## Appendix H-2012: Nisga'a Annual Wildlife Management Plan for 2012–2013 *Final(Revised - Jan 24/13)*

#### **Basis and Application**

The Nisga'a Annual Wildlife Management Plan is a legal document as prescribed in the Nisga'a Fisheries and Wildlife Act and in the Nisga'a Wildlife Regulations. These documents are based on provisions of the Nisga'a Final Agreement. In case of any disagreement between the content of this plan and any of the aforementioned documents, the aforementioned document(s) shall prevail.

This plan applies to Nisga'a citizens harvesting wildlife in the Nass Wildlife Area (see Figure H-2012-1). Management of harvests by non-Nisga'a hunters is the responsibility of British Columbia and Canada.

The content of this plan is consistent with agreements reached by the Nass Wildlife Committee (NWC) on 2 November 2011.

## Summary of the 2012–13 Wildlife Management Plan

- All Nisga'a hunters who hunt in the NWA must comply with the Nisga'a Fisheries and Wildlife Act, Nisga'a Wildlife Regulations, and the Nisga'a Annual Wildlife Management Plan.
- All Nisga'a hunters must carry a Nisga'a Hunting Licence while engaged in hunting activities.
- Legal (and some illegal) harvest methods are defined in the *Nisga'a Wildlife Regulations*.
- Nisga'a hunters can hunt anywhere in the NWA that is opened for hunting by the Director of Fisheries and Wildlife or that is not closed by the province of British Columbia due to concerns pertaining to:

(i) conservation, or (ii) public health or safety.

- A permit is required to harvest Designated Species in the NWA.
- Designated Species are Moose, Mountain Goat, and Grizzly Bear.
- Due to conservation concerns, and pending the outcome of a detailed review in a Moose Recovery Plan, it is recommended that the Moose harvest in the NWA be reduced. Accordingly, a Nisga'a allocation of 25 animals, all of which are to be bulls.
- The proposed Nisga'a allocation of Mountain Goat is 33 animals.
- The proposed Nisga'a allocation of Grizzly Bear is seven animals of which no more than two can be female.
- Hunters are required to submit biological samples of Designated Species for management purposes.
- Angling guiding management plans are still being developed.

#### Nisga'a Legislation

Nisga'a hunters are required to comply with the Nisga'a Final Agreement, Nisga'a Fisheries and Wildlife Act, Nisga'a Wildlife Regulations, and this Annual Wildlife Management Plan. Violators are subject to charges and prosecution.

#### Identification of Nisga'a Harvesters

According to the *Nisga'a Fisheries and Wildlife Act*, Nisga'a citizens who intend to harvest wildlife in the Nass Wildlife Area (NWA) must obtain a Nisga'a Hunting Licence from Nisga'a Lisims Government for a \$25.00 fee. The licence must be carried by the hunter when actively engaged in hunting activities. The harvest licence confirms the individual's right to harvest wildlife in the NWA according to the terms of the *Nisga'a Final Agreement* and protects Nisga'a rights to hunt from abuse by unauthorized hunters.

When applying for a hunting licence, those hunters who held a licence the previous year may be required to provide accurate information on hunting activities and animals harvested during the previous year. This information will be made available to the Director of Fish and Wildlife and is a component of harvest monitoring required under the terms of applicable legislation.

#### **Harvest Methods**

Modern and traditional methods of harvesting wildlife will continue to be used by Nisga'a hunters to harvest wildlife in the NWA for food, social, and ceremonial purposes. Harvest methods used by Nisga'a hunters to harvest wildlife in the NWA may differ from those permitted under federal or provincial laws. Complete information on harvest methods is provided in the *Nisga'a Wildlife Regulations*.

#### **Regulation of the Harvest**

The Nisga'a Final Agreement allows all Nisga'a hunters to harvest wildlife from anywhere in the Nass Wildlife Area that is open for hunting. Under the Nisga'a Final Agreement, the harvest of wildlife will be monitored and regulated by the Director of Fisheries and Wildlife.

