

JOB REPORT

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Project No. MC-2 Date 23 September 1960

Project Name: Coastal Fisheries Management Co-ordination.

Period Covered: August 1, 1959 to September 1, 1960.

Coastal Fisheries Management Co-ordination

Objective: To provide co-ordination of the investigative and developmental activities in the Coastal Fisheries Division.

Procedure: The co-ordinator is responsible for conducting his operations in order to produce results of material consequence. By serving as co-ordinator he is responsible for furnishing reports on the status and accomplishments of the Coastal Fisheries Division and on his own activities.

Findings: Personnel

During the year some changes in personnel were made. Although some biologists were lost, they were replaced quickly without an ensuing loss in data collection for those areas. Vacancies were filled, and at this time of writing all areas have a resident biologist.

In September of 1959 a full time field assistant was established in Seabrook to assist the oyster biologist and to collect data in the absence of fishery biologists in the Galveston Bay areas.

In October two new biologists began work in Upper Galveston and Aransas Bay areas.

The field station at Port Arthur was closed in January of 1960 and Areas M-1 (Sabine Lake) and M-3 (Lower Galveston Bay) were combined, the biologist moving from Port Arthur to Seabrook.

In June a biologist was hired to begin a study of the Gulf shrimp populations, particularly in the central coastal area.

Two biologists in Areas M-7, Corpus Christi Bay and M-4, Matagorda Bay, resigned at the end of August to accept other employment; however, the studies were continued by a biologist moving from another area (Upper Laguna Madre to Corpus Christi Bay) and one assuming all the duties for his entire area (Matagorda Bay).

Five summer field assistants worked the three summer months during the period when the biologists are usually busy with both field work and reports. The summer assistant program, consisting of senior or graduate level college students with a major in fisheries management, biology, or an associated field and with an interest in the field of marine science, has proved to be an excellent source of not only addition manpower during the busy summer months but also for full time biologists on the completion of their schooling.

Dr. Gordon Gunter joined the staff in August and began an evaluation of harvest regulations, statistical and field data on the Texas commercial shrimp.

Juvenile Shrimp Study

A standardized study of the small commercial shrimp in selected shallow nursery areas was begun in all areas this spring as the post larval Penaeids began to appear in the bays. The purpose of the study is to gather hydrographic, relative abundance, and growth data on these young shrimp (20 to 70 mm) prior to the time they appear in the fishery.

Standard sampling methods and data sheets were devised and each station was to be sampled twice each month. In addition to the associated hydrographic data, weight measurements, effort-yield information, and length-frequency histograms were prepared for each sample.

Over a period of several years this data together with the regular bay sampling of the larger size individuals, the new Gulf shrimp study, and a continuation of shrimp landing statistics can provide data for comparison which might conceivably lead to harvest predictions.

At this time the data thus far collected in the study is being analyzed by Dr. Gunter.

U.S. Army Corps of Engineers Permits

During the year field biologists examined plans and inspected sites of proposed construction works in the bays as submitted to the U.S. Army Corps of Engineers for approval. This activity included dredging of channels and basins, deposition of spoil, drilling of oil wells, construction of pipelines, etc.

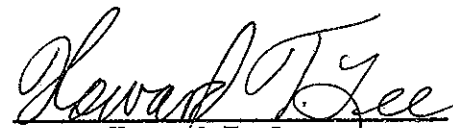
Each of the proposed works was considered for its effects on the marine fisheries habitat whether by actual destruction of an area by dredging or spoiling and filling or by possible adverse changes in the hydrography.

In almost every case the applicant was co-operative; and, when in some cases changes in the plans made them less destructive to the habitat, these were utilized.

A streamlined system of examining and reporting on these proposed works was developed in order to expedite the processing and to reduce delay to the applicant.

Prepared by Terrance R. Leary

Accepted by


Howard T. Lee

Date Accepted

7 November 1960

CONTRACT DRUM REMOVAL PROGRAM
1957 - 1960

Howard T. Lee

In 1957 the 55th Legislature enacted House Bill 90 which amended an earlier act restricting fishing activities in the Laguna Madre of Cameron County. The 1953 act in general had prohibited the use of seines and nets for taking fish in these waters. The 1957 amendment allowed the taking of drumfish under permits issued by the Game and Fish Commission as provided by still another statute (Article 952 L-11 Vernon's Texas Penal Code). This exception to the law was limited to the months of December, January and February.

Thus in 1957 the first contracts were negotiated with bonded fishermen and three permits were granted. Due to the newness of the program and lack of interest on the part of many fishermen no fishing permits were granted until February of 1958. There remained only that month for actual fishing. The permits and catches are recorded as follows:

Contractor	No. of days fished	Catch Reported in Pounds.
1	11	5,900
2	13	11,127
3	6	2,700
Total	<u>30</u>	<u>19,727</u>

In the following season beginning December 1958 the same rules and regulations were followed. Only one permit was issued. This contractor fished three days and caught 30 pounds of drum.

