Wolf Harvest Report - 2019-20 North Slave Region

Dean Cluff
Environment and Natural Resources
North Slave Region, Yellowknife NT
15 August 2020

Background

Wolf are harvested as both as a furbearer and as big game in the Northwest Territories (NWT). Since the 2008-09 harvest season, the North Slave Region (NSR) has administered a region-wide harvest incentive program to encourage more wolves to be killed to facilitate recovery of caribou (Cluff 2019, unpublished report, ENR, 05 Sep. 2019). The incentive began as \$100/carcass (skinned) for any wolf harvested within the region, dropped to \$50/wolf skull for the 2013-14 and 2014-15 harvest years but then increased to \$200/carcass (skinned or unskinned) with the 2015-16 harvest season. The increase was in response to new barrenground caribou survey results at the time and subsequent herd recovery efforts.

For the 2018-19 harvest year, an additional harvest incentive area for wolves was created as a result of discussions at a gathering of Environment and Natural Resources (ENR) staff and Indigenous leaders/representatives at François Lake in August 2018 (ENR 2019, North Slave Operations report, https://www.enr.gov.nt.ca/sites/enr/files/resources/128-ns-operations-report-proof.pdf). This enhanced wolf harvest incentive area (eWHIA) was established where the Bathurst and Bluenose East caribou herds were expected to winter in 2018-19 and came into effect in January 2019. The incentive for harvesting a wolf (skinned or unskinned) in this new area that year was \$900/wolf for both Indigenous and resident hunters. For the 2019-20 wolf harvest season, the boundaries for the eWMIA were again based on mid-January 2020 locations of female and male caribou from both the Bathurst and Bluenose East herds (Fig. 1). The incentive amount for the eWHIA was increased this year to \$1200/wolf and the cost of the tag was dropped throughout the NWT (cf., General Hunting License holders don't require a tag).

When an unskinned wolf carcass was brought to an ENR office, the harvester would receive either \$200 or \$1200 for it, the latter if the wolf was harvested from the eWHIA. The Department would then arrange for an Indigenous person to skin the wolf. Skinners would get possession of the pelt afterward and receive all the benefits under the Genuine Mackenzie Valley Fur Harvester program. Therefore, a skinner would receive a minimum of \$400 as advance payment for shipping a wolf pelt to auction, regardless of what the pelt would sell for. However, if the pelt sold for more than \$200 at auction, then a \$350 prime fur bonus was paid. If a harvester shot and also skinned the wolf from the eWHIA and prepared the pelt for auction, a \$1950 payment per wolf was likely (\$1200 for the carcass, \$400 for the pelt, + \$350 prime fur bonus). If the pelt sold for more than \$400, then the skinner would receive the difference between that price and the \$400 advance payment.

Skinning a wolf pelt to taxidermy standards is not mandatory for the prime fur bonus. Skinning a wolf to taxidermy standards takes more time as the ears, lips, and toes need to skinned out and properly dried. Many skinners have said there is little financial incentive to do this. A wolf pelt would have to sell significantly higher than \$400 so the difference that would be paid over the \$400 advance payment make the extra effort and time required worthwhile.

Wolf harvest summary

Wolf carcasses are normally logged into a spreadsheet as they are submitted. However, the territorial government shut down most of its operation as of 19 March 2020 due to the Covid-19 pandemic. Consequently, wolf carcasses brought in after this date may not have been processed normally and any missing information on the carcass tags may not have been acted on immediately. These *ad hoc* procedures also resulted in necropsies not being performed for all carcasses, which confounded the harvest summary statistics.

Combining two harvest logs to mitigate occasional missing carcass tag information resulted in 65 individual wolf harvest records for the NSR. One additional wolf carcass from the South Slave Region (north of Enterprise) was submitted to the NSR and is not included here. Among the 65 NSR wolf carcasses recorded, two were untagged and one carcass only had "Wekweeti" written on the tag thereby at least indicating the community from where it came. Six of these 65 carcass records did not have a catalogue number, meaning that they weren't processed normally and are "missing". One of these six carcasses was indeed missing because it was harvested at the Wekweeti dump in January 2020, used for a skinning workshop there, and then discarded. However, this wolf does represent a wolf harvested (and in the incentive area) and should be documented.

