

MAC Meeting

January 26, 2009

Grand Rapids, MN

Revised vision statement

“Moose have intrinsic value and are recognized for their importance to Minnesota. To the greatest extent possible, moose shall be managed for ecological sustainability, hunting, and viewing opportunities.”

Summary of Presentation and Discussion Notes

Here are some of the main points brought up in discussions throughout the day:

- MAC should consider possible outcomes/implications of listing moose in MN as a species of special concern, a threatened species, or an endangered species
 - MAC can make a recommendation as to if and to what category moose should be listed
 - This recommendation would be taken very seriously
- MAC should anticipate a lot of attention being turned toward moose
 - Consider how to present information to the public and possible reactions the public will have
- 1854 Treaty Authority harvest up to 30 moose per year and FDL allow a harvest of up to 35, but success rate is considerably lower (14 moose last year)
- Deer harvest in Minnesota has been very aggressive/liberal since 2003
 - In the arrowhead region public opinion is largely to decrease deer numbers if it means helping the moose population
 - If people are allowed to shoot either sex, they will
- Biological aspect of the moose harvest: Questions which need to be addressed
 - When to stop hunting in northeast MN?
 - Can an increased bull harvest affect the population?
 - Take-home: Bull only harvest could become a factor in population decline earlier (at higher population levels) than was originally thought (based on the model)
- When communicating with the public, how we say something is more important than how much is said. Communication needs to be clear and effective.

Presentation and Discussion Notes

Moose Listing Process : Richard Baker, DNR Endangered Species Coordinator

Threatened throughout all or a 'significant portion' of its range

- So, what is a 'significant portion' of moose range?
 - Undefined (?) / ambiguous

Goal is to publish a proposed rule by mid-summer

- Want to reach a resolution/agreement on the status of moose by then (June 1, 2009 – initiate rule making, complete rule-making by December 31, 2009)

If moose are designated as endangered or threatened, then there can be no harvest

Moose will likely be listed as a species of special concern, at least (Richard Baker)

- Still allows hunting

The public has a lot of input – in the end listing is an administrative decision, but the public has the ability to significantly influence the decision.

Species of special concern deserve extra attention, there are some regulatory impacts but harvest is still permissible. It elevates the attention that the species receives.

- Concern (Andy) – listing as a species of special concern opens the door to federal ruling, which is becoming increasingly politically driven. Once moose are listed they either go off the list eventually or move to threatened, which has huge implications (tribal impacts). Have talked about whether the band should designate moose as a species of cultural importance. Once moose are put on the state list they become much more visible, where does it end?
- Comment (Mike S) – Giving moose special status is a two-sided coin, there are costs and benefits.
- A concern is that once moose are put on the state list, that it could be listed federally quickly and with little biology behind it.
- (Richard) – Once listed, the feds are more likely to take a closer look, but nothing obligates them to take any action.

Thought process that is gone through

Consider:

- Is it unique or uncommon? Is the species...extremely uncommon in the state (take into consideration range in the state – almost any species is rare somewhere, so this statement is avoided)
- Does the species have...unique or highly specific habitat requirements? (This qualification is used more casually, exercise a lot of discretion here)
- Does the species...deserve careful monitoring of its status?
- Is the species on the periphery of its range?

If choose to go with special concern status, must be prepared to refute why moose are of special concern and not threatened.

A recommendation from the committee will be helpful in the ultimate decision. But, need to anticipate several different possible outcomes.

This process occurs about once per decade. Years of effort are put into listing or delisting. Need to consider making changes every three years, but process takes longer than that. Have no emergency authority, need to go through regular rule making, which takes a couple of years. If the moose is listed as special concern, it would likely stay that way for a while.

Question: What benefit is it to moose if they are listed?

- Increased attention in environmental review, resource protection, resource planning, etc.

Question: How can listing help turn the moose population around?

- If listed, would see a lot of media attention.
- What special attention accrues comes from various management entities and processes
- Many benefits result from listing a species

We should look at those 4 evaluative statements and consider how each applies to moose. Make recommendations based on that.

(Richard Baker) will be looking at information being submitted to the committee or by the committee to evaluate the range of possible outcomes.

- Will ask : What is the strength of the argument for a status, how refutable is one status versus the others? He is looking at BaseCamp and using it to deliberate, and will take into consideration the committee's recommendation. If the committee looks at the issue the way the Endangered Species Coordinator is looking at it, then it will be easier to take into consideration the recommendations of the committee.

Question: What other resources are used / are provided for use in evaluation?

- Public input is listened to and considered
- There are several different comment periods throughout the rule making process
- MAC could submit a formal comment at the start of the rule making process
- Anyone has a chance to be heard

Comment (Richard Baker): MAC should be thinking about this decision. Think about the implications of the possible decisions and how that affects MAC

Administrative Law Judge (ALJ) – Is the functional endpoint of the process because it gives a judicial decision, but the decision of the Commissioner is the ultimate authority.

