"Evaluating the Benefits of Recreational Fishing."

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A report to the Fisheries Research and Development Corporation on the Conference – by John Harrison, Executive Officer, Amateur Fishermen's Association of the Northern Territory Telephone 08 89323733 Facsimile 08 89323560 PO Box 2740 Palmerston NT 0831 Email afant@octa4.net.au 8 September 1999

Background

In 1984 a world conference on recreational fishing was held in France. Since then, I believe, there has not been a world gathering to discuss and share information regarding recreational fishing. European countries gathered, in Ireland, in 1996 to confer over recreational fishing but this focused only on Europe.

Recfish Australia has always advocated the need to have an international conference. Other countries can often use the trends and findings of research and management ideas from around the world. Networking benefits of such a conference are often overlooked and undervalued.

In 1995 Ms Joelle Row, Resource Management Officer (voluntary position) for the South African Deep Sea Anglers Association, and Professor Tony Pitcher, Director Fisheries Centre University of British Columbia, began discussing the concept of an international conference on recreational fishing. Further talks took place with them and John Harrison, then National Executive Director for Recfish Australia, at the 2nd World Fisheries Congress in Brisbane in 1996.

A theme was decided upon and the task of organising the conference was left in the hands of Professor Pitcher. Keynote speakers were sought and at the suggestion of John Harrison, Professor Bob Kearney, University of Canberra accepted an invitation to present one of four keynote speeches to the conference. The other three keynote speakers were Carl Walters Fisheries Centre University British Columbia, Ian Cowx Humberside International Fisheries Institute University of Hull and Rashid Sumaila Michelsen Institute Norway Fisheries Centre.

Scientists, researchers and fisheries managers presented a total of 32 papers covering a variety of topics including economic models, measuring the benefits of recreational fishing, survey methodologies, water quality improvements and social and biological reference points.

'Evaluating the Benefits of Recreational Fishing' was held in Vancouver, Canada from 1 – 3 June 1999. About sixty delegates from 8 countries attended the three-day conference. The conference proceedings are due to be published in about October 1999.

Where are we?

There are three clearly identifiable benefits to recreational and sport fishing – economic, ecological and social (including cultural). Whether Australia, or indeed any country, has clearly been able to quantify and value <u>all</u> of these elements is highly unlikely. Varying degrees of success have been evident in the economic side but these results have been subject to debate and often criticism by various people with either a vested interest in undermining the results or promoting an alternative analysis tool.

Accurate and credible data is absolutely vital as a tool for fisheries management around the world. Without this information the process of resource allocation, stock protection and the long-term sustainability of fishing would become even more politically influenced than it is now.

Australia has not been good at collecting data on a national basis. Efforts in states have been adhoc and methodology changes have meant that comparisons from one data set to the next have been almost impossible. Continuity and good trend analysis then becomes difficult. With only one national survey completed (Australian Recreational and Sport Fishing Confederation 1984 PA Management Consultants) in Australia we have a long way to go and a huge amount of debate ahead. Assessment of recreational fishing in Australia has not been done on a rigorous scientific basis. This needs to be rectified.

The proposed national survey, jointly funded by the Fisheries Research and Development Corporation, Federal Government and State & Territory Governments, will in a sense be the start of what must be a regular 5 yearly event. The data collected should be a means of assessing the size and scope of recreational and sport fishing and provide a good indication of the economic expenditure.

This proposed national survey will be a good start but I believe it will be insufficient to get a total picture of this sector of the fishing industry. Whether the direction of the proposed survey can be influenced at this stage is uncertain however it is important to ensure that future surveys do. It will become obvious in the future that not only is economic information important for the recreational sector but the social value and ecological benefits will need to be fully ascertained to ensure that the total picture is known and understood. I believe that the social benefits derived from recreational fishing will have a significant influence in the management decision making process in the future.

