

Terrestrial Furbearer Study



Progress Summary
July 2012-June 2013



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Terrestrial Furbearer Abundance and Habitat Use Study

Objective: Provide current information on abundance and habitat use of terrestrial furbearers (coyote, red fox, lynx, and marten) for use in evaluating potential Project-related impacts and identifying appropriate mitigation.

Completed Tasks

- 1) Assessed prey abundance (August 14-29, 2012)
- 2) Conducted aerial track surveys (Feb 26, Mar 27, Apr 19, 2013)
- 3) Conducted ground-based track surveys (Jan 15 – Apr 14, 2013)
- 4) Collected coyote and fox scats (Jan 15 – Apr 15, 2013)
- 5) Collected marten and lynx hair samples (Feb 7 – Apr 15, 2013)

Task 1: Prey abundance

Snowshoe hares

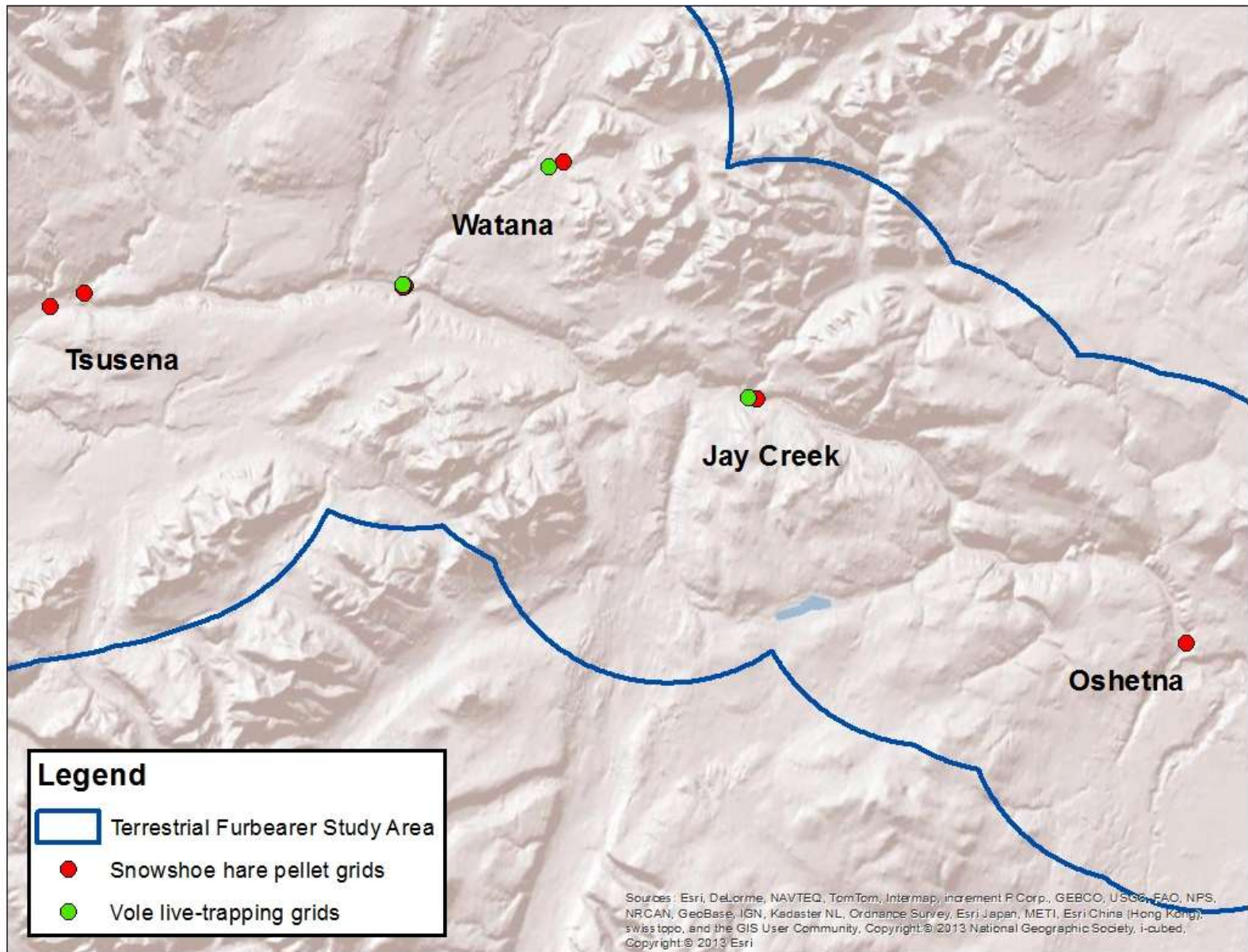
August 14-29, 2012: Established and surveyed 8 snowshoe hare pellet plot grids in spruce and tall shrub habitat