Hunting is permitted on cultivated land, Crown land that is subject to a grazing lease while the land is occupied by livestock, and on enclosed land as defined in the B.C. *Trespass Act* if the hunter has consent of the owner, lessee, or occupier of that land. In addition, the B.C. *Wildlife Act* and its regulations apply with respect to hunting closure and firearms restrictions to those areas in the NWA where hunting is restricted or closed for (i) conservation concerns, or (ii) public health or safety reasons.

Nisga'a hunters that harvest Designated Species (Moose, Grizzly Bear, and Mountain Goat) must have a Designated Species permit authorizing the hunting of that species. The Director of Fisheries and Wildlife will consider the Nisga'a allocation for each Designated Species, will determine the number of permits to be issued, may specify the sex of the animals to be harvested and the locations from which they may be harvested.

With the exception of Moose permits, permits are available on a first-come-firstserved basis from the Director of Fisheries and Wildlife, Nisga'a Lisims Government in Gitlakdamix. Permits are valid for the period indicated on the permit. To obtain a Moose permit from the allocation available, Nisga'a hunters must submit their names to the Director of Fisheries and Wildlife no later than 30 September of each year. If the number of names submitted exceeds the allocation then a draw will be made to select Nisga'a hunters no later that 15 October of each year.

The Director of Fisheries and Wildlife will specify the term of each Designated Species permit issued. When the number of harvests of each Designated Species reported to the Director of Fisheries and Wildlife reaches the Nisga'a allocation for that species or reaches the permitted number of kills of a particular sex of that species, the Director of Fisheries and Wildlife will cancel the outstanding permits for the harvest of that species or for the harvest of a particular sex of that species, as the case may be.

The Director of Fisheries and Wildlife may cancel any outstanding permits for Designated Species or restrict the harvest of non-Designated Species at any time. Notice of cancellation of permits will be delivered to the existing permit holders. Hunters will be notified of any restrictions on non-Designated Species by one of the following methods: posting, transmission by electronic mail, publishing under Nisga'a laws, or by written or oral notice.

Because it is mandatory that the Nisga'a Lisims Government ensure compliance with applicable laws and this plan, enforcement of Nisga'a harvest regulations will be by persons authorized to enforce federal, provincial or Nisga'a laws in respect of wildlife or migratory birds in British Columbia. It is envisioned that Nisga'a conservation officers will take over the lead role in enforcement when an adequate number of officers is trained and employed.

## **Designated Species**

The *Nisga'a Final Agreement* identified Moose, Mountain Goat, and Grizzly Bear as Designated Species in the NWA. These species remain as Designated Species and no others have been so designated to date.

As this plan concerns only Designated Species, management of Nisga'a harvests of wildlife other than Designated Species will be in accordance with the Nisga'a Final Agreement, the Nisga'a Fisheries and Wildlife Act, and Nisga'a Wildlife Regulations.

## Moose

### Conservation Status

Moose are the most important wildlife species harvested in the NWA by Nisga'a for food. The most recent (February 2011) population survey indicated that conservation efforts initiated in 2007 (i.e., a reduced, bulls-only harvest) have not been successful in rebuilding the Moose population in the NWA (see Figure H-2012-2). At present, the estimated Moose population (517 animals) remains well below optimal population size. an Consequently, there is a need to develop a Moose Recovery Plan with the goal of returning the population to a level that will support a sustainable harvest level more in keeping with the harvest demands placed on this species.

The Director of Fish and Wildlife recommends further reducing the Moose harvest until the results of the Moose Recovery Plan suggest that an increased harvest is sustainable. The Province has recommended suspending the provincially licenced moose harvest in the NWA for the 2012–14 regulation cycle.

## Moose Recovery Plan

It is proposed that a Moose Recovery Plan be drafted with the goal of returning the moose population to a level that will support a sustainable harvest over time. The results of that Plan will be used to inform management actions, including, but not limited to: Total Allowable Harvest, Harvest Allocation, Harvest Timing, Harvest Locations, Sex and Age Composition of the Harvest, Education and Outreach, Habitat Management, and Predator Management.

# Total Allowable Harvest & Harvest Allocation

The total allowable harvest (TAH) of Moose is based on an estimated population of 517 Moose wintering in the NWA. Considering the failure of the moose population to show signs of recovery since 2007, there is considerable uncertainty surrounding the accuracy of the model was used to calculate the TAH in 2007 and at present. In particular, parameters relating to mortality rates of adults and juveniles are likely in need of adjustment.

