for just one lake—with no inheritance rights!

OUTDOOR ADVICE: The Oregon game commission provides wildlife consultants in youth camps throughout the state, to assist camp directors. This summer, the wildlife specialists will work with more than 15,000 young campers at 70 different campsites. Nearly every organizational camp in the state has requested this educational service. The purpose is to educate youngsters in basic wildlife and natural resource conservation, and to develop outdoor skills.

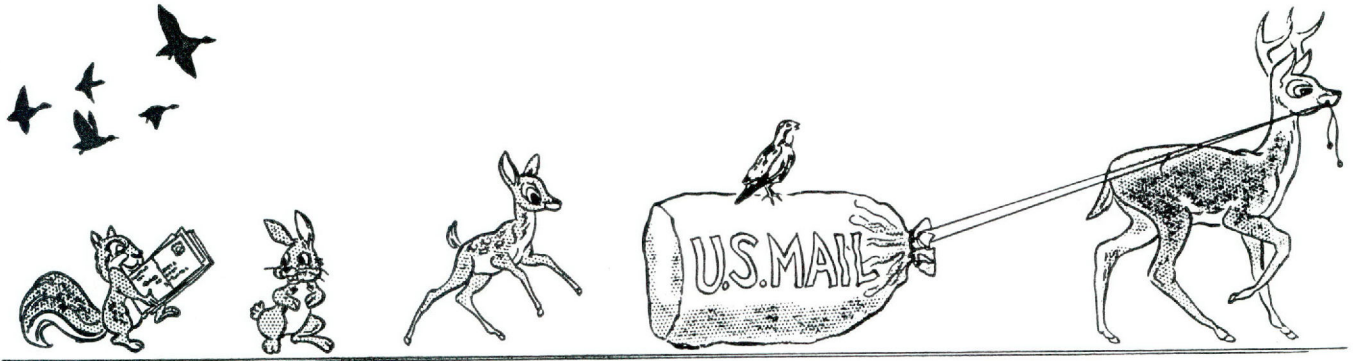
MORE VENISON FOR THE VERSATILE: A hunter may now take a deer in Missouri under a firearms permit and another under an archery permit, in the proper seasons. Previously, only one deer was allowed in a calendar year. Using either of the two methods alone, a hunter is still entitled to only one deer. New regulations, however, will permit a successful bowhunter to take another deer during the firearms season if he buys a firearms permit, and likewise will allow a successful firearms hunter to try again during the longer archery season.

NOT SPORTING: Pennsylvania sportsmen are not pleased with a bill in their General Assembly that would divert one-fourth of the money received from the sale of State-owned timber or forest products to counties, townships, and school districts. The proposal would

apply to lands owned and managed by the state game commission, most of which were bought and developed with funds from the sale of hunting licenses. Sportsmen's money has turned them into valuable game-producing areas. Sportsmen want all income from the game areas returned to the game fund, as they think otherwise there could be pressure for cutting timber whenever a local government found it needed some money, with the result that good game and timber management practices would not be heeded.

PESTICIDE PROGRAM: Three key Illinois conservation groups are laying the groundwork for a law to regulate the use of insecticides, herbicides, and other poisonous materials used to control pest plants and animals. A joint committee has been formed by the Illinois Federation of Sportsmen's Clubs, Illinois Audubon Society, and the Illinois Division, Izaak Walton League of America.

DON'T USE THOSE BIG WORDS: The New Mexico Game Dept. received a serious complaint that poisonous insect pellets placed on a certain ranch had caused the death of a bull valued at \$250. The Dept. does not use poison in any game management practice. What actually happened was that a Dept. officer called at the ranch house and told the superintendent's wife that he was preparing to do a deer pellet transect. (That is, he was about to count the deer droppings, in order to estimate the number of deer thereabouts.) Immediately thereafter, the bull died. The superintendent's wife, mistaking pellet transect for insect pellet, told the rancher the Game Dept. had placed poison on the ranch. When the matter had been cleared up, it appeared the bull had either been struck by lightning or had eaten a poisonous weed.



Beagle Dies

Editor:

The members of the Cen-Tex Youth Club sincerely thank the Game and Fish staff for publishing the article, "Little League Beagling."

Many have asked about the 9-inch female beagle shown qualifying as "lowest and slowest." I regret to report she died giving birth to 17 pups.

Diann Deason
Austin

Goose With Necktie



Editor:

I noticed in the July issue of your magazine a letter written to you by P. W. Johnson of Sweeny. In his letter he tells of a lesser snow goose which he killed last season which was banded near the mouth of the McConnel River in the Northwestern Territories, Canada. He stated that this bird was banded July 19, 1960.

The reason this attracted my attention was the fact that I also killed a banded bird which came from this exact area last year.