Voles

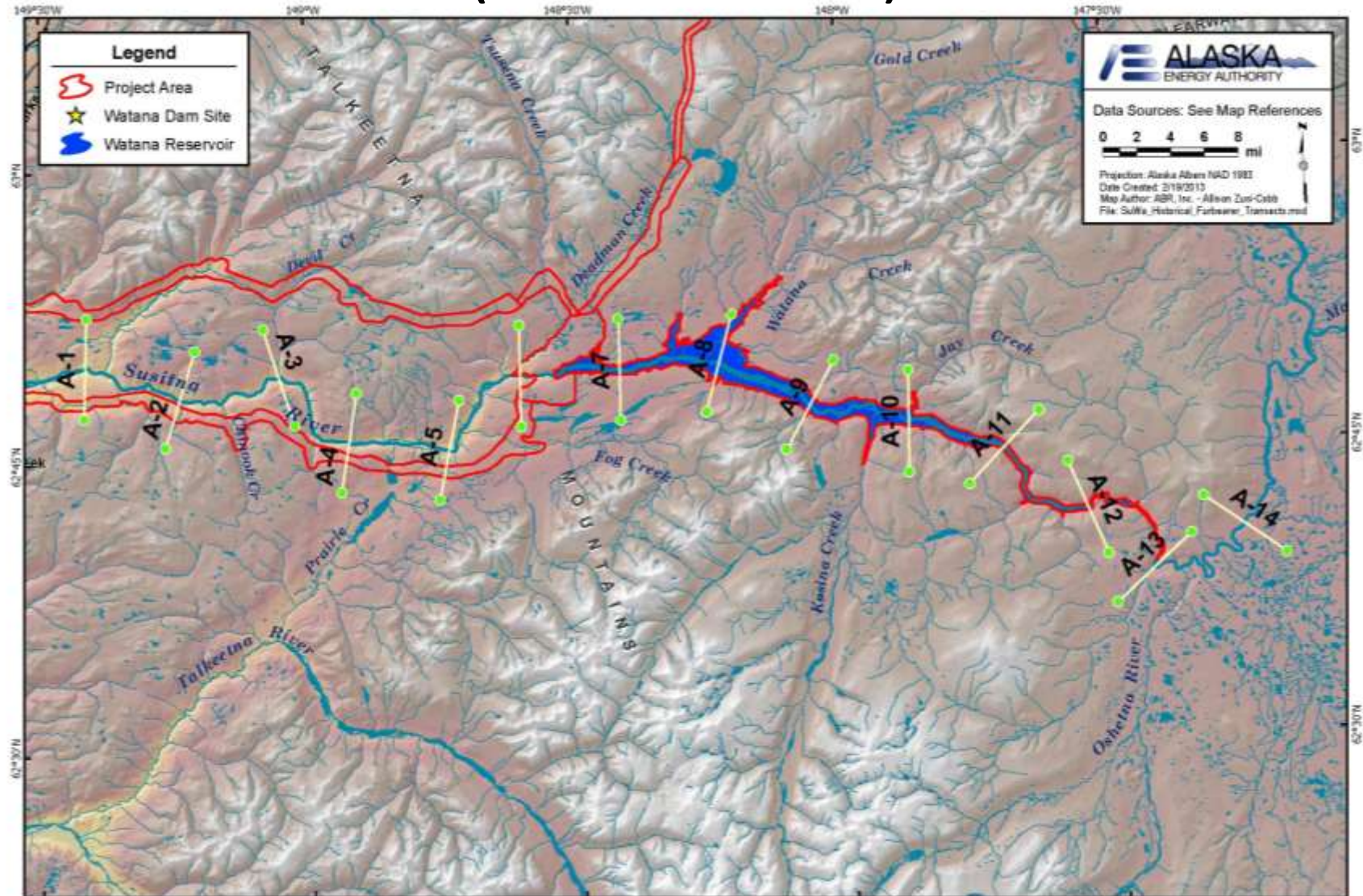
August 18-22, 2012: Established 3 vole-trapping grids in forest and meadow habitat

