Speaking Notes
ENR Presentation to
Wek'eezhii Renewable Resources Board
March 22, 2010

Slide 1 – Introduction

Good morning, Mr. Chair.

My name is Ernie Campbell.

I am the Assistant Deputy Minister of Operations for the Department of Environment and Natural Resources.

With me today are: Jan Adamczewski, our Ungulate Biologist;

Bruno Croft, Manager of Research and Monitoring for the North Slave Region;

Susan Fleck, Director of Wildlife; and,

Fred Mandeville, Manager of Wildlife and Environment for the North Slave Region.

We are here today to provide the Board with our best biological advice for managing caribou.

Our presentation has two main parts.

The first part is an overview of the technical information, which will be presented by Jan Adamczewski and Bruno Croft.

It will be followed by a shorter section on management aspects, which will be given by Susan Fleck and Fred Mandeville.

I will now turn it over Jan to begin the presentation.

Slide 2 – ENR Technical Presentation Overview

Thanks, Ernie.

The technical portion of our presentation this morning will focus on the following topics:

- What is a herd;
- Herds as the basis for management;
- Natural long term caribou cycles;
- Current trends in herd sizes;
- Have caribou moved elsewhere;
- Factors that affect herd size and trend;
- Management actions for other NWT herds; and,
- Recovery, Modelling and Risk Management

Slide 3 – What is a herd?

A herd is defined on the basis of a common calving area and similar movement patterns.

This animation shows the movements of satellite collared cows since 1996 from herds found in the North Slave.

The animation begins with caribou on their wintering areas on January 1st and follows their movements through the year.

Each colour is a different herd - red is Bluenose-East; brown is Bathurst; light purple is Ahiak; and, black is Beverly.

In winter, there is an overlap between the herds but as the calving season approaches, the herds move to separate calving areas.

I will stop the animation in June when the cows are on the calving ground. You will see how cows from each herd come together on their calving grounds.

During the rest of the summer, the herds are separate. In September, there is some overlap.

Slide 3 – What is a Herd cont'd.

During the rut at the end of October, the herds are separate again. Then they head to their wintering areas where the herds overlap again.

The collars can tell you where different herds are at all times of the year. Most collars are on cows but some bulls also have collars.

Slide 4 – Herds as the Basis for Management

The review done by the Alberta Research Council, or ARC, was started because of public concerns about the survey methods and the quality of information collected by our Department.

ARC is an independent agency with no previous involvement in NWT caribou studies.

Its independent peer review report was released in 2008.

The report supported the approach taken by ENR on caribou studies and the survey methods used.

ARC agreed herds are defined by the calving grounds they use throughout North America.

ARC also agreed herds were declining and there was no evidence of caribou moving elsewhere.

The report contained a number of suggestions on how ENR could improve its caribou programs.

It is important to note that ARC does technical or science-based reviews. It does not review policies or management decisions.

Slide 4 – Herds as the Basis for Management cont'd.

ARC did not want to address issues like harvest management or allocation because harvest management is the responsibility of co-management boards and governments, who must consider many factors when making management decisions.

ARC staff were able to use any reports or information they needed and were free to talk to anyone about them.

ARC relied on government reports, published technical papers and material provided by the outfitters.

Slide 5 – Herds as the Basis of Management cont'd

The GNWT is implementing the recommendations made by ARC. The recommendations are being used to develop the next five-year NWT Caribou Management Strategy.

ENR has looked at how many collars are needed for post-calving surveys to estimate herd size in the Bluenose herds and there are enough for recent surveys.

ENR must respect community requests to limit how many caribou are collared.

In the last three years, we have tried to survey all the herds at the same time during calving.

We have also increased the information being collected for all herds and included calf survival and comparing of the number of bulls to the number of cows.

Population models have been used to understand declines and to develop options for management of herds.

ENR is working to develop a process for peer review of reports to information from surveys out more quickly.

Slide 5 – Herds as the Basis of Management cont'd

The NWT Barren-ground Caribou Management Strategy provides a territory-wide approach for studies.

ENR works with co-management boards on studies and surveys.

We work with our co-management partners using an adaptive management approach.

ENR has always had strong partnerships with universities and other agencies to increase caribou studies and look at reasons for the decline of caribou herds.

We are also supporting traditional knowledge projects on caribou.

Slide 6 – Natural Caribou Cycles

Large changes in numbers over time, or cycles, are a normal pattern of barren-ground caribou herds across North America.

We know this based on traditional knowledge, from records of hunting success at traditional sites, from indirect methods like spruce root scars and, in the last 30 to 40 years, from population surveys of caribou.

Most herds in the NWT declined in late 1970s, increased in the early 1980s, reached high numbers in the 1990's and declined in the 2000s.

