Committee for Cooperative Moose Management
Meeting Minutes (Final Version)
March 30, 2016
Winnipeg River Learning Centre, Pine Falls

Present:

Paul Millan (Brokenhead Game & Fish)
Cam Neurenburg (LdB Wildlife Assoc.)
Kelly Leavesley (MCWS)
Johnathan Spence (BON)
Jim Hoard (Pinawa Game & Fish)
Ernest McPherson (BRFN)
Dan Bulloch (MCWS)
Neil Guimond (Sagkeeng FN member)
Gerry Arbez (MB Wildlife Federation)
Brian Kotak (MBMF)
Ron Missyabit (MCWS)
Earl Simmons (MCWS)
Stu Jansson LdB Fur Council)
Daniel Dupont (MCWS)
Ken Rebizant (MCWS)
Ivan Lavoie (Sagkeeng FN member)
Vanessa Harriman (MCWS)

1. Opening Prayer & Introductions –

Ernest McPherson opened the meeting with a prayer. Everyone introduced themselves.

2. Review/Additions to the Agenda

Brian reviewed the agenda with the committee. There were no additions.

3. Minutes from the January 7 and February 18, 2016 Meetings

For the February 18 meeting, MCWS clarified that they did not have all of the information necessary at the time of the meeting to develop the new moose population estimate based on the recent aerial survey. It was not simply that Vanessa was away.

4. Winter Activity Updates

Big Game Management Programs – Ken Rebizant

Current budget – moose $190,000, 152,000 for other big game (elk, deer), $80,000 for wolf. More surveys needed than funds available. Average cost for a survey is 80,000 - 100,000. Have more than 200 big game populations in the province, so priorities are identified by MCWS.

For 2016, MCWS was planning moose surveys in Duck Mountains, Porcupine Mountains, GHA 26, 11 & 8. Deer was planned for GHA 35 and 31. Elk survey was planned for part of GHA 35A.

Revised the survey plan due to a number of factors (e.g., insufficient snow). Moose surveys were completed in GHA 26, 11 and 8 (GHA 8 paid by Hydro as part of Bipole III). Deer survey occurred as planned. Elk survey in Vita area occurred as planned.

GHA 11 result was about 100 moose. Is what MCWS expected. Not good moose habitat. Also saw some woodland caribou.

GHA 8 had around 300-350 moose. Same as previous estimate (around year 2000), but much lower than historical high. Declined by about 50% from previous high of around 600 moose.

GHA 35 – approximately 4,500 deer. About the same as in 2002. The population isn't high. However, here is enough animals for the population to recover. There will be the same hunting restrictions as last year. There are no data in between years 2002 and 2016. The deer population was higher during this period, but no surveys were flown. A deer survey is usually only flown when there is a perceived problem. Recently, 2 cold winters in a row with deep snow have reduced the deer population in many parts of southern Manitoba.

Elk- 109 is the new population estimate around Vita. Only minimum counts prior (97 to 106 animals over previous 2 surveys).

<u>GHA 26 Moose Survey Results – Vanessa Harriman</u>

Survey flown January 9 to 21, 2016. The last 4 surveys had consistent methodology (2006,2010, 2013, 2016). The estimate for 2016 is lower than we anticipated (936 moose, plus/minus 140 moose – 90% confidence interval). The new population estimate is similar to that of 2010

2000 survey – population estimate was 2300 moose, but survey was conducted using a slightly different method. In 2000, survey was broken up into habitat types (therefore unequal survey block size). In 2006 and later, equal block size (not based on habitat type). Statistics used to generate the population estimate was also slightly different. Old methods incorporate an estimate of what is not observed during surveys. Was determined by going back and flying some blocks intensively (would inflate the population estimate by about 40%). Using newer statistics, year 2000 estimate would be around 1600 (not 2300 moose).

When comparing surveys, we should be using the lower pop estimate in 2000 (i.e., not applying the 40% correction factor), but there is still concern comparing numbers across all surveys.

MCWS not using the correction factor in their population estimates. This means that they are managing for a lower population number (i.e., a conservative approach). There is a high degree of uncertainty in all ungulate surveys.