In 1959 the 56th Legislature passed House Bill 330 which became operative on May 26 when signed by the Governor. This Act brought the Laguna Madre of Willacy County under the same type of program with the season set at January through May of each year.

It was felt that the primary reason for the light participation in the program was the stringent regulations adopted in 1957. These were set up by the Director of the Marine Fisheries Division in consultation with marine biologists and game wardens familiar with the area. As a result of discussions with various fishermen and Commission personnel, the regulations were liberalized to some degree for the season beginning December 1959. A copy of the regulations in effect at this time is appended to this report.

The net effect of the addition of Willacy County and the five month season there combined with the revised regulation made this third season much more successful from the standpoint of the quantity of drum removed. A month by month tabulation of the poundage reported caught is shown on Page 2.

Since the weight of the catch is normally determined at the time the fish are sold, the weight reported should be recognized as dressed. In other words small drum (up to 4 pounds) have been gutted and gilled and large drum (over 4 pounds) will have had the head removed also. The "in the round" weight would probably run from 5 to 10 per cent higher.

CONTRACTOR	DECEMBER		JANUARY		FEBRUARY		MARCH		APRIL		MAY		TOTAL	TOTAL	AVE. LBS.
	Days	Lbs.	Days	Lbs.	Days	Lbs.	Days	Lbs.	Days	Lbs.	Days	Lbs.	DAYS	LBS.	PER DAY
1.	0	0	0	0	15	6,330	19	8,108	0	0	0	0	34	14,438	425
2.	14	9,349	20	11,950	20	16,521	15	9,180	22	9,574	21	14,400	112	70,974	634
3.	12	5,577	22	15,249	19	12,133	18	10,728	26	6,766	0	0	97	50,453	520
4.	0	0	25	10,565	23	17,218	14	8,916	23	7,212	31	8,406	116	52,317	451
5.	0	0	31	9,101	22	13,485	16	13,876	0	0	0	0	69	36,462	528
6.	0	0	30	13,022	24	27,177	22	26,923	26	12,836	30	6,443	132	86,401	655
7.	0	0	0	0	16	7,407	1	108	0	0	0	0	17	7,515	442
8.	0	0	19	10,227	9	12,925	1	336	0	0	0	0	29	23,488	810
9.	0	0	0	0	19	11,906	0	0	21	8,424	31	14,260	71	34,590	487
10.	0	0	7	2,347	19	13,606	0	0	24	8,427	0	0	50	24,380	488
11.	7	2,118	19	10,841	18	11,752	14	6,041	14	3,464	0	0	72	34,216	475
12.	1	670	29	12,731	22	9,283	26	13,806	26	5,803	0	0	104	42,293	407
13.	0	0	29	12,731	0	0	0	0	0	0	0	0	29	12,731	439
14.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16.	0	0	0	0	22	9,275	24	12,615	19	3,205	0	0	65	25,095	386
TOTAL	34	17,714	231	108,764	248	169,018	170	110,637	201	65,711	113	43,509	997	515,353	---
Average Lbs. Per Day		521		471		682		651		327		385			

The table showing the catch of each contractor does not indicate the number of hours per day, the number of persons in the crew, or the type and quantity of gear used and therefore is not an accurate measure of the effort involved in making a specific catch. However, the degree of interest is indicated and will be used in deciding who will fish during the coming season.

It should be noted that one contractor was killed in a boating accident during his first month's activity and that another was seriously injured before he actually began fishing and was never able to participate.

In order to assure compliance with the regulations regarding release of fish other than drum and in answer to a few insinuations as to violation of that rule wardens were present at various parts of the area practically every day of the program. In additiona unscheduled spot checks of the different nets were made by the area biologist.

The checks by the biologist revealed that the number of "good" fish taken was very low and the number released dead was considerably lower. Findings were as follows:

