

Fish Trap Workshop Report — GCFI 1986

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During the 1986 GCFI meeting held in Bermuda, an informal session was organized to discuss the status of fish trap research. To initiate this session, a brief summary of recent trap work done in Bermuda on mesh selection was presented. Conclusions of this study were that mesh selection does occur in Antillean arrowhead traps and that the size at recruitment can be adjusted by shifting mesh size. It was noted however, that this technique may be of limited use as the species composition of the catch as well as the fishing power of the gear is also affected by mesh size. This and other work conducted in Bermuda were summarized by Burnett-Herkes *et al.*, in a paper on the management of trap fisheries given during this session of GCFI.

A general discussion ensued on the many gaps in our knowledge of the mode of operation of fish traps. Several outstanding issues were identified:

1. What is the effect of visual impact on determining the attractiveness of traps? That is, do large mesh traps fish poorly because they present a diminished visual profile relative to smaller mesh sizes?
2. Can traps be made more size selective without affecting the fishing power of the gear? In other words, is it necessary for small fish to be retained in order to attract the larger, target species or can large mesh panels (or escape gaps) be incorporated into small mesh gear to allow escapement of undersize animals while retaining the "visual attractiveness" of the trap?
3. To what degree does the size of a trap determine the fishing power of the unit of gear?
4. What effect does the presence of a given species have on the subsequent ingress of other fish? Conspecific attraction is well documented, but what effect does the presence of a large predator have on the attractiveness of the trap to smaller fishes and vice versa?
5. Can an effective, practical, reliable and inexpensive method be devised for timed release of trap doors which can be used to allow a given maximum soak time after which the gear is deactivated? Many systems are in use but many of these allow for wide variations in breakdown rate and may allow for significant periods of "ghost fishing" by lost traps. The impact of lost traps was also questioned and it was agreed that a method of deactivating lost traps in a short time frame is desirable.

In order to facilitate the coordination of research aimed at answering these and other related topics and to promote information transfer, an informal network of workshop participants was initiated. The Division of Fisheries in Bermuda agreed to act as coordinators of this network and designated the author as contact person. This group does not include all persons in the region interested in trap work and additional members are welcomed. To join please write to the above address. It would be of great assistance if those persons

responding were to include their areas of interest and a list of any of their unpublished or "in house" reports that may be of interest to the network.

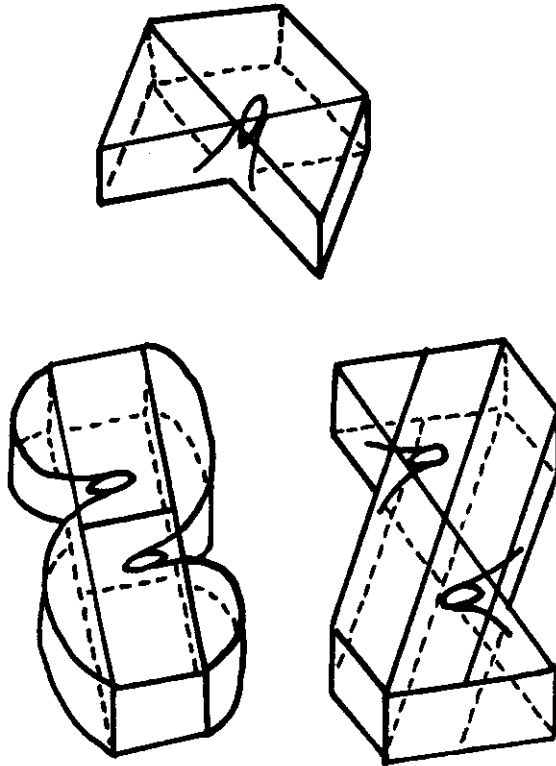


Figure 1. Three basic designs of Antillian fish traps in common use. Clockwise from the top are a) arrowhead or chevron trap; b) Z-trap; and c) S-trap (after Munro, 1983).