Several committee members indicated that people will be shocked at the new population estimate, as local people have been reporting seeing more moose and more moose sign. Gerry stated that the survey results for 2016 defies logic and what locals are seeing.

Vanessa reviewed the moose surveys in Minnesota – since mid 1980s in NE MN, there is a large amount of variability from year to year (based on annual surveys). For example, in one year, survey results doubled from the previous year. This is biologically impossible. Therefore, surveys are not perfect. NE MN moose population has also declined significantly over the last decade. MN has put a lot of money and effort into research, monitoring and management. Despite this, they continue to see their moose population declined.

The moose population decline is widespread in forested Saskatchewan, northern Minnesota, Manitoba, and NW Ontario. It is not an isolated problem.

Ron Missyabit suggested the committee members Google "moose decline". There is a lot of information out there. With all the resources put into moose in Minnesota, they still can figure out what their problem is. Given that it is occurring on a large geographic scale, there are likely multiple factors at play, including possibly climate change.

Kelly indicated that in the past, mangers have focused a lot on surveys. However, there are a lot of ups and downs in the data between years. Longer-term trends are important. For GHA26, we only have 4 data points over the last 10 years. Need a longer-term data set.

But how do you reconcile the 2016 survey results with what people are seeing and saying (i.e., more moose out there)?

Ron suggested that we need more information from those people out in the bush. There is a lot of value in people's observations.

Stu: what are the mortality factors? The survey data don't tell you the mortality factors are. Liver flukes, are they a significant factor? In the 1970s, Stu never saw liver flukes. By 1990s, liver flukes are common.

Just have to look at Southeast Manitoba and the Whiteshell to see what has happened to moose already.

The hunting closure in GHA 26 has definitely helped. Without the closure, we would have likely lost the moose population completely. But there are other factors that are responsible for the decline in GHA 26.

MCWS standardized the survey components as much as possible across the province as well as to be consistent with other jurisdictions. This includes training of the observers. MCWS used the same people for the 2016 survey as 2013.

Ernest indicated that he is disappointed in the results. He sees more moose sign in the bush. But survey shows otherwise. The results are confusing. Last summer, community members saw lots of moose tracks along the Black River. Ernest believes what he sees. Communities have agreed not to hunt and the results make it more difficult to justify the closure to First Nations. There has been a lot of management action, but the moose population has not increased.

Concern about changing duration of flights on each day. Can we compare between surveys then? Maybe the 2016 results are due to not flying longer days.

MCWS were hoping to fly the Duck and Porcupine Mountains this past winter, as there are conservation closures there. Unfortunately, snow conditions did not allow for moose surveys in these areas.

16 years of surveys. Habitat has changed a lot. Where (spatially) has the changes occurred? Where have the high, medium and low densities changed?

Moose Survey Methods – approx. 3-year interval. Conducted on a GHA-scale. Equal sized grid (approx. 3.5 x 5.5 km). Simultaneous survey in the north and south of the GHA – 2 helicopters, 3 observers per helicopter. Stratification – transects 1.75 km apart. 397 sampling units in total. Gives a general idea of number of moose within the sampling unit.

During stratification, wind direction/speed and air temp is recorded. Try as much to keep conditions as similar over the stratification period. Hard to control everything though. Takes 4-5 days to do the stratification. Stratification help to increase precision in the intensive flights and final population estimate.

Have tried infrared cameras but found that cameras missed more animals that human observers.

Can you do surveys at night? Some of the technology is military grade and not available. Commercial grade drones?

GHA 2016 Moose Survey Results
-253 blocks were low density
-126 blocks were medium density
-18 blocks were high density

Opportunity for local people to be involved in providing local knowledge as part of stratification process.

Intensive survey – attempt to count every moose in sampling units. 7 transects per sampling unit (transects 500m apart)

Flew almost all of the high density blocks. In low blocks, about 0.38 moose/block (range 0-4). Medium was 4.7 moose/block (range 0-25). High 13.9 moose per block (range 4-42).

