

A new study shows that between 23 and 45 percent (by weight) shrimp caught by a Texas trawler were discarded.

## Shrimp Discarding by the Commercial Fishery in the Western Gulf of Mexico

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Small brown shrimp (*Penaeus aztecus*) have been discarded at sea by commercial shrimp fishermen along the coast for many years. There are three apparent reasons why small shrimp are discarded: (1) the minimum size that can be landed legally in Texas ports is 65 "tails" per pound, (2) box-grading of shrimp by processors encourages discarding of smaller shrimp at sea, and (3) the vessel crews are often unable to "head" the entire catch at sea, so they concentrate on the larger shrimp which bring the best price, and they discard the smaller ones of lesser value.

In a previous study (Berry and Benton, 1969), the average quantity of brown shrimp discarded represented 33 percent of the catch by number and 22 percent by weight (Figure 1).

In June, 1972, another study was conducted aboard a commercial

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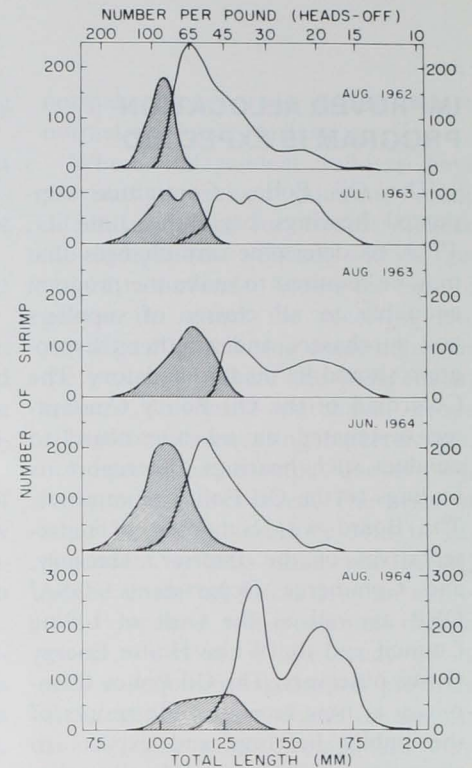
shrimp trawler operating from Port Isabel, Texas, and observed discarding varied between 23 percent and 45 percent by weight per tow in four tows during a 3-night trip (Table 1).

The report, "Trends and Conditions of the Fisheries of Texas for May 1972" (Orman H. Farley), stated that 300 pounds of shrimp were thrown overboard for every 100 pounds retained along the southern coast of Texas in late May. The June report from the same author stated that "culling was moderate to heavy all month." Verbal reports indicated that discards decreased from about 60 percent of the catch (by weight) in early June to 20 percent by the end of the month.

**Table 1.—Shrimp catches and discards from a commercial vessel<sup>1</sup> June 23-25, 1972, off the southern coast of Texas.**

Date	Pounds (heads-on)		Percent discarded (by weight)	Minimum size kept (tails/lb)
	Catch	Kept		
6-23-72	244	188	56	23
6-24-72	450	300	150	33
6-24-72	375	225	150	40
6-25-72	788	450	338	43
Total	1,857	1,163	694	

<sup>1</sup> Fishing was carried out in 19 to 22 fathoms.



**Figure 1.—Length-frequency distributions of brown shrimp that were discarded (shaded areas) or kept (unshaded areas) on the Texas shrimping grounds (from Berry and Benton, 1969).**

Discarding is recognized as a problem worthy of further investigation. The Texas Parks and Wildlife Department plans to study discarding of shrimp, and Texas A&M University recently began a study to determine the extent of discarding of marine organisms including small shrimp by trawlers. Hopefully, such studies will lead to a remedy acceptable to the industry and compatible with wise management and utilization of shrimp resources.

### LITERATURE CITED

Berry, R.J., and R.C. Benton. 1969. Discarding practices in the Gulf of Mexico shrimp fishery. FAO (Food Agr. Organ. U.N.) Fish. Rep. 57(3):983-999.

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