

## Marine Angling in Australia

Recreational fishing is extremely important and valuable to Australian society and to that nation's economy, according to recent reports<sup>1</sup>. Indeed, data compiled for the Australian Recreational and Sport Fishing Confederation indicate that there are about 5 million Australians who go fishing for sport and recreation each year. Thus, recreational and sport fishing is a huge industry there; in fact, it is one of the biggest industries in the country and is one of the biggest outdoor participation sports. Recreational and sport fishing is worth in excess of \$2.2 billion to the Australian economy each year, the Confederation reports.

The Australian Recreational and Sport Fishing Confederation is a national body representing and working for Australia's 4.5 million recreational and sport fishermen. It is not a fishing club and does not have individual members. Rather, its membership comprises all seven national sport fishing interest groups: Australian Anglers' Association, Australian Casting Association, Australian Fresh Water Fisherman's Assembly, Australian National Sport-fishing Association, Australian Underwater Federation, Game Fishing Association of Australia, and Native Fish Australia.

### Angling Popularity

Fishing reportedly ranks third among the most popular outdoor recreational activities in Australia. Ranked ahead of it are, first, swimming (not in a pool) and

playing court games like tennis, squash, etc. Ranked below it, in order, are swimming in public pools, physical fitness activities, and camping and caravaning. About 3 percent of Australian adults participate in skin/scuba diving.

### Saltwater Fishing

According to Australia's first "National Survey on Recreational Fishing," about 67 percent of the nation's anglers are male, while 50 percent of the males between the ages of 18 and 44 participate in recreational fishing. Most anglers (92 percent) prefer to fish with bait, while those using spinning lures number 26 percent; 18 percent utilize pots and/or rings to take crabs and/or prawns. Most Australian angling is also done in saltwater (including estuaries), primarily from the beach or from rocks (32 percent), while 26 percent fish from boats in bays or estuaries, and 21 percent fish from jetties and wharves.

Slightly over half (56 percent) of all Australian households own some type of fishing tackle, researchers report, and the average value of the particular angling tackle and related clothing articles (i.e., rubberized or waterproof clothing, angling jackets or vests, etc.) is nearly \$400. About one-third of all households reported either owning or having access to boats which are mainly used for fishing. It was also reported that in the 12-month period prior to the national survey (made in July 1984), Australian anglers spent \$170 million on tackle and related clothing articles and \$495 million on boats and boating gear. In addition, it was estimated that another \$150 million was spent on such items as boat fuel, insurance, licenses, bait, ice, etc. Adding in such other expenditures as vehicles and fuel used by anglers brought the en-

tire amount spent on recreational fishing in 1983-84 to \$2.2 billion (not included in this figure, however, was money spent for hotel/motel etc.).

Membership in organized clubs or groups, however, is low, as only about 4 percent of Australian fishermen belong to such fishing organizations. In addition, about 10 percent of fishermen are solitary anglers. Overall, male anglers fished mostly with their friends (40 percent), while 30 percent fished with family members, 17 percent fished with other people (including coworkers), and 13 percent fished by themselves. Only 4 percent of females fished by themselves while 68 percent of them fished with their family, 20 percent with friends, and 8 percent with others.

### Fishing Trips

The researchers also reported that male anglers made about 75 percent of the 48 million fishing trips taken by adults. In addition, they found that a relatively small number of the anglers accomplished a large proportion of the fishing effort—that those anglers who took 21 or more angling trips per year (18 percent) thus accounted for more than 62 percent of all fishing trips.

Why do Australians fish? The two top ranked answers were, respectively, to "relax and unwind" and "to be outdoors." The following three, ranked fairly evenly, included "for companionship reasons," for the "thrill or contest of catching fish," and to "catch fish for food."

Most of the respondents (71 percent) reported that their catch was eaten by themselves or their family, while 16 percent reported eating some and giving some away. About 5 percent released their catch.