This has also been demonstrated for most herds in northern Quebec and Alaska.

The graph at the bottom right of this slide shows large changes in numbers over time, although the peaks and lows do not always match among the herds.

Slide 7 – Current Trends in Herd Size – NWT

Using the map on this slide, we will look at where each herd in the NWT is found and what is known about its trend.

The calving ground for each herd is shown as a solid colour at the north end of its range.

Starting in the Inuvik Region, the Cape Bathurst herd was estimated at nearly 20,000 in 1992.

By 2005, this herd had declined to 18-hundred caribou.

The 2006 survey confirmed this number and the Inuvialuit agreed to stop all hunting.

In 2009, the new estimate of 18-hundred caribou shows the decline had stopped and the herd was showing a stable trend.

The Cape Bathurst herd remains closed to hunting.

The Bluenose-West herd moves mostly north and west of Great Bear Lake.

It has a similar history.

Slide 7 – Current Trends in Herd Size – NWT cont'd.

This herd declined from more than 100,000 animals in 1992 to just 16,000 in July 2006.

The Inuvialuit, Gwich'in and Sahtu wildlife co-management boards recommended a total allowable harvest for this herd.

The 2009 survey showed the decline has stopped and this herd appears to have remained stable during the past three years.

A total allowable harvest remains in place.

The Bluenose-East herd moves east of Great Bear Lake and north to Kugluktuk.

It has declined rapidly since 2000, from more than 100,000 caribou to 66,000 in 2006.

ENR attempted to do a post-calving survey of this herd in July 2009 but the survey was unsuccessful due to weather.

We do not believe the Bluenose-East herd has increased.

Slide 7 – Current Trends in Herd Size – NWT cont'd.

The Bathurst herd moves between Great Slave Lake and Bathurst Inlet.

It was estimated at about 470,000 animals in 1986.

The herd declined slowly through the 1990s and more rapidly in the 2000s.

From 2006 to 2009, the herd declined from more than 100,000 caribou to just 32,000.

The Ahiak herd is in the Queen Maud Gulf area during calving and it winter range extends as far as northern Saskatchewan.

Although there is no estimate of the size of the Ahiak herd, ENR and Nunavut biologists have flow regular survey lines over the calving areas every year for the last four years and compared the number of animals seen on transect.

This information has shown a decline of nearly 60 percent in the number of cows seen on the Ahiak calving area.

The Beverly herd moves from northern Saskatchewan to north of Baker Lake.

Slide 7 – Current Trends in Herd Size cont'd

The last full population survey of the Beverly herd was done in 1994 and resulted in an estimate of 276,000 caribou.

No more surveys were done on this herd until 2002.

Between 2002 and 2007, the number of cows on the Beverly calving area fell very rapidly.

In 2009, fewer than 200 cows were counted.

Information from a small number of radio-collars indicates the remaining Beverly caribou are moving with Ahiak caribou through much of the year.

East of the Beverly herd to Hudson Bay is another caribou herd, the Qamarirjuaq.

It was surveyed in 2008 and has declined slowly since 1994.

Its range is not shown on this map.

Conditions on the land are a little bit different for each caribou herd. For example, winter roads, exploration levels and snow condition can all be different. These all affect herd size and trend. That is why it is important to know where each herd goes.

Slide 8 – Current Trends in Herd Size cont'd

People always want to know how caribou are counted.

The Bathurst herd size is an estimate based on the number of breeding cows found on the calving area. These surveys are done in June.

Each survey starts by flying regularly spaced lines about 10 km apart over a very large area. About 14,000 km were flown in June 2009.

Caribou seen on each 10 km line are counted.

We also watch the travel of the collared animals.

This is how the exact number of cows has been estimated in the past 15 years.

The blue area is where the cows were concentrated in June 2009.

A lot of yearlings and a few bulls also travel to the calving area.

This part of the survey is called a systematic reconnaissance survey and the number of caribou counted can be compared to other years to determine the trend.

Slide 8 – Current Trends in Herd Size cont'd

People from the communities have participated in these surveys during the past four years.

Participants have included:

George Mandeville from the North Slave Metis Alliance;

Frank Camsell from the Tlicho; and,

Noel Doctor and Ron Fatt from the Akaitcho.

Slide 9 – Current Trends in Herd Size cont'd

Once the calving area is found, it is divided into high, medium and low density blocks.

Survey lines are drawn on a map for a plane to fly over and take photographs.

More lines are photographed in the high density area to make the results more precise.

The plane takes photos all along the line and the caribou in the photos are later counted.

About 99 percent of the caribou are in the high and medium density blocks.

It takes less than two days to take the photos.

At this time of year, the cows don't move around much so animals are not counted twice.