Of the five remaining uncatalogued wolf carcasses, one was a wolf from last year that was seized by ENR at the time on allegations it was shot illegally. Therefore, that carcass was not available for necropsy or payment at the time as it was held pending a court appearance. After several delays, the court dismissed the case this winter (i.e., a year later) because of changed testimony from a witness. Consequently, the carcass was released from evidence this winter and a carcass payment of \$900 was made (last year's incentive amount). However, despite the carcass being obtained by ENR, it was not clear if the carcass went missing or was one of the two carcasses with missing tags that were necropsied (likely). That seized-and-then-released wolf was a male as was also one of the two untagged wolf carcasses necropsied. While that record of the seized wolf was removed from this year's harvest summary, it could be that the untagged male wolf that was necropsied is that wolf included in the 2020 summary.

The wolf carcass with the tag that only had "Wekweeti" written on it (harvest log indicated a male) could be the one uncatalogued wolf from the Wekweeti area, however the sex on that uncatalogued wolf tag is different. Although the sex indicated on the carcass tag can be wrong given that the actual sex is determined/confirmed at necropsy, there is no evidence of such an error with this harvester in the log file. The remaining untagged wolf carcass necropsied was a

female and it is uncertain if it could be one of the three uncatalogued female wolves remaining. Furthermore, the five uncatalogued wolf carcasses could also represent duplicate entries. However, given what little information is available from the harvest logs, this could not be reliably determined. Therefore, these five records were considered unique and included in the harvest statistics as separate entries. Consequently, the number of wolves harvested in 2019-20 could be inflated by as much as five wolves.

Finally, one female wolf carcass was obtained from Ekati™ Diamond Mine on 30 January 2020 that was found dead on site. Although this wolf was not harvested *per se*, it does represent a removal from the population, especially in the eWHIA, and is included among the 65 wolves recorded as taken from the NSR for winter 2019-20. The wolf apparently made contact with the bumper of a vehicle but was not "run-over". The wolf apparently showed injuries on its left side/abdomen that might suggest an altercation or attack before impact with the vehicle. A necropsy on its potential cause of death is still pending.

Of the 64 wolves recorded as harvested from the NSR in 2019-20, 50 carcasses were necropsied plus another is pending (Ekati wolf road-kill). Of the 14 wolves that were not necropsied, one carcass was not received because it was discarded at the Wekweeti dump after the wolf skinning workshop there in January. Three other wolves just had the skull available (one of these skulls was from a carcass but the carcass was so scavenged that only the skull was salvageable). Therefore, up to 13 wolf carcasses were "missing" and not available to be necropsied. Two wolf carcasses were shipped to Inuvik at their request, for a wolf skinning workshop. The carcasses were not returned so they were not necropsied. Another carcass was recently found in another freezer. That leaves potentially 10 carcasses "missing". It could be that the 4 uncatalogued wolves could represent the untagged carcasses or be duplicated entries. If so, then potentially six wolf carcasses went missing and not necropsied. Where these 6 to 10 wolf carcasses went is currently unknown. It could be that some furred carcasses went to a skinner and the skinner only returned the pelt. This is not likely as ENR enlisted only a few skinners and they all knew to bring in the skinned carcass afterward for ENR to necropsy. The only likely possibility is that these wolf carcasses were disposed of accidentally when the bagged remains of necropsied wolves were removed. Necropsied wolves were kept separate from those wolf carcasses awaiting necropsy, but having other people involved because of Covid-19 restrictions on ENR staff in March and April may have contributed to possible confusion. Although examination of each carcass bag would have revealed if it was necropsied or not, this was probably not done.

Assuming 64 wolves harvested in the NSR in 2019-20 (given the above uncertainties and assumptions), plus the Ekati wolf, 32 were male, 32 were female, and 2 were unknown sex, based on necropsies (preferably) or sex indicated on the carcass tag. Sex ratio is normally summarized using the necropsy results because sometimes (usually about 10%) the sex given on the carcass tag is wrong. While most wolf harvesters can reliably sex a wolf carcass, I suspect that when carcass tags are applied when multiple carcasses are submitted, tags could be occasionally incorrectly attached to the appropriate carcass. Some harvesters do not check the sex and doing so after it is frozen, especially when curled up in a bag, may not be obvious or

easily done. This winter, of the 41 necropsies where gender of the carcass was also indicated on the tag, eight were wrong (19.5%). Of these eight errors, the direction was split evenly (4 males to females, 4 females to males). This percentage is about twice as high as last year, and may be inflated because not all wolves harvested could be necropsied or missing tag info was more frequent than 2019.