Because of the (i) observed decline in the Moose population since 2001 and (ii) uncertainty surrounding the mortality rates of juvenile and adult Moose, until such time as the Moose Recovery Plan suggests otherwise, the NWC recommends a TAH of 32 Moose consisting of 32 bulls, 0 cows and 0 calves. Assuming this TAH is approved by the Minister, then under the *Nisga'a Final Agreement*, a TAH of 32 Moose results in an allocation of 25 Moose to Nisga'a hunters.

## Harvest Timing

Moose can be harvested from 1 December through 15 January of each year.

## Harvest Locations

All moose harvesting must occur within the NWA in accordance with *Nisga'a Wildlife Regulations* and the B.C. *Hunting and Trapping Regulations Synopsis*).

#### Sex & Age Composition of the Harvest

The NWC recommends that the Nisga'a allocation of moose comprise 0 cows and calves and no more than 25 bulls in order to conserve and rebuild the moose population according to the assumptions and results of modeling exercises conducted by the NWC. Nisga'a Lisims Government will direct Nisga'a hunters to select bull Moose only.

## Mountain Goat

## Conservation Status

There have not been any formal attempts to inventory Mountain Goat throughout the NWA in the past 15 years. Despite this, there are no indications of any conservation concerns that would warrant a change in TAH as compared with the 2010–11 period.

Ministry data support the conclusion that the actual harvest is well below sustainable levels. Moreover, during the past several years the average annual Nisga'a harvest is estimated to be approximately one Mountain Goat with very little hunting pressure directed at this Designated Species.

recently The Province developed a Management Plan for Mountain Goat in British Columbia. That plan contains a number of management prescriptions with implications for Mountain Goat management in the NWA. It is expected that following a detailed review and application of that plan to the situation involving Mountain Goat in the NWA, the allowable harvest in each of the Mountain Goat management blocks, in addition to the TAH, may be revised. Such revisions will be

presented in a future version of the Nisga'a Wildlife Management Plan.

# Total Allowable Harvest & Harvest Allocation

The TAH of Mountain Goat is based on an estimated population of 3333 animals in the NWA. Accordingly, to achieve a maximum harvest rate of four percent, the NWC recommends an annual TAH of 133 goats. This population estimate and subsequent TAH remain unchanged from the allocation for the 2010–11 period. If this TAH is approved by the Minister, then under the *Nisga'a Final Agreement*, the Nisga'a allocation will be 33 Mountain Goats.

## Harvest Locations

In addition to areas closed for human health and safety (see *Nisga'a Wildlife Regulations* and the B.C. *Hunting and Trapping Regulations Synopsis*), there is no hunting in Mountain Goat Management Blocks 8 and 34 (see Figure H-2012-1). These are permanent closures. These blocks have been closed by the Director of Fisheries and Wildlife in order to protect small, isolated, low-elevation herds of Mountain Goats that occur there. The remainder of the NWA is open to Mountain Goat hunting.

There is little historical harvest data available to determine the specific locations where Mountain Goats have been harvested in the NWA However, the Nisga'a Lisims Government recognizes that it is necessary to distribute the hunt over a large geographic area in order to refrain from having an adverse impact on local groups of Mountain Goats occupying specific mountain blocks. future harvest monitoring If notes substantial increases in hunting pressure, efforts to spread the harvest pressure out in the NWA may become necessary.

### Harvest Timing

Although some Mountain Goats are harvested during the spring (April to mid-May), the primary harvest season for Mountain Goat is from early September to the end of December. The harvest during the latter part of this period tends to focus on coastal animals that are pushed, by heavy snowfall, to lower elevations where they are more accessible to Nisga'a hunters.

## Sex & Age Composition of the Harvest

It is likely that Nisga'a hunters show little selectivity in harvesting Mountain Goat with the possible exception that juveniles (kids) may be preferred by some hunters over adult goats as meat from younger animals is usually more palatable than that of older ones.

