

## 2011 Louise Lake Angler Harvest Survey

### Preliminary Results

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We conducted an angler harvest survey (creel) on Louise (locally known as Jackson) Lake over the summer of 2011. Anglers were interviewed on 27 days between May 20 (prior to ice out) and September 7, with sampling weighted towards the months of May and June.

We used access survey methods, similar to surveys done on the lake in 1997 and 2004. In 2004 we found extremely high angler effort on Louise Lake. That year, angler success for lake trout was very low, yet harvest levels were well above optimal sustainable levels for maintaining quality angling.

The 2004 survey report (Angler Harvest Survey: McIntyre Creek 2004) is available online at [www.env.gov.yk.ca/publications-maps/plansreports.php](http://www.env.gov.yk.ca/publications-maps/plansreports.php) for readers wanting details or to make comparisons.

### Key Findings

- Anglers spent 757 hours fishing over the survey period, which equates to 11.6 hours/hectare, a very high value for Yukon lakes. This effort was about half what we found in 2004.
- Most angling effort was on weekends in May/June and July.
- Most anglers fished from shore (73%), while 19% used motorboats.
- Poor weather over the summer was reported to have had a negative effect on fishing effort on Louise Lake.
- Arctic grayling were the most heavily targeted and caught fish, followed by lake trout and rainbow trout (see Table 1).
- Lake trout were fished for in all periods, but only caught in late May/June. Angler success rates were lower than in 2004.
- We estimate that in 2011 anglers caught
  - 351 Arctic grayling and kept 31 (in 2004 caught 649, kept 135)
  - 14 lake trout and kept 14 (in 2004 caught 69, kept 52)
  - 5 rainbow trout and kept 5 (in 2004 caught 170, kept 22)

- Based on the average weight of 2 lake trout sampled, we estimate anglers harvested 8 kg of lake trout over summer 2011. (Note that this does not include harvest that may occur at other times of the year). This value is slightly less than our estimated lake trout optimal sustainable yield level of 10 kg for Louise Lake.
- An estimated 7 kg of Arctic grayling and 2 kg of rainbow trout were also harvested over the summer.

**Table 1.** Estimated catch, harvest, and catch per hour of angling (CPUE), Louise Lake 2011.

	<b># Caught</b>	<b># Kept</b>	<b>Retention Rate</b>	<b>CPUE</b>
Arctic grayling	351	31	9%	0.46
Lake trout	14	14	100%	0.02
Rainbow trout	5	5	100%	0.01