NCASI
Caribou Research Program

What Is NCASI?

- A membership-supported, non-profit, scientific research organization focused on the environmental and sustainability issues of concern to the North American forest products industry

NCASI Work with Stakeholders

- NCASI has worked with, and obtains some funding from governments and non-governmental organizations such as:
  - World Resources Institute (WRI), World Business Council for Sustainable Development (WBCSD), USFS, Intergovernmental Panel on Climate Change (IPCC), USEPA, NRCan, Environment Canada, FAO, US Climate Change Science Program, World Bank IFC, IUFRO…

Some NCASI Facts...

- Established In 1943
- ~ 70 scientists/engineers
- Three Regional Centers in the U.S.
- Canadian Office in Montreal
- Two Aquatic Biology Field Stations
- $13 Million Annual Budget
- 93 Member Companies in North America

NCASI Technical Studies Program Areas

- Forest Environment & Sustainability
  - Wildlife & Biodiversity*
  - Conservation Planning*
  - Forest Watersheds
  - Forest Carbon & Soil Productivity
- Air Quality
- Water Quality
- Chemical-Specific Reporting & Toxicology
- Aquatic Biology & Ecological Impact
- Climate Change
- Residuals Management

* Caribou program in yellow areas

NCASI Caribou Research

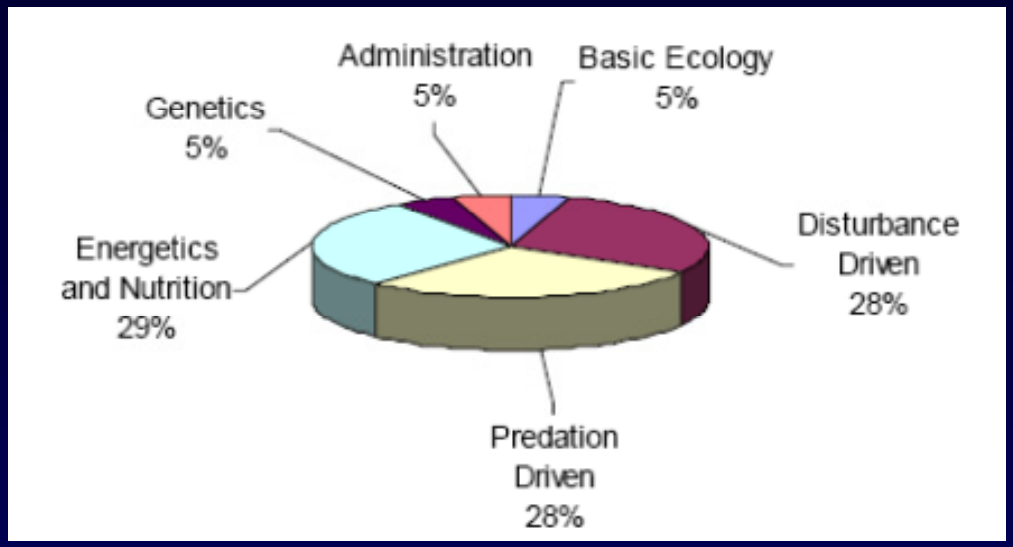
Publication of 3 Technical Bulletins

- Technical Bulletin no. 893, *Ecological Interactions among caribou, moose, and wolves: literature review*.
- Technical Bulletin no. 929, *A review of ungulate nutrition and the role of top-down and bottom up forces in woodland caribou population dynamics.*
- Technical Bulletin no. 939, *State of knowledge and analysis of current research on woodland caribou in Canada.*