The actual harvest of wolves within the NSR is actually 69 wolves (Table 1) because four wolves were harvested by two non-resident sport hunters near the end of March in the eWHIA. However, carcasses and harvest info were not obtained for these four wolves. Efforts are underway to contact these hunters to at least get the gender of these wolves.

Age classes were divided into adult (3 years or more), pup (< 1 year), yearling, 2-year-old, or juvenile based on body size and cursory examination of tooth wear pattern. The juvenile age class was used for either a yearling or 2-year-old when it is uncertain which one. Of the 65 wolves recorded in the 2019-20 harvest, 36 were adults, 5 were pups, 2 were yearlings, 1 was a 2-year-old, 13 were juveniles, and 8 were not classified. More precise age class determinations will be made later based upon tooth ageing by cementum annuli.

Wolves were killed in all months from September to April but differed significantly throughout the 2019-20 winter season. One wolf was killed in September, 10 wolves in October, 4 wolves in November, 10 in December, 15 in January, 8 in February, 7 in March, 5 in April, and 4 with unknown dates. Notably, 8 and 4 wolves were harvested from the Dettah dump or lagoon respectively, most during October. Four of those 12 wolves were pups. Therefore, one pack, maybe two, were likely removed from the area. While 11 of those 12 wolves were harvested in the fall, one adult female wolf from the Dettah lagoon was harvested in mid-April. Upon her necropsy, she had six fetuses inside. Consequently, there has to be at least one adult male wolf still around that area given that this female wolf would have bred in March. Still, there may be much fewer wolves harvested in the Dettah area this next season.

Another nine wolves were taken in the Behchoko/North Arm park area, and another four in the Wekweeti or Whati dump area. Consequently, many of the wolves taken under the \$200 harvest incentive reflect wolves close to communities, many of which could be "dump wolves". Once the stomachs from the wolves necropsied are analyzed, a better assessment of this proportion can be made. There were 44 payments of \$200 for wolves harvested within the NSR but outside the eWHIA. Only 10 payments of \$1200 were made for wolves harvested within the eWHIA (does not include the four wolves from the Tlicho wolf harvesting camps). This likely reflects the distribution of caribou this winter as most caribou (and therefore wolves) were not along the Tibbitt-to-Contwoyto winter road, which greatly assists harvesting by the access it provides (e.g., Cluff 2019, unpublished report, ENR, 05 Sep. 2019).

There were three wolf carcasses that received no payments because they were wolves found dead or euthanized, so not harvested. Two harvesters submitted only a wolf skull so they received \$50 each. Four wolf carcasses were obtained from a wolf harvest camp supported by the Tlicho Government and therefore a carcass payment was not made directly by ENR. Three

wolf carcass records did not have the harvester identified or location indicated and so precisely what payment was given is unknown. The total known payment for wolves harvested in the NSR in 2019-20 sums to at least \$20,850.

The vast majority (83%) of 65 wolf carcasses were provided by Indigeneous hunters given they were General Hunting License (GHL) holders. Four harvesters were Resident license holders, two wolves were found dead, one was euthanized from the Ekati™ mine, and other three had no information. Twenty-four hunters provided 60 of the wolf carcasses. Two carcasses were found dead, 1 was from Ekati™, and 3 unknown submitters rounded out the other six carcasses submitted. The greatest number of wolves submitted by one hunter was 9, followed by one hunter submitting 7 wolves (Fig. 2). Ten hunters submitted just one wolf carcass (Fig. 2). Hunters in the NSR requested 967 wolf tags for the 2019-20 harvest season. This is slightly less than the 1057 tags purchased last year when tags sold for \$22 each. Tag fees for wolves harvested in the NWT were dropped for the 2019-20 harvest season and while most hunters requested 1-4 tags, one hunter obtained 30 wolf tags.