The 2009 survey resulted in one of the most precise estimate of all the Bathurst caribou surveys.

Slide 9 – Current Trends in Herd Size cont'd

Since we know the ratio of bulls to cows from surveys done during the rut, we can calculate the estimate of total heard size using the number of cows on the calving area.

The basic method of the Bathurst surveys has been the same since 1986.

Slide 10 – Current Trends in Herd Size cont'd

Other types of information are also used to figure out if a herd is increasing or decreasing in size.

It is hard to tell from year to year but if you look back over five years, you can get a good picture of what is happening.

The following information is gathered for the Bathurst herd:

- Herd size every three years. Each survey costs about $400,000.

- Reconnaissance surveys of the calving ground. These surveys give you a rough idea of the number of cows on the calving grounds. On the top left graph, the red dots are the estimated of herd size for 2003, 2006 and 2009. The blue line shows the numbers counted on the reconnaissance surveys, which are much cheaper to do. The downward trend between 2006 and 2009 is cleard.

- Spring calf survival. The graph in the bottom left of this slide shows calf survival was good in the 1980s. These are the points above the line in the graph. Between 2000 and 2006, calf survival was poor. This means fewer calves were living to be adults. In the last three years, calf survival has been better than in the early 2000s but because of the low number of cows, not as many calves are born as when the herd was larger.

- Bull to cow rations are counted during the rut. The Bathurst herd has the lowest bull to cow ration of all NWT herds surveyed in recent years, at less than 40 bulls per 100 cows. A healthy herd should have 50-60 bulls to every 100 cows.

Slide 11 – Current Trends in Herd Size cont'd

This map shows the world's caribou and reindeer herds in 2009 as if we were looking down on the North Pole.

The red areas show the herds that are declining. The green areas are the herds that are increasing. The herds shown in the grey areas were uncertain or unknown because there is not enough information about them.

Globally, most wild caribou and reindeer herds are declining.

The graphs on the outside of the map show trend over time for some of these herds.

Unfortunately, there is a lot of red on this map and not much green.

The main reason for the overall declines in herds across the Arctic may be global weather patterns and, possibly, global warming.

However, each herd has its own conditions and, sometimes, neighbouring herds may have opposite trends. For example, one may be increasing while the other is decreasing.

We need to monitor individual herds and try to understand what is happening with each herd.

Slide 12 – Have Caribou Moved Elsewhere

Some people say caribou are not declining, the herds have just moved somewhere else.

There are three types of information that tells us that caribou herds have not moved anywhere else in the last three years.

First, in 2007 and 2008, ENR biologists flew the entire tundra from the Mackenzie Delta almost to Hudson Bay in early June at the time of calving. About 60,000 kms were flown each summer.

The green, yellow and red areas on the two maps on this slide show the only places where calving was seen.

The locations of all satellite-collared caribou were also checked and no caribou were found in the trees.

Flight lines also covered areas between calving grounds.

In 2009, the area between Kugluktuk and Baker Lake was flown. All the calving areas were found in the same place.

There were fewer caribou seen on transect in 2008 and 2009 than in 2007. This supports the information that all herds are declining.

Slide 12 – Have Caribou Moved Elsewhere cont'd.

On the maps, areas with high density of caribou are red; medium density areas are yellow and areas with low density are green.

Slide 13 – Have Caribou Moved Elsewhere cont'd.

Another way to look at whether cows are moving between calving areas is to look at how often collared cows switch from one calving area to another.

From 1996 to 2009, we have records for 153 cows.

We found that four percent of cows from the Bathurst herd switched to the Bluenose-East calving area while two percent of the Bluenose-East cows switched to the Bathurst calving area.

During the same period, three percent of three percent of Bathurst cows moved to the Ahiak calving area while two percent of the Ahiak cows switched to the Bathurst calving area.

These rates show that overall there was little net movement between the Bathurst herd and neighbouring herds.

These rates of exchange are similar to what is seen in other areas, such as Alaska, and are lower than those seen in northern Quebec.

Slide 14 – Have Caribou Moved Elsewhere

If caribou have moved elsewhere, we would expect to see increased numbers of caribou in neighbouring herds.

The graphs on this slide show the trend in herds on either side of the Bathurst herd.

On the left is the declining trend of the Bluenose-East herd from 2000-2006.

In the middle is the decline of the Bathurst herd from 1986 to 2009.

On the right is the downward trend in a number of cows seen on the Ahiak calving ground from 2006-2009.

The Bathurst herd declined at a faster rate from 2006 to 2009 than all the other herds in the NWT.

Slide 15 – Have Caribou Moved Elsewhere cont'd.

During the past three years, ENR has made a special effort to check that caribou have not moved elsewhere.

We do not believe the dramatic decline in the Bathurst herd is due to animals moving since no herds are increasing.

