



**PRAIRIE CREEK MINE  
ALL SEASON ROAD  
PUBLIC HEARING  
Day 3 - April 28, 2017**



# AGENDA

- Wildlife including Birds and Species at Risk
- Traditional Harvesting and Traditionally Harvested Species
- Cultural and Heritage Resources
- Closure and Reclamation
- Impacts from Employment

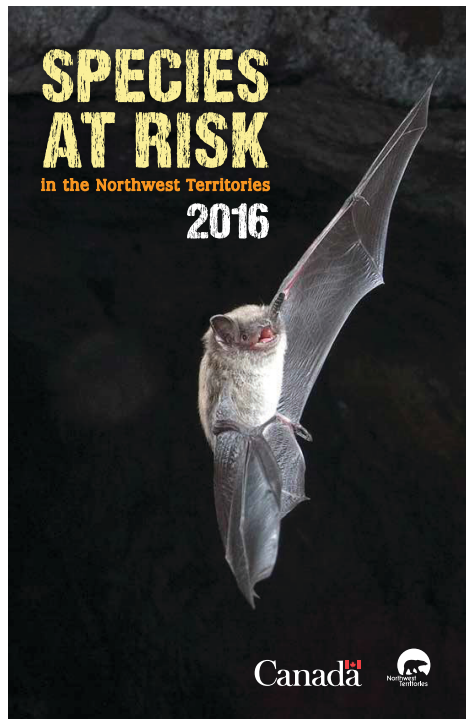
# SUB-AGENDA

- Wildlife including birds and species at risk
  - Mountain caribou
  - Boreal caribou
  - Collared pika
  - Bears
  - Birds and species at risk

# Mountain caribou

- Official range does not extend to road
- Congregations to north and west
- Collars show a few animals cross the road, consistent with anecdotal observations
- Mitigations such as collision avoidance, speed restricted crossing zones appropriate
- Structured recording of road user and community-based monitor sightings, appropriate adaptive management
- Aerial surveys have limited relevance to adaptive management, but useful to Parks Canada for broader population tracking
- Low potential for significant population-level effects





## FOR MORE INFORMATION

### GOVERNMENT OF CANADA

Environment and Climate Change Canada  
Canadian Wildlife Service

867-669-4765  
EC.SANIT.ELP.NTEC@Canada.ca  
sara@ec.gc.ca

Fisheries and Oceans Canada

204-983-0600  
aquaticspeciesatrisk.ca

Parks Canada Agency

1-888-273-8888  
pc.gc.ca

### GOVERNMENT OF THE NWT

Department of Environment and Natural Resources  
Toll-Free 1-855-783-4301

or contact your regional Environment and Natural Resources office  
sara@govint.ca  
nwt-speciesatrisk.ca

### OTHER AGENCIES

Committee on the Status of Endangered Wildlife  
in Canada (COSEWIC)