- (1) 4,800 feet all of 6-inch mesh net out from 8 a.m. to 6 p.m. (10 hours) contained 72 drum, 6 trout, 2 redfish, 1 flounder, 3 blue crabs. One redfish was dead. Of 81 edible fish 9 (11%) were so called "good" fish. Of the good fish 1 was dead - 1.2% of the total catch.
- (2) 2,400 feet of 5½ and 6-inch mesh net out 10 hours contained 261 drum, 2 trout, 2 redfish, 2 flounder, 65 crabs, 1 stingray, and 6 hard-head catfish. Dead were 2 trout. Of 267 edible fish, 6 were "good" (2.2%) and 2 were dead (0.76%).
- (3) 2,400 feet set out for 16 hours. (Mesh size not noted). The catch consisted of 264 drum, 50 blue crabs, 3 sheepshead, 4 flounder. Of 275 edible fish, 11 (4%) were "good" and 2 (0.72%) were dead.
- (4) 1,900 feet (6½", 5½", 5¼" mesh) were checked after a 16 hour set. Caught were 65 drum, 1 trout, 1 flounder, 1 pompano, 2 skipjacks, 1 stingray, 1 hard-head catfish and 15 blue crabs. Only 1 trout was dead. Of a total edible catch of 68 fish, 3 (4.4%) were "good", 1 (1.4%) was dead.
- (5) 2,100 feet of 7-inch mesh net out for 12 hours had 44 drum, 2 sheepshead, 1 flounder, 2 skipjack, 2 hard-head catfish, 1 sea robin, and 3 blue crabs. Of a total of 47 edible fish, 3 (6.3%) were "good", none were dead.
- (6) 2,100 feet of 6½ and 7-inch mesh net out for 13 hours held 68 drum, 1 sand trout and 3 blue crabs. Of 69 edible fish 1 (1.5%) was "good" and released alive.

From the foregoing facts it is concluded that the December '59 - May '60 season is the first successful period in this drum fish control program. Since sport fishing pressure on this species is so very light when compared to the effort expended in harvesting trout, redbfish and flounder, it is essential that the program not only continue but be enlarged if the proper balance of fishery stocks is to be attained. A 1958 survey of sport fishermen revealed that on a statewide basis black drum make up 11.7 per cent of the catch of four species. In the entire Laguna Madre the percentage is 14. This would indicate a considerably larger population since the effort directed toward drum is no greater in this area.

The only real problem facing the contract drum fishing program is the development of a stable market. Since the season lasts only six months, the wholesaler has difficulty in moving his supply and the price varies from day to day. It is not surprising therefore, that the crews worked little more than half of the 183 days available to them.

It is recommended that the entire Laguna Madre in Cameron, Willacy, Kenedy and Kleberg Counties and Baffin Bay be brought under the provisions which regulate this activity and that consideration be given to lengthening the season.

Rules and Regulations for Contract Commercial Fishing in Texas Coastal Waters

- (1) All persons desiring a contract for fishing in closed waters must fill out an application questionnaire, answering all questions fully and after having signed and notarized the questionnaire, return it to the Game and Fish Commission, Marine Laboratory, Rockport, Texas. A Fee of Five Dollars (\$5.00) is required before a permit may be issued.
- (2) The person receiving a contract must provide the Commission with a One Thousand Dollar (\$1,000.00) bond, made with a reliable surety company and payable to the State of Texas and approved by the Executive Secretary of said Commission, conditioned upon his faithful performance of the terms of such contract under regulations prescribed by said Commission.
- (3) License Requirements. The person holding the contract and all persons employed for fishing by the contract holder must have a Commercial Fishing License. All boats used must be provided with a Fish Boat License. Seine or Net License, to be of metal, must be firmly attached to each one-hundred (100) feet or fraction thereof of net.
- (4) No fishes other than Black Drum will be permitted on the premises or in possession of the contract holder or his employees during the time the contract is in force.
- (5) No contract will be transferable.
- (6) Each contract holder must be present to supervise the activities of his employees while actually fishing unless hindered by illness. In case of illness (attested to by a physician) the contract holder must designate an employee to be in charge during his absence. Such designation shall be made to the Game and Fish Warden in the county at least eight hours prior to the time such designated employee shall take charge of operations.
- (7) A monthly report, provided by the Game and Fish Commission, must be sent to the Director of Marine Fisheries monthly, giving the information called for. (These reports will be strictly confidential.)
- (8) A record of the name and Commercial Fishing License Number of each person employed to assist in taking fish under this contract shall be kept by the contract holder and shall be made available to the Game and Fish Commission upon request.
- (9) Gear to be used. Only gill nets may be used either as strike or set nets. Total length of net (including pocket) in any one fishing operation shall not exceed two thousand four hundred feet (2,400'). Net webbing (exclusive of pocket piece) shall be of not less than $2\frac{1}{2}$ inch bar measure or 5 inch stretched. Strike nets may have a pocket piece of one (1) inch square mesh or two (2) inches stretched mesh. Mouth of pocket may be fifty (50) feet wide and a wing of not to exceed one hundred (100) feet may be used on either or both sides of the pocket. (The pocket piece may not exceed two hundred fifty (250) feet in length.)
- (10) Hours of operation. Fishing shall be done during a period of the calendar day beginning no earlier than two hours before sunrise and ending no later than two hours after sunset. Permittee and/or his employees should not enter the fishing area prior to this time or remain after the closing hour.
- (11) NO NET SHALL BE USED AS A DRAG SEINE.