

A Different Perspective on Fish Traps in South Florida

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RESUMEN

En años recientes Florida ha experimentado progresivamente una reacción pública violenta al uso de nasa por pescadores comerciales. Quejas de que dichas nasas constituyen un serio atentado para la poblaciones de peces y el ambiente marino no han sido sustanciadas debido a la limitada investigación realizada hasta la fecha.

Este trabajo usa perspectivas históricas para proponer que el problema es causado por un creciente esfuerzo recreacional dirigido hacia una población de peces relativamente estable, con un inevitable descenso en la capturas por unidad de esfuerzo independiente de la pesca comercial. La disminución de la pesca comercial debido una legislación restrictiva se pronostica a medida que el sur de la Florida cambia rápidamente de ser un área de pesca comercial para convertirse en área recreacional.

In view of the controversy now raging over use of saltwater fish traps in South Florida, I agreed to participate on this program in order to emphasize certain aspects of this issue that my colleagues may be understandably reluctant to discuss in their own presentations. After an absence of some months, it is truly shocking to return and find a media file consisting of clippings filled with misinformation, hyperbole and hysteria (Hardie, 1979). In the rapidly developing public concern for South Florida's environment, there is no precedent for the intensity of reactions that surround this issue. The fact alone should be sufficient to alert us that we are dealing with a problem more profound than it appears on the surface.

It is my belief that the real motives behind this outcry have not been clearly perceived by either side. In this paper I want to identify these motives, define the problem in its most fundamental form, and place the controversy in a realistic perspective.

Let me explain that I am here because of my research (Craig, 1976) that began in an effort to design and introduce modern fish trap technology suitable to South Florida. The immediate objective was to produce gear that would improve the off-season income and operational efficiency of fishermen in the spiny lobster industry. The unexpected results seem to have placed me in the role of the Magician's Apprentice who started something that went far beyond his intentions.

Long before my project was completed, some of the traps being used were somehow acquired by commercial fishermen operating in the study area, and soon this distinctive design spread rapidly up and down the coast of southeastern Florida between Palm Beach and Ft. Lauderdale.

By coincidence, the Republic of the Bahamas chose this same year (1975) to declare its own 200-mile fishing protective zone and consequently most

foreign commercial fishermen were expelled. This caused the displacement of perhaps 450 Miami-based Cuban-American lobster fishermen who were compelled to seek a living elsewhere. Some returned to South Florida where they began working with fish traps of Cuban design. These traps were deployed in federal waters off Monroe County, an area where any unusual activity attracts invidious attention.

During the next few years several other factors relevant to the problem of public criticism of fish traps arose. I trust it is no surprise for you to hear there has been a dramatic increase in clandestine drug traffic by smuggling across the shallow reefs of Dade and Monroe Counties. While night fishing has always been the preferred technique of snapper fishermen, the alarming increase in the frequency of these trips did not go unnoticed by drug enforcement agencies, including the Florida Marine Patrol. Although there is no evidence to justify a correlation, the prospect of these newcomers, many of whom were resident aliens already highly skilled in lobstering and reef fishing, adding clandestine cargo to their catch exceeded the relatively low threshold of tolerance displayed by their native Floridian competitor.

Even more important to my argument are the sharp wholesale price increases that have occurred for certain select species of snapper and grouper since the energy crisis and inflation have struck our economy. A decade ago it was not always possible for a commercial fisherman to dispose of large mangrove snapper at 30 cents per pound. Market demand today has inflated this price more than 400% while choicer species are in increasingly short supply. As we grow older, the sense of taste is often the last to be retained; consequently, the age/frequency structure of the Florida population supports an abnormally dense concentration of quality restaurants, many of which specialize in local seafoods. Stated more simply: fresh fish have become a valuable commodity. Even in small quantities there is now a strong incentive for recreational fishermen to sell their catch.

Less well publicized is the remarkable growth of the aquarium market for tropical reef fish. Our affluent South Florida society has generated an insatiable demand for these small, beautiful fish, many of which die within a few weeks of their capture and are routinely replaced by fanciers. The increasing numbers of diver-collectors and dealers who have entered this industry have not been documented in the literature, but it is substantial by any measure and yet another factor in the competition for our finite reef fauna.

But still we have not arrived at the single most important factor explaining the violence of public reaction to the use of fish traps by commercial fishermen. Nevertheless, it is necessary to digress for a moment in order to establish an important point missing from newspaper accounts and curiously ignored by environmentalists. This is a concept that likewise fails to appear in the draft management plans that have appeared to date, and there is no reason to believe it was considered by members of the various advisory panels or scientific committees. Since it seems to have been universally overlooked, we can all approach it on an equal basis.