Tribal Harvest of Moose : Andy Edwards and Mike Schrage

Tribal hunting seasons are the same as state seasons

Harvest of moose is limited to 30 animals each year (for Tri-band)

- Question: Is that 30 for each band or 30 total?
 - Unanswered question. It has never been made a serious issue, even since Fond du Lac pulled out of the agreement. The statement is subject to interpretation.
- Comment: It is interesting that there is a clause for increasing harvest if moose populations increase, but none for limiting harvest if populations decrease.
 - If the state were to close the season for biological reasons, then the Tri-band would also halt harvesting moose
 - If the state limits/decreases harvest, the Tri-band still has authority to harvest 30 moose
 - Wisconsin bands are not included in the moose harvest
 - For the most part, the entire northeastern range of moose is inside the ceded territory, so the Tri-band is able to take moose from anywhere within that ceded territory
 - Also means that all areas open for state moose hunting fall within the ceded territory
 - Tribal hunters are not restricted by state zones
 - A lottery system is held – groups of 3-4 hunters per permit, most of which are able to hunt every other year
 - Aim for 5% harvest per zone --- go through on zone by zone basis and determine how many moose can be taken per zone
 - Harvest %s have been consistent since went to yearly hunt

Fond du Lac – currently in a lawsuit with the state of MN – exercise full rights to hunt, fish and gather (upheld by courts). Phase 2 of the lawsuit is determining the details of how those rights will be exercised (details are still being worked out)

- Fond du Lac feels they should be able to issue tribal permits under their own system (60-80 permits/year) with 30-35 moose harvested.
 - However, the number of moose taken has dropped dramatically in recent years (14 this year). Success rate is considerably lower than it has been in years past
 - FDL has a bulls only 3 week season and has its own zoning system to distribute hunters

Both FDL and 1854(Tri-band) have mandatory registration.

- FDL is bulls only harvest
- 1854 can still harvest either sex

Tribal harvest numbers constitute a significant % of the state-wide harvest (30%), but still not a large % of the moose population

Questions/Comments

What hunting methods are allowed?

- No spot-lighting
- No motorized vehicles
- FDL methods are self-imposed – they are not terribly different than state hunters (do allow baiting for deer). Methods for take are not liberal as WI bands. If it doesn't threaten public safety or conservation of the resource, then the bands may do it.

If the bands don't zone hunters, is there any concern about harvesting more than should be harvested closer to the reservation than there is further away?

- 1854 sits down with the state – have a good idea of where the harvest will come from year to year
- State bases their permit allotment per zone based on how many of the harvestable moose are left after the tribal estimates of harvest are determined for that area (Tribal harvest will take 7 moose from a zone in which there are 10 harvestable moose – 3 are left for the state to harvest)

Deer Management: Lou Cornicelli

Recognized in the late 1990s and early 2000s that deer populations were higher than goal

- Fit deer population model to the yearly buck harvest data – changes yearly due to harvest numbers

Current populations – have been very aggressive since 2003 in harvest effort

- Started being very liberal – removed a lot of restrictions
 - o 2005-2008 : generally a 1:1 take (antlered vs. antlerless)
 - o Indicates that the population is in decline

Winter severity is monitored (1989-present), and deer are typically fed in severe winters

Recommend keeping deer at goal levels, not feeding deer just because it is a severe winter

Questions/Comments

To what degree is antlered vs antlerless harvest a social aspect of harvest?

- When people are allowed to shoot anything, they will.
- In a period of 10 years went from a buck only harvest to a 7 deer bag in the arrowhead region
 - Have become very aggressive/liberal with deer harvest
 - Use buck harvest trend as a density indicator

How will this discussion relate to the public? What does the public want from the deer harvest?

- Social desire in arrowhead is to lower deer density to favor moose population
- Reasonable thing to do is to re-evaluate goals for deer as a result of this discussion
- The fact that we are discussing deer in the context of moose explicitly implies a relationship between deer and moose density
 - o Need to come to a consensus as to what the committee believes regarding this issue

If deer are an issue, and there is a need to reduce deer numbers further, is it possible?

- Have to decide that as a committee

Comment: In NW Agassiz they run their own counts on deer and moose. Both populations fluctuate together until the early 1980s, and then the deer and moose diverge with deer increasing and moose numbers decreasing. Should get that data set.

Moose Harvest – Biological Aspects: Mark Lenarz

Questions which need to be addressed

- When to stop hunting in northeast MN?
 - Opinion is that with a current population of ~7000, it is far too early to end the season. However, if the population was 300, the season should be halted.
 - Where, between those numbers, is the population level at which hunting needs to end?
- Can an increased bull harvest affect the population?
 - Bull only harvest affects the population IF there are insufficient bulls to breed all of the cows.
 - In Alaska, bulls form harems and an individual bull will breed many cows. However, in the east bulls form attachments to one or two cows.
 - If this is the case, then much of a shift from a 1:1 bull:cow ratio could cause the population to decrease.