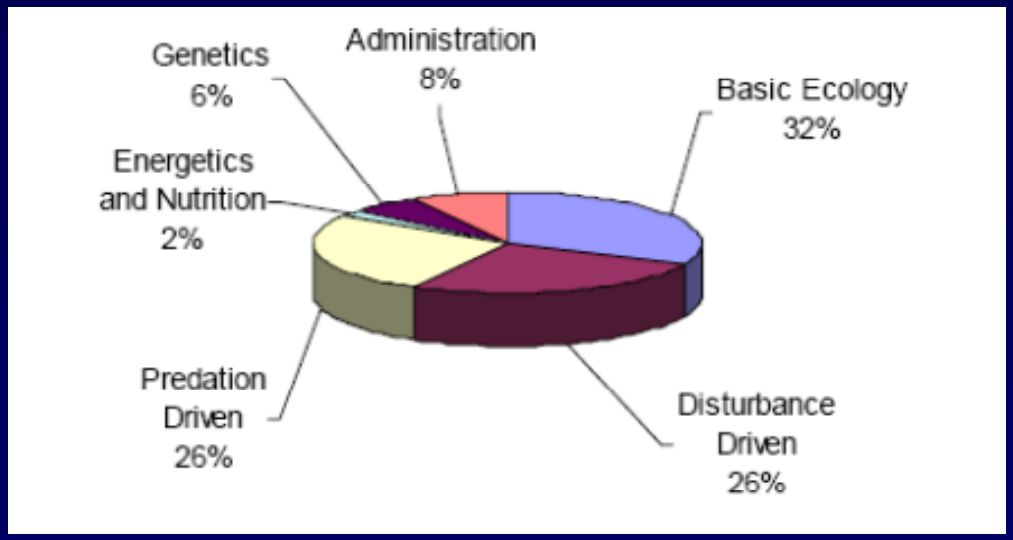
…environmental research for the forest products industry since 1943.

Identified Gaps in Caribou Ecology Knowledge

State of Research – NCASI Technical Bulletin 939



Current Research Needs



Current Research Efforts*

* Significant gap in nutrition research

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Scope of NCASI Caribou Nutrition Program

1. Captive (tame caribou) work
   - Defining the fundamental relationship between diet (habitat) and caribou viability;
2. Field Studies
   - Evaluating how forest silviculture can be used to actively benefit caribou populations; and
3. Computer Modeling
   - Building spatially-explicit models to enable industry to alter silviculture to optimize potential benefit to caribou on actively-managed forest land.

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Phase I - Captive Work

R.G. White Large Animal Research Station

Dr. Perry Barboza (UAF)

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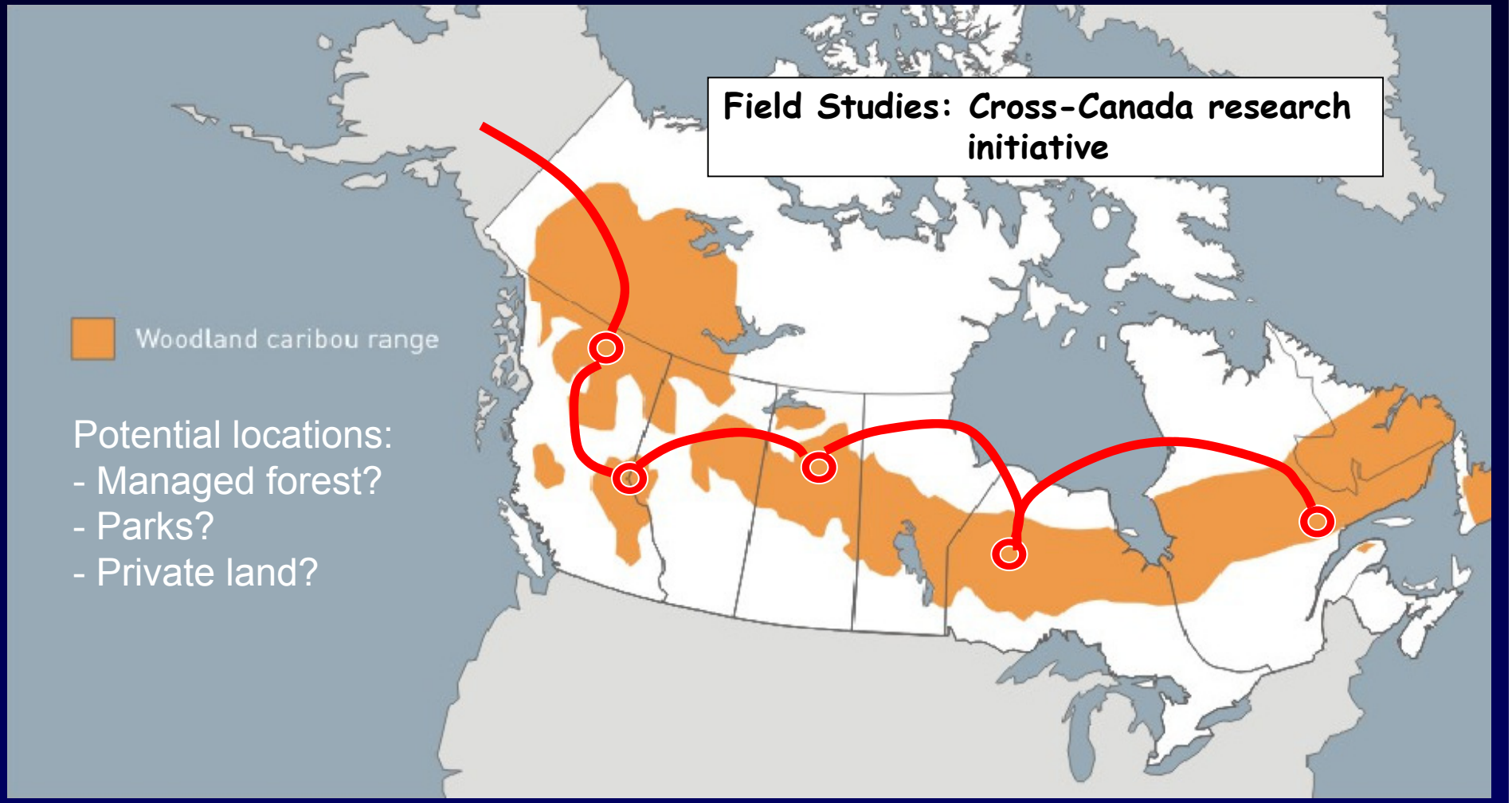