Ninety years ago there were barely enough residents in what is now the Miami metropolitan area to qualify for the establishment of a United States

post office (Pierce, 1970). Sixty years ago, the marine resources of South Florida were nearly the exclusive province of commercial fishermen who in any coastal community constituted a significant percentage of the residents living there. Recreational fishermen on the other hand were restricted to a few elitist enclaves such as Boca Grande where they disported themselves with "silver kings" using calcuttas and leather spool brakes. Today the situation is exactly reversed. It is the fulltime commercial fishermen who are likely to live in an enclave such as Conch Key or Pine Island where they are surrounded by communities of retired recreational fishermen. Florida, the last pioneer state in the East, has swiftly changed from a frontier to the nation's playground, as shown by private boat registrations (Mathis et al., 1979) and the amount of Dingle-Johnson funds generated from the sale of marine recreational equipment. We can say with certainty that the nature of Florida's marine resources user group has changed from all-commercial at the beginning of this century to one that has swung heavily in the direction of recreational fishing and will continue to do so. Even though their absolute numbers may be greater than in 1900, commercial fishermen now constitute much less than 1% of Florida's labor force and the figure is steadily decreasing.

I suggest it is culturally inevitable that commercial fishing activity will disappear from South Florida coastal waters as the user group composition becomes disproportionately in favor of recreational interest. In his remarkably even-handed reporting, Davis (1979) has shown that politicians with uncanny perception and courage have already sensed this trend and are anxious to espouse the interests of the majority. Management councils following their mandates still try to maintain an impartial approach that accommodates both user groups (Anon., 1978). With all management plans subject to annual review, they will soon encounter greater pressures to reconcile their position to this societal shift.

To be sure, there will always be large areas within the United States Fisheries Conservation Zone remaining firmly in the hands of commercial interest, such as the Bering Sea, Georges Bank, and perhaps Florida's Middle Ground, but all those areas within the reach of the small recreational boater will ultimately become off-limits to commercial fishermen.

Why is it my prediction has no room for co-existence of the two groups by means of some so-called "fair" formula? Simply because the sport fisherman is catching fewer and smaller fish each year and he is unshakably convinced commercial fishermen are to blame. Is this complaint based in fact?

Yes, it is. But fish traps, roller nets, purse seines, trammel nets and all the other commercial fishing gear are not the cause of this real problem. If sportsmen today catch fewer fish than in the past, what is the explanation?

There is a growing body of evidence based on extensive field study indicating that many marine fish and crustacean populations maintain themselves today at about the same levels as they have in the past, subject of course to occasional short-term fluctuations. A few well-known species follow cyclical periods of scarcity and abundance related to variables having nothing to do with fishing pressures. In general, it is safe to say that where a critical habitat has not been degraded, we are dealing with equivalent biomasses now, as in the past.

I hope you can see that the answer to our problem is a matter of historical perspective, hence the title of this paper. Couched in terms we can all understand, I am saying that the pie is the same size as it used to be, but today too many people are trying to eat it. Equally divided, everyone gets an unsatisfactorily small share. In this boarding-house analogy, the big fellow across the table is not going to leave the little man any dessert.

What I have said to you today is that the complaints against fish traps are often exaggerated and unreasonable, but certainly understandable. They stem from a general frustration experienced by thousands of sport fishermen unconscious of the fact it is they themselves who are largely to blame for overfishing inshore coastal waters. The commercial fisherman, as whipping boy, will eventually be legislated out of existence. Before he disappears, recreational fishermen must be prepared to adopt a responsible attitude toward these resources and support the regional fisheries management council policies in the FCZ and the state agencies within their territorial waters.

LITERATURE CITED

- Anon.
1978. Reviewing mutual Gulf and Atlantic problems. *Fish Boat* 23(12): 30pp.
- Craig, A.K.
1976. Trapping experiments with snappers in South Florida. Pages 222-236, *in*: H.R. Bullis, Jr. and A.C. Jones, eds. Colloquium on snapper-grouper fishery resources of the western central Atlantic Ocean. Texas A&M University Sea Grant College; Mississippi-Alabama Sea Grant Consortium, Report No. 17.
- Davis, C.
1979. Florida's political fish fighters may require some special attention. *Fort Lauderdale News and Sun Sentinel*. Nov. 4, p. 20C.
- Hardie, J.
1979. Emotional fish-trap issue going before legislature. *Miami Herald*. April 4, p. 4-F.
- Mathis, K., J.C. Cato, R.L. Degner, P.D. Landrum and F.J. Prochaska.
1979. Commercial fishing activity and facility needs in Florida: Brevard, Broward, Indian River, Martin, Palm Beach, St. Lucie, and Volusia counties. Fla. Agricultural Market Research Center. Industry Dept. 79-1.
- Pierce, C.W.
1970. *Pioneer life in Southeast Florida*. Coral Gables, Univ. Miami Press. 264 pp.