In a global sense there has been many theories and models developed in a bid to assess the value of recreational fishing. In fact new ones are being developed continually. A number of these will be detailed in the official proceedings of the Vancouver conference. In the USA a five yearly national survey has been conducted since 1955 which has provided a wealth of data for management decisions. These decisions being closely linked to the trends identified in the data analysis. The province of British Columbia, Canada also collects data on recreational fishing on a 5 yearly cycle.

There are many differences between commercial fishing and recreational fishing. In the commercial sector it is the maximum volume of seafood that can be harvested on a sustainable basis for the least cost – least cost landed product. Although this may be seen as a simplified analysis I believe it to be the bottom line for that sector of the industry.

The distinct difference being that in the recreational sector the product is fishing.

The experience and enjoyment factor could be very high with a "no catch" not devaluing the recreational fishing at all. The social value of being able to take your children fishing and knowing that the fish will be there for another generation is of paramount importance to the recreational fishing community.

Rights are going to be a major issue in fisheries management in the future. It is impossible to manage recreational fishing by keeping up with demand. Biologically it is not possible to grow more fish than the environment can maintain. In some parts of California, USA, as many as 50 – 60 boats per hectare of water can be seen during peak fishing periods. Heavily fished locations may need to be lottery driven as far as access rights are concerned.

The other daunting prospect is that of property rights. With the commercial sector strongly advocating the need for property rights for their industry players the issue of how the recreational sector fits into this concept hasn't been addressed. If Australia goes down the path of allocating property rights in wild fisheries the recreational sector has to be included in the equation. How resources are to be allocated along this line is, I believe, going to be very difficult.

A third element may come into play in the property rights debate. If property rights are a saleable item the possibility looms that extreme conservationist movements could buy up all, or a large percentage of the rights to a single fishery. Given the philanthropists within Australia this is very real possibility. This may be devastating to both the commercial and recreational sectors.

Willingness to pay is esoteric. However it has been used as a means of valuing the recreational fishing sector in the past. It's meaningless can be illustrated with two simple analogies. Someone's willingness to pay to have a heating system repaired during the winter months in Canberra would be a lot higher than fixing the same system during summer.

Secondly, a classic example of the willingness to pay concept, on the West Coast of Vancouver Island, Canada, the daily bag limit for Chinook salmon had to be reduced from 2 to 1 due to stock concerns. This meant a large number of guided fishing trips were cancelled because of the reduced bag limit. The following year the bag limit was reviewed and reinstated to 2. The trips were rebooked. The value of each trip is about \$4,000. Does this mean a willingness to pay \$4,000 for one extra fish?

In the U.S.A, Congress passed the Environmental Compensation & Liability Act. In response to this legislation The U.S. Department of the Interior and the National Oceanic and Atmospheric Agency (NOAA) developed regulatory guidelines for appropriate methods to use for measuring damages, to be in compliance with the above Act. Procedures to use for measuring the value of non-market resources which might have sustained some sort of damage include such economic techniques as travel cost and contingent valuation method(CVM).

Additionally, the U.S. Water Resources Council has cited CVM as an appropriate method for measuring net economic value. The test of acceptance of a technique for valuing a non-market commodity, specifically CVM, occurs ultimately in the courts, where judges and juries consider the validity of the technique in valuing damages. A price tag has to be placed on the damage to award compensation. There have been many successful court cases where CVM was accepted in assessing use value. The argument in the courts has now shifted from use value to non-use value. Non-use value includes existence or bequeathed value. For example, what is the value of just knowing that fish exist?

Currently within Australia the resource allocation issue is influenced markedly by political interjection and lobbying. The decision by the Federal Government to ban the commercial catch of blue and black marlin and the NT Government changes to the barramundi fishery in some rivers in the Northern Territory are but two examples of decisions based mainly on the result of political pressure. The management processes within Australia could and should respond positively to information that is sensible, defensible and scientifically based. In the short term some recreational fisheries may be the losers, however if we, as a country, are willing to invest in the correct data collection the management process will respond accordingly. It is therefore very important that the will is there to collect all of the necessary data in a manner that will deliver the answers. In doing so we will ensure that maximum benefit will be derived without fear of putting the resource at risk of over exploitation.