If a large number of Bathurst caribou had moved to another range, we should see some sign of this on our surveys or through movement of radio-collars.

There are not many caribou in the North Slave region and this is why ENR has been recommending management actions.

Slide 16 – Factors Affecting Herd Size and Trend

Many factors affect population size and trend in barren-ground caribou herds. This is the main reason it is important to monitor information for each herd.

Predators, like wolves take calves and adults throughout the year, and bears often kill young calves on the calving grounds.

Weather affects caribou in many ways at all times of the year.

Fire on the winter range is a natural part of the ecosystem. But big fire years may mean that large parts of the forested winter range will burn and the lichens caribou depend on in winter are very slow-growing. Seventy a hundred years may go by before caribou use burned winter range extensively.

Barren-ground caribou may be disturbed by mines, roads and traffic.

Declines or increases in some herds may be influenced by population age structure.

A herd with a large proportion of young-to-middle-aged cows is likely to have higher survival and productivity than one with many very young or very old cows.

Slide 16 – Factors Affecting Herd Size and Trend cont'd

Caribou have various parasites and diseases, which may affect their condition and reproduction.

Hunter harvest from large herds is usually a small proportion of the herd, but if declining herds reach low numbers, the harvest may have a significant impact.

In the next few slides, we will review the information available for the Bathurst herd for each factor.

Slide 17 – Weather: Potential Effects on Caribou

Weather conditions are different every year.

Weather conditions can affect how food grows.

If snow is deep, it is hard for caribou to find food.

A hot summer can mean lots of insects, which bother caribou when they are feeding.

All of these will affect conditions how fat a caribou gets before winter and how it survives the winter.

In the last 25 years on the Bathurst range, there seems to be warmer winters and later freeze-up.

There also seems to be more insects in summer.

In the last ten years, we have noticed calving has been a bit later.

Slide 18 – Fire on Caribou Winter Range

Communities have been concerned about forest fires on the winter range of caribou.

Fires renew the land and caribou have lived on this land a long time.

ENR, university researchers and Tlicho elders are working together to look at relationships between caribou and fires on the Bathurst range and how it might affect winter caribou food.

ENR is also conducting meetings with communities this spring to review the wild fire program and how fires are managed.

This will be an opportunity for communities to identify key caribou area that should be protected from fires.

Slide 19 – Disturbance, Mining and Cumulative Effects

Mining provides a lot of jobs for people in communities.

The three diamond mines in the North Slave region have programs in place to monitor caribou.

The large area shown on this map is the summer range of the Bathurst herd.

Fewer caribou are found within 14-20 km of the mine sites than elsewhere, which means that caribou avoid the active mines.

This is shown in the two smaller circles on the map. This amounts to about four to five percent of the Bathurst summer range.

There are no mines on the Bluenose-East or Bluenose-West or Porcupine herd ranges in the Yukon and these herds are also declining.

Roads can make it easier for hunters to find caribou

We also need to understand more about cumulative effects on the caribou ranges.

Slide 20 – Health, Condition and Pregnancy Rate

During the last three years, health and condition of caribou taken during community hunts in the North Slave has been good.

Caribou have been fat and pregnancy rates have been high at about 95 percent.

This is in contrast to 2005, when cows were in poor condition and pregnancy was low.

During that fall, hunters reported seeing few calves and in spring 2006, we had the lowest calf survival recorded for this herd.

In the last three years, health, condition and spring calf survival have been good.

ENR believes, this means environmental conditions are good.

So what is causing the decline?

ENR believes when there are fewer caribou, harvest has a much bigger impact.

Slide 21 – Wolves

Many people believe wolves are a main cause for caribou declines.

ENR's information suggests wolf numbers are also declining because they have fewer caribou to eat.

Each summer, ENR checks about 100 den sites on the Bathurst range.

This has been done for about 15 years and there has been a big reduction in the number of active den sites and the number of adult wolves at each den site.

Last August, only one den was occupied compared to four years earlier, when there were 17.

No caribou were seen in the area in contrast to when surveys started 15 years ago.

Overall, these surveys indicate that wolf numbers have dropped rapidly in the Bathurst summer range in the last five years.

Few wolves are seen on the calving grounds. During the last 4 years, more than five wolves were seen each June.

Slide 22 – Wolves cont'd.

In June 2009, there were four wolf sighting in total on about 14-hundred km of flight lines over the Bathurst calving ground.

There are still wolves in the Bathurst range and they still kill caribou.

Our studies indicate wolf numbers are low and, most likely, their kill rates have dropped in proportion to their numbers.

ENR is proposing new studies to assess wolf abundance on the Bathurst range.