Although under provincial law, it is illegal to shoot a kid or a nanny in the company of a kid, this law does not apply to the Nisga'a harvest. Considering the extremely low harvest of Mountain Goat by Nisga'a hunters, there is presently no need to direct hunters to harvest a specific segment of the population (e.g., adult males) as is done elsewhere.

## **Grizzly Bear**

## Conservation Status

There have not been any formal attempts to inventory Grizzly Bears throughout the NWA in the past 15 years. Despite this, there are presently no indications that the population is experiencing conservation concerns that would result in alterations to management.

The Province is presently revising its approach to developing population estimates for Grizzly Bear within Grizzly Bear Population Units. Additionally, a recent report for the Province identified a portion of the Cranberry Grizzly Bear Population Unit as a priority for an updated inventory. Should that inventory proceed, its findings and implications will be captured in a future version of this plan.

Over the past several years the actual Grizzly Bear harvest (as per Ministry data) is well below the sustainable annual harvest of an estimated 14 bears. Over the past 3 years the Nisga'a harvest has averaged approximately one Grizzly Bear per year with very little hunting pressure directed at this Designated Species. This level of harvest is well below the Nisga'a allocation of six bears per year.

## Total Allowable Harvest & Harvest Allocation

Until such time as the Province revises the population estimates of Grizzly Bear in the NWA, the NWC agrees that, in light of recent (light) harvest pressures, existing estimates are suitable for the purpose of calculating a TAH.

The TAH of Grizzly Bears is based on an estimated population of 430 Grizzly Bears in the NWA. Accordingly, to achieve a maximum harvest rate of three percent, the NWC recommends an annual TAH of 20 bears per year. This TAH is an increase over that for the 2010–11 period. If this TAH is approved by the Minister, then under the *Nisga'a Final Agreement* the Nisga'a allocation is seven (7) Grizzly Bears, of which no more than two (2) can be female.

Permits to harvest the Nisga'a allocation of Grizzly Bear will be obtained by application to the Director of Fisheries and Wildlife.

### Harvest Locations

In addition to areas closed for human health and safety (see *Nisga'a Wildlife Regulations* and the B.C. *Hunting and Trapping Regulations Synopsis*), there is no hunting in the Khutzeymateen Grizzly Bear Population Unit (located on the south side of the Nass River east of Ksi Sii Aks). That area has been closed by the Minister for conservation purposes. The remainder of the NWA is open to Grizzly Bear hunting.

#### Harvest Timing

There are no restrictions on the timing of the Nisga'a harvest of Grizzly Bear. However, Grizzly Bears are harvested primarily during the fall period, from mid-September until they den in late November. The spring bear hunt usually concentrates on Black Bear, but the occasional Grizzly Bear may be taken during mid-March until mid-May.

### Sex & Age Composition of the Harvest

The Nisga'a allocation is six Grizzly Bears of which up to two can be female. It is believed that two females can be harvested without negatively affecting the Grizzly Bear population according to the assumptions of population size made by the NWC.

As per the Nisga'a Wildlife Regulations, Nisga'a hunters authorized to hunt Grizzly Bear must not shoot a female Grizzly Bear with cubs, a Grizzly Bear under two years of age, or a Grizzly Bear in the company of another Grizzly Bear that is under two years of age.

### **Harvest Monitoring**

Harvest monitoring in 2012–13 will be conducted by periodic interviews of Nisga'a hunters. Harvest monitoring will be facilitated with mandatory return of permits and biological samples to the Director of Fisheries and Wildlife or authorized Nisga'a wildlife official in each community. All "filled" permits and biological samples must be returned within three business days of harvest.

Harvests will be monitored over a 3–5 year period in order to compare actual harvests to Nisga'a allocations.

The following biological samples are required to inform wildlife management decisions.

- Hunters are required to remit a lower mandible (jaw) or incisor (front) tooth of each Moose or Mountain Goat killed.
- Hunters are required to remit a lower mandible (jaw) or vestigal premolar tooth of each Grizzly Bear killed.
- Hunters are required to remit a segment of hide of each Grizzly Bear killed for DNA analysis.