- Conducted 4 night live-trapping session at Watana forest and meadow grids
- Conducted a 1 night live-trapping session at Jay Creek forest grid

Task 1: Prey abundance, 2012



Task 2: Helicopter Track Transects (Winter 2013)

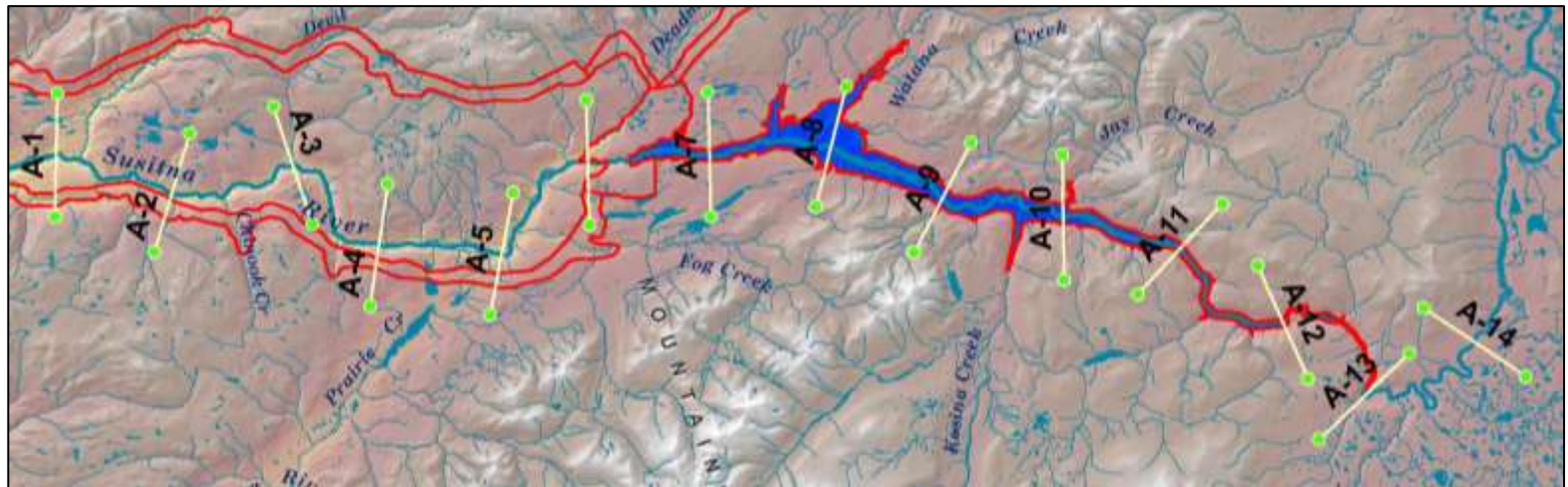
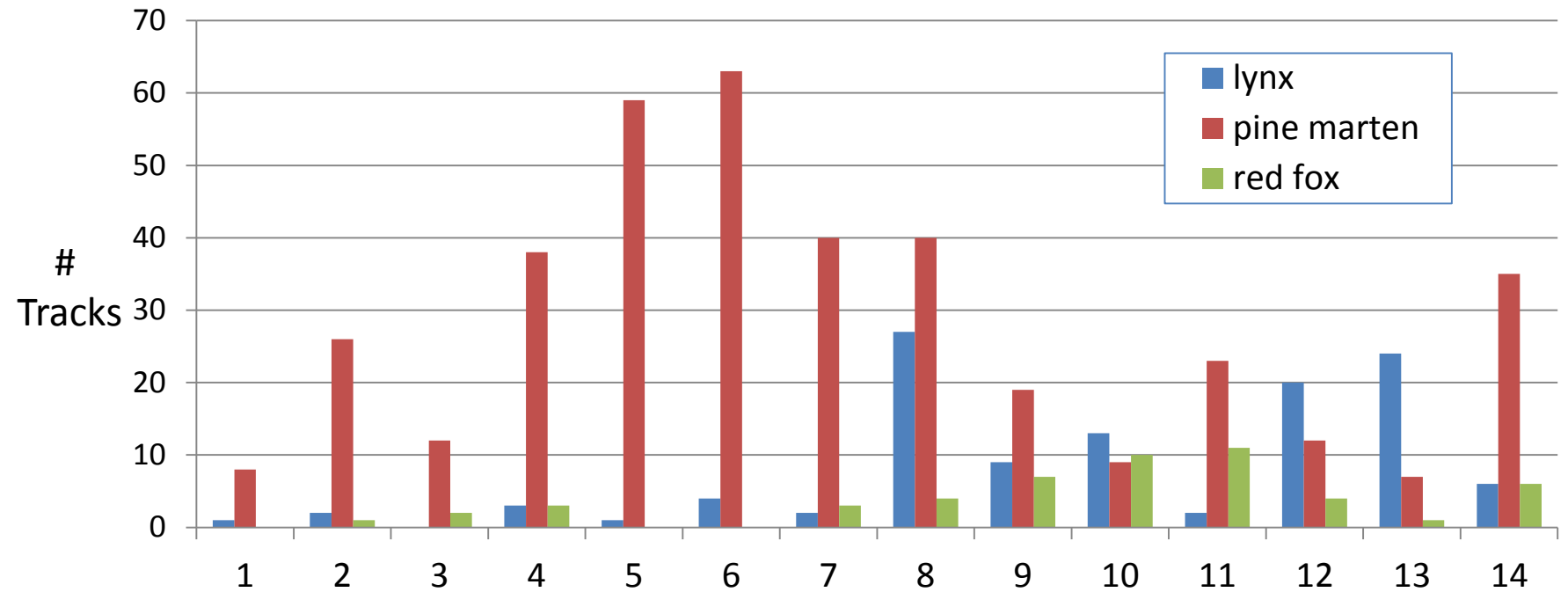