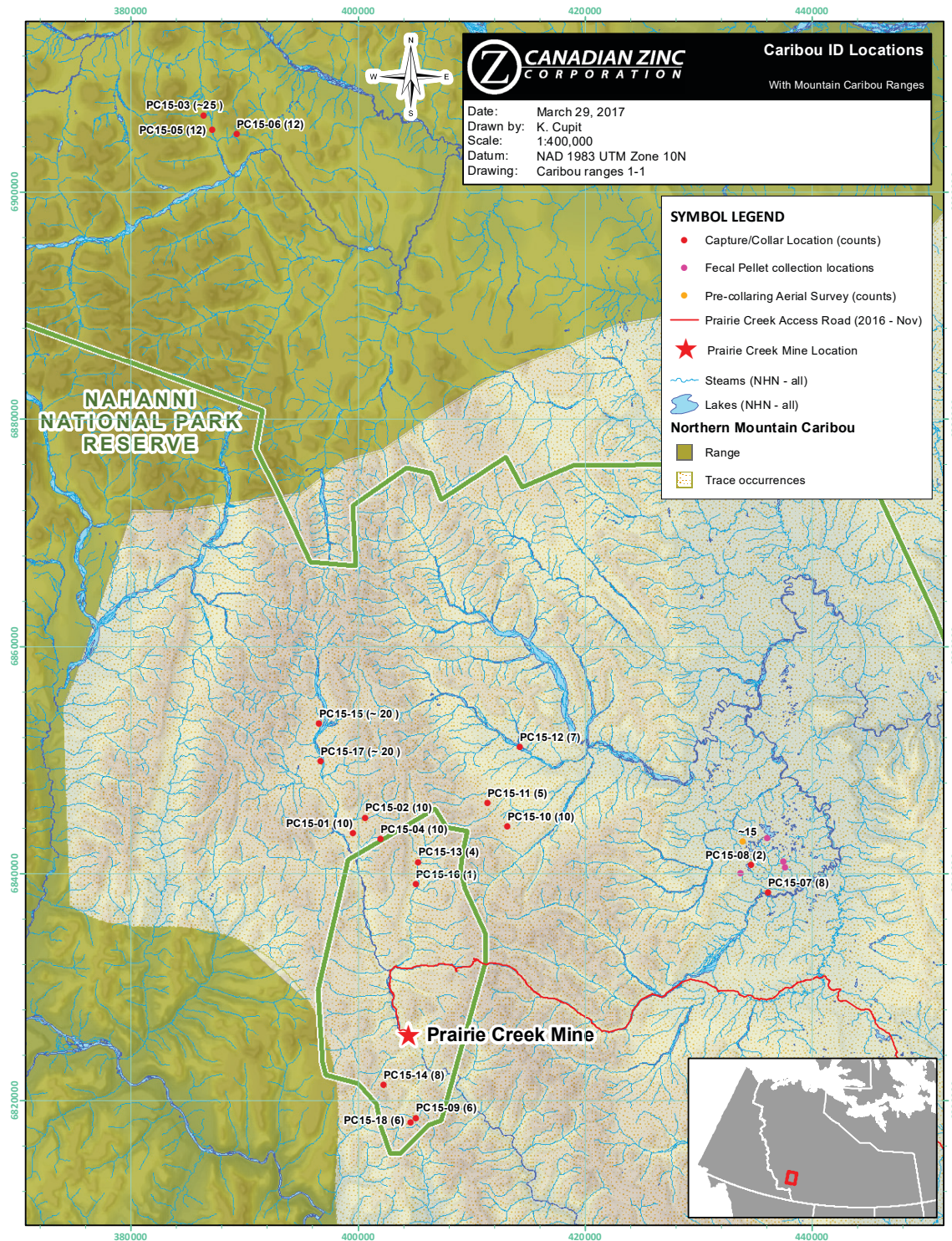
cosecw.gc.ca

Species at Risk Committee

nwt-speciesatrisk.ca/SARc

Conference of Management Authorities

nwt-speciesatrisk.ca/CMA





# Mountain caribou

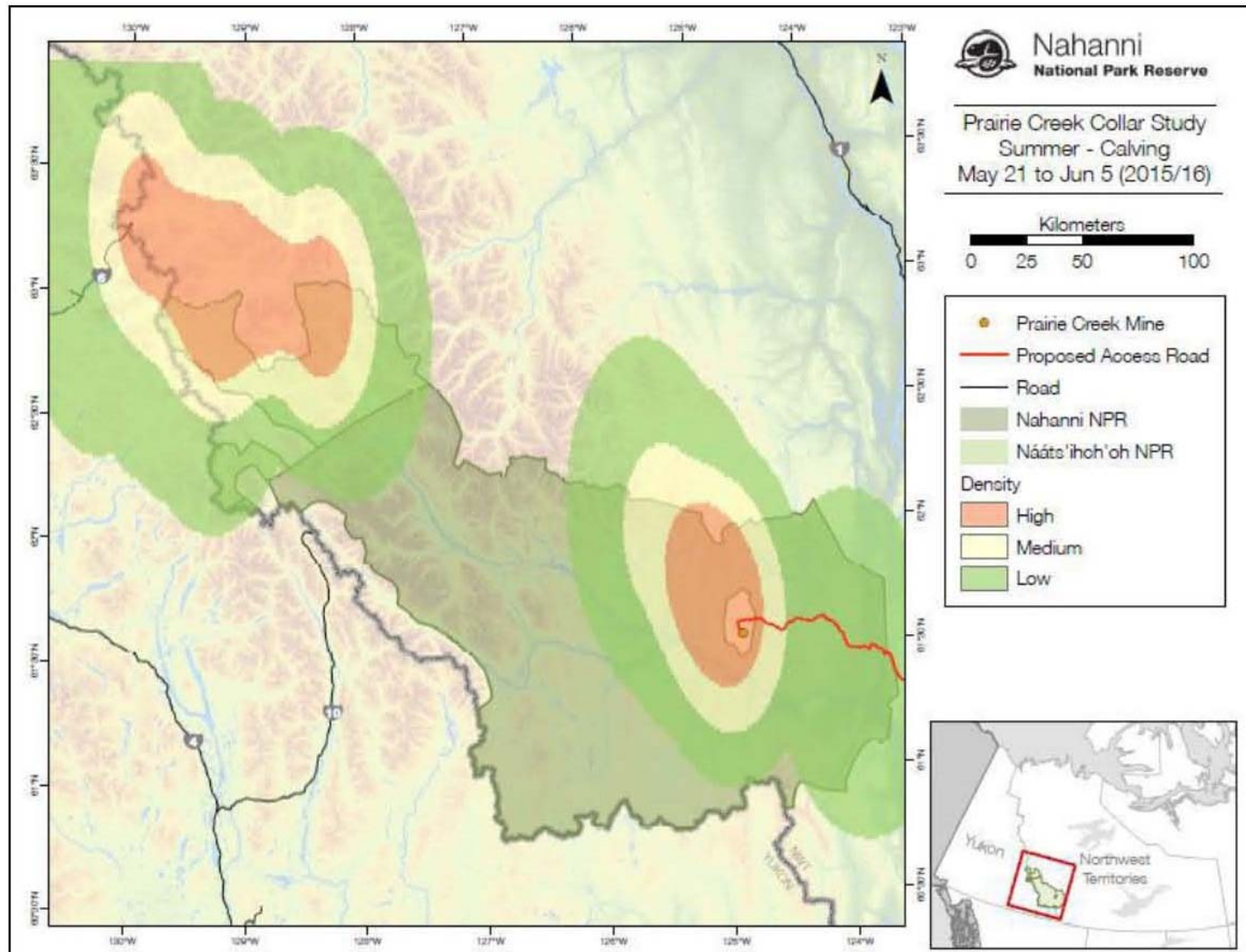


Figure 1. Kernel density map of locations for all collared caribou in calving season.



**CANADIAN ZINC**  
CORPORATION

# Mountain Caribou Collar Study

SPRING MIGRATION (Apr 16 to May 20)



Date: April 5, 2017  
Drawn by: K. Cupit  
Scale: 1:300,000  
Datum: NAD 1983 UTM Zone 10N  
Drawing: Caribou ranges 1-3









**NAHANNI  
NATIONAL  
PARK RESERVE**

 **Prairie Creek Mine**

## SYMBOL LEGEND

-  Prairie Creek Access Road
-  Prairie Creek Mine Location

## Collar ID (population)

-  PC15-01 (10)
-  PC15-04 (10)
-  PC15-07 (8)
-  PC15-08 (2)
-  Steams (NHN - all)
-  Lakes (NHN - all)

## Expected Counts (Spring Migration)

-  1 - 5
-  0 - 1







**CANADIAN ZINC**  
CORPORATION

## Mountain Caribou Collar Study

SUMMER CALVING (May 21 to Jun 5)

