

# RAT RIVER CHARR FISHING PLAN



March 1998

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This plan was prepared by the Rat River Charr Fishing Plan Working Group, on behalf of the Aklavik Renewable Resource Council (RRC), the Fort McPherson Renewable Resource Council (RRC), and the Aklavik Hunters and Trappers Committee (HTC). Support was provided by the Department of Fisheries and Oceans (DFO), the Gwich'in Renewable Resource Board (GRRB) and the Fisheries Joint Management Committee (FJMC).

## **GOALS OF THIS FISHING PLAN**

1. To maintain a healthy stock of charr in the Rat River system
2. To maintain and manage the Rat River charr fishery for the continued use and enjoyment by the residents of Aklavik and Fort McPherson
3. To encourage cooperation among all users to ensure sound management of the Rat River charr stock

## **BACKGROUND ABOUT THE PLAN**

The need for this Plan was first identified at the first GRRB Rat

River Charr Workshop, held in Aklavik on January 25, 1995. In June 1995, January 1996, and March 1996, delegates from the Aklavik RRC, Aklavik HTC and Fort McPherson RRC met to prepare the first edition of the Fishing Plan. It was finished and signed in Aklavik, NT, on June 14, 1996. The Plan is revisited and updated annually. The second edition of the Plan was signed on March 22, 1997.

This third edition of the Fishing Plan was signed by the Working Group in Aklavik, NT, on March 14, 1998. The Plan will continue to be revised and updated as necessary, and as new information is available on the stock and the fishery. The Plan represents consensus of all signatories to the Plan, and belongs to the communities and the users of the Rat River charr resource.



**ABOUT THE RAT RIVER**

The Rat River flows from the Richardson Mountains, following a 130 km (80 miles) course before entering the Husky Channel of the Mackenzie River 35 km (22 miles) to the northwest of Fort McPherson, NWT. One tributary, Fish Creek, has many deep pools and is fed by one or more year-round springs. Water temperatures at the spring source area are in the 4-5 C° range, and this maintains some open water areas used by the charr for overwintering.

**HOW MANY CHARR ARE THERE?**

The size of the Rat River charr stock, estimated through mark-recapture during the 1989 upstream migration, was 11,200 (95% CI 8,532 - 15,020). A second (Petersen) estimate, done at the

Fish Hole in that same year, yielded a similar estimate (10,920, 95% CI 7,690 - 16,200).

The size of the stock was most recently estimated using 1996 recapture data from tags applied to charr at the Fish Hole in fall 1995. The 1996 estimate was 9,677 (95% CI 8,195- 11, 159). These three estimates are all within each other's confidence regions, and therefore no major changes in the size of the stock were detected for the period between 1989 and 1996.

More tags were applied in fall 1997 and are available for recapture in the summer 1998 fishery. Therefore there will be another estimate of stock size available after the 1998 fishery recaptures of those tags are summarized.

The ratio of silvers (resting year charr) to spawners (reproductive year "red" charr) was found to favour silvers (about 3.5 to 1) during the upstream migration. The ratio of females to males favours females 4 to 1.

**WHERE DO THEY GO?**

Rat River charr that were tagged in 1989 and in 1995 were captured only at the following locations: Shingle Point, Aklavik, Big Eddy,

Husky Channel, mouth of Rat River and Destruction City. No Rat River tagged fish have been caught at other locations, suggesting that the Rat River charr don't go up other streams or mix with other charr stocks, except in the ocean (e.g., Shingle Point).

### HOW MANY ARE CAUGHT IN THE FISHERIES?

In each year between 1973 and 1993, the harvest of Rat River charr was estimated to fall within the range from 1600 - 2600 charr per year. This includes some catches from the Fish Hole in the early 1970's. A small (e.g. <900 kg) commercial fishery was closed in 1985.