<sup>1</sup>Note: This article is derived from reports in various Australian publications such as *Fins*, *Australian Fisheries*, and other periodicals and news items based on the two-report study "National Survey of Participation in Recreational Fishing" done by PA Management Consultants of Melbourne for the Australian Recreational Fishing Confederation

# *Fisheries Management and Recreational Fisheries in Western Australia*

B. K. Bowen

## **Management Directions**

In July 1985 I published a Discussion Paper entitled "Arrangements for Entry to all Fisheries off and along the Western Australian Coast." The purpose of the Discussion Paper was to introduce a concept that resource access by professional fishermen should be limited along the entire coastline of Western Australia. Following a series of industry discussions, the Western Australian Fishing Industry Council (WAFIC) adopted the general approach of limited entry as a platform for sound management, but held the view that my proposal would result in arrangements which were too restrictive for the fishing industry.

WAFIC therefore submitted its proposal involving the development of some additional limited entry fisheries and also a strategy for managing developing fisheries. This approach has been adopted by Government, which means that by the end of 1987 all of the major fisheries along Western Australia will have a limited entry program. This involves approximately 20 different fisheries.

Furthermore, many of the management plans established as a result of Government and industry discussions will include a fishing capacity reduction mechanism to offset the growing fishing pressure resulting from better fishing boats, gear, and fish finding techniques. For example, the snapper fishery requires a 2 for 1 reduction in vessel access authorization transfer.

## **Organizational Structure**

In Western Australia there are two major Councils representing the fisher-

men: The Western Australian Fishing Industry Council which represents the professional fishermen and is comprised of representatives of many Associations of Professional fishermen along the coast; and the Western Australian Recreational Fishing Council, which is the WAFIC counterpart, and represents the recreational fishermen of the State. There are a number of recreational fishing Associations involved such as the W.A. Division of the Australian Anglers Association, the W.A. Trout and Freshwater Angling Association, the W.A. Branch of the Australian Underwater Federation and so on. It is pleasing to note that representatives of these two Councils have met to discuss items of mutual interest in relation to the exploitation of fish resources.

## **Angling as an Important Source of Fresh Fish**

As part of the study of Mercury in Sea Food a national consumer survey of fish and seafoods was undertaken in 1976-77. That survey produced some interesting and important information relating to the part played by recreational fishing in providing fish for the household. For Perth, the survey showed that 46 percent of the households interviewed had a member who went recreational fishing. That activity was closely allied with the source of the fresh fish supply to households. In fact, the survey showed that 47 percent of the householders interviewed stated that their source of fresh fish was

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either as a result of it being caught by a member of the household or as a gift. This places recreational fishing high in importance not only as a leisure pursuit but also as a source of fresh fish.

It is not surprising then that there is a continuing but proper debate on the use of fish resources by professional and recreational fishermen. However, in that debate it is important to recognize the legitimate role played by both groups of fishermen.

## **Fisheries Resource Users**

There are professional fishermen who attempt to maximize their financial return on capital and labor and, in so doing, capture fish for sale to the wider community. Then there are the recreational fishermen who attempt to maximize their recreational pursuits and, in so doing, capture fish for themselves and their friends, or for the purpose of adding to the storehouse of knowledge of the fish stocks.

Both professional and recreational fishermen are responsible in their use of the fish resource, but those who are termed recreational fisherman but who attempt to operate in a professional manner are out of tune with both the true professional and true recreational fishermen.

For the most part the professional fishermen will be few in number but take the largest share of the combined professional and recreational catch. The very nature of their profession requires this to be so. On the other hand, the number of recreational fishermen is usually high, although their combined catch will usually be only a small fraction of the total catch.

Sound management must take into account the differing points of view presented by professional and recreational fishermen. The professionals tend to hold the view that they should have prime use of the resource because for them it is an industry of national importance, while the recreational fishermen tend to explain that the resource would be of greater value to the community if it were available to an increasing degree to their expanding number rather than be fished, and perhaps overfished, by a small number of people for financial return.

The history of development of most,

but not all, of the fisheries in Western Australia is that their first exploitation has been by professional fishermen in estuarine or inshore areas close to the centers of population. Recreational fishing has followed and grown quite rapidly with a result that both professional and recreational fishermen are now important users of the coastal fish resources. In terms of fisheries management it is important that Governments recognize that both groups of users fulfil a responsible and proper role in the use of the fish resources.

