



RECREATIONAL FISHERS IN AUSTRALIA

A social snapshot 2017



Introduction

Recreational fishing has significant social and economic significance in Australia. Over 3 million people fish recreationally each year and it is therefore one of the most significant outdoor activities undertaken by Australians. Recreational fishers are not a uniform group characterised by a common interest in going fishing for recreation. Rather they are a community characterised by behavioural and demographic diversity¹. Recreational fishing is not age-limited and the range of socio-economic profiles, levels of educational attainment, metropolitan to remote location and family status are represented. As such, the culture of recreational fishing in Australia is inclusive of a range of motivations, methods and behaviours.

One of the challenges for fisheries managers is to increase and support the participation of recreational fishers in matters relating to recreational fisheries. Understanding both demographic and behavioural diversity is important if recreational fishers are to be more active as co-managers or stewards of their fisheries² as is a greater understanding of values and of specific communication preferences. Recreational fishers represent an expansive social network and understanding the social dimensions of this community will contribute to the sustainable management of fisheries in general.

This report provides an overview of what is known about the social and non-Indigenous cultural aspects of recreational fishing in Australia. It is acknowledged that Indigenous cultural fishing can have recreational aspects, however, for the purposes of this report the cultural significance of fishing per se for Indigenous people is not discussed. The economic benefits derived from the participation in recreational fishing, species targeted and harvest are not included in this report.

¹ Copeland et al 2017; Fedlar and Ditton 1994; Henry and Lyle 2003; NSWDPI 2008; Sutton 2006

² Arlinghaus et al. 2013

Fishing activity

Recreational fishing is a popular activity, with typically around 23 million fishing activities in a year³. Around 90 per cent of fishers fish at least once a month⁴ but the national average is 6 days a year and about two thirds of all fishers fished for 5 or less days in a year ⁵. What this means is a large number of fishers do relatively little fishing while, at the other extreme, relatively few fishers are very active and contribute disproportionately to the overall effort.

Recreational fishing is also a persistent activity in people's lives: over 92 per cent of fishers had been fishing for more than 10 years⁶.

Most of the fishers go fishing in coastal and estuarine waters, while freshwater fishing activity is concentrated in rivers and creeks⁷. Most of the fishing takes place from the shore (57 per cent) compared to 43 per cent boat-based fishing⁸. A third of fishers usually travelled 20km or less to go fishing, while about 20 per cent would usually travel more than 150km.

Fishers predominantly (85 per cent) use a line (using bait, artificial lures or jigs)⁹. About 15 per cent only catch and release, while the majority (77 per cent) will move to catch and release once they have caught enough for a feed¹⁰. The trend in recreational fishing practice has been a steady increase in the practice of catch and release¹¹. Rates of catch and release appear to vary with the species being targeted, ranging from rates in excess of 70 per cent for some species to less than 5 per cent for others¹².

Who the fishers are

Other than going fishing, recreational fishers have little in common with each other. Apart from the majority being male, they can be any age, socio-economic status, occupation and from any geographic location¹³.

A low number of fishers belong to formal fishing clubs, usually less than 10 per cent of a survey sample 14.

³ Henry and Lyle 2003;

⁴ Copeland et al 2016

⁵ Henry and Lyle 2003

⁶ Copeland et al 2017; Sutton 2006

⁷ Copeland et al 2017; Henry and Lyle 2003

⁸ Henry and Lyle 2003

⁹ Henry and Lyle 2003

¹⁰ Copeland et al 2017

¹¹ Mcleay et al 2022

¹² Giri and Hall 2015

¹³ Copeland et al 2017; Henry and Lyle, 2001

¹⁴ Henry and Lyle 2003; Sutton 2006

Demographics

The majority of recreational fishers are male, regardless of age group 15. The greatest numbers of recreational fishers were in the 30-44 age group 16 but the age group with the highest proportion of participants (28 per cent) is children (aged 5 to 14 years) Participation rates stay within the 19 to 23 per cent range from 15 years old to 44 years old, then start to decline. Very few people (less than 4 per cent) aged over 75 years go fishing anymore.

Participation rates also vary from year to year. When there is a decline in fishing activity, the most commonly cited reason is work or business. When there is an increase in participation, it is usually due to a change in personal preference to include fishing as a recreation¹⁸.

Fishers come from all income brackets, with nearly half having a household income of between \$30,000 and \$60,000. Over 10 per cent have a household income in excess of \$100,000¹⁹.

Nearly three-quarters of Australian recreational fishers have post-school qualifications (trade certification, Diploma and/or Degree)20. Under 10 per cent have at best a Junior High School completion (equivalent to Year 10).

Communication

The ways in which recreational fishers get information and their preferences in doing so contribute to their capacity to engage with each other and with the broader issues associated with recreational fishing management. Understanding the issues associated with fishers' communication preferences is important in order to meet the goals outlined in the National industry development strategy²¹.