The bird I killed was a lesser Canadian honker. It was banded on July 18, 1960. It was banded one day before the goose Mr. Johnson killed. This I thought would be of interest to you. This honker was killed out on the Cypress-Hockley prairie.

The bird was also wearing a pink plastic necktie.

This bird was banded by C. D. MacInnes. If Mr. Johnson sees this, I would

appreciate it if he could write me and let me know if the same person banded his bird also. The band number on my bird was 597-70125.

I have been reading your magazine for the past few years and have enjoyed it thoroughly. Keep up the excellent work. Above is a picture of the results of the hunt and the goose.

James A. Clapp
2143 Chilton Road
Houston, 19, Texas

Help Wanted

Editor:

Can any of your readers supply me with any of the following issues. If so, my set will be complete for all issues since 1938.

July, 1944; March, 1947; August, 1948; April and November, 1949.

Phil D. Goodrum
814 Sarah Ann
Nacogdoches, Texas

A Kansas Friend

Editor:

A fine magazine—keep up the good work. My son, Tommy (8 years of age), and I surely enjoy reading your magazine. We place our old copies in the school library so that Tommy's little friends can enjoy them also.

William G. Talley
Eureka, Kansas

Father Set Pace

Editor:

Regarding W. L. D. Winship, Clarkwood, Texas, letter in the April issue, wherein his boys got lots of deer: He topped this himself the season of 1941.

We were hunting south of Alice, had car trouble, and someone had to walk the five or six miles back to the house, I was crippled with a twisted knee, so W. L. D. started out. In about 20 minutes I heard two shots close together. In another minute or two there was a third shot. A couple of minutes later a fourth shot, and a few seconds later a fifth shot came. Five shots in less than five minutes!

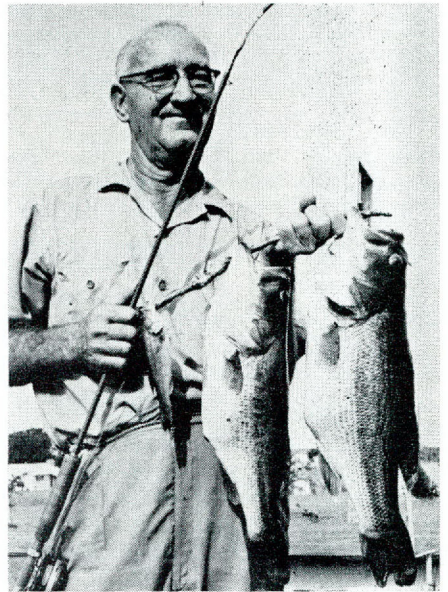
When we finally got together around noon, he had two big bucks and two big gobblers. His story—shortly after he left the car he heard turkeys and lay down in the grass to wait. He heard a noise behind him and on turning, found two big

gobblers looking at him. He shot the gobblers, picked them up along with his gun. On looking up, he saw the first buck, dropped the gobblers, shot the buck, then picked up the gobblers and went to the buck to cut its throat. He looked across the clearing, as he took out his knife, to see the second buck. So he dropped his knife and shot the second buck (It took two shots on the last one.).

But boy, he ended his hunting season in a hurry.

J. Y. De Shong
San Antonio

Tackle-Buster



Editor:

Above is the picture of Jeff Nelson, a Cass County fly rod bass fisherman who explains it all in picture. First a 10-inch bass, next an 18¾-inch four-pound one, and then an old tackle buster 22-inch six pounds, 11 ounce one that broke his fly rod as you can see in the picture.

This being a good-luck-hard-luck picture, we thought you might want it for Texas Game and Fish. Nelson caught his bass on a black and yellow popping bug. Why should I write—the picture is self explanatory. The theory here is from a small beginning grows a big ending.

I. B. Price
Atlanta

Outdoor Books



GUIDE TO THE WYOMING MOUNTAINS, Orrin and Lorraine Bonney. \$6.50. Published by Sage Books, 2679 S. York St., Denver 19, Colo. 290 pages, profusely illustrated.

At first glance a book on the subject of Wyoming mountain climbing might not enliven much interest in Texas. Then it develops that the book was written by Texans. They are Orrin H. and Lorraine Bonney of Houston, who take you into the wilderness areas of that part of the United States which spends most of its time above the clouds.

Although an attorney in Texas' largest city, Bonney has found time to research the list of 13,000 foot peaks in wonderful Wyoming. He's even climbed a number of them, and has pictures to prove it. Bonney is a noted Alpinist and a member of the American Alpine Club.

