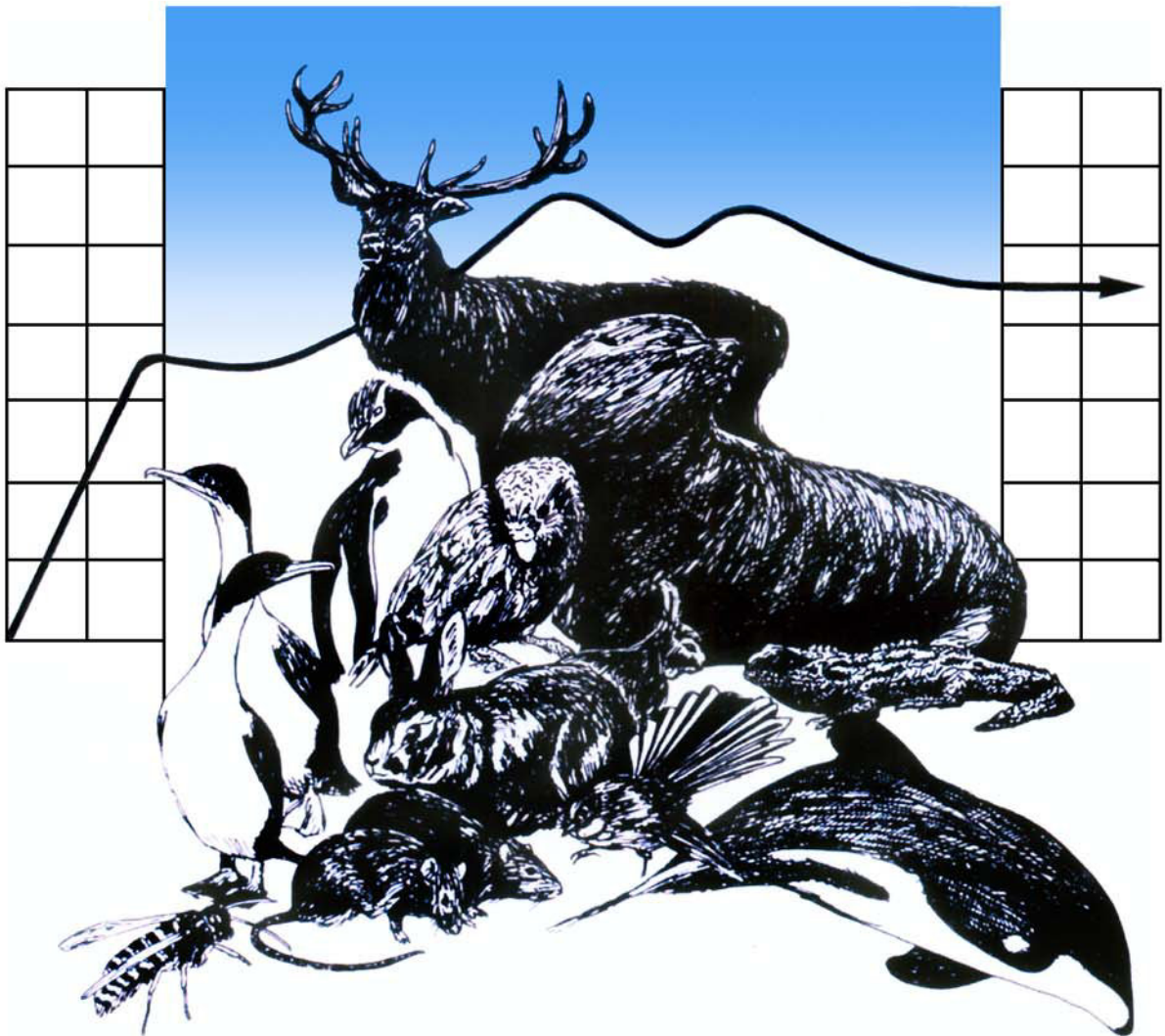




DEPARTMENT OF ZOOLOGY



WILDLIFE MANAGEMENT

A Social Survey of Backcountry Anglers in the Greenstone Catchment

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Prepared for

Otago Fish and Game New Zealand

by Christopher Roberts

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Abstract

The introduction of a 'controlled fishery' during February and March on the upper Greenstone river has been successful but has the potential to increase angling pressure on the nearby Caples river. An increase in angling pressure is a concern to Fish & Game Otago because angler satisfaction is often affected. Quantitative and qualitative research methods were used to understand angler satisfaction. The former included an on-site survey while the qualitative component included interviews with 'expert anglers' and personal observation. Results indicated there was a high level of satisfaction on both rivers with low encounter rates and similar catch-rates as those described in previous studies. However, the proportion of overseas anglers using the Greenstone and Caples rivers continues to increase with many choosing a guide. Future management should focus on these trends and address the behaviour of the various sub-groups that use backcountry fisheries. This knowledge will ultimately lead to informed management decisions and provide a clear path to an affective licensing system.

1 Introduction

A trout fishery is made up of three components: the trout, their habitat and the anglers that try catch them (Nielsen 1993). Arguably, future management of sports fisheries may rely increasingly on social science rather than biology as angler satisfaction becomes the priority to base management decisions. This is particularly the case in New Zealand where the majority of fisheries are self-sustaining. The Fish & Game councils are public entities, established under the Conservation Act 1987. Although they report to the Minister of Conservation, they are not funded by taxpayers. Angler satisfaction is of great importance to managers as almost all of Fish & Game's monies come from the sale of fishing and hunting licences.

The purpose of this report is to understand angler satisfaction on the Caples river where it has been hypothesised that angler satisfaction has been compromised since the introduction of a controlled-fishery on the Greenstone river.

The Greenstone and Caples rivers are recognised as nationally important wilderness trout fisheries and are valued for their catch rate, scenic beauty and peace and solitude (Kroos & Walrond undated). Both fisheries were granted a Water Conservation Order in 1997 for the amenity and intrinsic values they possess in their natural state (Ministry of the Environment). They represent two of only eight fisheries regarded as 'nationally important wilderness river fisheries' in New Zealand (Tierney et al. 1982).

Both rivers are valued for their rainbow trout (*Oncorhynchus mykiss*) fishing, particularly the Greenstone which has 28km of fishable water compared to the 16km available in the Caples catchment (Walrond & Hayes 1999). Brown Trout (*salmo trutta*) are also present in both rivers but in contrast to most South Island fisheries they are not dominant.

Otago Fish and Game have implemented a backcountry fishery licence (BCL) which has evolved since 2004/2005 when it was first introduced. An average of 1100 BCL's have been sold over the last three seasons with 55% sold to resident anglers (pers comm. Gabriellson). The licence represents a free endorsement to any angler whom holds a whole season licence or family licence. The main

objective of its introduction was to establish a database that Fish & Game could use to contact and interview anglers who fished the Greenstone, Caples, upper Lochy, and Dingle rivers within the Otago region (Gabriellson 2010). These interviews are generally an online satisfaction survey that identifies any management issues each individual fishery may have.

A survey of the upper Greenstone River during the 2002-03 prior to angling use restrictions suggested non-resident anglers would be displaced to other Otago fisheries if they were unable to fish the Greenstone, particularly the Caples river (Stickland & Hayes 2004). The potential overspill of anglers from the Greenstone during the Controlled Fishery (CF) has been identified as a concern to Fish & Game Otago.

Results of an online survey sent out regarding the 2009-2010 season indicated that 27% of anglers that fished the Caples river were either dissatisfied or very dissatisfied - this represented the lowest satisfaction level of all the rivers associated with the BCL regime (Gabriellson 2010).

This report uses qualitative and quantitative methods to determine angler satisfaction in the Greenstone catchment, particularly the Caples River where potential problems may occur during the controlled fishery. The quantitative component involved a social survey where anglers were actively intercepted during their fishing experience and interviewed on-site (Pollock 1994). The qualitative component included a group interview with 'experts', individual interviews, personal observation and detailed notes taken during the 2010-2011 fishing season.

2 Study Area

The Caples and Greenstone Valleys



Figure 1 Location and fishing beats of the Caples and Greenstone Rivers (Beat 1-3 represent three different lengths of the river which are available to book during the ‘controlled fishery’ in February and March)

The Greenstone river drains Lake Mckellar and lies in between the Alisa and Livingstone mountain ranges. It flows south-east through a heavily glaciated valley with a characteristic u-shaped profile and tussock flats. The river is surrounded by steep mountain slopes clothed with southern beech forest (*Nothofagus spp.*). The river has three major tributaries; Steele Creek, Passburn and the Caples river, the latter joining the Greenstone 3 km upstream from Lake Wakatipu. The Greenstone eventually drains to the east coast of the South Island via the Clutha river. Both the Greenstone and Caples are linked by the sub-alpine McKellar pass, trampers often walk the five day circuit. The Greenstone also joins the Mararoa valley that lies south of the Passburn and the world-famous Routeburn track, regarded as one of NZ’s premier alpine tracks.

Angler access into the controlled fishery of the Greenstone valley is available at the Greenstone car-park or from the divide. A two hour walk from the Divide allows anglers to reach Beat 1, while a four hour walk from the Greenstone car park is required to access beat 3. In contrast, the Caples river only requires a thirty minute walk from the Greenstone car park to access the lower section, while a two hour walk is required to access the upper Caples.

Arguably, the Caples valley has a higher scenic value, particularly above the mid-Caples hut where the valley becomes more confined and the mountain peaks become increasingly spectacular towards the west.

3 The Controlled Fishery of the Greenstone River

The controlled fishery (CF) of the upper Greenstone operates during February and March when angling pressure often peaks with the influx of overseas visitors. The CF is made up of three beats, Beat 1, Beat 2 and Beat 3 (Fig 1). Beat 1 begins at Lake McKellar and Beat 3 ends at the Slyburn confluence. The lower Greenstone river flows from the Slyburn confluence to Lake Wakatipu and can be fished at any stage during the season.

The CF allows anglers to book a beat a minimum of 5 days in advance. Only one beat each day can be booked, and each beat can be booked for a maximum of two consecutive days. Anglers are allowed to bring one companion with them. The non-controlled fishery (NCF) operates during November, December, January, April and May when anglers can fish any section of the river on any given day without having to make a booking. Currently, the Greenstone river is the only controlled fishery in the Otago region.

4 Methodology

Data was collected using both Quantitative and Qualitative methods. This report has interwoven both methods in an attempt to understand the complex nature of angler satisfaction. The quantitative component provided an objective method to quantify angler opinion and the qualitative component was used to analyse the subjective qualities of angler satisfaction.

4.1 Quantitative Method

Data was collected by the author during 7 days of every month between November and March in the Caples Valley. During this period fishers were actively surveyed as close to the end of their fishing day as possible. The main advantage of this interception technique is it reduces memory bias. The author actively searched for anglers using other recreationalists, Department of Conservation staff and by observing from several lookout points. The Greenstone river was surveyed using a similar method during the non-controlled period (Nov-Jan). An online survey was sent out to all anglers who used the fishery during this period to determine satisfaction levels.

The survey included twelve questions. Eight of these questions were used by Walrond (1995) (appendix 2). Anglers were asked what knowledge they had of the fishery, how many angler encounters they had experienced, how crowded they felt the fishery was, how satisfied they were, the degree of expectations they had and if these expectations had been met. Catch rate and species caught were also recorded, and anglers opinion on the size and quality of their catch was included.

4.2 Qualitative Method

Research studies that are qualitative can be used to study a particular phenomenon, particularly a social phenomenon where people are the main subjects and a 'focus of enquiry' can be used to guide research (Lincoln & Guba, 1985). The focus of enquiry for this part of the project was angler satisfaction on the Caples river. A non-emergent design was used and data was analysed using transcripts of interviews, diary, survey forms, personal observations and audio tape.

The survey forms were used primarily to obtain data for the quantitative component; however there were two open ended questions in which anglers were encouraged to give reasons for their answer. Firstly, a question that addressed angler expectations was left open so the interviewee could provide reasons for their answer. The second open-ended question asked anglers if there had been anything that had detracted from their experience. Anglers that couldn't think of a response were recorded as having 'no response'. Most interviews were 8-9 minutes in duration but some lasted for 30 minutes.

When there are several potential management options regarding a resource it is prudent to bring interest groups together that allows them to be part of the decision-making process. This is also a part of the OF&G management plan. A group interview was conducted at the beginning of March and five 'expert' anglers were invited to join a focus group to discuss management of both fisheries. Anglers were primarily selected on their experience and how frequently they fished both fisheries. The group included two resident guides, two resident anglers and one non-resident angler. All of these stakeholders were met by the author during the 2010-11 fishing season, three on more than one occasion. All of the anglers possessed a high catch rate and knowledge of the fishery and the guides were well respected locally and members of the New Zealand Professional Guides Flyfishing Association (NZPGFA).