### **The Common Property Nature of Fish Resources**

A view commonly expressed is that a fish resource is the common property of the community and thus should be available in good measure to each member of the community. A view has also been expressed that, in terms of monetary return to the community, the most efficient use of a fish resource may well be through its increasing capture by recreational fishermen.

However, recent management decisions taken throughout Australia to introduce limited entry fisheries and individual transferable quotas have now to be taken into account when considering the sharing of the catch in the longer term by recreational and professional fishermen. Let me take the example of the output controls on the southern bluefin tuna by way of ITQ's. Currently the Australian quota for this species is 14,500 metric tons divided among the eligible fishermen. Quotas have been bought and sold on the basis of the owners of the quotas having a precise share of the total quota, whatever that might be from year to year. However, by way of a proposition let me now incorporate into that fishery an increasing recreational take of southern bluefin tuna to the extent that the production by recreational fishermen forms a significant, but not necessarily large, portion of the total catch. This would need to be taken into account in determining the annual quota and thus the share available to each holder of an ITQ.

The question would then be posed as to whether the reduced ITQ, as a result of increased recreational fishing, should set the pattern for future decisions when

recreational fishing further increased or whether both parties should bear a portion of any future reductions required.

While the example used has related to output controls of ITQ's, the same principle is involved where input controls have been used, such as a limit on the number of pots in a rock lobster fishery.

It seems to me that constraints or reductions in fishing capacity, at least for some fisheries which are operating under a limited entry management plan and which are already heavily exploited, have to be shared by both the professional and recreational fishermen.

In summary, I believe that the common property definition of a fish resource has to be refined to incorporate the concept of a control in the total fishing capacity operating on a fish stock such that the control mechanisms relate to both professional and recreational fishermen. It seems to me that it would not be equitable to reduce the fishing capacity of the professional and recreational sector, with a view to reducing exploitation rate, but at the same time allowing the growth of the fishing capacity of the recreational sector. However, there will be exceptions to this generalized statement. For instance, estuarine fisheries are likely to gradually become more important for recreational fishing and less so for professional fishing.

### **Gear Definition**

In the aquatic environment any fish can be taken by any gear type unless there is a Notice which gives attention to that fish or that gear type. In relation to both professional and recreational fishing there is a need to define the gear allowed.

Turning to recreational fishing, because this is what I am focussing on here, it is, I believe, necessary to describe the gear which is appropriate for use by recreational fishermen. For instance, should fishing nets now be regarded as recreational fishing gear, or it is appropriate that a recreational fishermen be allowed to have on his vessel long-line equipment including a power winch. I believe that both recreational and professional fishermen would welcome the development of more precise gear specifications for each of the two fishing sectors.

### **Recreational Preserves**

While the general approach in Western Australia is to set rules on closed areas and seasons which apply equally to recreational and professional fishermen, there have been some decisions taken which either explicitly or implicitly favor recreational fishermen. For instance, in an area around Rottne Island, a tourist island off Fremantle, recreational fishermen are allowed to take rock lobsters using their permitted two pots per person, but professional fishing in that area is not permitted. In other areas the gear regulations are so designed, such as prohibiting all gear likely to be used by a professional, that the only real use of the resource is by recreational fishermen. This occurs around jetties and similar structures. Finally, the Fisheries Act provides for a listing of species, such as the freshwater crustacean (marron), which shall not be taken for sale.

There have been a number of requests for rock lobster recreational preserves to be extended to the waters near the various fishing towns between Fremantle and Geraldton, but such requests have been declined on the basis of such action being not equitable in terms of sharing the catch in that particular circumstance.

In terms of sharing the catch it is pleasing to note that many of the important professional fisheries are in areas or on species which are not major sport fisheries. I refer to the prawn fisheries, purse seine fisheries, and the large-scale trawl fisheries. However, there are other fisheries such as the rock lobster, Australian salmon, and herring fisheries for which there will be a continuing debate on the proper sharing between professional and recreational fishermen.

As I said at another conference, making decisions on sharing the catch at a time when fishing pressure is increasing will require the patience of Job and the wisdom of Solomon. However, I trust that those who become involved in this debate will have sufficient of both of these attributes to provide for appropriate arrangements such that the recreational fisherman will be able to obtain a measure of recreational pursuit and the professional fisherman a measure of economic success.