Slide 22 – Hunter Harvest

ENR has been monitoring harvest levels in the Bathurst range. =

Information is obtained from various sources.

The harvest by resident hunters and outfitters has been well monitored.

There is good information on Aboriginal harvest for some years. For example, the Dogrib Harvest Study reported 8 – 20 thousand caribou taken annually in the early 1990s.

When the Bathurst herd was much larger 15 years ago, the number of animals hunted was larger than what we see now. Then the harvest represented only between two and six percent of the herd.

In the last two year, ENR and the Tlicho Government monitored the harvest jointly in Wek'eezhii.

Now when the herd is much smaller, hunters take between 13-24 percent of the herd at its current size of 32,000.

No caribou herd can sustain this level of harvest.

Slide 22 – Hunter Harvest cont'd.

Resident and outfitted hunters may hunt only bulls.

Most of the harvest occurs during winter.

In the fall, mostly bulls are hunted. But in the winter, more cows than bulls are hunted.

Cow survival must increase if caribou herds are to increase.

Slide 23 – Factors Affecting Herd Size and Trend Conclusion

It is important to know how many caribou are hunted and where the hunting occurs.

This map shows where caribou were hunted last winter in Wek'eezhii.

The orange and red areas are where most of the hunt took place.

Using the location of the collared caribou, you can see which herds are being hunted.

The purple dots are Bluenose-East caribou and the green dots are Bathurst caribou.

Last winter, most of the harvest was from the Bathurst herd.

You can also see the influence of the winter roads on where the hunt takes place.

We can't do much about most factors that affect caribou herds but we need to think carefully about the impact of hunting.

Slide 24 – Recovery, Modeling and Risk Management

One of the recommendations of the ARC report was to make greater use of computer models in monitoring and managing caribou herds.

ENR and the Sahtu and Wek'eezhii Renewable Resources Board held a workshop with community representatives in May 2009 to look at different types of models.

The model used for the Bathurst herd is also used by the Porcupine Caribou Management Board.

The next three slides show how the Bathurst herd would respond to different levels of harvest.

On this slide, the computer model was asked to project what would happen if the harvest stays the same. The model also assumes that calf production and other conditions would stay the same as they were in 2009 and harvest would stay at an estimated 4000 cows per year and 1600 bulls per year.

Under these conditions, the rapid decline of the herd would continue and the herd could disappear in four to five years.

Slide 25 – Recovery, Modeling and Risk Management cont'd

The second example looks at what could happen if all harvest is stopped, pregnancy rates are high and calf survival is very good or better than 2009.

The model projects the herd may stabilize and increase slightly over a five-year period.

Keep in mind that calf numbers would have to be better than we've seen in recent years in the Bathurst herd.

Slide 26 – Recovery, Modeling and Risk Management cont'd

This slide looks at what could happen if about 16-hundred bulls are hunted and cows are protected.

If there is also good calf survival and productivity, the model projects that the herd would still decline, but at a slower rate than between 2006 and 2009.

Currently the herd has quite a few young cows, one to two years old.

These cows need another year or two to produce lots of calves.

Right now calf productivity is at a point where, at best, it would balance natural mortality.

Slide 27 – Risk Management

Currently, there is disagreement among various groups about what should be done about hunting.

More consultation is needed but the longer harvest management is delayed, the harder it will be for the Bathurst herd to recover.

This slide provides some idea of the level of risk associated with different levels of hunting.

There are three columns showing the influence that calf productivity has on herd trend.

Each row has the most likely outcome for a certain amount of harvest.

Red means a fast decline; green means an increase; and, yellow and orange are slower declines.

At the top is what the trend is if there is no harvest.

With no harvest, a slow decline is expected if calf numbers are the same as 2009. The herd could be stable or increase a bit if calf numbers get better.

At the bottom, it shows the trend if there is a harvest of 5000 caribou or 7000 caribou a year, about the same estimated harvest as in 2008-2009.

Slide 27 – Risk Management cont'd.

At this level of harvest, the herd can only decline quickly, not what calf numbers are like.

In between are harvest levels of 1000, 500 and 200 caribou.

At lower levels of harvest, a decline is still likely.

The herd's best change for recovery is with no harvest.

But, another approach the Board could consider is to reduce hunting to very low levels over the next three years to allow time for a co-management process and plan to be put into place...one that everyone could live with.

If this option is chosen, ENR would recommend the interim harvest from the Bathurst herd should be less than 500 caribou of which 80 percent, and preferably 100 percent, should be bulls.

A harvest of this size does increase the risk of further decline but at a much slower rate than the likely decline of a harvest of 3000-5000 cows and 1000-2000 bulls.

ENR would also suggest the bull harvest spare the prime bulls and emphasize young bulls.

