

VIEWPOINT OF THE U.S. BUREAU OF SPORT FISHERIES AND WILDLIFE

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The Bureau of Sport Fisheries and Wildlife operates under the Department of the Interior. Actually, the name "INTERIOR" is a misnomer—for the Department should more properly be called the "Department of Natural Resources," since it is the principal conservation agency of the Federal Government. The Bureau of Sport Fisheries and Wildlife and the Bureau of Commercial Fisheries are the two Bureaus of the Fish and Wildlife Service which date back to their antecedents—the Biological Survey, the Bureau of Fisheries, and the U.S. Fish Commission which began in 1871.

Operations of the Bureau of Sport Fisheries and Wildlife, specifically in marine waters, however, began in 1959 when the Secretary of the Interior was authorized and directed by the Congress "to undertake continuing research on the biology, fluctuations, status and statistics of the migratory marine species of game fish of the United States and contiguous waters."

While it was recognized as early as 15 years ago that marine game fish angling was increasing in popularity at a fast rate, its magnitude was uncertain. In 1955, the U.S. Bureau of Sport Fisheries in cooperation with the Bureau of the Census began a national survey of hunting and fishing which is carried out every five years. In that year, it was determined that over 4 million citizens participated in marine game fish angling. The survey in 1960 showed that this number had increased to over 6 million. In that year, a study was made to determine the numbers and poundage of fish taken. The best estimate obtainable was 1.4 billion pounds. This compares with a catch in the same year and in the same waters of 1.7 billion pounds of edible species by our commercial fishermen. Even taking into account the possibility of errors in calculating a population from a relatively small sample and the known proclivity of fishermen to sometimes exaggerate the size of their fish, the catch is still impressive.

The 1965 survey disclosed that over 8 million citizens were serious marine game fish anglers. This is an increase of 82 percent in 10 years. In contrast, the United States population during the same period increased only 17 percent. In carrying out this means of recreation, the sport anglers not only paid for tackle and bait, but many drove long distances, paying for gas and oil, hotel and motel accommodations, food, boats and motors, boat charters, etc., an amount totaling almost 800 million dollars. The survey showed that over 2 million of the anglers fished on the Pacific coast, spending an amount estimated at almost

300 million dollars in 1965 in pursuing this sport. The Pacific coast commercial catch of fish in the same year was valued at the fisherman's level at about 125 million dollars. By the time the commercial catch reaches the consumer level, it has probably generated to the economy of the country two or three times the value to the commercial fishermen, or about the same as for the sport fishery.

We don't have a breakdown by states, but because of its population, better weather, facilities, and species available, California undoubtedly enjoys a big share of the sport fishery effort and catch.

I have particularly stressed the value of the sport fishery because too often it has been overlooked or minimized in discussions of our marine resources. This is particularly true at the National level in spite of the fact that a National Academy of Science, Committee on Oceanography report states that one of the highest returns for research dollars invested in oceanographic studies could be obtained through research on recreational fisheries. Obviously, sport fishing has reached such proportions that it must be considered more seriously if we are to manage intelligently the resources of our marine environment, and this applies particularly to the living resources of the California Current system.

Conflicts between sport and commercial fishermen are recognized by the U.S. Fish and Wildlife Service as being detrimental to the wise utilization of our marine resources. The Service recently appointed committees from both Bureaus to discuss these problems. The only current conflict recognized in California waters was the one related to the northern anchovy. The commercial fishermen would like to harvest a greater tonnage of this species, and the sport fishermen are opposed to this, based on the not unreasonable hypothesis that this species is essential to sport (and commercial) species as a forage fish, and that the commercial fishery, once begun, would continue to expand until the resource was reduced to a bare subsistence level as has occurred with the sardine.

Among other things the Service has recommended that it should:

1. Work toward representation of both sport and commercial fishing interests on interstate, national, and international fishery committees and commissions where appropriate.
2. Work with state fish and game agencies and interstate commissions to develop comprehensive sport and commercial fishing statistics.

3. Work with state fishery agencies to establish local advisory communities to assist state and federal agencies, sport groups, and industry to prevent or resolve conflict issues.
4. Make itself available to help mediate sport-commercial fishing conflicts when called upon by appropriate officials.
5. Take advantage of opportunities to participate in meetings where sport-commercial fishing issues are to be discussed."

Other recommendations were suggested for each Bureau and State fishery agency.

Actually, the policy of the Fish and Wildlife Service has not changed since it was first expressed by Assistant Director, Charles E. Jackson in 1940, restated by Thompson in 1953, and again by the Fish and Wildlife Service in 1967. This includes the following points, and I quote:

- a. The Service, lacking the regulatory powers of the states, is concerned with conservation based on technical information and will not take sides on social and political issues.
- b. When a fish resource is not sufficiently large to permit both commercial and recreational fishing, it should be used so that the greatest number of citizens will benefit.
- c. The Service is against waste, overfishing, and depletion, but also is against undocumented charges of these.
- d. The Service urges that both sides actively support their respective associations, interstate fishery commissions, federal and state fact-finding, and equitable distribution of costs between groups."

Sportfishing in the marine environment will undoubtedly increase in future years. As a nation we enjoy more leisure each year. Our workweek has been reduced during the past half century from around 60 hours to about 40 hours per week. Several trades and professions now have a workweek of 35 or 36 hours. More and longer vacations have also tremendously increased leisure time for American citizens. The amount of money spent on vacations has doubled since World War II, while the amount spent for liquor, for instance, has increased by only 7 percent.

It is very fortunate that we do have more leisure time. The stress and strain of modern living, par-

ticularly in our burgeoning urban communities, makes it increasingly necessary to seek meaningful, relaxing, recreational opportunities and many are turning to marine game fishing as the answer.

A conservative forecast shows that we can expect a continual growth in the number of marine anglers to 18 million by the year 2000. More than 95 million days were spent by anglers in coastal fishing in 1965—and this amount is expected to increase to 360 million days by the year 2000. Since the population of California is increasing faster than that of most states, we can expect more than the average increase in sport fishing pressure here.

Some of the living resources have already suffered declines in abundance partially, at least, from overfishing. Many more may suffer similarly from the destruction of their environments. The estuaries, where many of our ocean species spend part of their lives, are continually being degraded by draining, filling, dredging, spoil deposition, and pollution from many sources. Pesticides and herbicides, draining from agricultural areas, have invaded the estuaries and also the ocean. Thermal pollution is another factor that will become more prevalent and its effect is unknown.

Obviously, we are going to need more facts if the California Current living resources are to be utilized more wisely. One of the greatest needs is a sport fish statistical program which will produce total catch by species and amount of fishing. Increased research, particularly on problems related to the sport fishery, will be necessary, since in the past this aspect has not received the attention it deserves. More funds will be required. The research should be coordinated between all state and federal laboratories working on these problems, so as to produce the most knowledge with funds provided. Fortunately, the relations between laboratories has been good. We at the Tiburon Marine Laboratory have received assistance many times in the past from both state and federal laboratories for which we are grateful, and have offered assistance in a small way to the other laboratories when we were able. We will do our part to see that these relations continue. Working together we probably will never solve all the problems, but perhaps we can show the way towards realizing the utmost from this natural resource.