The decline in the calf:cow ratio – statistically there is no relationship to the bull:cow ratio

- Keep in mind that there is a lot of noise associated with the calf:cow ratio
- There is no data to indicate that pregnancy rate is being affected by a bull only harvest

In the last 5 years, the bull:cow ratio shows a downward trend (statistically significant linear trend)

- In the last 5 years 164 bulls have been harvested from a population of ~7000
 - Bull harvest alone should not be the cause of this downward trend
 - Implies that harvest is additive mortality, not compensatory
 - Model shows 0.79 bull:cow ratio, and last year's bull:cow ratio was 0.77

If there is high recruitment rate, then the bull harvest will have less of an effect on the population.

There are no data available indicating cows are not being bred

May want to incorporate the bull:cow ratio and calf:cow ratio when making permit recommendations

Need to identify the minimum bull:cow ratio/threshold

- Stop hunting when unable to keep the bull:cow ratio above that threshold

Questions/Comments

Need to relate bull:cow ratio to pregnancy rates

- Pregnancy rates are difficult to determine

Concern: using calf:cow ratios as determinant for hunting permits issued

- Relate the impact harvest has on bull:cow ratio to how the calf:cow affected
 - o For example -- If have calf:cow ratio of 0.3, then the bull harvest should be lower than if the ratio was 0.6

How can the DNR claim the calf:cow ratio is decreasing and then still allow hunting? (public perspective)

- Need to determine if harvesting bulls is affecting the growth rate of the population

What if the bull:cow number is above the threshold, but the population is still in decline (what happens when there are 1000 animals left?)?

- It is socially acceptable to harvest at population level of 7000 animals, but not socially acceptable to harvest at 300.
- It is important to determine (a separate) social threshold

Take-home: Bull only harvest could become a factor in population decline earlier (at higher population levels) than was originally thought

Bull:cow and calf:cow ratios are interdependent concerning the effect of bulls only harvest.

The clearest choice if we continue with a bulls only harvest, is to harvest less. But, if the ratio continues to drop, then will continue to reduce the bull harvest...

Main Point: we can have an effect on the moose population with a bull only harvest.

Question: Assumption here is that mortality is the same for both bulls and cows, but maybe we need to consider differences in mortality (cows deal with pregnancy, birth, etc. maybe causing higher mortality)?

Comment: Sub-committee options

- There are a whole range of possible options (close certain zones, every other year harvest, etc)
 - o Consider, we do not have information on ratios per hunting zone, we have an idea for entire area
 - o Response: In theory, could close a zone for one year and open it the next, but in reality the zone would probably not open again.

If the season is closed, what happens to the resources to monitor moose?

- Historically, when hunting seasons are closed for a species, keep monitoring but it is infrequent

It is important for the sub-committee to think of research options if money were to become available. Bring ideas as to what research needs to be done and how much money would be required.

Since 1971 we've added new moose zones, so why can't we subtract zones?

- We could subtract certain zones, but we do not have bull:cow ratios for individual zones.
- We have combined zones and stratified across zones instead of across the range in the past

If we returned to every other year harvest, how much would that enter into the model?

- It would effectively be the same as cutting the annual harvest in half
- A certain % would die of natural mortality, and hunting would become more compensatory rather than additive
- It would slow the decline

Would maintaining a certain age class of bulls make the harvest less additive?

- It would leave bulls which are more effective breeders in the population....

Human Dimensions of Moose : Dennis Becker

Things to consider:

The role of science

The role of stakeholders

The process

Stakeholders: hunters, outfitters, resorts; there is a whole industry surrounding a once-in-a-lifetime hunt

- Also have to remember that a large contention of stakeholders are concerned with simply being able to SEE moose in the wild.
 - There is a broader social situation that needs to be considered: the public will not be able to sort through all of the information (which at times appears to be conflicting) i.e. the public will largely not understand a continuance of a hunting season for moose if the moose population is declining.
 - May start to see legislation being proposed about hunting – which will probably be ill-conceived because people/groups proposing it won't know enough about what is going on with moose
 - MAC has control over how information is shared/presented to the public
 - This is going to be a controversial issue – encourage MAC to think about the use of information and how it is presented to the general public
 - Looking for input in identifying key areas we can't afford to miss
 - Get people involved who have a stake in this issue

The economic aspect is something MAC has not addressed yet

- Comment: Need to consider different economic values placed on moose in different regions. Moose in northwest Minnesota are seen as nuisance and cause of crop depredation, whereas moose in the northeast are seen as valuable resource (harvest and tourism).

MAC also needs to consider the difference between socially and biologically acceptable thresholds for moose numbers in the state.

Questions/Comments:

Comment – There are a few hundred hunters in the state, but many thousands of people who just want to be able to SEE moose in MN. Need to consider the value of viewing opportunities.

Comment – when communicating with the public, how we say something is more important than how much is said. Communication needs to be clear and effective.

Comment – Maybe communications sub-committee could be assembled at the end of the process.

Miscellaneous**Thoughts/comments on the NW population**

How will NW population be addressed?

- Address in sub-committee if feel there is a need
- Its within the MACs charge, so it should be addressed
- Ag dimension in NW and tourism dimension in NE – may not be feasible to lump together in all sub-committees