For anyone who has ever been to Wyoming, or who plans to go there, the book is most informative. It is well and entertainingly written and provides real authority for any one interested in becoming an Alpinist.—*L. A. Wilke.*

THE CAMPER'S BIBLE, by Bill Riviere. 176 pages, including more than 100 line drawings and photographs, and 4-page appendix listing places to write for maps and camping information in the United States and Canada. Published 1961 by Doubleday & Company, Inc., Garden City, New York, \$1.95.

For the family who has decided to rough it on vacation and the experienced camper who is interested in improving his woodsman's skills, **THE CAMPER'S BIBLE** is a thorough guide for a good trip.

This "how to do" book, written in first person by a veteran woodsman and former guide, has the answers to the basic camping problems as well as tips that cover situations the novice might not anticipate.

The author points out that the right equipment is necessary for a pleasant trip, and he furnishes detailed information explaining what equipment is best for various camping situations and how to use it. This information ranges from tents to clothing and personal gear with photographs and line drawings illustrating points.

The section on camp cooking includes not only information concerning equipment but also a few recipes such as one

for "rolled" coffee, which might be helpful to Mom in changing her sophisticated percolator coffee to a hardy woodsman's favorite.

In his camping safety chapter, the author suggests remedies to squelch mosquitoes, black flies, midges, or "no-sees-ums," insisting that a camper doesn't have to be miserable to enjoy a camping trip. More serious hazards such as snake bites and accidents are also covered with emphasis on prevention rather than cure.

Using "informal observations of such things as mare's-tails, mackerel sky, sundogs, and a series of homely but surprisingly accurate weather proverbs and backwoods beliefs" can be important to the camper, according to the guide. He notes and explains many of these weather proverbs.

For illustrated advice and instructions, **THE CAMPER'S BIBLE** is a helpful camping companion.—*Ann Music*

Two important Texas outdoors books are available from the Game & Fish Commission, Walton State Bldg., Austin, Texas. They are

A FIELD GUIDE TO THE BIRDS OF TEXAS, by Roger Tory Peterson. Price \$3 postpaid.

THE MAMMALS OF TEXAS, by Dr. W. B. Davis. Price 50 cents, postpaid.

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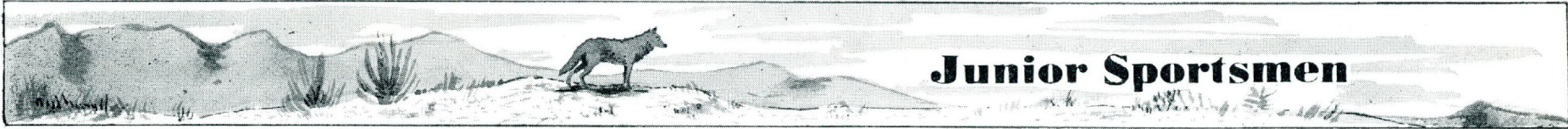
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Junior Sportsmen

STATE GEOGRAPHY PUZZLE

By CAROLYN SMYRL

How is your knowledge of Texas geography? Here is a simple test for it. Fill in each blank with the proper name of the river, city, mountain, canyon, island, or national park that is located approximately where the blank is. The legend on the lower-left side of the map will tell you how to know what each blank represents by noting the symbol beside it. The legend contains explanations of the symbols used. Good luck on the test. Let us know how long it takes for you to complete and if you enjoy working it.

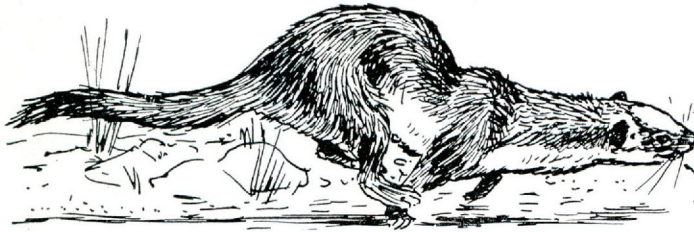
~ = river
 • = city
 Δ = mountain
 - - - = canyon
 ⊙ = island
 ⊙ = national park

WEASEL



Although most people think of the long-tailed weasel, *Mustela frenata*, as terrestrial, they are quite adept at climbing trees. This species can be found almost anywhere there are pocket gophers, ground squirrels, and other small mammals to pro-

vide it with food. Another little-known fact is that the long-tailed weasel is a champion swimmer capable of crossing swift streams without hesitancy. When cornered, this weasel is vicious and aggressive—a necessity on its part because of its natural



enemies bobcats, snakes, hawks, owls, foxes, and house cats. This slender carnivore has a small head, long neck and body, and short legs. Its upper parts are yellowish brown and its head is black. It has a white spot between its eyes, a black-tipped tail,



and under parts of orange buff. Because the weasel sometimes wantonly destroys chickens, it is often regarded as a nuisance by persons who do not know that this evil is off-set by the weasel's destruction of pocket gophers and mice.

Texas Game & Fish

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