In 1994, the total estimated subsistence harvest was 2,700, calculated by adding up: (1) a portion (50%) of the Inuvialuit catch at Shingle Point, (2) all charr caught at the Aklavik townsite by both Inuvialuit and Gwich'in fishermen, (3) all charr caught at Husky Channel and Big Eddy, (4) and all charr caught at the mouth of the Rat River and at Destruction City. In 1995, the harvest was lower, with total catches from all of the above locations totalling 2,251. In 1996, the harvest of Rat River charr from all locations was estimated at

3,104. In 1997, the harvest of Rat River charr was estimated at 3,365 charr.

### 1. RECOMMENDED SAFE HARVEST LEVEL

- a) Given the most recent estimate of stock size that we have at this time (9,677), and DFO's suggested safe removal rate of 10-15%, the safe harvest level for this stock may be on the order of 1000 to 1500 charr per year. This level needs to be refined, however, as the safe removal rate is based on a study of slower-growing Arctic charr in the central Arctic. Rat River charr are smaller and grow more quickly than their counterparts to the east. The lack of change in stock size estimates during the period from 1989-1996 provides some evidence that the stock may be able to withstand removals beyond the 10-15% suggested for the eastern form of Arctic charr.
- b) Until more information or indicators are available, the signatories of this Plan agree to an interim harvest guideline of 2000 charr per

year for this fishery.

To achieve this level of harvest, the signatories of this Plan recommend that all persons fishing for Rat River charr cut back their own harvest in the amount of 30% from their 1997 level. That is, if 30 were caught in 1997, then only 20 should be caught in 1998. If everyone follows this recommendation, then the total harvest of Rat River charr should end up within the suggested limit of 2000. People should take only what they need for their own subsistence purposes.

- c) Community fishermen feel that the amount of charr that is consumed by bears, otters or other wildlife may have contributed to the decline in the stock. The amount of charr eaten by predators could be estimated.

## 2. RECOMMENDED FISHING GEAR AND METHODS

- a) Use 4" or 4.5" mesh nets.
- b) Nets should be no deeper than 30 mesh deep.
- c) There should be no more

than three (3) nets set per household.

- d) RRC's and HTC's are encouraged to set stricter guidelines (by-laws) for net check intervals, such as twice per day during the peak of the run (weather permitting).
- e) Fishermen remaining at the fishery throughout the season should be given priority in the selection of fishing sites.
- f) Options for a net exchange should continue to be pursued.

## 3. ALLOCATION OF HARVEST

- a) In the event that harvest restrictions are necessary, it is the responsibility of the GRRB, FJMC and DFO to make recommendations as to what the total allowable harvest level would be.
- b) Signatories to this Plan are responsible for reaching an agreement as to how this total allowable harvest would be divided among the claim areas and the communities.
- c) Finally, it would be the

responsibility of the respective RRC's and HTC to divide their own allocation among their own membership.

#### 4. TYPES OF FISHERIES

- a) Subsistence use: Consistent with the Inuvialuit Final Agreement and Gwich'in Comprehensive Land Claim Agreement, and subject to conservation, the first priority for all fishing under this Plan will be subsistence use.
- b) Other uses: Other fisheries may be considered in the future by the communities, so long as these uses do not compromise the stock and all subsistence needs are met first.
- c) Commercial sale of Rat River charr to non-aboriginal persons is currently illegal.

#### 5. STORAGE & PROCESSING

- a) Nets must be checked every 30 hours in the summer months (DFO Regulation; see Appendix).
- c) All catches must be stored and processed as to minimize

wastage (DFO Regulation; see Appendix). The amount of charr caught and stored should be intended for the needs and benefit of the family doing the fishing.



#### 6. PROTECTION OF FISH HOLE

- a) The Fish Hole at Fish Creek will be protected from disturbance or degradation by the Gwich'in Co-management Boards in place for this purpose (e.g., RRC's, GRRB, Land and Water Board).
- b) The Rat River Charr Fishing Plan Working Group (WG) meets at least once per year. The WG should be consulted and involved in the decision process prior to any developments being approved for the Rat River watershed.