A one to one interview was conducted with an experienced overseas angler who has a good knowledge of Otago and Southland streams. He has been here for the last 15 seasons and keeps detailed records of his fishing activities. He is also the President of a Trout Unlimited chapter in Montana and is a retired environmental scientist. The interview lasted for two hours.

4.3 Bias

Although anglers were interviewed close to the finish of their day's fishing, incomplete data was experienced on most occasions. Also, anglers who fish for shorter periods are less likely to be intercepted causing a 'fishing duration' bias (Kroos 1997). Anglers that fish more often have a higher likelihood of being interviewed and their experience could be significantly different from those who fish infrequently.

The Caples and Greenstone Valleys are difficult to monitor as a single researcher. Although the author used a consistent route to patrol each valley there were areas close to his camp that would have received additional observation. Anglers may have been missed in both valleys, particularly in the Greenstone valley where a four hour walk is required from Beat 1 to the mid-Greenstone hut.

The author has spent several years tramping, fishing and working in the Greenstone catchment. Every care was taken to allow interviewees to express their opinion without the influence of the researchers personal experience.

5. Results

The following results use quantitative and qualitative methods to understand angler opinions on the Caples and Greenstone river.

5.1 Caples River

A total of 53 interviews were conducted. 81% of anglers were non-resident and 19% were resident. Of this, 25 (47%) were conducted during the non-controlled period and 28 (53%) during the controlled period on the Greenstone river. It is estimated that around 20% of all anglers who fished the Caples during the 2010-11 season (Nov-Mar) were interviewed.

Table 1 Angler country of origin (n=53)

Country of origin	Number	%
United States of America	31	58
New Zealand	10	19
Australia	9	17
Germany	2	4
Austria	1	2

The majority of anglers interviewed were resident of the United States of America (58%). Of these, most lived in the Pacific north-west (72%). New Zealand anglers accounted for 19% of the survey and most were interviewed during the NC period (70%). Australians were the third largest group using the resource and represented a similar number of visits as the residents (17%). The average angling party was two and the maximum number in a party was four.

Table 2 Location and month of interview (n = 53)

	Nov	Dec	Jan	Feb	Mar	%
Lower Caples	1	4	10	14	11	75
Upper Caples	1	3	5	3	1	25
Total	2	7	15	17	12	

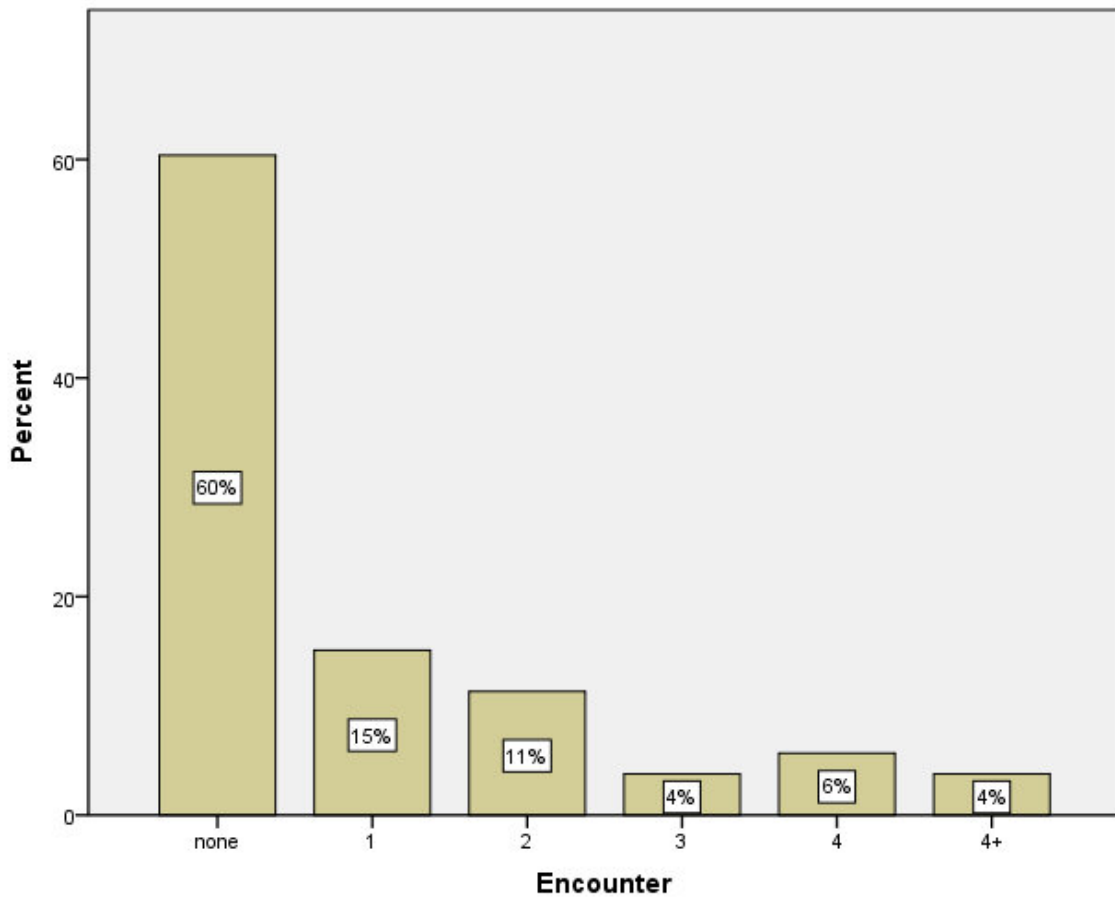
Most of the angling pressure occurs on the lower Caples river (75%). The upper Caples received 25% of the angling pressure. Most anglers accessed the fishery by foot (92%) with only two helicopters landing. February was the busiest month, accounting for 17 interviews (32%) and November was the quietest (4%). A large proportion of anglers used a guide (34%).

Table 3 Summary of angler catch (n = 53)

	Non-Control (n=25)	Control (n=28)	Total
Fishing hours	149.25	140.75	290
Fish landed	78	36	114
Rainbow	65	33	98
Brown	13	3	16
Harvest	0	2	2
Catch-Rate	0.52	0.26	0.39

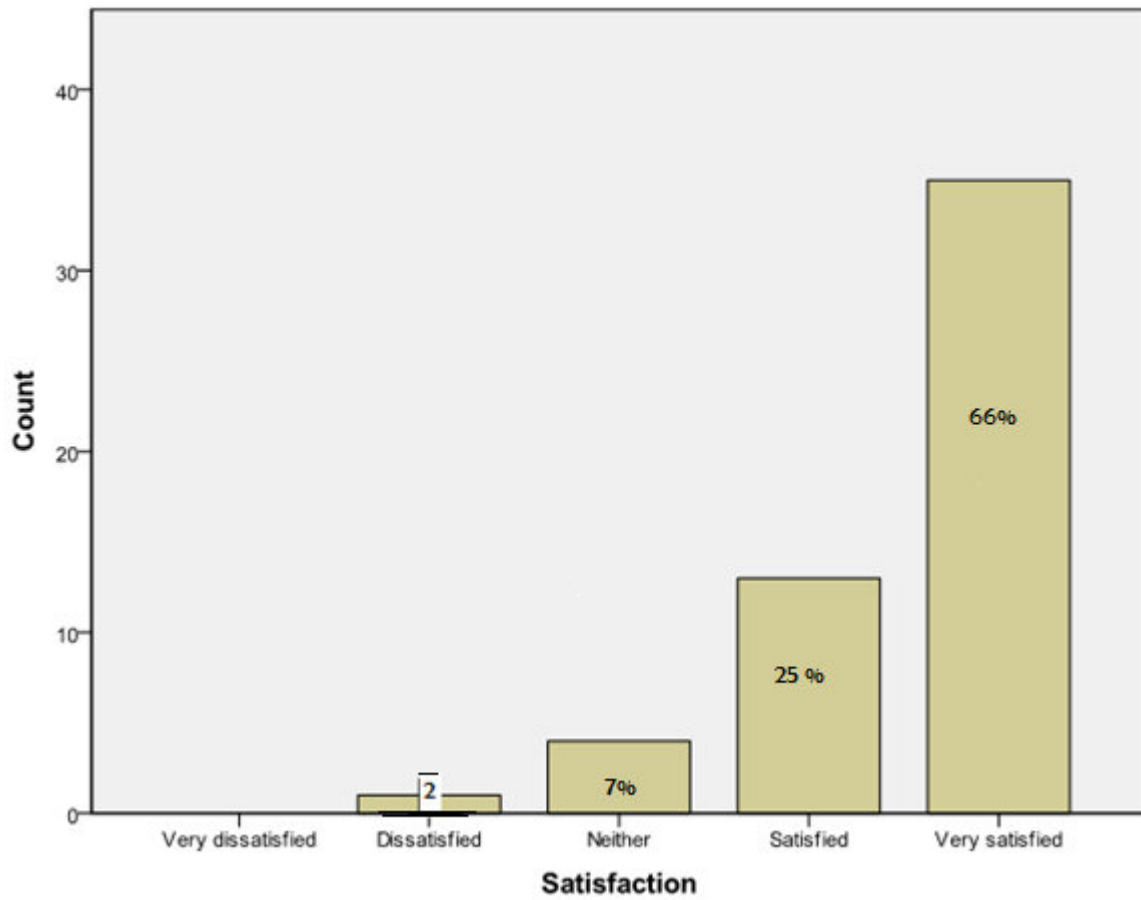
A total of 290 hours of fishing effort was recorded during the survey, with 114 trout landed. The catch comprised of 98 rainbow trout (86%) and 16 brown trout (14%) representing a catch- rate of 0.39 fish per hour. Most fish were landed during the non-controlled period (68%) when a higher catch-rate of 0.52 fish per hour was recorded. Most anglers practiced catch and release with only 2% of fish harvested.

Figure 2.1 Encounters with other anglers (n=53)



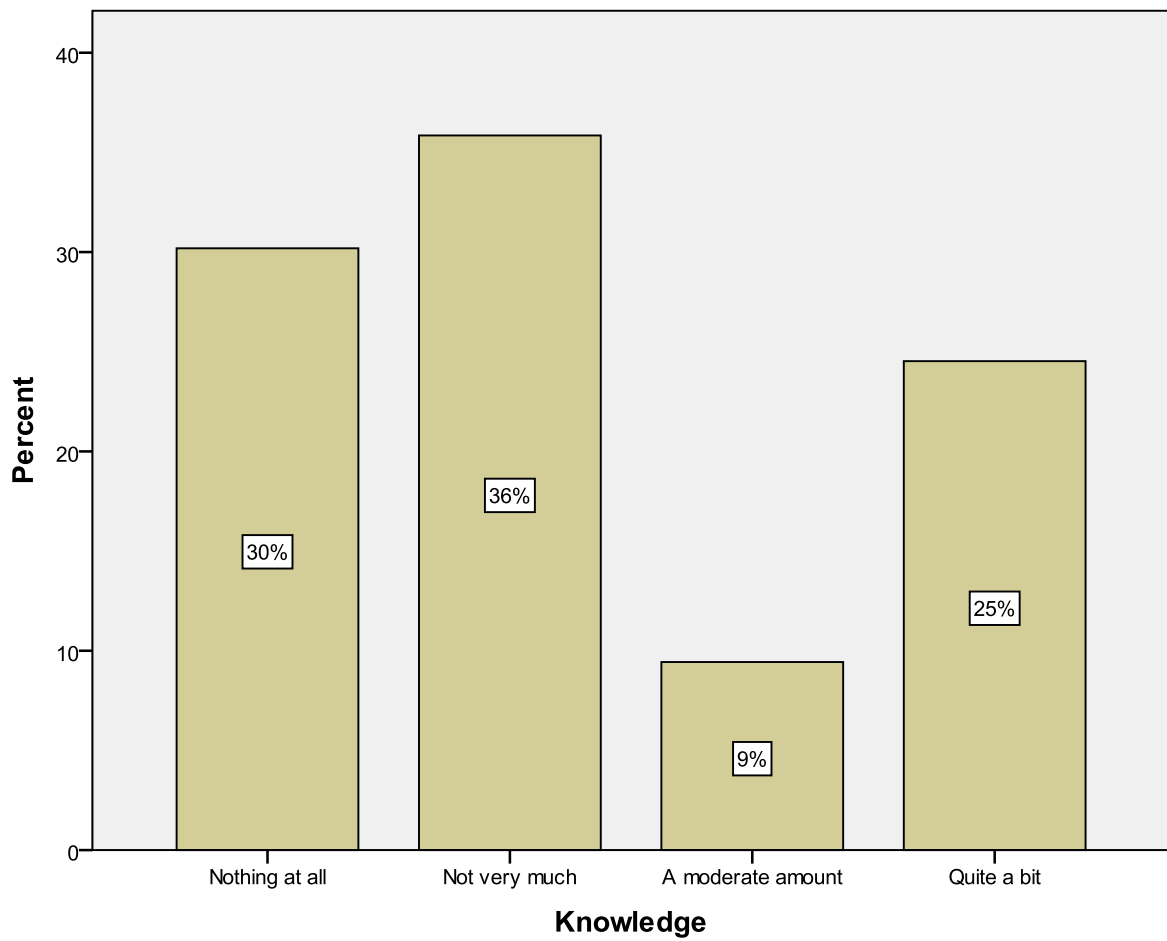
Anglers were asked how many encounters with other fisherman they had experienced per day. The majority had seen no anglers during their trip (60%). The most anglers seen was during the controlled period when one angler began his trip late afternoon and came across six other anglers fishing the lower Caples. The mean encounter rate during the controlled period was 1.3 anglers per day compared to a lower rate of 0.56 anglers per day recorded during the non-controlled period. Overall, the encounter rate over both periods was 0.92 anglers per day.