Slide 28 – Summary of Technical Presentation

Before we move on to the management part of the presentation, I will review the main points for our technical summary:

1. The Bathurst decline from 2006 to 2009 is faster than in any other NWT herd
2. Most of the world's wild caribou and reindeer herds are declining so this is not unique to the NWT. It is possible herds will continue to decline even with no harvest.
3. ENR survey methods to estimate herd size are reliable and there is no evidence the missing caribou went somewhere else.
4. Numbers of wolves on the Bathurst range have declined rapidly in the last five years.
5. For the Bathurst herd to increase, cow survival must increase and calf productivity must also improve.
6. The Bathurst herd cannot sustain the levels of harvest as they were in 2008-2009.

I'll turn now over to Susan Fleck and Fred Mandeville to talk management options.

Slide 29 - Proposed Management Actions

Thanks, Jan. In this section, Fred and I will talk about the following:

- Management actions in other NWT herds;
- Engagement and consultation done by ENR on the joint proposal before the Board;
- ENR recommendations for management actions; and,
- What happens after the Board provides recommendations.

Slide 30 – Caribou Management Actions taken in NWT

As we have seen, caribou herds have been declining throughout the Northwest Territories.

In the Inuvialuit, Gwich'in and Sahtu regions, ENR has been working with co-management boards and communities to assist recovery of the Cape Bathurst and Bluenose-West herds. The goal has been to ensure as many cows as possible survive.

For the Cape Bathurst herd, all harvest was stopped in 2007 based on recommendations from the Inuvialuit wildlife co-management board.

There has been good calf survival for the past two years and the 2009 survey to estimate herd size suggests there has been no further decline. The Inuvialuit have a community conservation plan to protect the calving area used by this small herd.

For the Bluenose-West herd, all resident and outfitted hunting has stopped and a Total Allowable Harvest is in place for the Aboriginal harvest.

The allocation of harvest among the three regions sharing this herd was determined by the Invuialuit, Gwich'in and Sahtu wildlife co-management boards in accordance with land claim agreements.

The Total Allowable Harvest is not established in regulation but is controlled by the use of tags provided to community harvester committees.

Slide 31 – Caribou Management Actions taken in NWT cont'd

The survey in 2009 indicates the size of the Bluenose-West has not changed since 2006.

Calf survival has been good and harvest effort has focused on bulls. This suggests the approach is working.

For the Bluenose-East herd, which is shared with Nunavut, the Sahtu, Dehcho and Tlicho, there is concern about harvest levels and that the decline is continuing.

The Sahtu Renewable Resources Board recommended a voluntary total allowable harvest in 2006 focusing on bulls and stopped all resident and outfitted hunting in the Sahtu region.

During the past two years, this herd has been wintering primarily in the Tlicho region.

A survey to update herd size could not be completed in 2009 because of weather conditions and is planned for 2010.

The Nunavut, Sahtu, Inuvialuit and Tlicho co-management boards are leading a process to develop a management plan for this herd and the Bluenose-West and Cape Bathurst herds.

Slide 31 – Caribou Management Actions taken in NWT cont'd

The point here is that reducing harvest is making a difference.

For these herds, concerns about the impact of predators were raised but there have been no reports from communities of high wolf numbers.

I'll turn it over to Fred now.

Slide 32 – Engagement

There have been questions about the level of information sharing and consultation on the joint proposal with First Nations, Metis groups and stakeholders, such as resident hunters or outfitters.

The next two slides provide a summary of meetings and workshops held. This does not include telephone calls or informal discussions at airports and other meetings.

After the June 2009 survey of the Bathurst herd, ENR began sharing information in July and August that the herd was expected to be much smaller than in 2006.

This was based on comparing the number of caribou seen on the calving grounds during the last four years. The exact count was not available until September.

In accordance with the Tlicho Agreement, ENR and the Tlicho Government began working on a joint proposal in July to submit to the Wek'eezhii Renewable Resources Board.

Two workshops were held with representatives from almost all communities in North and South Slave in early October to identify options for recovery. This information was also considered when developing the joint proposal.

Slide 32 – Engagement cont'd.

Once the new herd size of 32,000 was available in late September, a number of Aboriginal groups identified the need for conservation and took on leadership roles.

The Yellowknives Dene First Nation cancelled their fall hunt.

The Dene Nation leadership passed a motion in October in Dettah that harvesting is a concern and there was need to work together on a long range plan.

The Northwest Territory Metis Nation passed a motion in October urging all members to not harvest caribou for a few years to aid recovery and urged its members to use alternate country food sources.

Slide 32 – Engagement and Consultation

ENR also held meetings in almost all of the North and South Slave communities outside of Wek'eezhii to talk about the ideas in the joint proposal identified, which would help caribou herds recover.

