

Wildlife Issues at the Ekati Mine

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Photo: Dean Cluff, GNWT

Wildlife and Environmental Impact Assessment
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Association for Impact Assessment
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Presentation Outline

- About the Ekati project
- About the Agency
- Wildlife Monitoring at Ekati
 - -Wolverine, Caribou, TK
- Agency Conclusions





About the Ekati Project

- Canada's First Diamond Mine
- Gem Quality Diamonds
- •Located in NWT Arctic barrens, 300 km NE of Yellowknife
- •Open pit mining (usually under lakes) followed by underground mining
- •Processed kimberlite deposition into large containment facility (former lake)











The Ekati Environmental Impact Assessment

- Full panel review 1994-1996
- 1997 project approval
- Affected Parties identified
- Approval subject to Environmental Agreement
 - BHPB (proponent), GNWT, Canada
- Based on adaptive environmental management





About the Agency

- Established in 1997 through Environmental Agreement
- Members include Aboriginal Parties, governments and BHPB
- Board of Directors appointed by Members
- Funding from BHPB





The Agency Mandate

- Technical review of BHPB environmental management and government performance
- Facilitate involvement of Aboriginal Parties and Traditional Knowledge
- AGM, office and staff, annual report, website, library
- www.monitoringagency.net





Roads







Waste Rock Piles







Pits







Long Lake Containment Facility







Wildlife Effects Monitoring at Ekati

•Focus on VECs – Caribou, Grizzly Bear, Wolves, Wolverine, Upland Breeding Birds, Falcons

- •Aboriginal technicians often used when conducting monitoring
- •Program has evolved since 1997 and incorporates views of stakeholders and research





Wildlife Effects Monitoring at Ekati

The WEMP focuses on the following core research and actions

- Habitat loss
- Wildlife attractants observed and mitigation
- Wildlife incidents and mitigation
- Species specific monitoring for each VEC





Agency Perspective on Key Lessons from Wildlife Monitoring at Ekati 1997 - 2005

Wolverine

- Mortality despite best practices in waste management
- Improved monitoring should increase understanding of regional population
- Aboriginal involvement

Caribou

- Small changes in behaviour
- Regional research pointing towards longer range effects
- BHPB plans modifications to monitoring in 2006





Wolverine Monitoring

- Frequently observed near Ekati particularly in winter 2001 and 2005
- Mortalities, relocations and many incidents involving use of deterrents
- Snow track survey used through 2004
- DNA identification study underway (2005-2007)
- Substantial effort directed at incident prevention







Metal fencing applied to skirting with additional mesh applied to prevent wolverine burrowing in winter





DNA Based Wolverine Monitoring

Robert Mulders (GNWT) conducting regional monitoring of wolverine in area near diamond mines.





Photo: Rob Mulders GNWT

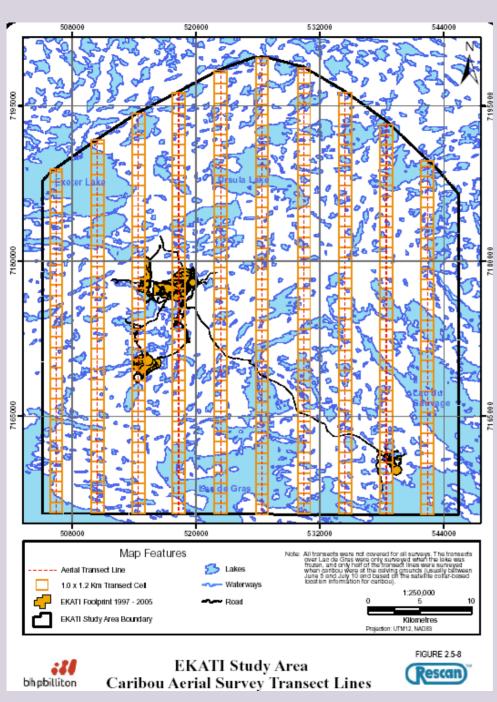


Caribou Near Ekati









Aerial **Transect** Survey for Caribou, Ekati Claim **Block**





Caribou Monitoring Results

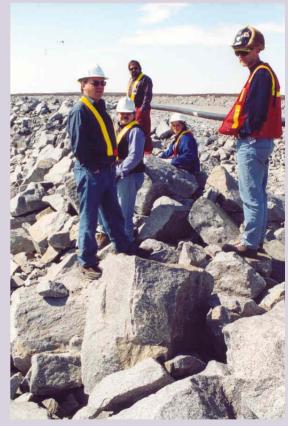
- Many years of on monitoring on claim block
- Relatively few indications of caribou impacts





Caribou and Roads





Caribou-Friendly Road edge



Wolf-Friendly Road Edge



Regional Caribou Studies

- UNBC Study (2003), GNWT Study (2004)
- Based on radio collared caribou
- Both find "something" is happening at a regional scale some effect of developments?
- Consequences for monitoring programs
- Currently being investigated and company appears committed to doing this in 2006
- BHPB consultants recommend more regional studies





Regional Caribou Studies and Management Plans

- Cooperation with Diavik
- Expansion of study area
- Discontinue northern migration aerial survey
- Fund GNWT caribou collar program
- More study on caribou interaction with mine components
- Bathurst Caribou management plan and Barren-ground Caribou management strategy from GNWT





TK Involvement in Caribou Monitoring

- 'Inokhok' fencing appears successful at directing caribou away from potentially dangerous areas at Ekati
- Site visits annually to monitor caribou interaction with mine infrastructure
- Award winning Naonayaotit Traditional Knowledge (NTK) Project
- Comments from Agency meetings with elders more effort on dust monitoring





Chris Hanks (BHPB) Receiving BHPB Corporate Award on Behalf of NTK Project Team







Inukshuk Fence







Agency Conclusions

- Generally good wildlife monitoring programs
- Improvement in monitoring programs based on research and broad stakeholder input
- Few identified impacts to date
- Improved monitoring to come





Questions?