Figure 2.2 Degree of satisfaction



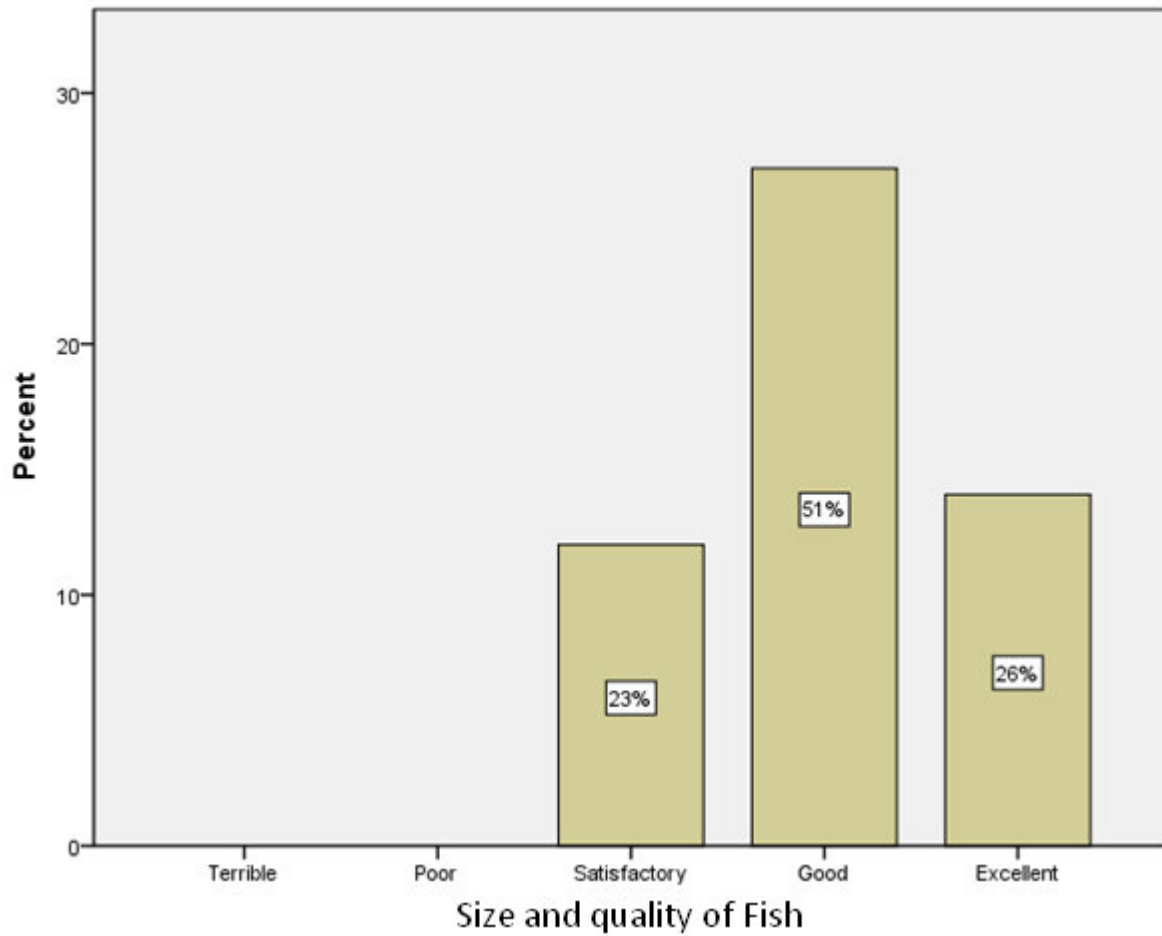
Anglers were asked how satisfied they were with their overall experience. The most frequent response from anglers was they were very satisfied (66%), with 81% of anglers either satisfied or very satisfied with the fishery. Only 2% of anglers were dissatisfied and 8% were neither satisfied nor dissatisfied.

Figure 2.3 Angler knowledge of the Caples river (n=53)



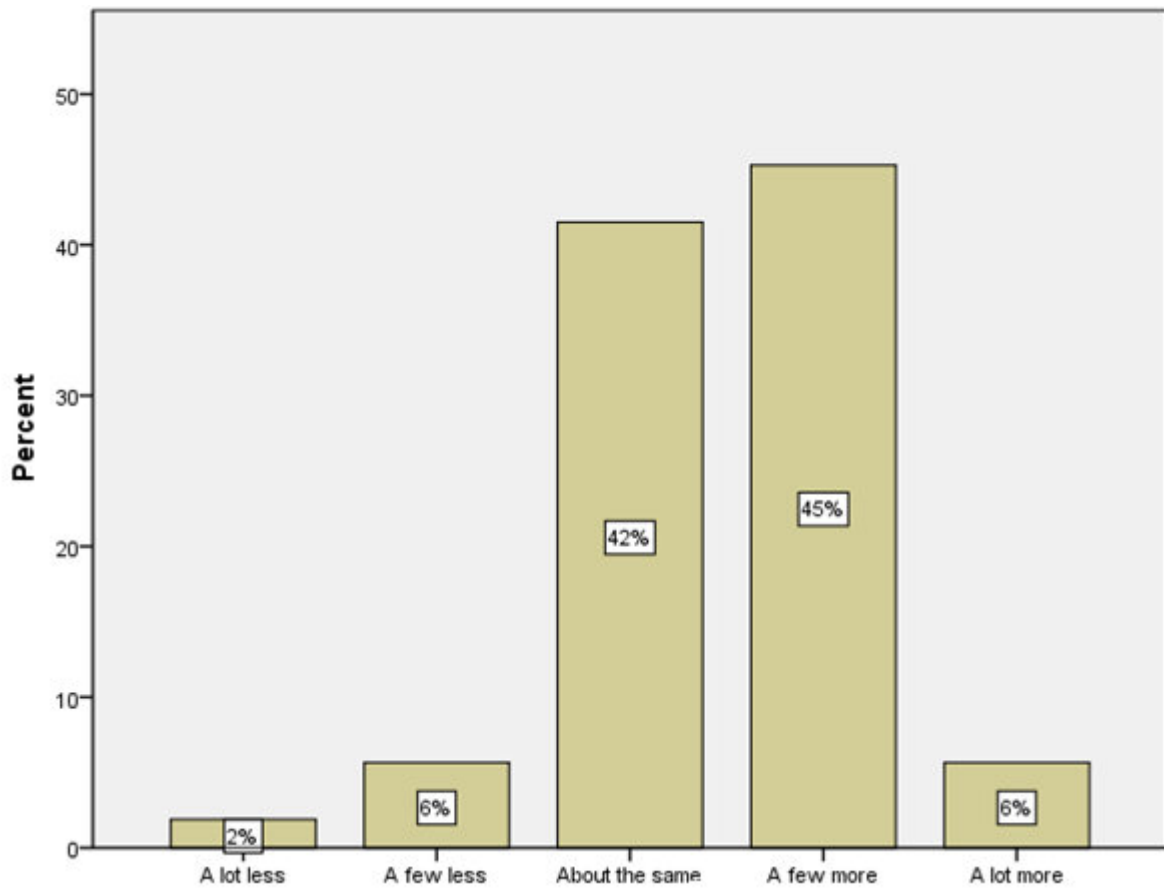
Anglers were asked what level of knowledge they had of the Caples river. The majority of respondents knew nothing at all (30%) or not very much (36%). Not surprisingly, the majority of anglers that had quite a bit of knowledge (25%) were from New Zealand (54%) followed by the USA (38%).

Figure 2.4 Size and quality of fish (n=34)



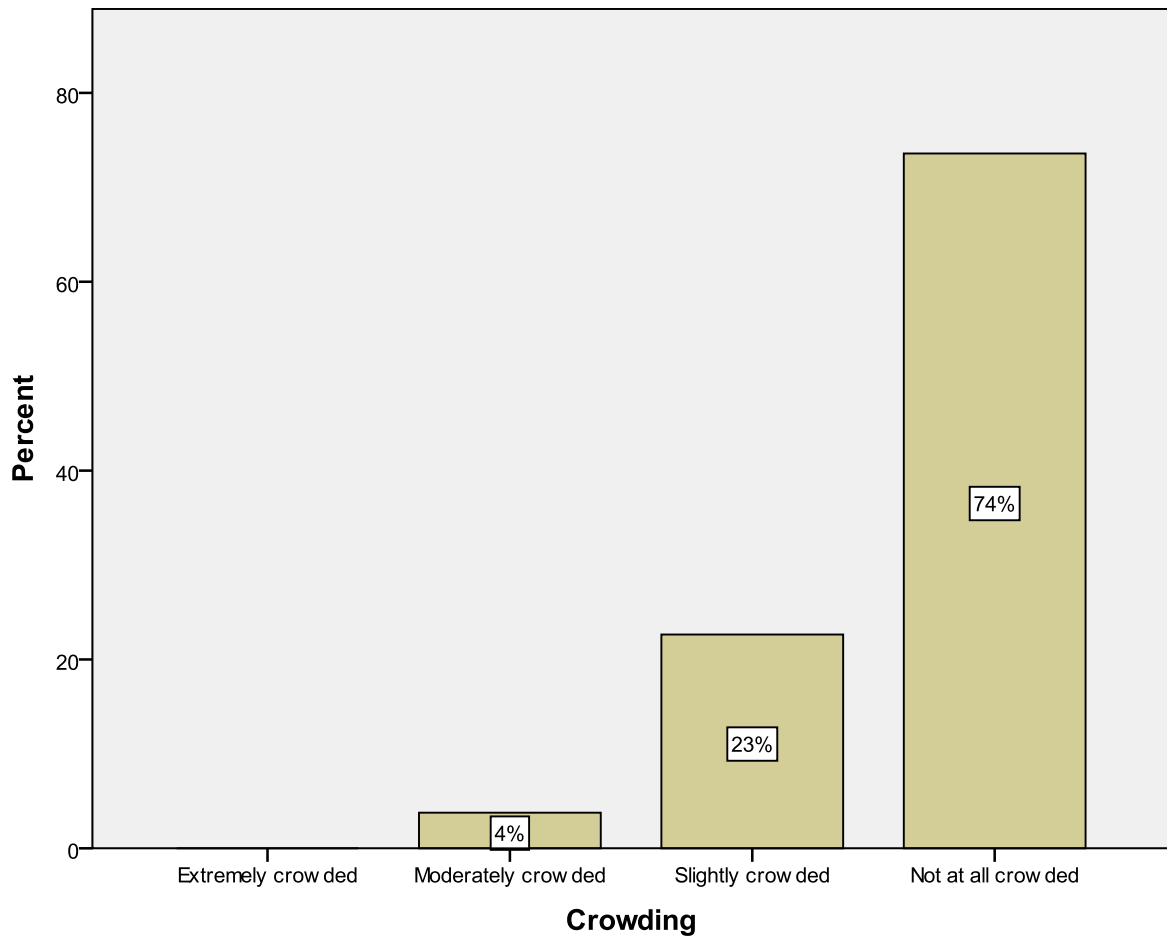
Anglers were asked to rate the size and quality of their catch. The majority of respondents described the size and quality of the fish they caught as good (51%) followed by excellent (26%). The majority of respondents that viewed their catch as satisfactory (23%) fished during the controlled period (65%), most complained that it was obvious the fish had been caught before (60%) followed by lack of girth (28%).

Figure 2.5 Expected encounter levels (n=53)



Anglers were asked how many anglers they expected to encounter during their fishing trip. The most frequent response was the encounter rate would be a few more (45%). 42% expected to see about the same.

Figure 2.6 Perceived crowding (n=53)



Anglers were asked if they perceived the Caples fishery as being crowded. The majority of anglers felt the fishery was not at all crowded. (74%), 23% felt it was slightly crowded and only 4% felt it was moderately crowded. No respondents viewed the fishery as being extremely crowded. During the non-controlled period (n=25), 76% of anglers felt the fishery was not at all crowded and 24% felt it was slightly crowded. During the controlled period 72% of respondents felt the fishery was not crowded at all, 22% felt it was slightly crowded and only 6% felt it was moderately crowded.