Table 1. Wolf harvest records in the North Slave Regions based on carcass/skull collections. The harvest season spans 01 July 2019 to 30 June 2020. Since 2010, regular incentive payments have varied from \$100/wolf carcass (or \$50/skull) to \$200/wolf carcass. A new enhanced wolf harvest incentive area was introduced with the 2019-20 harvest season.

| | Carcass/Skull | | | |
|--------------|-----------------------|-----------------|-----------------------|---------------|
| Harvest Year | Regular | Enhanced | Other | Total Removed |
| 2010-11 | 41 | n/a | | 41 |
| 2011-12 | 80 | n/a | | 80 |
| 2012-13 | 56 | n/a | | 56 |
| 2013-14 | 24 | n/a | | 24 |
| 2014-15 | 35 | n/a | | 35 |
| 2015-16 | 48 | n/a | | 48 |
| 2016-17 | 73 | n/a | | 73 |
| 2017-18 | 40 | n/a | | 40 |
| 2018-19 | 7 ^a | 59 ^b | 1 ^c | 67 |
| 2019-20 | 50° | 18 ^d | 1 ^e | 69 |

^a \$200 incentive/wolf carcass (skinned or unskinned).

b \$900 incentive/wolf carcass (skinned or unskinned).

^c Gahcho Kue mine wolf euthanized by ENR.

 ^{\$1200} incentive/wolf carcass (skinned or unskinned);
 includes 4 wolves from outfitters where the \$1200 was not paid.

e road-killed wolf at Ekati mine.

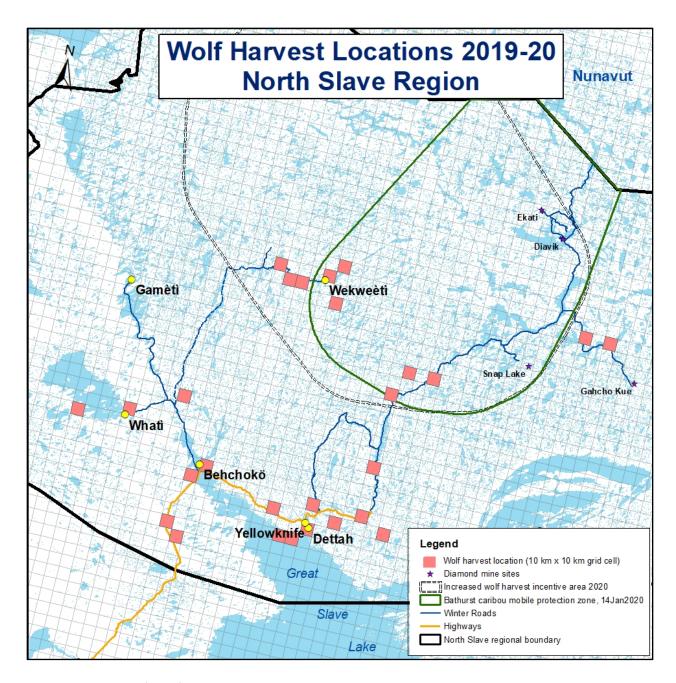


Figure 1. Location of 65 of 69 wolves harvested in the North Slave Region, 2019-20. More wolves were harvested outside (50) the increased wolf harvest incentive area (eWHIA) than inside (19). There were 14 wolves harvested from 9 grid cells inside the eWHIA. Four wolves were also harvested in the eWHIA in late March but precise spatial locations were missing and therefore not mapped. One wolf was hit by a vehicle at the Ekati mine (not mapped) and represents the 19th wolf removed from the eWHIA by people. Boundaries for the eWHIA were generally based on the winter locations of barren-ground caribou in January 2020 within the North Slave Region.

Number of Wolves Harvested per Hunter

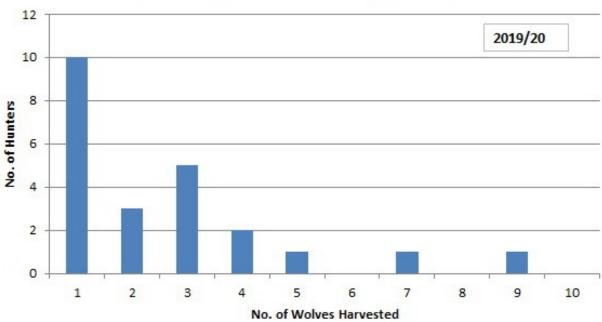


Figure 2. Number of wolves harvested per hunter throughout the North Slave Region, 2019-20. Numbers do not include those wolves harvested by Nunavut hunters hunting in their asserted territory within the North Slave Region.