Phase II – Cross-Canada Field Studies

(Dr. Kathy Parker (UNBC), Dr. John Cook & Rachel Cook (NCASI))

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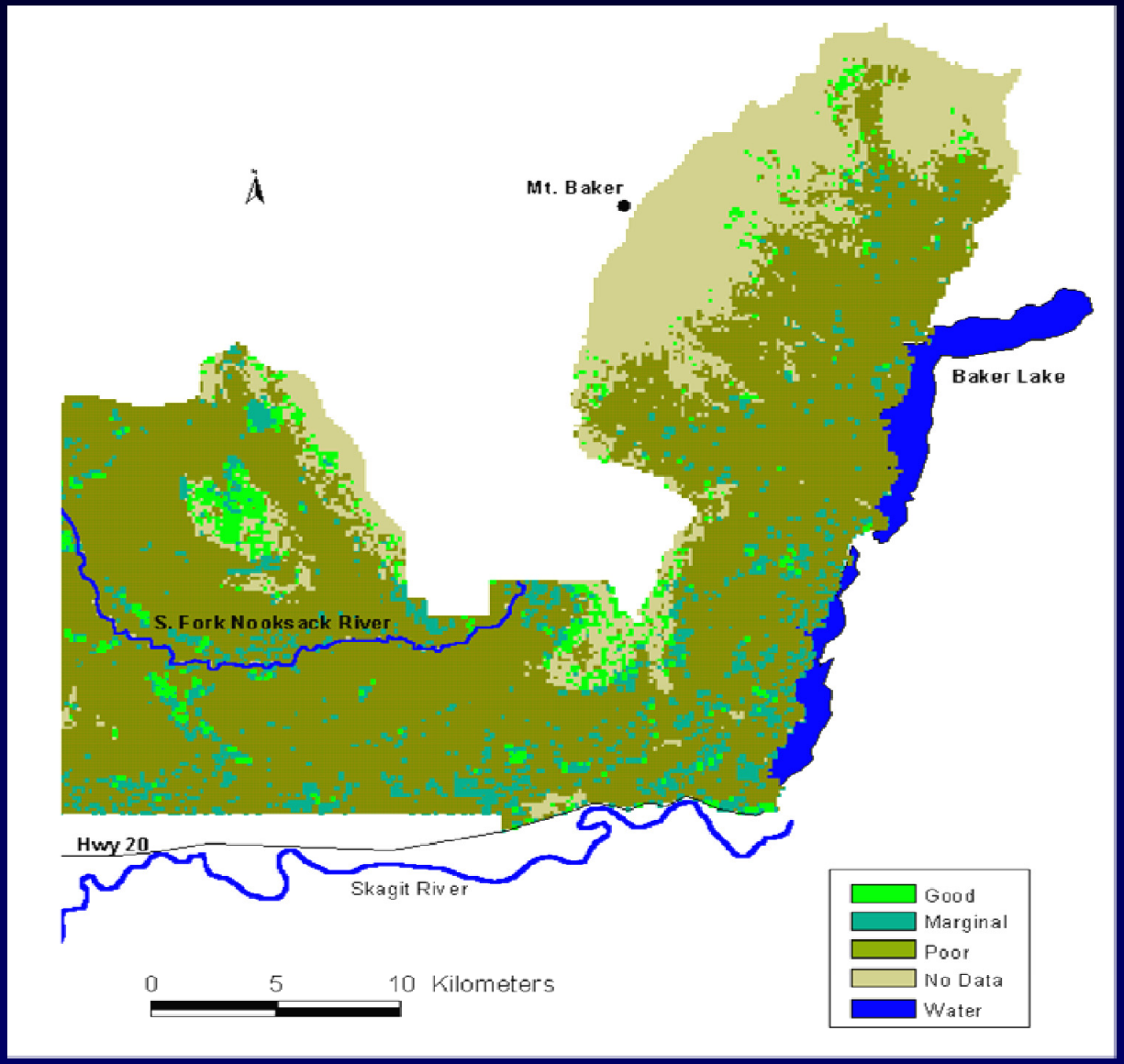
Phase III – Computer modeling to map "good" caribou habitat