Date: April 5, 2017  
Drawn by: K. Cupit  
Scale: 1:300,000  
Datum: NAD 1983 UTM Zone 10N  
Drawing: Caribou ranges 1-3



**NAHANNI  
NATIONAL PARK  
RESERVE**

★ **Prairie Creek Mine**

### SYMBOL LEGEND

- Prairie Creek Access Road
- ★ Prairie Creek Mine Location

#### Collar ID (population)

- PC15-01 (10)
- PC15-04 (10)
- PC15-07 (8)
- PC15-08 (2)
- ~ Steams (NHN - all)
- ~ Lakes (NHN - all)

#### Expected Counts (Summer Calving)

- 1 - 5
- 0 - 1







**CANADIAN ZINC**  
CORPORATION

# Mountain Caribou Collar Study

SUMMER POST CALVING (Jun 6 to Sep 24)

Date: April 5, 2017  
Drawn by: K. Cupit  
Scale: 1:300,000  
Datum: NAD 1983 UTM Zone 10N  
Drawing: Caribou ranges 1-3




**NAHANNI  
NATIONAL PARK  
RESERVE**


 **Prairie Creek Mine**


## SYMBOL LEGEND


 Prairie Creek Access Road


 Prairie Creek Mine Location


### Collar ID (population)


 PC15-01 (10)

 PC15-04 (10)

 PC15-07 (8)

 PC15-08 (2)

 Steams (NHN - all)

 Lakes (NHN - all)

