

Selkirk/Cabinet-Yaak IGBC Subcommittee

4/10/18 Meeting Notes

Cusick, WA

Subcommittee Members present: Chris Savage, Rodney Smoldon, Cindy Weston (for Linda Clark), Holly Jewkes, Wayne Wakkinen (for Chip Corsi), Pat Seymour (for Eric Besaw), Bart George (for Ray Entz), Norm Merz (for Gary Aitken, Jr.), Dave Hattis, Ben Conard, Gregg Kurz, Steve Pozzanghera, Kim Annis, Kirsten Kaiser, Wayne Kasworm

Notes:

Wayne Kasworm: Research/Monitoring Update (most of the following notes are copy/pasted from his presentation)

- Recovery targets
 - 1. Females with cubs over a running 6 year average.
 - 2. Number of BMUs occupied by females with young over 6 years.
 - 3. Known human-caused mortality not to exceed 4% of calculated population (from females with cubs last 3 years).
 - 4. Female mortality should not exceed 30% of total mortality.
- Selkirk Mountains known human caused mortality – most mortality was in BC last year. Total mortality 2012-2017 was 5 females and 6 males.
- Selkirks: 7 of 10 US BMUs occupied (goal is 7 of 10)
- Selkirk Criteria = 6 females with cubs over 6 years, total mortality not to exceed 4% of min population, and female mortality should not exceed 30% of total mortality. 2012-2017 numbers are 18 females with cubs/6 years = 3.0 females with cubs. 11 mortalities/6 years = 1.8 per year or 2.4% mortality of calculated population (61). 5 of 11 mortalities were adult female (45%).
- Cabinet-Yaak known human caused mortality: none in last 2 years.
- Cabinet-Yaak 2012-2017. Had 11 of 22 BMUs occupied (goal is 18 of 22) with 6 human-caused mortalities (1 female, 5 male).
- Cabinet-Yaak Criteria = 6 FWC over 6 years; Total mortality not to exceed 4% of population and female mortality should not exceed 30% of total mortality; 2012-17 = 16 females with cubs / 6 years = 2.7 females with cubs; 2012-17 = 6 Mortalities / 6 years = 1.0 per year or 2.1% mortality of calculated population (47); 1 of 6 Mortalities were female = 17%
- Radio collared bears are the basis for determining population trend
 - •Survival information based on time wearing collar alive
 - •Mortality cause information
 - •Reproduction data
 - •Survival of young
 - •Calculations compare reproductive rates with survival/mortality rates to determine if population growing
- Cabinet-Yaak Population Trend
 - •Cabinet-Yaak = 2.1% annual growth rate

- •Population 2012 = 48-50
- •2013-2017 Add 5 augmentation bears but 2 known dead
- •Current Population? ~55-60 bears
- GYE and NCDE growing at 2-3%, so similar rates here.
- Annual Selkirk Survival Rates 1983-2017
 - 2002 Selkirks trend was 1.8%
 - • No collared bears from 2004-2012
 - • Add 2012-17 data to prior survival data
 - • No significant change?
 - • Add new reproductive data to calculate trend
- 2017 Telemetry Monitoring
 - Cabinets –2 Males
 - Yaak–5 Females, 7 Males
 - Selkirks–4 Females, 6 Males
- How bear populations expand over time – female offspring set up home ranges near their mother.
- Cabinet-Yaak / Selkirk Mountains 2018 Trapping and Hair snag plans
 - •Selkirk Trapping: One team May-June in WA, July –August in ID
 - •Cabinet-Yaak trapping: Two teams spread between the Yaak and Cabinets.
 - •Continue hair snag program with expansion of rubs and corral sampling in the Selkirks(2 techs, plus Tribal and Agency) and continuation of rubs and corrals in the CY (2 techs)
- New Projects - Genetics
 - •Hair samples from captures, rub trees and corrals with cameras
 - •We get species, sex, individual genotype, and parentage
 - •Propose to evaluate changes in genetic diversity over time. Document gene flow and effective linkage in support of eventual delisting for both Selkirksand Cabinet Yaak
- Selkirk Migrants and Gene Flow
 - Sample of 161 Individual genotypes 1983-2016
 - Previous Measures of Heterozgosity were = 0.54, Yellowstone = 0.57
 - Measures of gene flow (Fst), #'s of Migrants, Allelic richness, Ancestry of genetic lineages, use of assignment tests
- New Projects - Huckleberry contribution to Grizzly Bear diets
 - •Hair, tissue and blood samples are used in isotope analysis to determine diet fractions of terrestrial meat, vegetation, fish
 - •Developing a method to determine fraction of berries in diet from isotope analysis
 - •Preliminary results suggest berries are about 20% of annual diet
 - •Huckleberries contain 10-20% sugar on BRIX scale
 - •Sugars converted readily to fat
 - •Females appear to require >20% fat level at denning to produce cubs
- Huckleberry research in British Columbia by Dr. Michael Proctor
 - •Huckleberries widely distributed
 - •Fruit production varies by year and by site
 - •Bears appear to seek out most productive site