Looking beyond available forage to available dietary value (e.g. from NCASI elk research)

Nutritional Resources of Nooksack & Skagit Watersheds based on "Interagency Vegetation Mapping Project" (IVMP) GIS coverage and *NCASI elk nutrition data*



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Ecologically Applied Knowledge to be Gained

- Understanding and quantifying the “nutritional landscape”
- Identification of silvicultural approaches that enhance the nutritional value of caribou habitat
- Increase in a local population’s resistance to predation (improved dietary resources resulting in larger, more viable young and less time required for foraging)

Development of tools to help minimize negative effects on caribou populations, where caribou and industry harvesting co-exist.

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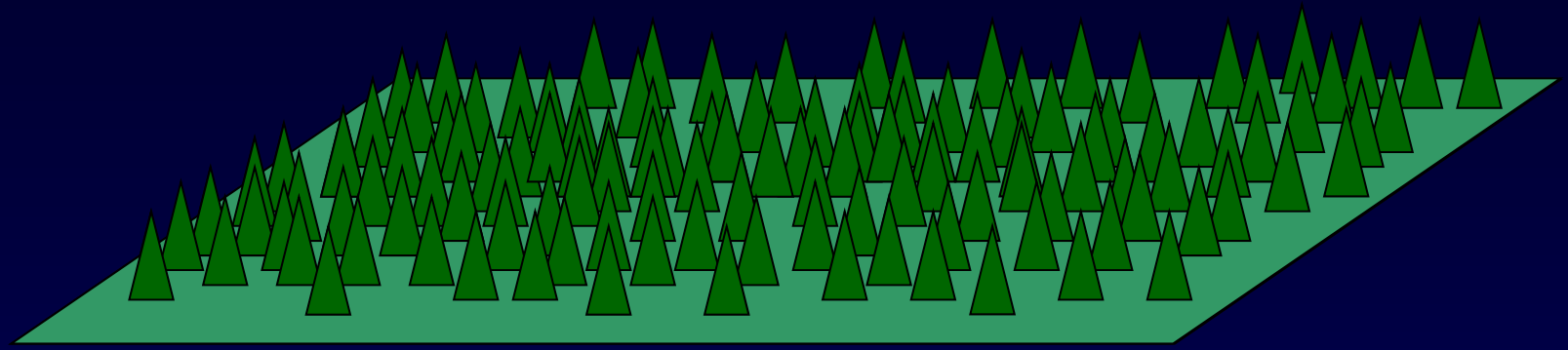
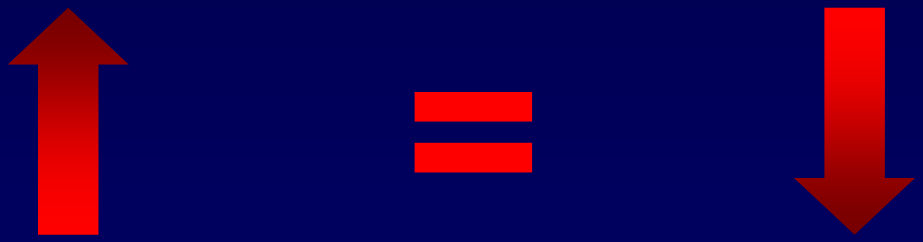
Improve habitat nutritional value through silvicultural techniques:



Increase nutritional value in areas where temporary habitat alteration will take place



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For More Information

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