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- Hunters are required to submit the head of each Grizzly Bear killed for measurement of the skull.
- Hunters are required to remit the uterus (reproductive tract) of all female Moose, Mountain Goat and Grizzly Bear killed.
- Hunters are required to submit the horns of each Mountain Goat killed for inspection and measurement.

In the above list, the "remit" is used to indicate that the biological sample required will not be returned to the hunter. The word "submit" indicates that the hunter must provide the required body part or animal for inspection only and the body part will then be returned to the hunter.

### **Angling Guiding**

An angling guiding annual plan is currently being developed by the Director of Fisheries and Wildlife. Until such time as the plan has been completed and approved by Nisga'a Lisims Government and the Province of British Columbia, no angling guiding by Nisga'a citizens in the NWA will be allowed except under current provincial regulations.

#### Trapping

Nisga'a Lisims Government currently holds Registered Trapline 0616T014. That area is not currently being trapped. The Director of Fisheries and Wildlife mav invite applications for the use of this area in the future. Possible uses include: running a trapper training program for youth. operating the area as individual's trapline, and operating the area for the purpose of trapping research.

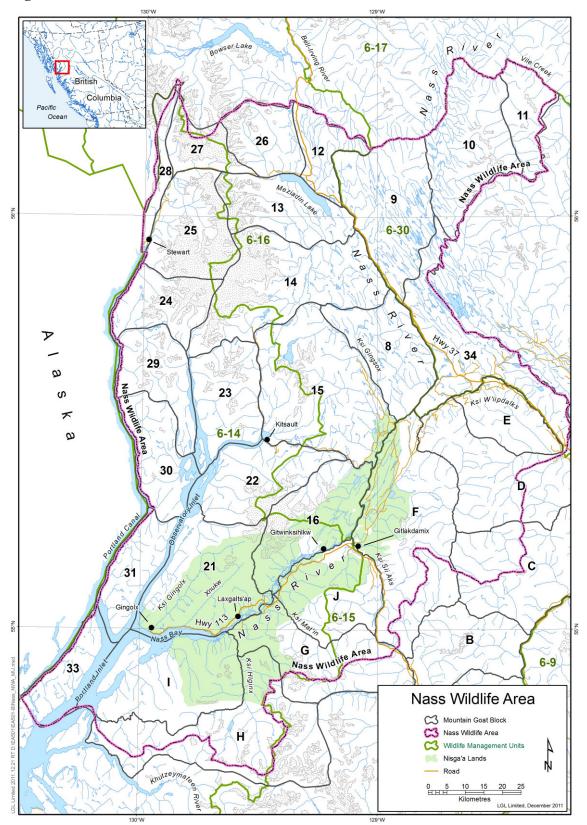
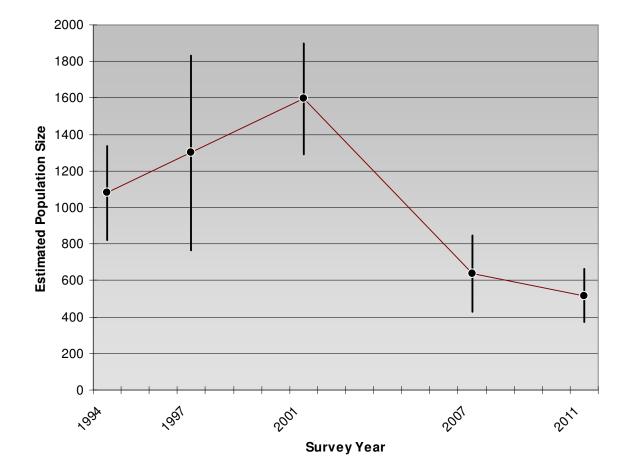


Figure H-2012-1. Nass Wildlife Area.





Population estimates and 90% confidence intervals using calculated mean moose densities from five moose aerial surveys in the Nass Wildlife Area. Population totals for 1994 and 1997 were not adjusted to account for differences in survey area because it is assumed that the best moose habitats were within the stratified areas each year, and because the survey areas overlap substantially. Because the actual survey areas were the same only in 2001, 2007, and 2011, comparisons of those results are more meaningful than comparisons involving other years. Source: Demarchi and Schultze (2011).