Recreational fishers access information from a wide variety of sources (Figure 1). The primary source is other fishers²². Television, magazines, bait and tackle shops and newspapers are also sources but of far less importance. Other research identifies television shows, newspapers and information in boat and tackle shops as sources that are used a lot by recreational fishers²³.

However, the usual source of information varies depending on the information being sought. For example, when sourcing information about fish habitat, their sources changed and were more evenly distributed. Other fishers were still an important source but online government source was the most used.

15 Copeland et al 2017; Giri and Hall 2015; Henry and Lyle, 2003

16 Henry and Lyle 2003

17 Giri and Hall 2015; Henry and Lyle, 2001

18 McInnes et al 2013; Sutton 2006

19 Sutton 2006

20 Copeland et al 2017 21 RFAC 2011

22 Copeland et al 2017; NDW DPI 2010

23 Sutton 2006

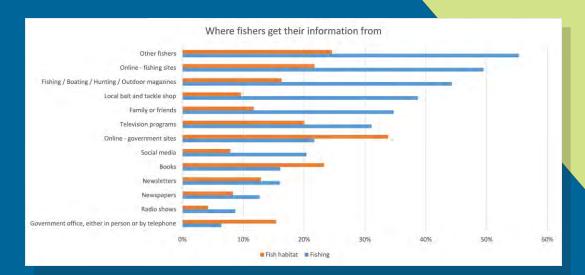


Figure 1: Where recreational fishers get their information from (Source: Copeland pers. comm).

The sources fishers are using to get their information are not necessarily the ones that they trust the most (Figure 2) nor the ones they would prefer to use (Figure 3). The exception is the significance of other fishers as sources of information. As well as being the most used, other fishers are the most trusted and the preferred sources of information. However, this confidence is not uncritical and is placed primarily in fishers recognised as being 'good' fishers, that is, fishers who catch fish, and that are usually known personally²⁴.

It is worthwhile noting that while fishers do not trust internet-based sources relatively highly compared to other sources, they have a consistent preference to access information that way (if not from other fishers). This preference is a shift from older data which indicated a preference for television fishing shows, followed by mailed newsletters. Internet or emailed information was ranked equal third with fishing magazines²⁵.

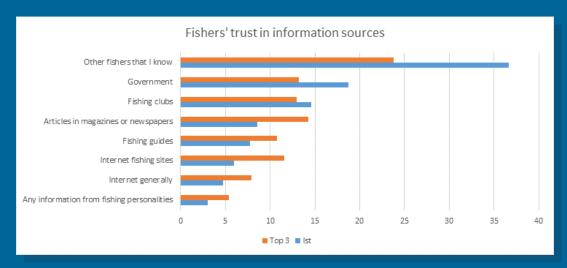


Figure 2: The sources of information recreational fishers have the most trust in. (Source: Copeland pers. comm).

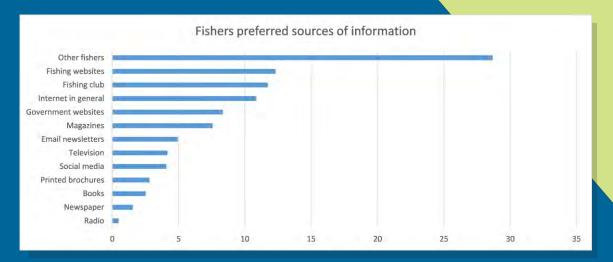


Figure 3: Recreational fishers' first preference for sources of information. (Source: Copeland pers. comm).

Other research suggests that fishers' initial levels of interest in a topic can have significant effects on how their interest in learning more about that topic might be stimulated²⁶. In addition negative emotion – being told what not to do or that what they are doing is wrong - is more likely to limit fishers' interest in informally learning, especially in relation to scientific information and their acceptance of it. Positive messages, for example, recognizing fisher efforts to improve fish habitat, is far more likely to meet with success²⁷.

Why fishers fish

Relaxing, being outdoors and spending time in natural areas are the most important motivations for going fishing²⁸. Just over a third of Australia's recreational fishers reported they went fishing mainly to 'relax and unwind' (37%). Another 18% fished 'for sport', and 15% 'to be with family'. Only 8% of recreational fishers considered catching fish for food as their primary motivation²⁹. Recreational fishers can be grouped into types, based on their motivations, attitudes and fishing behaviour³⁰. The majority fall into the 'Recreational enthusiast' category: those for whom the outing is the most important and the feed of fish a bonus. This group are closely aligned with the 'lovers of open space'. For some of this group the act of fishing justifies being outdoors. The 'social fishers' are also a large group, for whom the camaraderie and fellowship are most important. Interestingly, though, spending time with family and friends is also rated as unimportant by a relatively high proportion of fishers³¹. So, unlike, relaxing and being outdoors, which were consistently important, having company while fishing was something people either really liked or did not value at all. At a National level, 'Sportspersons', those who enjoy the challenge, the skill, the odds, the adrenalin rush and satisfaction of a job well done, is the second highest motive but the capture of fish for food rated poorly³².