Helicopter Track Transect Results, 2013

Species	February 26	March 27	April 19	Total
marten	93	105	193	391
weasel	68	43	91	202
lynx	22	53	39	114
wolverine	14	40	53	107
fox	13	28	11	52
wolf	9	0	11	20
otter	2	6	4	12
mink	0	1	0	1
total	221	276	402	899
Days Since Snow	2	4	9	--
tracks per DSS	110.5	69	44.7	--

No coyote tracks were detected along transect routes

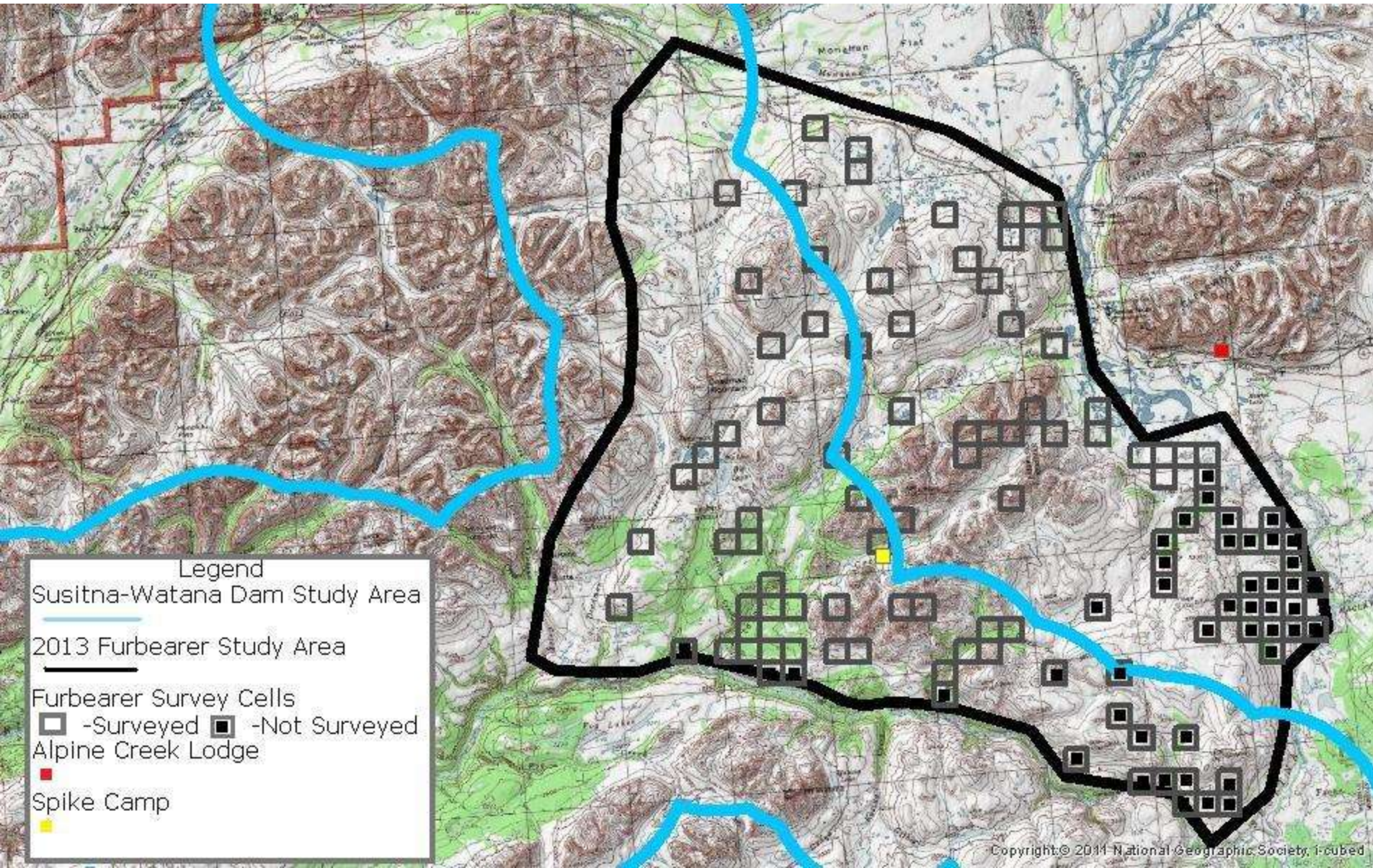
Tracks Per Transect (East – West Gradient)