The Tlicho Government held meetings with representatives from its communities to discuss the ideas in the joint proposal.

There is support from the Tlicho Government and all other First Nations on actions relating to elimination of harvest by resident and outfitted hunters.

There is not unanimous support for Aboriginal hunting restrictions.

Strong concerns were also raised about the role of predators, the impact of winter roads, the effect of the diamond mines and the impact of shifting hunting pressure to other declining herds.

However, ENR must stress that for the Bathurst herd to have any chance to recover, hunting of cows must be stopped until the herd can sustain it.

Slide 33 – Final ENR Recommendations for Wek'eezhii

During the past two months, ENR has considered comments from consultation.

Although most groups suggested different ways to reduce hunting, no agreements have been reached.

ENR maintains urgent actions to control hunting the Bathurst herd are required when we look at its rapid decline, low numbers, the impact of harvest and the herd's relatively poor calf recruitment.

I'll now review the ENR recommendations for actions for caribou herds that move through Wek'eezhii.

For the Bluenose-East herd, which is shared with Sahtu, Dehcho and Nunavut, ENR recommends all resident and outfitted hunting stop in Wek'eezhii.

This is consistent with actions taken in Sahtu in 2006. To date, the estimated harvest this winter, including Nunavut, is about 2000 caribou.

ENR is concerned that the herd has been declining and is recommending a bull only harvest, as a precautionary measure, for General Hunting Licence holders.

Slide 33 – Final ENR Recommendations for Wek'eezhii cont'd.

ENR is working with Nunavut and others to update the estimate of herd size this summer.

This will allow everyone to assess if more actions are needed.

ENR will also continue to support the actions needed to complete the management plan for this herd being led by the NWT and Nunavut co-management boards.

For the Bathurst herd, ENR recommends immediate actions. With only 32,000 caribou, this herd cannot sustain the 2008-2009 estimated harvest level.

There is support from consultation with Aboriginal organizations to stop all resident and outfitted hunting.

ENR recommends that all cows be protected.

A small bull harvest could be considered until the next survey in 2012 to allow time to come to agreement on harvest restrictions and develop a management planning process and plan.

During the next three years, monitoring should include annual harvest reporting, calf survival and trend of breeding cows on calving ground.

Slide 33 – Final ENR Recommendations for Wek’eezhii cont’d.

ENR will provide results annually to boards and communities.

ENR is prepared to consider options to reduce predation by wolves.

ENR suggest obtaining a new herd estimate in 2012 and to reassess management actions.

ENR is prepared to work with First Nations, the Tlicho Government and engage Nunavut to set up a process for developing a long term management plan.

Slide 34 – Final ENR Recommendations for Outside of Wek'eezhii

For the herds outside of Wek'eezhii and east to Nunavut, ENR is recommending the same management actions as for the Bathurst herd.

A process is needed to allocate harvest if a small bull harvest is recommended by this Board.

The harvest will need to be shared with other general hunting licence holders.

For the Ahiak herd, ENR is recommending the same actions as for the Bluenose-East herd.

Stop resident and commercial hunting.

ENR is concerned that the herd is still declining and is recommending a bull only harvest, as a precautionary measure, for General Hunting Licence holders. Harvest should be reported annually.

ENR is prepared to work with First Nations and Tlicho Government and engage Nunavut and Saskatchewan to set up a process for developing a long term management plan.

I'll turn it back to Susan to continue.

Slide 35 – Why is Harvest Management Important

ENR's primary recommendation to help caribou herds recover is to increase the survival of cows.

Harvest by people directly affects the rate of recovery.

Today people are able to go out and get caribou with little effort because of winter roads and the use of trucks and skidoos.

The last time caribou numbers were low in the late 1970's, the methods of harvest were quite different.

In communities, people still used either dog teams for trapping and hunting or very small snow machines like Elans that could not travel far.

There were no winter roads to hunt from by trucks and there was little use of aircraft for hunting.

There were no outfitting operations and limited resident hunting.

In those days, if caribou numbers were low and people couldn't hunt them, people used other animals and fish for food.

Today it is different.

Slide 35 – Why is Harvest Management Important cont’d

It is hard for caribou to hide from people so they can increase in numbers.

Caribou have been plentiful for the last 25 years but people need to remember caribou numbers go up and down.

Slide 36 – Why is Harvest Management Important cont'd

Setting harvest restrictions does seem to be making a difference for two herds in the NWT.

Calf survival in these two herds has also helped them to stabilize.

But, it is important to keep in mind that increases in the Cape Bathurst and Bluenose West herds are not guaranteed to happen in the Bathurst herd.

The global outlook for caribou and reindeer is not very good.

Other factors, like predation, spring weather, winter weather and so on, still have effects on the herds.