5.2 Greenstone River (non-controlled period)

An on-site survey was not conducted during the 'controlled fishery' but results from an online survey suggested 25% were very satisfied, 42% were satisfied and 33% (n=23) remained neutral (pers comm. Gabriellson) No anglers were dissatisfied or very dissatisfied indicating the controlled fishery is working. The following results were recorded during the non-controlled period between November and January.

Table 4 Angler country of origin (n=37)

Angler Origin	Number	%
New Zealand	16	43
Australia	8	22
USA	6	16
Sweden	4	11
Other	3	8

The majority of anglers interviewed during the non-controlled period were resident in New Zealand (43%). The second largest group interviewed were from Australia (22%) followed by the USA (16%) and Sweden (11%). Other nationalities included Switzerland, Japan and Germany (8%). The average angling party was two and the maximum number in a party was four.

Table 5 Location and month of interview (n=37)

Beat	1	2	3	Level of use %
1	1	3	4	18%
2	11	1	7	42%
3	5	8	5	40%

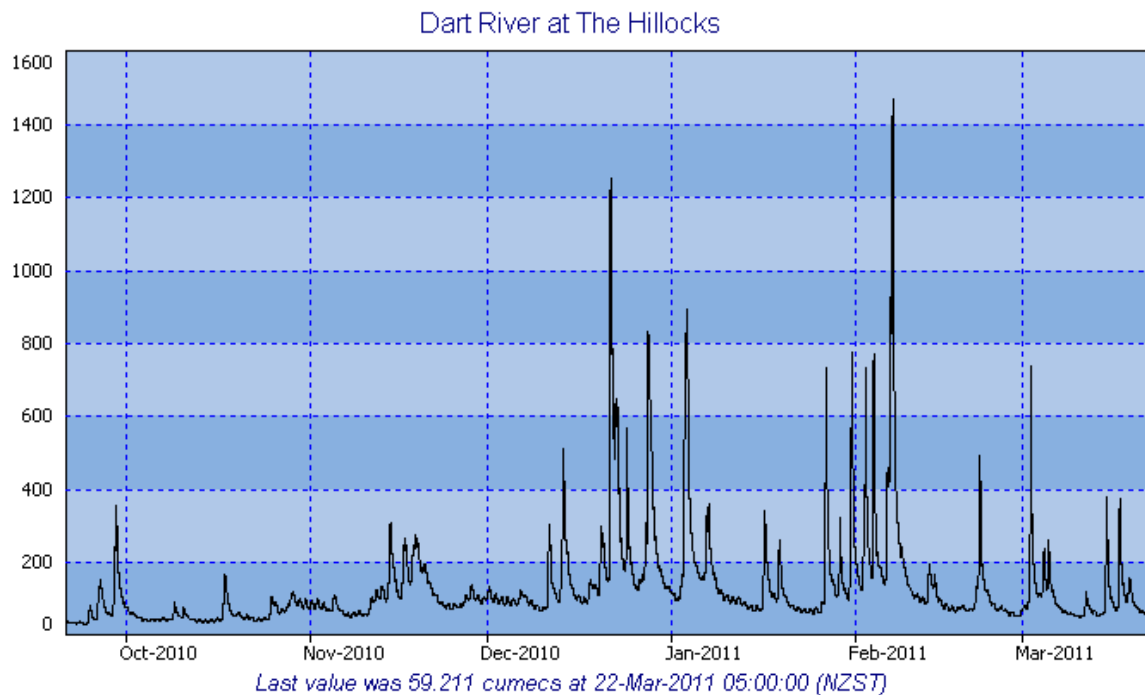
The majority of anglers were interviewed on Beat 2 (42%) followed by beat 3 (40%). Beat 1 represented 18% of use by respondents and was the least used during the non-controlled fishery. The majority of anglers chose to access the fishery on foot (86%) and 14% used a helicopter. The majority of anglers were non-guided 81%.

Table 6 Summary of catch during the non-controlled period

	Non-Control
Total Hours fished	249
Fish Landed	189
Rainbow	167
Brown	22
Harvest	5
Catch-Rate	0.76

A total of 249 hours of fishing effort was recorded during the survey with 189 trout landed. The catch comprised of 167 rainbow trout (88%) and 22 brown trout (12%) representing a catch-rate of 0.76 fish per hour. The majority of anglers practiced catch and release with only 3% of fish harvested. For further results on the Greenstone river please refer to Appendix 1.

Figure 3 Dart river cumec flow between October 2010– March 2011



The weather during the 2010-11 season was described as ‘being one to forget’ (ODT). The Otago region experienced heavy rain fall, particularly from mid - December until the beginning of March. The Dart river can often act as a good indicator with proportional flows often flowing through the Greenstone catchment (fig. 7) which corresponds with observations made on the river flow in the Greenstone and Caples by the author.

6 Qualitative Interviews

6.1 Group Interview

Group Participants

Angler 1 (A1) – Experienced resident (Queenstown) angler, fished both the Greenstone and Caples during the 2010-11 season and recorded a high catch rate. He is obsessed with fly-fishing and has visited about thirty different fisheries this season.

Angler 2 (A2) – Experienced resident (Queenstown) angler , fished both the Greenstone and Caples during the 2010-11 season.

Angler 3 (A3) – Experienced non-resident (Montana,USA) angler who fished the Caples during the 2010-11 season and recorded a high catch rate. Also has knowledge of several other Otago fisheries. Has been coming to NZ for the last five fishing seasons.

Guide 1 (G1) – Experienced fishing guide (Queenstown) with 30 years experience of the Greenstone catchment. Used to do 80-90 guiding days a year and now does 50 days. Has also been a hut warden up the Greenstone valley.

Guide 2 (G2) – Experienced angler living in Queenstown. Guides a few trips a season but prefers to go fishing by himself or with a friend. Has frequented the Greenstone catchment for over twenty years.

A detailed summary of the focus group can be viewed in Appendix 3

Individual Interview

Angler 5 (A5) – Non-resident Montana USA. Has been coming to New Zealand since 1990 with his wife; they own a bach in Queenstown that acts as their base for 4 months of the year. He has an exceptional knowledge of South Island fisheries, particularly in Otago and Southland. He is a retired environmental scientist and the President of a Trout Unlimited chapter. Angler 4 was interviewed at his bach in Queenstown. He has been practising fly-fishing for 44 years and keeps records of all his activities.

Participants were asked to describe their fishing experience up the Greenstone catchment and describe the key attributes they seek before choosing a fishery.

G1 feels the ‘number of fish and solitude’ was important. Most of his clients had enjoyed their experience up both rivers except for one occasion when an angler had walked up to him on beat 2 of the Greenstone. ‘He demanded that he was allowed to fish above us so we just went below him and fished the water he missed.’

G2 enjoys getting away from the ‘merry go round of life’ by escaping up the Greenstone or Caples. ‘I enjoy sharing the experience with somebody but I also enjoy solitude’.

Scenery and solitude are also key attributes for A3, he really enjoyed the upper Caples this season. However, he was concerned with the riparian zones of the lower Caples.

‘I like the upper Caples - there is no livestock and great riparian areas, the grass is tall and mosses go all the way down to the water’s edge’. He went on to describe how the lower Caples had been destroyed by overgrazing. ‘Back home they don’t allow you to graze riparian zones but it seems quite common over here’.

A5 describes a visit to the Caples like ‘going to church’. He enjoys the scenery and the challenge of trying to catch a large brown trout, and he has his own names for each pool. As a retired environmental scientist he also believes the Greenstone and Caples should be fenced off to protect the riparian zones. ‘Its a lot easier protecting the river now rather than trying to fix it later, it’s even worse in Southland!’ He explained the reasons for his concern and proceeded to talk about his Trout Unlimited chapter that raises money with auctions and other events, the proceeds go towards the fisheries.

A1 had fished up the Greenstone river on opening day for the last five years and felt helicopters were a problem, ‘I think helicopters should have the same drop zones so you can be a bit more confident that no-one is going to drop in on you.’

The author only observed five landings during the non-controlled period. Previously, anglers have identified limiting helicopter access as a popular management option (Strickland & Hayes 2003).

A5 has little time for helicopters; 'I'm nearly 80 years old and if i can walk in so can they'

All participants were satisfied with their trip up the Greenstone catchment. The non-resident participants are concerned with the riparian zones where cattle and sheep graze. Helicopter use was rare in the Caples valley but highlighted as an issue in the Greenstone.

Participants were asked to discuss the results of the 2009-10 online survey that suggested 27% of anglers were dissatisfied (23%) or very dissatisfied (4%) with their fishing experience on the Caples river.

A1 believed some people had false expectations, 'the reality is, the Caples river is so accessible you have to be prepared to walk around people and carry on for an hour but there's too many people that aren't prepared to do that!' He went on to say that most dissatisfaction would occur in the lower Caples because access is easier.

A5 visited the Caples on four occasions this season and saw no one on three occasions. He wasn't aware there was a problem in the Caples.

A2 described an occasion when he ran into three groups; 'the only time i've ever been dissatisfied was when I ran into three groups on the lower Caples. I tried to overtake one and came across another group. The same happened when I tried to overtake them so my day was ruined'

G1 felt anglers had false expectations. 'I would say that a lot of them would be dissatisfied because they're not seeing fish. In my experience, the Caples is a river where most of the fish are caught blind. I often hear people say there are no fish or blame other anglers for disturbing the water.'

A5 was met originally on the lower Caples and knew there were other anglers on the river. 'If this was in Montana, the car park would be full and you would be elbow to elbow out here. Twenty years ago Montana was like New Zealand but now its overcrowded. I've been up the Caples four times this year and I've fished the lower Caples every time. That's as far as I can go because my wife can't get past the second pool and this is the first time I've seen anyone.'

Participants seemed surprised by the results but concluded any dissatisfaction would probably occur in the lower Caples. They believed most anglers would walk in a start fishing from the confluence and be reluctant to overtake another angler because of the walk involved. Fish often hide in the Caples river and it was suggested that anglers with little knowledge of the fishery would walk past water that held fish because they couldn't see them, consequently the speed they were covering the water in would increase encounter rate.

Participants were presented with results from the on-site survey conducted up both rivers during the 2010-11 season and asked to comment.

A1 was surprised by the low sample size in the Caples. 'These results would have been different last year, I was up there quite a bit last year and there was definatly more anglers around'.

A3 believed the weather was responsible for the low sample size; 'I was up there last year too and the weather was much better, its been terrible this year'.

A5 mentioned that resident anglers would find it difficult to plan their fishing trip because the rivers were constantly rising in January and February. He felt that resident anglers only have a few windows during the season to go fishing and on most occasions you need at least two or three days, especially if you don't live locally.

A2 was surprised by the way anglers viewed their own angling success. 'I've got friends that go up the Caples and say there's no fish, a lot of people I talk to can't catch fish up there, they probably don't know how to fish the river properly.'

Anglers surveyed on-site (Caples river) were asked to comment on how they rated their own success. The majority of anglers were satisfied with their success (38%). Almost half of the respondents rated their success as either good (23%) or excellent (25%). Anglers who viewed their success as excellent had the highest catch rate of 0.77 fish/hr compared to a lower rate of 0.35 fish/hr experienced by those who viewed their success rate as poor. Only one angler viewed their fishing success as poor. He had been fishing for 7 hours without catching a fish. Not surprisingly, anglers scored their success much higher during the non-controlled period when the average catch rate was 0.52 fish/hr. A lower rate of 0.26 fish/hr was observed during the controlled period.

G1 makes sure his clients have the correct expectations and are prepared to walk further if necessary. 'The first thing I ask my clients via e-mail is, can you walk?', 99% of my clients have been satisfied with their experience on the Caples, I tell them they're not going to see many fish and prepare them to fish blind.'