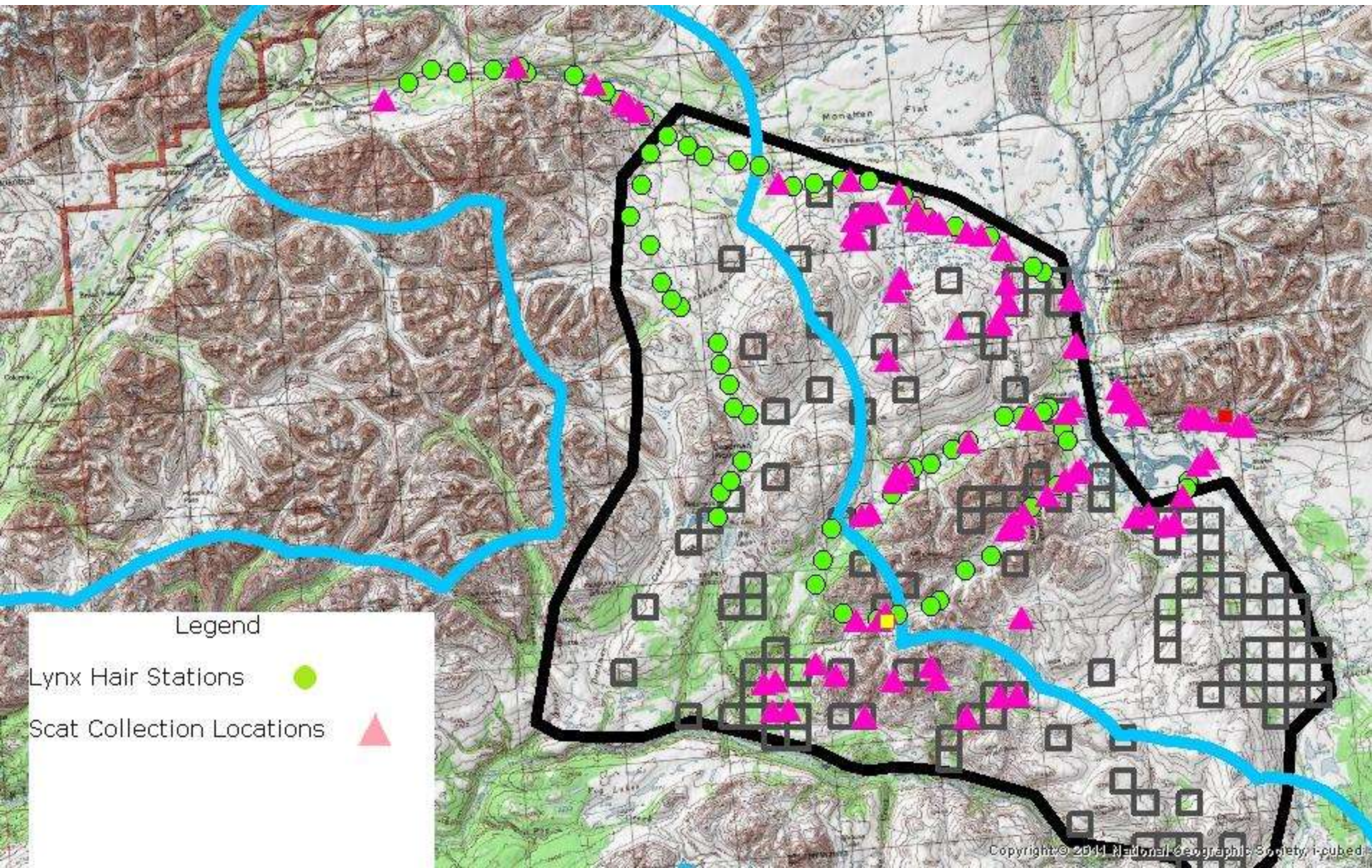
Tasks 3-5: Ground-based Track Counts, Scat and Hair Collection

- 100 4-km² survey cells were randomly generated in areas accessible by snowmachine from the lodge
- A total of 60 cells were surveyed in 2013
- Tracks of furbearers and prey were recorded
- Habitat and snow characteristics were recorded at tracks and random locations
- 70 lynx hair stations were deployed and checked bi-weekly
- Scats were collected along travel routes and during track surveys

Task 3: Ground-based Track Counts



Tasks 4 & 5: Scat & hair collection



Tasks 4 & 5: Scat & hair collection

Sample Type	Wolf	Coyote	Red Fox	Marten	Lynx	Other	Total
Scat	1	34	75	6	2	16	134
Hair	NA	NA	1	4*	21	12	37

- Many of the “other” samples were identified in the field as wolverine
- * Marten traps could not be deployed at full capacity due to restrictions on access to CIRI lands
- Genetic analyses of samples will begin in July 2013

Issues Encountered

- Lack of suitable housing: The closest housing we found was Alpine Creek Lodge, which greatly limited ability to access to the main study area due to long travel times.
- Lack of access to ANCSA (CIRI & associated village) corporation lands: We were unable to access most of our study area for marten and therefore did not deploy marten hair traps this year (aside from setting out a few traps near the lodge to assess their functionality).