It appears as though throughout the world the real currency is votes. In Canada when the Minister was reducing the daily bag limit from two to one Chinook salmon a slogan was invented. "One fish = no vote, two fish = one vote". The importance of accurate and reliable data is paramount. Take out, or at worst reduce the implications of political decision-making. The old adage of he who yells the loudest is a recipe for disaster for our future prospects in the fishing industry.

Providing a platform where good data is the objective will lead to the majority of decisions being made by the angling public. If cold hard <u>facts</u> are made available in simple terms the recreational fishing industry will, I believe, make the hard decisions and not have to coerced.

Acceptance of management decisions can be best illustrated by an extreme example in North America. A lottery system was introduced which limited the number of boats able to access a particular waterway. With only 15 boats allowed on the water at any one time the initial reaction from the angling public was one of outrage. However after a couple of days the anglers were applauding the concept. Two good days of fishing was far better than 20 days of poor fishing.

Assessing the value of recreational fishing cannot be limited to economic values only. The industry is far more complicated and to do justice to the process a means of incorporating the other elements must be addressed. The social, cultural and ecological benefits have to

be included in the equation when valuing the industry. To not do this will deflate the "real" value.

The "take a kid fishing" concept is a very important and a socially influential program. It is believed that children who learn to fish are less likely to be involved in socially unacceptable practices. Although unproven, as far as I am aware, this in itself would make a fascinating research project and may shed some light on the importance of adding this element to the whole process of valuing the recreational sector. If the anecdotal evidence is anything to go by then I believe there is a need to assess this through a formal research process.

Animal welfare extremists are going to have more and more impact on the recreational fishing industry from now on. Already in some European countries a legal sized fish once caught cannot be returned to the water. A paper was delivered in Germany not so long ago indicating that angling was in the process of being banned in the Netherlands – it is believed that in about 5 years no angling will be allowed. Unfortunately this type of attitude is likely to spread, in the first instance across Europe but later into North America, Australia etc. A prediction made at the Conference in Vancouver placed angling being banned in the European Union by 2010.

Unless we take the necessary steps to widely promote the national code of practice and to get it enshrined in legislation, as it is in the Australian Capital Territory, we will have problems in stemming the radical elements of this movement. Education of tomorrow's anglers must take priority, however a concerted effort also needs to be taken to include the anglers of today.

Water will become the most valuable resource on the planet in the immediate future. With a growing population around the world water must be available for human consumption and the traditional practices of damming waterways, rivers etc for storage will continue unless alternatives are developed. The major problem, from a recreational fishing perspective, associated with damming of rivers is the impact it has on fish movement and migration. New alliances will need to be established with planning authorities, governments, councils and the like to ensure that the construction and development of water storage and catchment facilities has little or no impact on fish habitat, movement and migration.

Summary

Any attempt to "value" the recreational sector of the fishing industry must include the non-tangibles such as social, cultural, environmental and ecological aspects. To not do so will leave out what I think are very important elements. I believe that a pure economic evaluation of the recreational sector is not the answer. Research into these values needs to be addressed.

Education and awareness amongst the future anglers is absolutely vital. Efforts must be increased to raise the knowledge level of tomorrow's anglers. Their input and influence on the future of recreational fishing will be the determining factor in the sustainability of this sector.

The animal welfare movement could be a real threat to recreational fishing. Additional effort must be launched to overcome a potential disaster. Recreational fishing is a way of life for about five million Australians. We are privileged to be able to fish and we must ensure that tomorrow's anglers are educated and made aware of acceptable fishing practices.

The fishing industry as a whole must form alliances with planning authorities to ensure water catchment and storage does not impact on waterways in Australia.