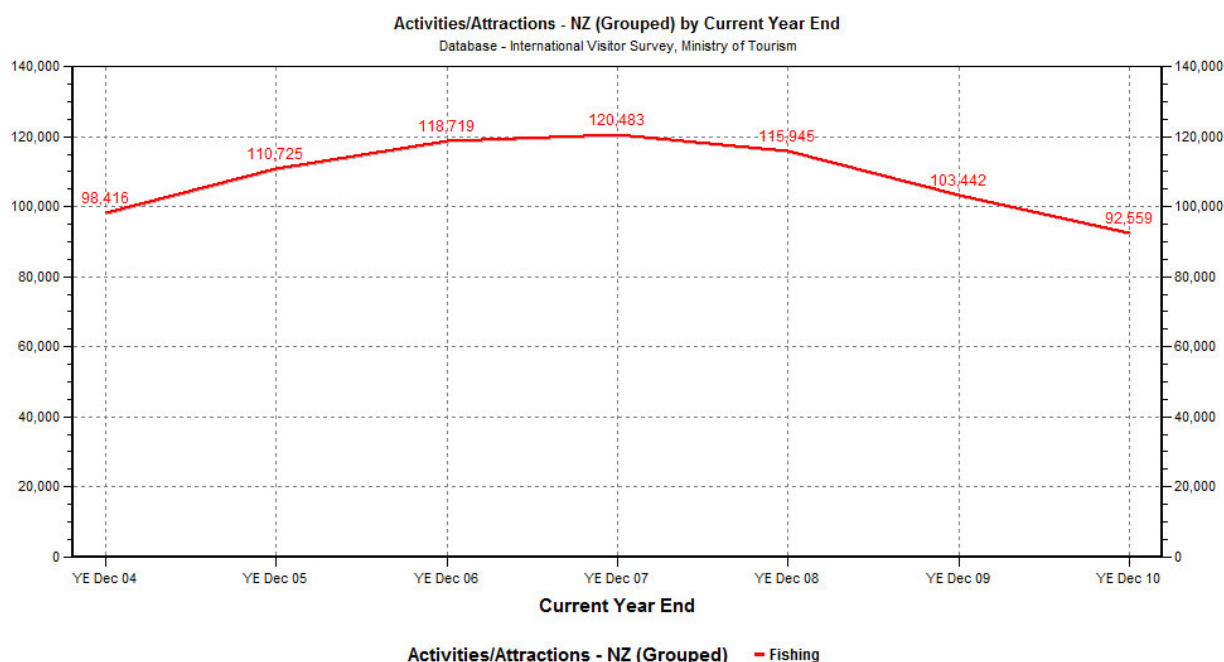
The weather (fig.7) was believed to have restricted the number of anglers on both rivers. Apart from the low sample size most of the results didn't surprise the participants. Angler success was a surprise because the Caples was viewed as being more challenging to fishers.

The participants were asked to comment on noticeable trends from past research, in particular, the increase in overseas visitors (Walrond & Hayes 1999, Strickland & Hayes 2003).

All the participants agreed they had noticed an increase in overseas anglers but many described having these encounters more frequently on the Oreti and Nevis rather than the Caples river. All of the participants found it hard to believe only 19% of the Caples sampled population were from New Zealand.

An international visitor survey has shown a gradual decline of visitors seeking recreational fishing as an activity when they visit New Zealand (fig. 9). The Australian market continues to grow compared to the US Market that shows a general recession in visitor numbers.

Figure 4 International Visitor Survey – Fishing (includes all types of fishing)



G1 described an Austrian he has seen over the years fishing several fisheries whilst travelling and staying in his Mercedes campervan. A1, A2 and G2 described similar stories where they have met anglers whom spend weeks travelling around New Zealand fishing. He then reminisced about the ‘good old days’ during the early 1980’s when ‘you wouldn’t see anyone up there.’

A5 described an American angler who lived near Queenstown and had boasted of fishing the Caples on 16 occasions during the 2010-11 season. ‘People should respect the fishery, if they want to fish every day they should choose a different stream and respect other anglers.’ When the author studied the fishing diaries kept by Angler 5 it was noted that he frequented 12-15 different streams a season. There were eight core streams that were visited regularly. He avoids the Routeburn, Maita and Oreti because he feels there is always somebody there.

All of the resident participants described fishermen from overseas that come over to New Zealand to fish as many rivers as possible. Many of the respondents interviewed on-site had a good knowledge of New Zealand fisheries and enjoy coming over regularly on fly fishing holidays.

Participants were asked to comment on the Controlled Fishery of the Greenstone river.

A1 felt it was a good system and really easy to use, ‘it’s nice to have a stretch of water to yourself that no one else is going to fish’.

G2 felt the CF was very effective and suggested the Controlled Fishery should be increased in duration. ‘It should be earlier so during the NZ holiday time you can have a crack’

During the beginning of the focus group G1 was eager to endorse the CF. He also suggested it should be extended to include other fisheries like the Oreti and Nevis but believed this wouldn't be appreciated by the majority of resident anglers. He supported the idea of starting the CF earlier. 'I would make the CF start in December, it wouldn't bother me at all, leave November free so residents can go up when they like.'

When asked if anglers were attracted to the CF because of the additional publicity it receives all resident anglers had no response, while non resident A3 insisted the reason he first decided to fish the Greenstone was because it was a CF. He stated that 'it must be controlled for a reason, the fishing must be pretty good.'

A1 believed the CF would work on the lower Caples but thought it would be 'nice to leave it the way it is so everyone can have a crack'. He believed some anglers only walked in to fish a couple of pools and they should be free to do that without further restrictions. A3 agreed and felt it was defiantly not required for the upper Caples.

G1 felt the CF wouldn't work on rivers with easy access because residents wouldn't allow it, 'they'd just turn up and say 'stuff this, i'm here and i'm going to fish its really difficult to restrict resident anglers.'

The controlled fishery is viewed favourably by participants, indeed most wanted it to be extended. The guides were keen for it to be implemented on other rivers but believed resident anglers would not be in favour.

Future management of the Greenstone catchment was discussed and participants were asked if they would be prepared to help F&G collect data.

A1 said he already was helping F&G by collecting data on the fish he had caught.

G2 believed that F&G wasn't interested in guides because they didn't make any money from them. He continued to suggest that F&G should charge guides at the start of the season, and recommended \$4000.00 as a good amount. He believed this would eliminate all the guides who give the business a bad name. He was willing to cooperate with OF&G to aid management.

A5 thought it would be fantastic to get involved with F&G and contribute to the running of fisheries in the South Island. I keep a detailed record of my fishing trips and would enjoy the opportunity to help if it means these fisheries are well looked after. He continued to discuss the increase of non-resident licences, agreeing that non-residents should pay more. 'Why not, even if you charged double we'd still pay it, in Montana a resident pays \$20USD and a non-resident pays \$100USD, in Canada there is a special licence that non-residents have to pay, I don't mind paying more as long as the money goes back into the fisheries.'

All participant showed a willingness to work with OF&G if it benefited the fisheries of Otago. A one off payment was suggested for guides and in return their clients would not require a licence but all details of the angler and the fishing trip would be given to F&GO to improve monitoring.

6.2 On-Site Interviews

Anglers were provided with two open questions during the on-site survey (Appendix 2). They were also encouraged to elaborate on any other issues if time permitted.

Question 1: 'To what extent have your expectations been met, and why?'

Greenstone River (Nov-Jan) (n=37)

The majority of anglers felt their experience was as expected (49%), followed by 35% believing that their expectations had been exceeded during their fishing trip up the Greenstone during the non-controlled period. Only 45% of anglers provided a reason to justify their expectations. This included fish abundance (32%), scenery (24%) and sight fishing (8%). Anglers expectations were negatively affected by the lack of fish (16%), spooky fish (12%) or fish that were in poor condition (8%). There were no anglers that believed their experience did not live up to their expectations.

Caples River (Nov-Mar) (n=53)

The majority of anglers felt their expectations had been exceeded (60%), the main reasons influencing this result was scenery (40%), sight fishing (29%) and fish abundance (16%). Anglers who felt their expectations had differed from what they expected (9%, n=5) because they had either seen or caught no fish. No anglers felt that their expectations had not been met.

Question 2: 'Is there anything that detracts from your enjoyment?'

This open ended question produced 'no response' from 87% of respondents on both rivers. The remaining anglers mentioned sheep (6%), lack of fish (2%), anglers fishing ahead of them (2%), air traffic (2%) and spooky fish (2%) as detracting from their overall experience.

6.3 Personal Observations

There were several incidents in which anglers chose to move upstream or downstream to avoid another party. On most occasions there was no communication between parties. Instead, one made a decision and the other was left wondering where they had gone, creating a negative feeling. An average speed of 0.62km/h (n=22) was calculated from parties fishing both rivers using GPS.

Most anglers practiced catch and release (98% Caples, 97% Greenstone) and a slight majority of anglers used a landing net (51% n=90). Photographs were often taken once a fish was landed. On occasion the duration that the fish was out of the water for was cause for concern.

Most anglers interviewed on-site were happy to participate in the survey with one angler who showed signs of inconvenience. Anglers rarely had anything negative to say about either fishery and their non-verbal communication was positive and open. Many made sincere comment's that they were having the 'best fishing experience of their life'.

6.4 The Fishing

The author believes the fishing was good during the 2010-11 season. A seemingly late spawning run affected the condition of much of the catch during the early season with many fish looking slim and some showing signs of scarring due to aggressive behaviour. High rainfall, as previously discussed, caused flooding in both valleys and some sections of both rivers had naturally changed at the beginning of 2011. During this period the fishing became challenging on the Caples river as river flows were high and fish had been displaced or were hiding. When the river did resume to its natural flow the majority of fish were caught fishing 'blind'. The trout population in the Caples river doesn't seem to have changed but their behaviour indicates they are actively hiding under banks and in the faster water.

7. Discussion

Several studies have addressed angler satisfaction in the Greenstone catchment (Walrond 1995, Strickland & Hayes 2004, Walrond & Kroos undated). In general, these studies have indicated that anglers are satisfied with their overall experience, with little indication of any trends of dissatisfaction. Anglers have consistently caught fish, and the breakdown of species and catch-rate has remained very similar. This study shows that angler satisfaction has remained high with anglers enjoying the scenery, sight fishing and solitude. A social carrying capacity determines the number of angler encounters before an angler's satisfaction is negatively affected. The suggested carrying capacity on both rivers has never been exceeded, indeed, this year the average encounter of 0.92 anglers per day on the Caples river is lower than the 1.42 anglers per day recorded in previous studies (Walrond & Kroos undated).

The obvious trend these studies have shown is that overseas anglers are increasing disproportionately to residents. Subsequently, guided fishing trips have also increased. This was confirmed by interviewed participants whom described regular encounters with overseas visitors in the Greenstone catchment. The qualitative component also revealed that many anglers have specialist knowledge of several wilderness or back-country fisheries that they have visited over a number of years. Understanding the behaviour of these anglers has been difficult with many overseas anglers providing inaccurate contact details that make future surveying difficult (Strickland & Hayes 2004). Future management will be heavily influenced by the activities of non-residents. This means that understanding their behaviour and which sub-groups dominate a fishery will be of increasing benefit to managers compared to the nature of the experience which has shown little change (Chipman & Helfrich 2001).

Bryan (1979) describes a simple conceptual framework developed around the idea of 'recreational specialization'. This framework represents a 'continuum of behaviour from the general to the specialized'. Four sub-groups are defined by the angler's fishing orientation, equipment, resource orientation, management philosophy, social setting and leisure orientation. At the high end of the scale the technique specialists often organise their life around fishing and have distinct preferences for their recreational setting. Returning anglers gain a richer cognitive with past experience and will often select one or more resources with similar attributes and fish them frequently (Hammit et al.

2004). Understanding these various sub-groups and the changing patterns of where they are fishing will allow managers to make informed decisions, particularly if new licence options are required.

The reasons behind the consistent decline in resident anglers using the Greenstone catchment are unclear. The weather during the 2010-11 season would have made it difficult for residents to organise a fishing trip around their holiday period with heavy rain falling through the Christmas period and into the new year. In addition, the New Zealand economy entered recession in early 2008 with the full effects of the global financial crisis becoming evident a year later. Consequently, this may have caused a decline in fishing excursions from residents as the New Zealand economy continues to recover. However, it is clear that similar information about the subgroups of resident anglers are required to gain a better understanding of the New Zealand angling population. The New Zealand population is ageing and there is a decreasing proportion of children, which, combined with an ageing workforce will have tremendous management implications in the future. Whole season licence sales in Otago have been consistent over the last two decades (pers comm. N. Watson) but if the population continues to change and license numbers decline, managers will need to target sub-groups in an effort to recruit more resident anglers, particularly the youth.

The reduction of resident anglers in the Greenstone catchment could be the result of coping mechanisms employed by anglers to deal with crowding or conflict. Coping has been defined as a conscious or sub-conscious behaviour that reduces stress (Sutherland 1996). Manning & Valliere (2001) investigated coping behaviours of trampers in and around the Acadia National Park in Maine. They identified displacement, product shift and rationalization as the three components of coping when crowding or conflict occurs. If applied to the Greenstone catchment, displacement suggests that as crowding occurs anglers may seek new resources that are less crowded. Rationalization would involve anglers rating their satisfaction highly when they were actually less than satisfied during their trip, consequently they may not return. Finally, product shift describes a cognitive behaviour where an angler's opinion can change over time. For example, an angler may have viewed the Greenstone catchment as a 'wilderness' fishery during the 1980's because there were rarely any encounters with other anglers but today he may view the fishery in a different way since access has improved and angler use has increased.

