

Encounter Levels – A Study of Backcountry River Trout Anglers in Nelson-Marlborough and Otago

Carl Walrond – Graduated 2001

Abstract

The spread of knowledge of the quality of the angling experience available on New Zealand's backcountry river trout fisheries, combined with greater disposable incomes, and increased population mobility has resulted in an increase in use levels. The New Zealand Tourism Board actively uses backcountry-angling imagery (photographs of large trout, angling settings in scenic environments) in its overseas promotions of New Zealand as a tourist destination. Fisheries managers have documented complaints of crowding and cases of conflicts between helicopter-borne anglers and foot-access anglers. Over the past two decades a commercial guiding scene has evolved with the majority of clients being non-resident anglers. This has added to increased use levels.

Trout angling is generally thought of as a solitary experience and research to date has shown that non-catch related aspects of the experience (peace and solitude, the natural environment) are very important, especially in backcountry settings. Concerns have been expressed about the ability of New Zealand's backcountry river fisheries to cope with increased levels of use. This may seem surprising given that on the majority of backcountry rivers use levels are below 500 angler days per season. But anecdotal reports suggest that trout can become more difficult to catch after an angler has fished a stretch of water on a backcountry river.

A social survey of backcountry anglers was carried out over the 1996/97 and 1997/98 fishing seasons. This focused on angler feelings toward encounter. A normative approach to determining angler social carrying capacities was adopted. This involved a questionnaire and an angling diary. Three distinct subgroups were surveyed: residents; non-resident unguided and guided anglers. The top three ranked satisfaction sources (reasons for fishing) on backcountry rivers were peace and solitude, natural environment/scenery and spotting trout.

Results indicate that anglers are very sensitive to encounter on New Zealand backcountry river fisheries. A major reason for this appears to be behavioural changes of trout caused by earlier arriving anglers fishing the water and disturbing trout. Low actual, expected, tolerable and preferable encounter rates were documented and these decreased with difficulty of access. This suggests that the anglers are very sensitive to encounter and sends a clear message to management that anglers desire low-encounter angling experiences. Actual encounter rates are within tolerable rates for the majority of rivers. Angler subgroups had differing opinions on the issue of helicopter access and the imposition of restrictive regulations in the backcountry. This suggests that some form of zoning approach to management may be appropriate. Angler support for a recreational opportunity spectrum approach to management adds weight to a zoning process.

It is concluded that social carrying capacities are very low (<3 encounters per day) for backcountry river trout anglers. There was a high degree of consensus among the anglers as to expected, preferable and tolerable levels of encounter. This degree of consensus was considerably higher than

recent North American social carrying capacity research that showed trout anglers were one of the least tolerant groups of backcountry users. This suggests that there is something unique about the New Zealand backcountry fishing experience. Low angler carrying capacities are likely to be related to behavioural changes of trout caused by angling pressure. This result taken together with the high satisfaction ranking for peace and solitude suggests that backcountry river trout angling can never be a mass-tourism product.

The study makes a contribution to the literature on encounter norms. Remote backcountry rivers are at the primitive end of the recreational opportunity spectrum. Anglers in these environments have very clear ideas about the number of other anglers they expect, prefer and tolerate encountering. This illustrates that for this low-use recreation experience users do have norms and that there is sufficient consensus among users to identify parameters that describe high-quality recreational angling experiences.

Profile

Doing my PhD research (1996-1999) gave me the chance to work at the offices of Fish & Game Otago while I was in Dunedin and at the Fish & Game Nelson-Marlborough offices and the Cawthron Institute while in Nelson. It exposed me to the workings of a science research institute and to the day-to-day operations of fish and game management. I was extremely lucky to have scientist John Hayes as my boss at the Cawthron Institute. Not only did he always out-fish me he guided me through the politics of fresh water fisheries management and demonstrated the importance of scientific rigour. Going through the process of submitting, doing revisions and then defending my thesis he gave me some valuable advice 'just keep jumping through the hoops.'

I went to Finland and London for about eight months in 1999-2000. While in London I enjoyed very brief careers as a bartender and as a financial forecaster (due to my Excel skills) before they had to 'let me go' which was just as well as I was off to Ireland for a pub-crawl the following week. Back in New Zealand I got a job at the Ministry for Research, Science and Technology in late 2000. I met some very clever people there like my boss Paul Reynolds now the head of the Ministry for the Environment. After two years I realised that policy was not for me and got a job at the Ministry for Culture and Heritage working on Te Ara – the online encyclopedia of New Zealand where I have been ever since. My position is a researcher/writer and I research, write, caption, re-write and edit encyclopedia entries.

I have published a couple of papers from my PhD – one in the International Journal of Wilderness and another as a chapter for Brent Lovelock's 2007 book *Tourism and the consumption of wildlife*. I have also kept up my freelance journalism publishing articles and a book *Survive! – remarkable tales from the New Zealand outdoors* in 2008.