Much smaller numbers of fishers fall into the other categories³³:

- 'Unlicensed professionals'
- 'Accumulators' focus on fish as food
- 'Competitors' the capture of more fish than others is the primary concern
- 'Hunters' motivated by chase and kill
- 'Adventurers' savour the chase, but not the kill, and who release their catch.

The research consistently identifies non-catch-related motives as more important than catch- related motives for fishing. It appears the expectation of fishing success is important, but the harvest aspect of fishing is clearly not the major motive identified for most Australian recreational fishers.

The thing fishers value

The predominance of relaxing and being outdoors as the motivations for fishing point to the value fishers place on the natural environment. Fishers are primary recreational users of waterways and their environs, and the 'naturalness' of these areas is an important contribution to fishing satisfaction.

For between 40 per cent and 56 per cent of fishers, fishing is either their first or second most important outdoor activity. However, when asked "If you could not go fishing, are there any other outdoor activities that would provide you with the same level of satisfaction and enjoyment that you receive from fishing?", a majority of fishers agree that other activities, most commonly camping and hiking, could be substituted for fishing³⁴.

Being in a healthy outdoor environment is part of the Australian fishing culture. Being able to catch fish – the anticipation and the potential – is also an important factor. Fishers appear to understand that healthy waterways are more likely to mean more fish are available.

Australian fishers rate the restoration of fish habitat as the most effective thing that can be done to improve the probability of catching a fish (Figure 4)³⁵. Loss or destruction of fish habitat, such as wetlands, reefs, breeding areas, and pollution are seen as major threats to recreational fishing³⁶. Also very highly rated are decreasing commercial fishing pressure, enforcing fishing rules and protecting waterways from the effects of development.

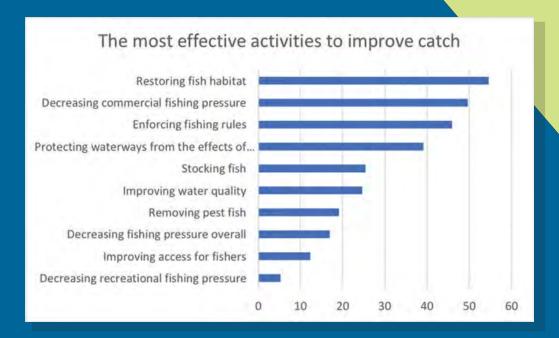


Figure 4: The most effective means to improve fish catch (Source: Copeland et al 2017).

About one quarter of recreational fishers participate as volunteers in activities designed to improve fish habitat. The majority of the activity involved cleaning up litter (Figure 5)³⁷.

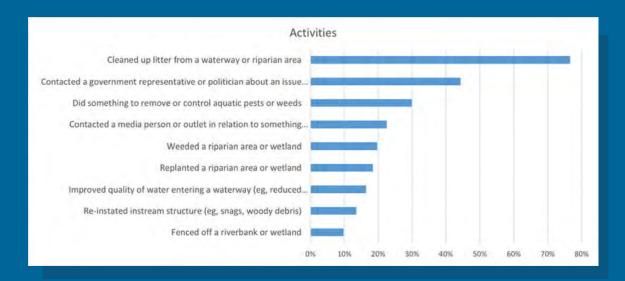


Figure 5: The fish habitat improvement activities fishers undertook as volunteers (Source: Copeland et al 2017).

The main benefit fisher's experience from being involved in fish habitat improvement activities was the satisfaction of putting something back into their sport (Figure 6)³⁸. They also saw spending time outdoors as a major benefit, a feeling consistent with the motivation for going fishing itself. Seeing an increase in the numbers of fish that they like to catch is not a highly rated benefit, underlining the relatively low importance of catch-related motivations overall.



Figure 6: The benefits fishers experienced from being involved in voluntary fish habitat experiences (Source: Copeland et al 2017).

The primary reasons why fishers do not get involved in fish habitat improvement, despite the acknowledgement that a healthy environment is critical to both satisfaction with the fishing experience and healthy fish populations, relate to not having enough time, knowledge / skills or money (Figure 7). Lack of contacts with people who do have the time, knowledge and skill is also important³⁹.