If anglers have been displaced it would be prudent for managers to understand where they have gone and which resource(s) they have chosen to source a similar experience from. From a management point of view, resource substitution is important, particularly during the Controlled fishery period when anglers may not be able to book a beat. The author believes the concept of rationalization was not applicable to the Caples this season due to the sincerity of anglers interviewed: they seemed to be genuinely satisfied and this conclusion has been supported by other stakeholders. The idea that anglers may have avoided the Greenstone catchment because of a perceived 'product shift' is possible but further investigation would be required. Evidence from past reports suggests a significant increase in angler use, so particular sub-groups may have chosen to seek a resource where they can have a similar experience to what they previously enjoyed in the Caples.

Fishing guides can currently obtain a blanket concession from the NZPFGA and fish anywhere in the country. A high proportion of the on-site interviews in the Caples valley were with guided parties (34%). Aside from the possibilities already discussed, their activities and resource choices remain a

mystery. However, several guides consistently used the Greenstone catchment. The challenge for fishery management is to build a better relationship with these 'tourism operators' and better understand their clients and resource usage. Again, this could provide useful information on a growing phenomenon on New Zealand fisheries. Implementing a strategy that develops the relationship between fishing guides and F&GO is a real possibility and could promote an improved licensing system.

In summary, the Caples and Greenstone rivers represent the 'jewel in the crown' of Otago fisheries. Future management of these and other backcountry fisheries will largely depend on who is using them. There have been dramatic changes over the last three decades with overseas visitors acquiring an increased knowledge base of our fisheries, and guided trips increasing as foreign anglers look for the ultimate fishing experience. There has been a steady decline of resident anglers using the Greenstone catchment, and further research is required to understand if this trend is happening on other Otago fisheries and other regions. To improve our fisheries we need to use a combination of quantitative and qualitative methods to understand the behaviour of these three groups and encourage stakeholders to work with F&GO.

8. Recommendations

1. Continue the 'controlled fishery' on the Greenstone river and continue to monitor both rivers every five years. The current management system in the Greenstone catchment is working and should continue.
2. Improve monitoring of non-resident anglers.
 - a) The collection of contact details must be improved. To obtain a BCL anglers and guides must supply the correct details or the license should be deemed invalid.
 - b) A similar survey should include research into angler behaviour. As discussed, a better understanding of angler behaviour will provide essential information required to create an effective licensing system. F&GO have a unique opportunity to target anglers who seek a 'backcountry' or 'wilderness experience'.
3. Establish a management system for guides by
 - a) Establishing a register of guides that use the BCL, only guides that are registered can obtain a BCL, and only if contact details are correct. Guides that provide insufficient details of their clients on a regular basis will be taken off the register and a BCL will be unavailable.
 - b) Use BCL data base to establish guide usage of the BCL. In time, managers will be able to establish an average of how much each guide would spend on licence fees each season. This information could be used to set a rate at the beginning of each season, guides would only require a BCL for their clients, a whole season licence would not be necessary.

4. A survey should be conducted in another back-country fishery prior to future monitoring of the Caples and Greenstone. Satisfaction and behaviour of anglers should be targeted. During the survey, a sample of overseas anglers should be contacted prior to their departure from New Zealand and interviewed about their experience(s).

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References

- Bryan, H. 1977. Leisure value systems and recreation specialization: the case of trout fisherman. *Journal of Leisure Research*. 9. 174-187
- Chipman B.D and Helfrich 1998 Recreational Specializations and motivations of Virginia river anglers. *North American Journal of Fisheries Management*. 8:390-398
- Ditton, R.B and Hunt K.M 1996 Demographics, participation, attitudes, management preferences, and trip expenditures of Texas anglers. Department of Wildlife and Fisheries Science.
- Gabriellson R. 2010. Preliminary summary of results for the 2009-2010 satisfaction survey of backcountry licence holders in Otago. Council Report. Unpublished
- Hammit, W.E, Backlund, E.A, Bixler R.D. (2004) Experience use history, place bonding and resource anglers during recreation engagements. *Journal of Leisure Research*. 36:356-378
- Kohler and W. A.Hubert, 1999. Inland fisheries management in North America. American Fisheries Society, Bethesda, Maryland.
- Kroos, T. 1997. Caples river survey 1996-97. Paper presented to the Fish & Game New Zealand workshop. Nelson, July2-3
- Lincoln, YS and Guba, EG 1985 *Naturalistic Inquiry*, Beverly Hills,CA: Sage
- Manning, R. and Valliere W 2001 Coping in outdoor recreation: Causes and consequences of crowding and conflict among community residents. *Journal of Leisure Research* 33: 410-426.
- Nielsen, L. A. 1993 History of inland fisheries management in North America. *North American Journal of Fisheries Management*. 10:3-31
- Sutherland, S. 1996. *The international Dictionary of Psychology*. New York: Crossroad
- Strickland, R.R and Hayes, J.W. 2004. A survey of Greenstone River anglers prior to angling use restrictions. Cawthron Institute. Report No. 770
- Pollock, K.H., Jones C.M., Brown T.L. 1994 Anglers survey methods and their application in fisheries management. American Fisheries Society Special Publication 25. Bethesda, MD
- Tierney, L.D, Unwin, M.J., Rowe, D.K., Graynoth, E. and McDowall, R.M 1982 Submission on the draft inventory of wild and scenic rivers of national importance. Fisheries report no.28. Fisheries research division, Ministry of Agriculture and Fisheries, Christchurch
- Walrond, C. 1995. Wilderness fisheries management – a case study of the social carrying capacity for the Greenstone river. Planning Department, University of Otago, Dunedin.
- Walrond, C. and Kroos T. (undated) The Greenstone and Caples angler surveys. Unpublished paper presented to a Fish & Game seminar on backcountry fisheries.

Walrond, C, Hayes, J. 1999. Social survey of backcountry anglers in the Nelson-Marlborough & Otago. Prepared for Fish & Game New Zealand and New Zealand Professional Fishing Guides Association. Cawthron Report No. 501

Newspapers

Otago Daily Times. Season one to forget 11 February 2011

Web-sites

Ministry of Environment - <http://www.mfe.govt.nz>

Personal Communication

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Rasmus Gabriellson Regional Officer of Otago Fish & Game

Appendix 1

Results during the Greenstone 'non-controlled' period

Figure 5.1 When anglers were interviewed (n=37)

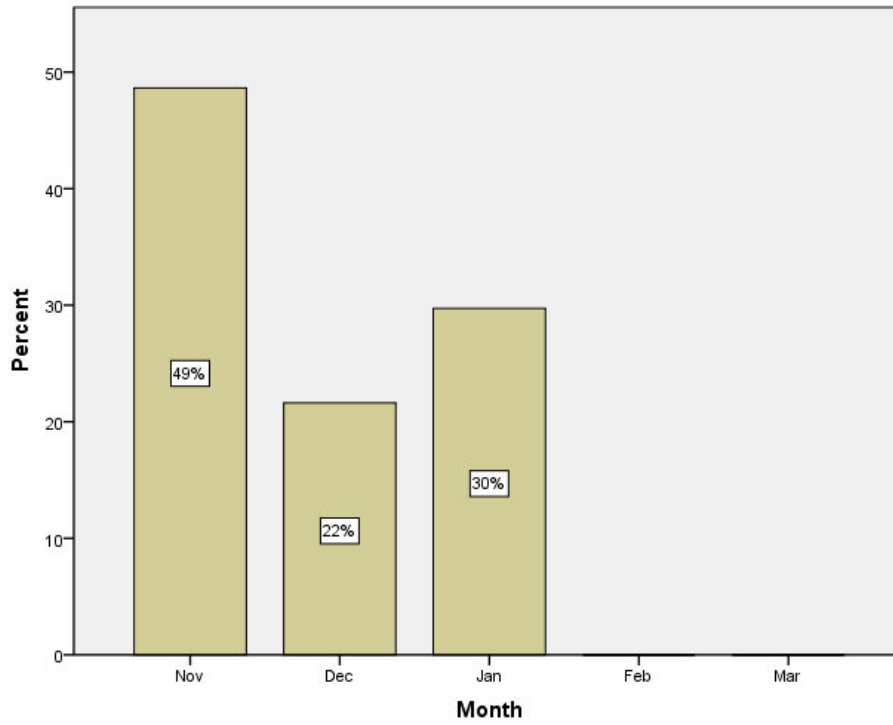


Figure 5.2 Angler Success (n=37)

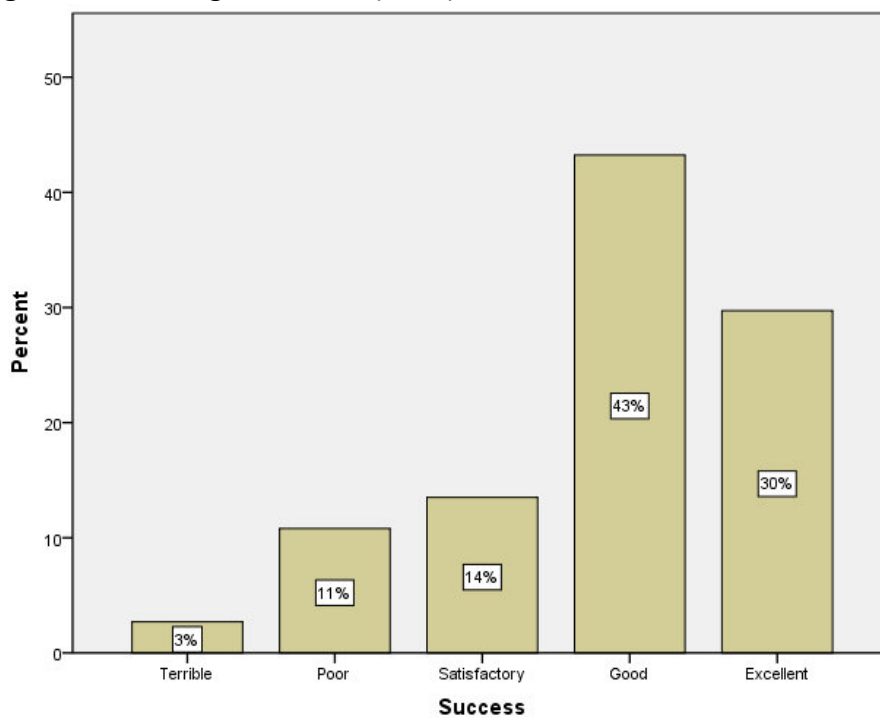


Figure 5.3 Size and Quality of fish

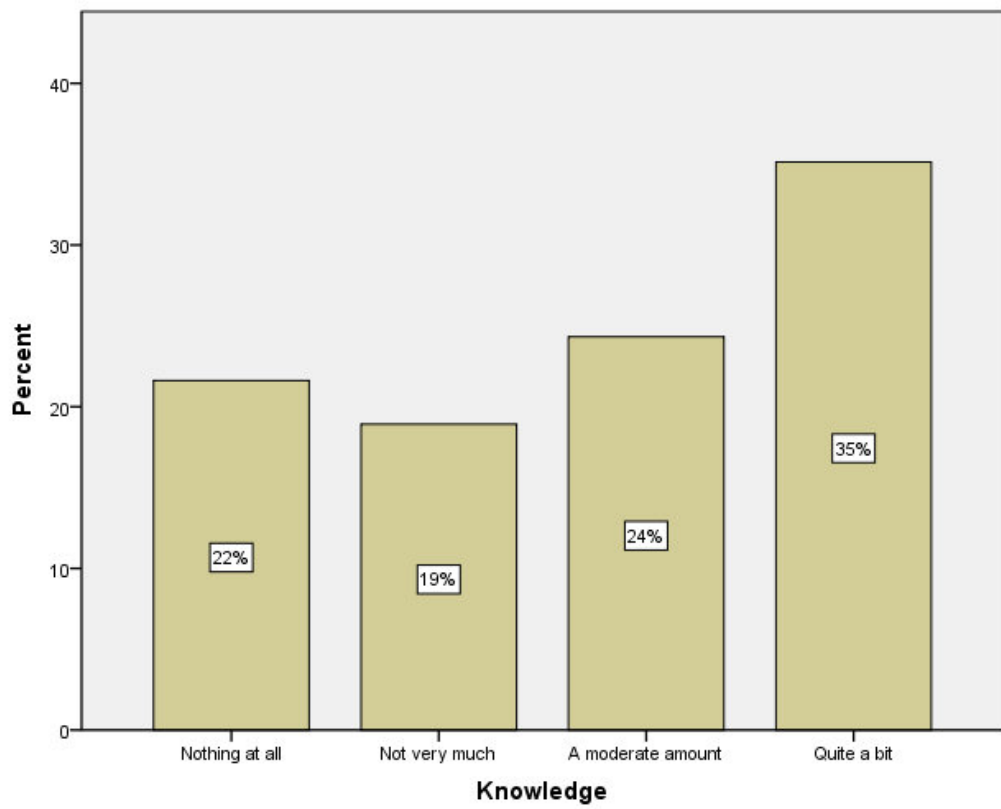
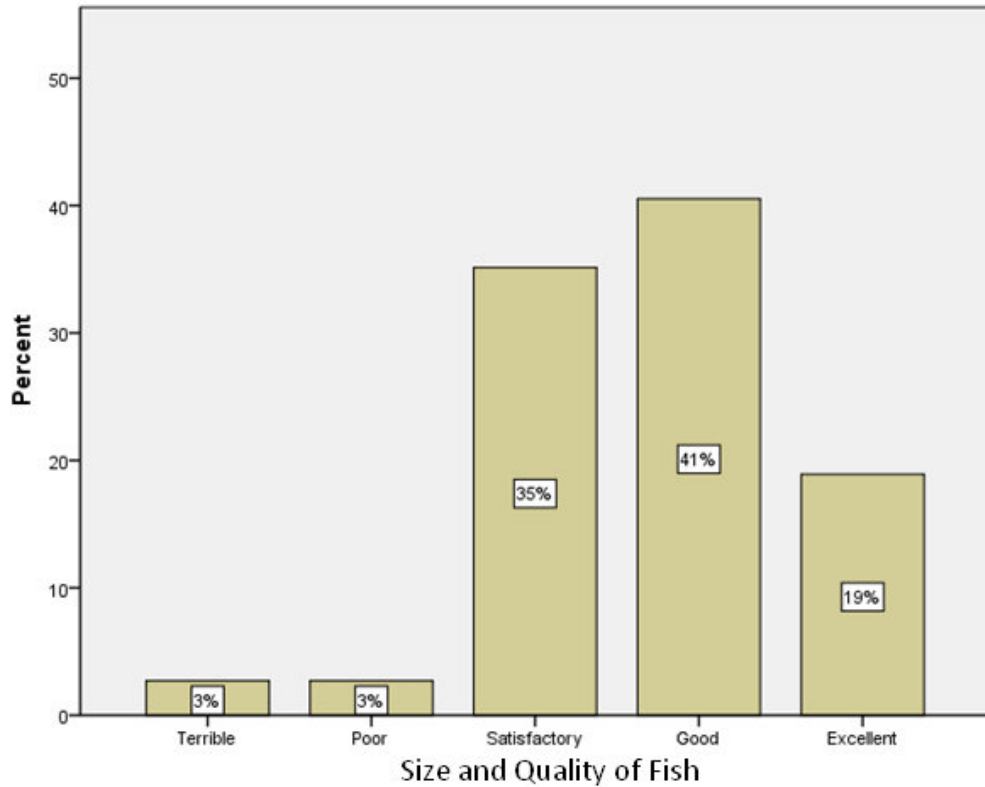