Also, when herds are reduced to very low numbers, recovery will take much longer than if the herds had stabilized at higher numbers.

ENR's view is that a limited harvest, mostly or all males, could be considered for the Bathurst herd for an interim period while a more comprehensive plan is built, recognizing there is a risk of further decline.

It's time we all took responsibility to help caribou.

Slide 37 – Small Harvest of Young Bulls

In the joint proposal, ENR recommends mobile protection zones with a small bull harvest.

As noted earlier in the presentation, there is some risk with this approach but it would allow some time for a planning process to be undertaken.

Here are three options for achieving the objective of a small bull harvest. They are offered for discussion purposes

1. Set a Total Allowable Harvest for a management zone where the majority of the Bathurst caribou are located. This would be implemented using a tag system. The location of the management zone may have to change annually depending where the satellite collared caribou are. This option would ensure that harvest is controlled.

2. Fall harvest and bulls only – Few caribou are taken in the fall because they can only be accessed by aircraft. If communities were advised where Bathurst caribou are, they could avoid this herd. Education would be required to ensure hunters can distinguish young males from females. Mandatory reporting would allow agencies to track the level of harvest. This measure could be evaluated every year to see if it is effective in minimizing harvest. This would allow communities to obtain some caribou when they are in the best condition.

Slide 37 – Small Harvest of Young Bulls cont'd.

3. Winter harvest and bulls only. As most hunting is concentrated along winter roads, harvest could be minimized by not allowing hunting on winter roads or transport of caribou on winter roads. Again communities could be informed where Bathurst caribou are so they could avoid hunting this herd. Mandatory reporting would allow agencies to track the level of harvest. This measure could be evaluated each year to see if it is effective in minimizing harvest.

Slide 38 – Addressing Hardships

ENR understands that low caribou numbers creates hardships for all those who use caribou.

In previous times when caribou numbers were low, people hunted other animals and caught fish.

These options exist today and ENR is prepared to assist here. In addition, ENR and Industry, Tourism and Investment have taken the following actions to address hardships:

1. Increased access to wood bison in North Slave region to provide an alternative country food to caribou.
2. Assist communities in North Slave region to access caribou from neighbouring herds. However, communities outside the North Slave region have expressed concern that this may cause additional pressure on those herds which are also declining.
3. Work with co-management partners to develop conservation education programs that involve youth and elders.
4. The harvester assistance program known as CHAP, which is run by Industry, Tourism and Investment, will continue.
5. New tourism programs have been created to support the outfitting industry which is facing numerous challenges.

Slide 39 – Wolves

ENR is also prepared to look at ideas for predator management.

Wolves are hunted for their fur. The current harvest from the caribou range in the North and South Slave regions is about 400 wolves per year, with most of those taken in the South Slave region.

Actions have been taken to encourage wolf hunting. These include the fur program, which provides $200 per well-handled wolf pelt, and increasing the number of tags for outfitted hunters from one to two.

ENR also pays a hunter $100 for each wolf carcass. These are examined to obtain information on reproduction, condition and ages of wolves.

Questions have also been asked about how many wolves there are and ENR is proposing a study to take a closer look at this.

In some places, wolf control has been done to help caribou recover.

In the Yukon and for the Forty Mile herd in Alaska, wolf control was in place for several years. These programs did not start until it was determined that hunting restrictions were not leading to recovery.

Slide 40 – Next Steps

This is the final slide focuses on the next steps once recommendations are received from the Wek'eezhii Renewable Resources Board in May.

ENR's objective is to work with people to put measures into place by the end of this summer.

1. Inside Wek'eezhii, ENR will consult with the Tlicho Government, in accordance with the Tlicho Agreement, on implementing the recommendations to replace the Interim Emergency Measures.

2. To the east of Wek'eezhii, ENR will consult with Akaitcho First Ntions, such as the Yellowknives Dene First Nation and Lutsel k'e Dene First Nation, and Metis organizations on implementing measures to conserve the Bathurst herd and the Ahiak herd. ENR will use the recommendations from the Board as a basis for the consultation. ENR is also very interested in discussing the many actions suggested by Aboriginal groups to the Board.

3. For management planning, ENR will continue to support the process for the Bluenose-East herd and work with Aboriginal organizations and Nunavut and Saskatchewan governments and co-management boards to establish process for management planning for Bathurst and Ahiak herds. ENR will also work under these processes to follow up on results from surveys to be conducted in summer 2010 to obtain new estimates of herd size for the Bluenose-East and Ahiak herds.

Slide 40 – Next Steps cont’d.

We all have a responsibility to ensure that caribou are around for future generations.

We have all the tools we need.

The decisions that have to be made are difficult and painful.

But if we work together, we can be successful.

Mahsi cho.