## 7. RESEARCH & MONITORING

- a) DFO, FJMC and the GRRB will provide information on the studies that are being conducted to the communities, prior to, during and after any and all projects are completed. RRC's and HTC's will review and approve project proposals before the projects proceed. Local information and expertise will be used in the design, delivery and interpretation of all projects concerning Rat River charr.
- b) Persons fishing for Rat River charr will provide the charr monitors and the Gwich'in Harvest Study or Inuvialuit Harvest Study field workers with accurate information about their catches. When requested and practical, persons fishing for Rat River charr will make their catches available for measuring and sampling by the charr monitors.
- c) Fishermen will return any and all tags recovered from charr and also provide DFO or the charr monitor with accurate information about when and where any such tagged fish were caught. DFO and the charr monitors will ensure that accurate records are kept about all returned tags, and that rewards are distributed promptly.
- d) Local knowledge about Rat River charr and their habitats should be obtained through a community knowledge study, and thus be available for present management studies and activities and for future generations.

## 8. LIFE OF THIS PLAN

- a) This third version of the Plan will be in effect for one year, after which time it will be reviewed again in 1999, prior to the fishing season. The interval for reviewing the Plan after 1999 will be decided in 1999.

On behalf of the Aklavik RRC, Ft. McPherson RRC, Aklavik HTC, on 14 March 1998, at Aklavik, NT, we are signatories to this agreement effective from this date to March 31, 1999.

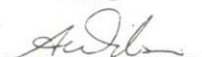
Aklavik RRC

Ft. McPherson  
RRC

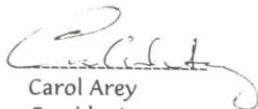
Aklavik HTC



Joe Benoit  
President



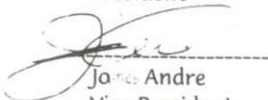
Abe Wilson  
President



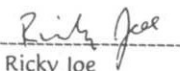
Carol Arey  
President



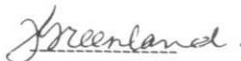
Dale Semple  
Vice-President



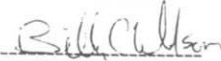
James Andre  
Vice-President



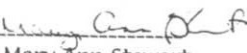
Ricky Joe  
Vice-President



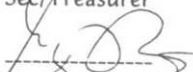
Fanny Greenland  
Sec/Treasurer



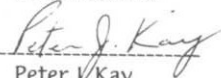
Billy Wilson  
Sec/Treasurer



Mary Ann Stewart  
Sec/Treasurer



George Nerysoo  
Councillor



Peter J. Kay  
Councillor



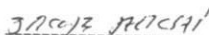
Flora Elanik  
Director



James McDonald Sr.  
Councillor



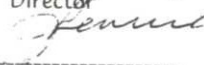
Woody Elias  
Councillor



Jacob Archie  
Director



Charlie Snowshoe  
Councillor



Jerry Lennie  
Director

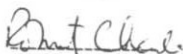


Alice Vittrekwa  
Councillor



Danny C. Gordon  
Director

Witnesses:



Robert Charlie, GRRB



Billy Day, FJMC



Ron Allen, DFO

**Appendix. DFO NWT Fishery Regulations that apply to subsistence fisheries for Rat River charr:**

- 1) Nets must be checked every 30 hours in the summer (May 16 to October 31) and every 72 hours in the winter (November 1 to May 15).
- 2) At least one third of a stream must be left open to allow fish to pass.
- 3) Indian, Inuk or persons of mixed blood, may fish without a license by angling or gillnets, set lines, spears, snares or dip nets, for food for himself or for dogs.
- 4) No person shall fish by snagging.
- 5) No person shall dispose of dead fish or any remains or offal of fish by leaving it in the water or on the ice over the water.
- 6) Fish that is suitable for food shall not be wasted.
- 7) All nets must have the name of the net owner clearly marked.
- 8) Fishery Officers may determine or prescribe the distance between each and every fishery and shall forthwith remove any fishing apparatus or material that the owner neglects or refuses to remove.