Figure 5.4 Angler Knowledge

Figure 5.5 Angler Expectations

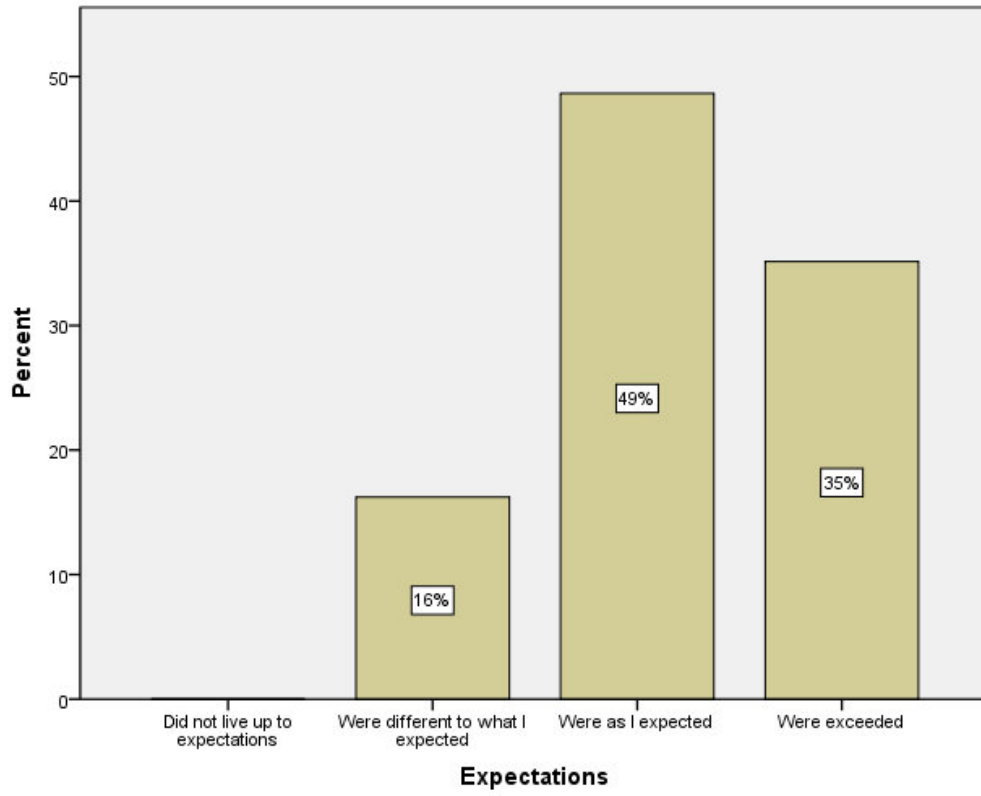


Figure 5.6 Angler Encounter Rate

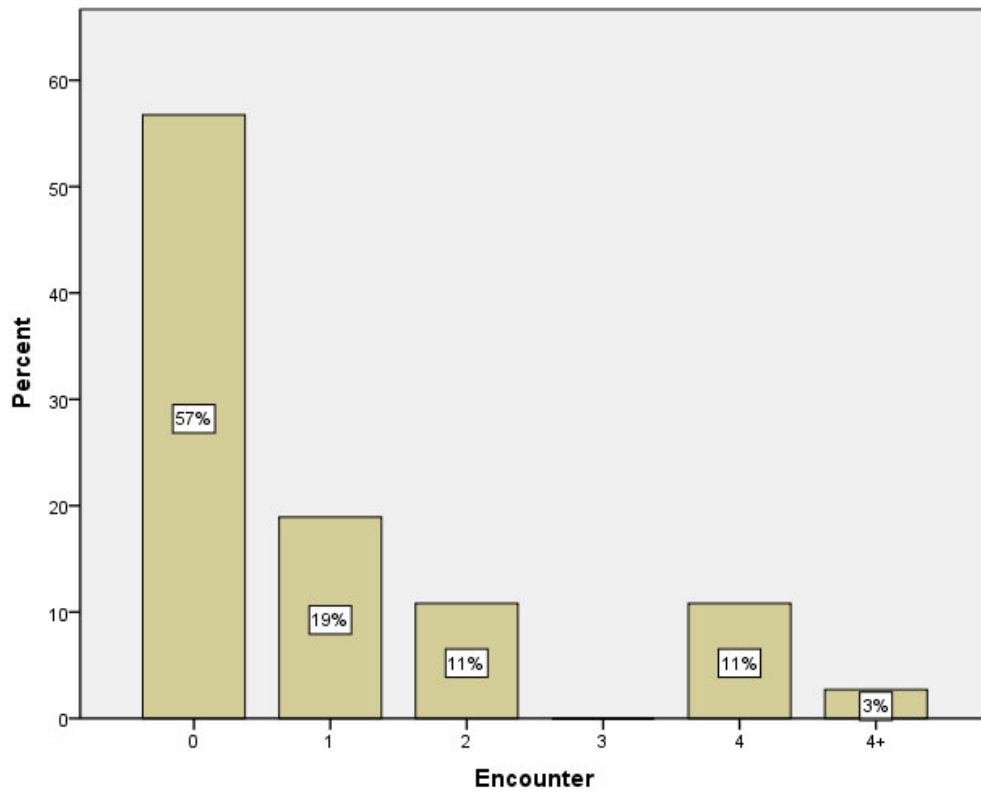


Figure 5.7 Crowding

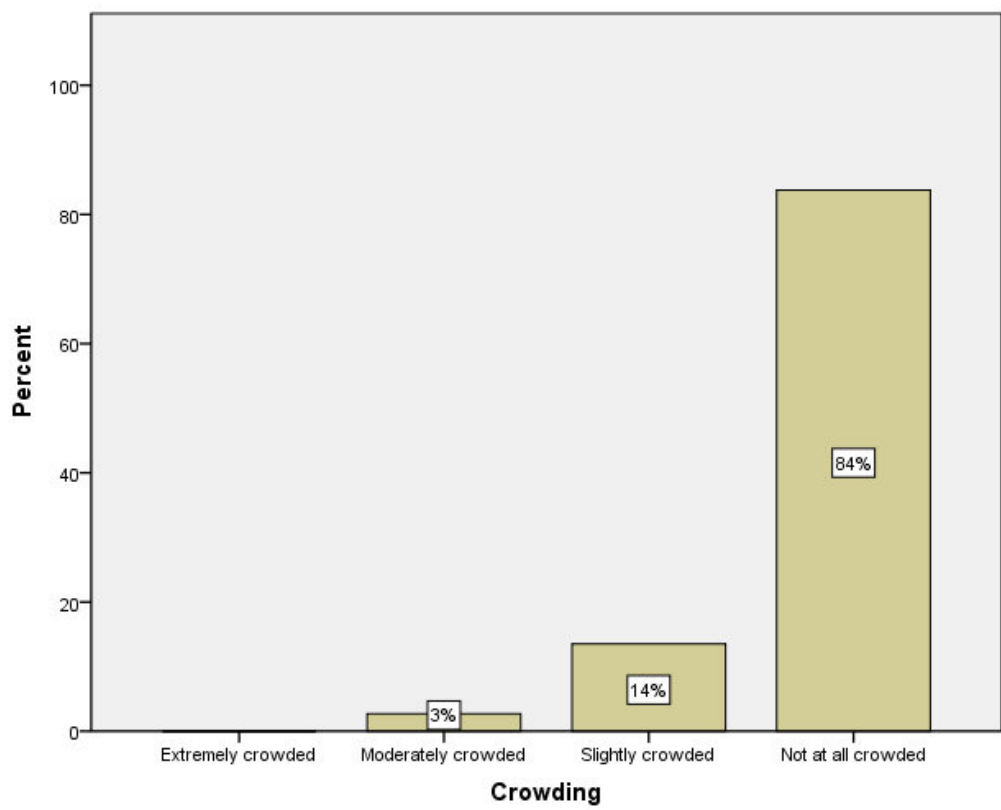
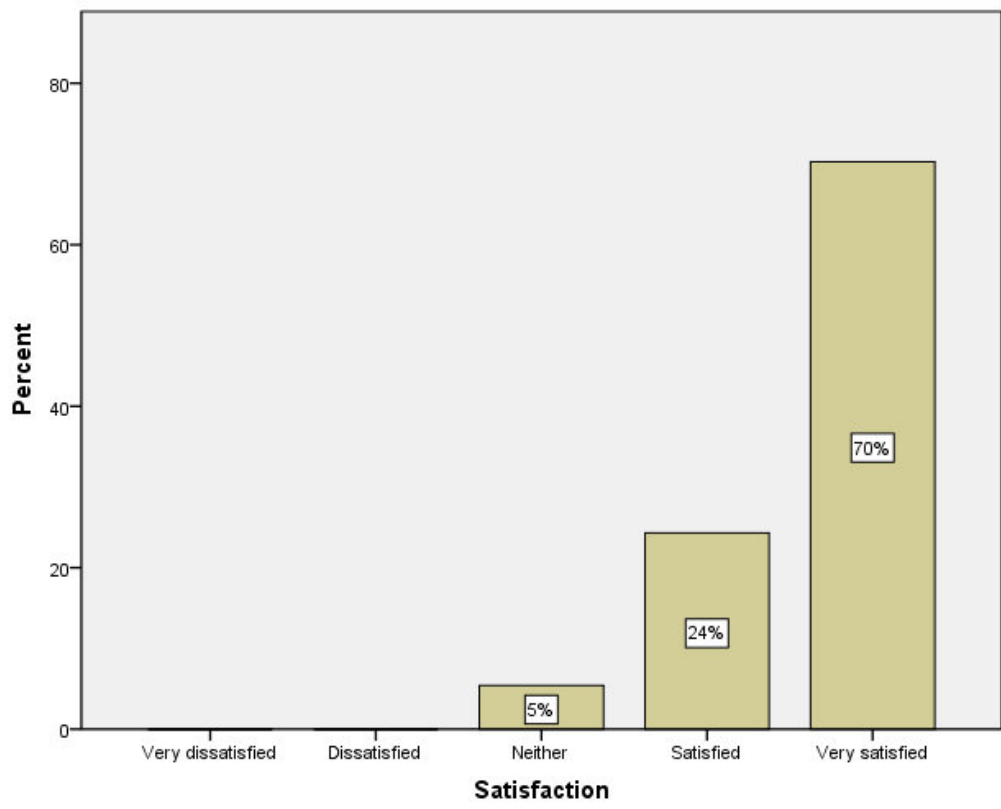


Figure 5.8 Satisfaction



APPENDIX 2 – On-site survey

Date: _____ Time: _____ Interview Number: _____ GPS Mark: _____

Guided Y/N Harvest Y/N Landing Net Y/N Beat: _____

Licence Number: _____ Backcountry License Number: _____

1. How many fish have you caught? Rainbows Browns

2. How many hours have you been fishing for?

3. Overall, how do you rate the size and quality of the fish?

TERRIBLE 1 2 3 4 5 EXCELLENT

4. How satisfied are you with your angling success?

TERRIBLE 1 2 3 4 5 EXCELLENT

5. What level of prior knowledge did you have of the fishery?

NOTHING AT ALL 1 2 3 4 QUITE A BIT

6. To what extent have your expectations been met?

THEY WERE NOT MET 1 2 3 4 THEY WERE EXCEEDED

Why?.....