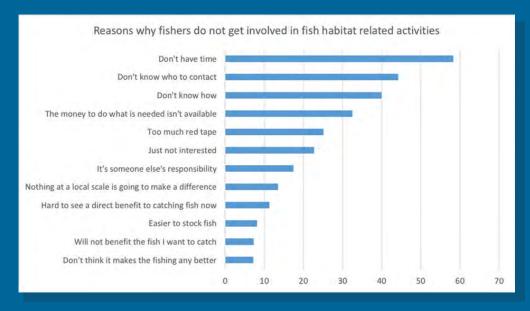


Figure 7: The reasons why fishers do not get involved in fish habitat improvement activities. (Source: Copeland et al 2017).

Summary

The Australian recreational fishing community is in many ways diverse but a common factor is the enjoyment of being outdoors and relaxing in a natural environment while hoping for a bite on the end of a line. Fishers come from all walks of life and socio-economic circumstances but they share this enjoyment, even if only on the few times a year they manage to go fishing. There are some fishers who fish almost every day and there are some fishers for whom the trophy fish is the driving motivation, but these fishers are in the minority.

Fishers listen to and learn from other fishers, usually those known to them and they are the preferred and most trusted source of information about fishing. Increasingly, fishers would prefer to be able to get their information from online sources, although the level of trust in such sources is not high. Preferred information sources vary depending on what information is being sought and negative messages are more likely to hinder communication than positive ones will.

Australian recreational fishers value the environment they enjoy being in and understand the importance of healthy fish habitat and reducing pollution and the impacts of development to improving the health of fish populations. Most of them do not participate in activities to improve fish habitat due to lack of time and resources, but those that do, gain a great deal of satisfaction from putting something back into their sport.

Acknowledgments

This paper was prepared following an international survey of recreational fishers and their motivations to undertake habitat management activities. The data referred to here was gathered from responses from 928 recreational fishers in Australia who took part in that survey. Contributions to the paper were provided by Craig Copeland, Bonita "Snagger" Brown and Simon Fitzpatrick. Production of the report was by Simon Fitzpatrick. The paper was prepared as part of the OzFish Unlimited project "Empowering recreational fishers as champions of healthy fish habitat" which is funded by the Fisheries Research and Development Corporation.

References

Arlinghaus R., Cooke S.J. and Potts W. (2013) Towards resilient recreational fisheries on a global scale through improved understanding of fish and fisher behavior. Fisheries Management and Ecology 20, 91-98.

Copeland, C., Baker, E., Koehn, J.D., Morris, S.G. and Cowx, I.G. (2017) Motivations of recreational fishers involved in fish habitat management. Fisheries Management and Ecology, 24, 82-92.

Fedler, A.J. and Ditton, R.B. (1994) Understanding angler motivations in fisheries management, Fisheries 19(4):6-13.

Giri, K. and Hall, K. (2015) South Australian Recreational Fishing Survey 2013/14, Fisheries Victoria Internal Report Series No. 62, Melbourne.

Henry, G.W. and Lyle, J.M. (eds) (2001) The National Recreational and Indigenous Fishing Survey, Fisheries Research and Development Corporation (FRDC) Project No 99/158.

Li, O., Gray, S. A., and Sutton, S.G. (2016) Mapping recreational fishers' informal learning of scientific information using a fuzzy cognitive mapping approach to mental modelling, Fisheries Management and Ecology, 23, 315-329

McInnes, K., Taylor, S., and Webley, J. (2013) Social, Attitudinal and Motivational Recreational Fishing Survey: part of the 2010 statewide recreational fishing survey, Department of Agriculture, Forestry and Fisheries (Queensland), Brisbane.

McLeay, L.J, Jones, G.K. and Ward, T.M. (2002) National Strategy for the Survival of Released Line-caught Fish: A review of research and fishery information, FRDC Project 2001/101. Available at http://frdc.com.au/research/Final_Reports/2001-101-DLD.pdf (accessed 220516).

NSW Department of Primary Industries (NSW DPI) (2010) More Habitat, More Fish: a strategy for educating recreational fishers about habitat, NSW DPI, Orange.

Ormsby, J. (2004) A Review of the Social, Motivational and Experiential Characteristics of Recreational Anglers from Queensland and the Great Barrier Reef Region, Research Publication No. 78, Great Barrier Reef Marine Park Authority (GBRMPA), Townsville.

Recreational Fishing Advisory Committee (RFAC) (2011), Recreational fishing in Australia - 2011 and beyond: a national industry development strategy, Commonwealth of Australia, Canberra.

Robinson, J. (no date), The Economics of Recreational Fishing in Queensland, School of Economics, University of Queensland.

http://www.uq.edu.au/economics/schoolsday/JACKIE%20

ROBINSON_The%20Economics%20of%20Recreational%20Fishing.pdf (accessed 18/05/16)

Sutton, S.G. (2006) An assessment of the social characteristics of Queensland's recreational fishers, CRC Reef Research Centre Technical Report No. 65, CRC Reef Research Centre, Townsville.