### Expected Counts (Summer Post-calving)

 12+

 5 - 12

 1 - 5

 0 - 1







**CANADIAN ZINC**  
CORPORATION

# Mountain Caribou Collar Study

FALL (Sep 25 to Dec 31)

Date: April 5, 2017  
Drawn by: K. Cupit  
Scale: 1:300,000  
Datum: NAD 1983 UTM Zone 10N  
Drawing: Caribou ranges 1-3

**NAHANNI  
NATIONAL PARK  
RESERVE**

**Prairie Creek Mine**

## SYMBOL LEGEND

- Prairie Creek Access Road
- Prairie Creek Mine Location

### Collar ID (population)

- PC15-01 (10)
- PC15-04 (10)
- PC15-05 (12)
- PC15-07 (8)
- PC15-08 (2)
- PC15-09 (6)
- PC15-10 (10)
- PC15-11 (5)
- PC15-12 (7)
- PC15-13 (4)
- PC15-14 (8)
- PC15-15 (~20)
- PC15-16 (1)
- PC15-17 (~20)
- PC15-18 (6)
- Steams (NHN - all)
- Lakes (NHN - all)

### Expected Counts (Fall)

- 12+
- 5 - 12
- 1 - 5
- 0 - 1







**CANADIAN ZINC**  
CORPORATION

# Mountain Caribou Collar Study

WINTER (Jan 1 to Apr 15)

Date: April 5, 2017  
Drawn by: K. Cupit  
Scale: 1:300,000  
Datum: NAD 1983 UTM Zone 10N  
Drawing: Caribou ranges 1-3



## SYMBOL LEGEND

- Prairie Creek Access Road
- Prairie Creek Mine Location

### Collar ID (population)

- PC15-01 (10)
- PC15-02 (10)
- PC15-04 (10)
- PC15-07 (8)
- PC15-08 (2)
- PC15-09 (6)
- PC15-10 (10)
- PC15-12 (7)
- PC15-14 (8)
- PC15-16 (1)
- PC15-17 (~20)
- PC15-18 (6)
- Steams (NHN - all)
- Lakes (NHN - all)

### Expected Counts (Winter)

- 12+
- 5 - 12
- 1 - 5
- 0 - 1

**Prairie Creek Mine**

**NAHANNI  
NATIONAL PARK  
RESERVE**



# Boreal caribou

- Road crosses “buffer” range
- Front Range upland terrain not preferred
- Reported congregations to the north and south (N. Larter, GNWT biologist)
- No sightings during any CZN studies
- 1700 ha of new disturbance over and above permitted winter road

# Collared Pika

- Sporadically detected in talus terrain along Sundog Creek
- Road alignment adjusted to minimize talus disturbance
- Presence/absence survey proposed prior to construction, mitigation as necessary

# Bears

- Mitigation to minimize risk of den disturbance during construction
- for collision avoidance
- Mitigation for human encounters

# Birds and Species at Risk

- Habitat disturbance minimized by generally following winter road alignment
- Mitigation for construction proximity (Trumpeter Swans) and blasting
- Mitigation for nesting season
- Limited length of wetland terrain minimizes potential for effects on wetland species that could be present
- Survey of avian species presence and abundance planned prior to construction to establish baseline
- No expectation of any significant potential for effects



# Traditional Harvesting and Traditionally harvested species

- Main harvest is NBDB members opportunistically hunting moose in readily accessible areas e.g. along rivers
- Caribou seldom harvested (boreal)
- Traplines in Grainger Gap area (R. Vital has a cabin), but not operated for “about a decade”
- Moose, bear and rabbit harvesting proximal to Nahanni Butte, as well as medicinal plants and berries



# Cultural and Heritage Resources

- No heritage resources found in 2 previous surveys of “high potential” areas
- Commitment to doing suitable AIA prior to construction, involving NBDB members
- Heritage resource brochure for road planning and construction personnel
- Clear policy re heritage resource protection

# Closure and Reclamation

- Borrow Pit Management and Reclamation Plans and Closure Reclamation Plan
- Topsoil salvage and storage
- Scarification, ripping and roughening of surfaces
- Maintain drainage, no ponding, surface stabilization and sediment control
- Revegetation by natural invasion. No seed mixes

# Impacts from Employment

- Positive benefits of employment
- Minimize negative side-effects consistent with previous EA (social supports, restricted entry to Nahanni Butte)
- Existing SEA

Thank You