7. How many anglers did you encounter?

8. How many anglers did you expect to see?

A LOT LESS 1 2 3 4 5 A LOT MORE

9. How many anglers would you have preferred to have seen?

A LOT LESS 1 2 3 4 5 A LOT MORE

10. How crowded do you think the fishery is?

EXTREMELY CROWDED 1 2 3 4 NOT AT ALL

11. Is there anything that detracts from your enjoyment of this fishery? Y/N

.....

12. How satisfied are you with this fishery?

VERY DISATIFIED 1 2 3 4 5 VERY SATISFIED

APPENDIX 3 Focus group summary

What attributes in a fishery do you look for and how many times have you fished

G1 - Hut wardened up there and fished it on opening day last 13 years and haven't seen anyone. I look for a fishery with no anglers and somewhere that hasn't been hammered. The number of fish and solitude is important, as a guide you don't want to see any other anglers – the system up there is great!

A1 – I agree, I look for similar attributes and hungry fish, the Backcountry Rivers hold hungry trout.

A2 – I'm weather dependent, I go where the weather is best, if it looks bad the night before I'll change my plan. I fished quite a number of fisheries this year.

A1- I've probably fished 30 different rivers this year, including the west coast, driving is not an issue but usually 2-3 hours drive for a day fish eg. Shag, Turnbull

G2 – I enjoy fishing by myself but like to fish with a mate so I can share the experience, especially somewhere challenging. I enjoy the solitude, its great to get away from everyday life, the merry go round of life. I fished about 12 different fisheries this season in Southland and Otago.

A3- Ive fished about 15 different fisheries including lakes and rivers. Has to take weather into account because his only days off are generally bad days due to his job. I don't want to see any anglers, I don't go to the Mataura,

Describe your experience up the Greenstone/Upper Caples?

A3 - I like the upper Caples, theres no livestock, great riparian areas, the grass is tall and theres moss right down to the river. I don't want to fish the lower Caples. Back home most of the rivers are fenced off, the lower Caples has been destroyed. Back home they don't allow you to graze livestock on the riparian zones but it seems common over here.

G2 – I came across cattle when I went up the Caples, 3 cows walked across a pool I was about to fish, at least in the upper Caples you won't see any of that and you might even come across a deer.

G1 – Apart from the hut warden up there my clients had a great time. My clients want to write a complaint about his behaviour, he wanted to know if I had a concession. He was rude and arrogant. I usually walk in about an hour before we start fishing in the Caples and don't have many problems. I flew into the Greenstone and saw somebody fishing Beat 2 so we landed in Beat 3 and this guy was right up on us straight away! I said to him, 'you've come up here pretty quickly', and he demanded that he fish above us so we agreed to go back and fish the water he'd missed. My clients weren't to bothered. I've fished up there for years and only had two situations like that.

Do guides communicate with each other prior to trips?

G1 - Oh yeah, that's why I like the booking system.

G2 – You know your not going to run into anyone up there with the booking system

A1 – I think the helicopters should have the same drop zones so you can be a bit more confident that no-one is going to drop on you. I've fished the Greenstone on opening day for the last 5 years and haven't had a problem. There was a group of Aussies (4) that split up and fished all three beats in one day! It can be done, we fished the whole lochy in a day, your just fishing to what you can see. That can happen on the Caples when you don't see that many fish, you tend to cover water a lot faster.

A2 – There seems to be two distinctive groups of fisherman from my point of view. One that likes to catch a lot of fish and the other that will walk past a lot of fish and look for size. When i go out with my grandfather, we'll fish 3km in a day. If I go with a group of my friends we tend to fish a bit quicker.

A3 – I fished from the confluence to about 3km above the mid-Caples hut in a day, i defiantly like to move, I'm a walker.

Lets have a look at the results of an online survey sent to BCL holders last year.

Why do you think people were dissatisfied last season?

A1 – they probably don't understand why they are dissatisfied. People think that because they are going to fish a back-country river they won't see any people. The reality is, its so accessible you have to be prepared to walk around people and carry on for an hour but there's people that aren't prepared to do that and they'll be the ones that are dissatisfied. I bet it was because of people meeting each other on the lower Caples, you have to anticipate that's going to happen.'

G2 – i think it would be because of encounters with other people.

A2 – If your catching fish you don't really see any people. If the weather is windy you'll cover more water and there's a higher chance you'll run into people. If everyones catching fish your all moving at the same pace. The time when i've been dissatisfied i ran into three groups, i tried to overtake one and came a cross another one, the same happened when i went ahead of the next group so my day was pretty much stuffed.

G1 – I would say that a lot of them would be dissatisfied because there not seeing fish, because people come to NZ anticipating sight fishing in clear water. The Caples especially is a river where you catch most of your fish blind in my experience so they are there but you can't see them most of the time. Then they say 'there's no fish in the river' or they blame other anglers for disturbing the water.

Let's have a look at my results.

Reactions

A1 – There's more browns in the Greenstone than I expected.

G1 – I think people expected to see a few more people because of the number of cars in the car park. They see about 15 cars in the car park but when they get up the Caples they only come across one angler.

A1 – these results look like they would have been different from last year. I was up there quite a bit this year and last year and there were definatley more people around.

A3 – is that a weather thing? I was up there last year too and the weather was much better, its been terrible this year.

G1 – who ever said there was a problem up there anyway?

G2 – Tom Kroos started it all but he’s not there anymore.

A2 – it’s weird though. I’ve got friends that go up the Caples and come back and tell me there’s no fish. I go up the next day and catch a few, maybe they just don’t know how to fish the river properly. I’m surprised people are so satisfied with their personal success because a lot of people i talk to can’t catch fish up there. These results show me that people are happy with the overall experience. They enjoy the scenery etc. That’s what i get out of it too, the experience, catching fish is an extra bonus

G1- the first thing I ask my clients on the e-mail is ‘can you walk for an hour and a half’. 99% of my clients are satisfied with the Caples. I’ll walk into the high bank and fish to a couple of runs below the hut. I tell them there not going to see loads of fish and they’re going to have to fish blind. I’ll sometimes walk past pools where the fish have obviously been hammered, you can see it, that’s why they’re stuck down the bottom.

Discuss noticeable trends of studies (increase in Non-Res, increase of guides)

G1 – I’ve noticed an increase in overseas anglers on the Mataura. I came across an Austrian in a big luxury Mercedes 4wd campervan who obviously comes over to fish as many fisheries as possible.

G2 – I’ve come across an American that will thrash the Oreti for two days, move on and thrash the Nevis for to days and so on

A1 – I’ve been up the Nevis a dozen times and never not seen anyone, thers always people trying to catch those big browns.

G1 – The increase in Americans does surprise me but doesn’t worry me. The increase in Aussies does, they’re as annoying as shags. I really don’t see any problems up with theses fisheries

When I discussed the high percentage of guided trips taking place G1 did not wish to discuss due to the current DOC monitoring of guides up the Caples. However, he continued to confirm that he realised DOC had sent a ranger up the Greenstone and Caples to monitor commercial activity but didn’t want to waste too much time talking about it.

G1 – A DOC girl contacted all the guides and wanted to speak to us, well, no-one spoke to her so i don’t know what the poor girl did. I phoned her boss to see what was going on, she wanted to come out for a day’s fishing and see what we did. Her boss said there had been a complaint, but he was just telling me porkies wasn’t he? Our NZPGA concession doesn’t cover the Caples valley, but that’s just one of those silly agreements DOC has with Ngai Tahu, they’d never take you to court. So they perceive there is a problem but they are only doing that to screw us for more money. They want to introduce a separate concession for the Caples and Greenstone and charge us more money, well i

just tell them I fish up the Greenstone, do they think i'm an idiot! That's what annoyed me about the hut warden, he asked me, 'where's your concession', I just walked away from him, he's not even a warranted officer.

The author discovered a complaint had been made by a member of the NZFGA. A guide had tried to join the organisation and obtain the blanket concession but was refused due to a personality clash with a NZPGA member. The member of the NZFGA then informed DOC that there could be a guide fishing up the Greenstone catchment illegally. DOC where then forced to address the complaint, it would seem the NZPGA member thought their concession covered the Caples and Greenstone.

A1 – I think you'll find that most of the dissatisfaction will occur in the lower reaches where access is easier.

What do you think of the controlled fishery up the Greenstone?

A1 – I think its a good system, its nice to have a stretch of water to yourself that no one else is going to fish.

G2 – I think it is very effective. I don't see any reason why it shouldn't be increased. It should be earlier so during the NZ holiday time you can get a guaranteed crack at some water. I'd like to see it start during mid-January.

G1 – I would make the controlled fishery start in December, it wouldn't bother me at all. Leave November free so kiwi's can go up when they like.

A1 – People don't realise how easy it is to make a booking

A2 – I know quite a few fisherman that don't have computers. I also know that having to use one to make a booking can be a hassle for people like my father.

Having a 'controlled fishery' could potentially attract people to the Greenstone river due to the attention it would receive. When I suggested this to the group, A3 quickly responded.

A3 - I was attracted to the fishery because it was 'controlled' – it must be 'controlled' for a reason, the fishing must be pretty good!

G1 – I think the system is great, I would have beats on the Oreti and Nevis, actually i'd have them on a lot of rivers but kiwi's wouldn't be too happy about that – they would just tell you to get stuffed. You've got to walk for 4 hours or get a helicopter into the Greenstone so there is a lack of alternatives when you get there so the beat system works. It wouldn't work on a river with easy access.

What about the Lower Caples? Does anyone think a controlled fishery would work there?

A1 – I think it would work but its nice to leave it the way it is so everyone can have a crack. A lot of them are just fishing a couple of pools.

A3 – You certainly don't need it up in the upper Caples, when i was up there I only saw people on the lower Caples.

Past research has indicated that some anglers have anti-guide or anti-helicopter sentiment, how would you improve the relationship between guides and non-guides?

G2 – I think its the guides responsibility to sort out any issues on the river.

A1 – I think guides have got to be upfront and honest about what sort of day they've had. For example, if I know they've had a cracker day let us know so we can go somewhere else. You get the feeling sometimes they don't want to give too much away.

A3 – I don't want to see anybody, i don't want to be around anybody when i'm fishing and I've never come across a guide when i've been fishing. Back home we restrict some sections of rivers for certain activities, for example, there is a river where jet boaters have been allocated a section of river and rafters have been given another and it seems to work very well.

G1 – It's a tough one because it depends on what kind of day your having, for example, if your having a pretty tough day and you see an angler charging up to you that can really annoy you. If you've had a good day it becomes easier to deal with other people you encounter. I've only had 3 incidents where anglers have become aggressive. If I see anyone when I walk into the Caples I tell my clients we have to keep going and give these guys room. I use my binoculars to determine how they're fishing, I try to gauge if there covering all the water or just fishing the likely spots, that allows me to understand how fast they are fishing and how much room I should give them. But i've had very few people walk up on me, its the kind of thing you might experience more on the Mataura.

A2 – I don't really have a set routine to deal with other anglers. I was always taught how to approach anglers in the correct manner by my grandfather, he would always say 'you've got every right to be there and you have no right to be there'

G2- I think you have to first of all ask them if they want to join you and fish pool for pool. A calm approach and conversation with the angler is all that is required.

A1 – I like to sit down and watch them fish, if they're hooking into fish well i'm going to go above them for a good bit.

G1 – A lot of people are jealous of guides cause they think we catch all the fish. Most of my clients aren't good fisherman, they can't cast, line manage or mend.

Would you be prepared to help F&G manage these fisheries, afterall you are all shareholders?

A1 – I already do, I record the length and weight of fish and pass that data on to F&G.

G1 – I was told years ago that F&G weren't interested in guides because they didn't make any money out of them.

At this point A3, the non-resident angler can't believe that F&G don't make any money from guides.

G1 – I think F&G should charge guides at the beginning of the season a certain amount and allow our clients to fish for free, this would soon get rid of all the guides that give the business a bad name. Why don't you charge us \$4000NZD at the start of the year?