Bulls / 100 cows was 59 in 2016, calves per 100 cows was 44 in 2016 (well within normal range, above the minimum necessary to grow the population)

Vanessa went over the limitations of large scale surveys and factors that affect the results of the survey (# days taken to survey, sightability)

Sightability influenced by a number of factors (animal group size, animal activity, snow depth, canopy cover, visual obstructions, time of day, observer fatigue, observer ability) as well as weather and survey conditions (snow, fog)

General impressions of survey crew
-more moose in 2016 than 2010
-same or fewer moose than 2013
-sightability lower? Moose less active in 2016. Less snow in 2016 than 2013 and 2010. May have missed more moose in 2016 compared to previous surveys?

Difficult to compare when 2 crews are doing the survey simultaneously.

Gerry: another survey next winter is needed. This will help explain the 2016 results.

Ivan: what is happening to the calves? The CCMM needs to focus on the calves.

Other factors: red willow (dogwood) is disappearing. Deer in south of GHA 26. Wolf incentive program is no longer in place.

Is sightabiity an issue in 2016? Not as cold. Maybe the moose were not active. Would influence the result.

Conservation closure: will communities still support it? Closure affects the communities financially, as community members are forced to buy their meat at the store. MCWS needs to go into the communities to discuss the results. What about Metis? A report still needs to be given to the new provincial government. Therefore a decision won't be made yet. The recent Supreme Court decision has no bearing however on their hunting rights.

Consensus from the committee that we recommend another moose survey next winter

Can you make some sort of a noise to mobilize moose during the intensive surveys? Improve sightability?

Collars on wolves in 5 different packs now. Will provide information that we did not have before.

Calves/100 cows suggest that the problem is not with calf survival, and therefore not a function of predation. Collars on moose will help us understand reasons for adult mortality.

Cam: if FNs were allowed to subsistence hunt (lifting the conservation closure), would communities support ban on night lighting?

What about habitat and the long-term effects of fire suppression? Maybe fire suppression has altered the ecology of the area.

Tick infestations in moose? Cam observed 4 moose with severe hair loss in March.

Ivan and Neil suggested that community member participation in surveys is really important.

What about predation by bears? High population could be contributing to moose calf mortality.

How do we convey this information and the results of the survey? Consultation process must be aggressively pursued. There needs to be an increased understanding among stakeholders. Still need to be patient, as all of our efforts to date have not resulted in a recovery yet.

Stu/Ivan – We need to reduce pack density of wolves, not individual wolf density of we are going to have long-term success at reducing predation on moose by wolves.

There should be a workshop in the communities (1 regional workshop) to discuss moose survey results. Need to invite elders.

What about habitat? What is the carrying capacity of GHA 26? There is lots of very good moose habitat in the south part of GHA26, but no moose. Lots of deer there though.

There is a need to understand the needs of the FN communities.

How do we take this info back to our respective organizations? Need a consistent message. The moose committee came up with the following:

Survey results suggest that:

- 2016 moose population in GHA 26 is 936 +/- 140 moose
- 2016 population size is similar to 2010
- population size in 2016 is lower than 2013
- Our collective efforts have prevented the moose population from dipping below 2010 levels. However, at best, the population is not greater than what it was in 2013.

A new issue of Moose News should be published to get the message out.

The committee also developed a number of recommendations:

1. MCWS to conduct a moose aerial survey in 2017
2. MCWS to meet with communities and stakeholders to explain the results
3. Produce a Moose News focused on the 2016 results and explanations.
4. Encourage continued participation in moose management actions.
5. Government to support non-government participants in aerial surveys
6. Investigate mechanisms responsible for lack of recovery of moose population

Jonathan Spence indicated that BON is willing on hosting another regional meeting/workshop on moose.

5. Discussion on MBMF and Moose Committee Budget for 2016-17

Brian indicated that the future of the MBMF is unknown right now. Letters have gone out to 11 provincial ministers with only a response from the Minister of Conservation. A meeting will be set up with the Director of Forestry and Director of Wildlife. Without core funding to the MBMF, the organization will either fold or continue on with no staff or office. This will be a decision that the MBMF Board will have to make. Brian indicated that it is not possible to for the MBMF to survive on project-related funding only. He is also engaging the federal government and others (Hydro).

6. Moose Management Recommendations Development

As the meeting ran late, the committee did not continue with the recommendations process.

7. Next Meeting

To be determined. The committee would like to have a meeting before the end of June.