- •Can we use bear radio locations to identify most productive sites? Use location data during late July, August, and early September?
- •Can we then characterize these sites and develop a predictive model to extrapolate these conditions to other places?
- Ecological variables Top variables:
 - Low canopy cover
 - Low % coarse soil fragments
 - Less slope
 - High Precip as winter snow
 - High mean annual radiation
 - Shorter Frost Free Period
 - Mean annual Precip
 - Low climatic moisture deficit
 - High Precip in summer
 - Aspect
 - Wet topography
 - Soil pH
 - ROC score = 0.86
- BC Model outputs and expected use
 - •Integrate with seasonal habitat quality mapping
 - •Support timber program if post harvest improves Huckleberry production
 - •Supportive of fire prescriptions if post fire improves Huckleberry production
 - •Tried to apply model in US, but did not work well
 - •GIS layers and map units differ across border?
- New Projects - Huckleberry research in US through Graduate Student
 - •Companion study to BC effort
 - •Utilize a Graduate Student for most analysis through University of Montana
 - •Grizzly Bear Recovery office would support an assistantship for student
 - •Need to identify US sampling sites based on telemetry
 - •Need field effort to visit sites heavily used by bears and characterize sites
 - •Utilize US data layers to develop a predictive model if possible
 - •Utilize existing field crews to collect data at high bear use sites during August
- Selkirk Mountains population estimate
 - •Michael Proctor has discussed the possibility of a mark recapture DNA based Population estimate in BC (2020?)
 - •If occurring, would be valuable to have a similar effort at same time in US
 - •Not cheap
 - 2012 CYE estimate cost ~\$1.6 million. Selkirks in US is smaller, so maybe ~\$500K-\$750K
 - Discussion: should we focus on rub trees for now and then do a population estimate later? This would spread out the costs because the rubs will already be identified by the time we do a population estimate. Important to continue discussing doing a population estimate because it'll be difficult to generate the needed funding.

- Does the Subcommittee want to pursue this? Do we want more discussion between now and the November meeting? Discussion with Proctor regarding timing of the BC estimate? Have him join us in November for our meeting?
- Kasworm estimate for current work: Budget for single person rub tree / corral hair collection for 5 months as currently utilized in the Selkirk and Cabinet-Yaak Recovery area.

Item	5 month Season cost
Personnel salary and fringe	17,500
Per Diem for field groceries	2,100
Vehicle (typical costs for vehicle provided by an agency)	\$7,000
Supplies (10 cameras, GPS , Inreach, monthly service plans, misc supplies)	\$6,000
Lab Genetic Analysis	\$5,000
Housing (provided by agencies)	??
TOTAL	\$37,600

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Kim Annis – Bear Management and I&E Update (most of these notes are copy/pasted from Kim’s presentation)

- Public Sanitation Sites - Proposal to move the current site that is at the top of the Yaak Hill on Hwy 2 north of Troy to a site to the north along the Yaak River Road.
- Lincoln County:
 - ●2 sites remain in the CYE, neither in Core: McGinnis Meadows and Happy’s Inn
 - ●Still working towards completing West Kootenai (CYE) and Pinkham Creek (NCDE) sites this year.
 - ●No solutions yet for Rexford and Fortine (NCDE)
 - ●Delays in closing of gates at night and use of electrified mats due to snow.
 - ●All others in the CYE are completed!
- 2018 plans include bear and bear spray training, multiple festivals, and school presentations
- Spring 2018 grizzly bears:
 - 19 March 2018 NW of Troy, MT bear visited a private residence. Garbage trailer, rabbits, free ranging chicken
 - Same location 1 week later, possibly a different grizzly bear; 3 goats killed, outside of their makeshift pen, over 2 days; Location now has all small livestock enclosed in a 7-line e-fence
 - April 5, 2018 a bear visited a residence and investigated the ground under where bird feeders had been
 - 05 April 2018 6 miles west of Plains, MT – grizzly bear photo
 - 06 April 2018 Thompson River Road, north of Thompson Falls, MT – grizzly bear photo
- I&E Committee updates

- I&E updates from everyone for the Executive Committee in June
- Yellowstone and I&E Grant Funding – what happens now that they are delisted?
- I&E will be getting 5-year plan and I&E Strategic Direction updated by mid May
- Current/updated list of Subcommittee members (Colleen Matt)
- Request for printed materials coming soon (Colleen Matt):
- 3 choices: Bear Spray, Coloring Book, WWO Brochure
- No luck on multi-lingual handout for mushroom season (WWO has one that can be printed in Spanish)
- Lori Roberts will be reinvigorating the IGBC Facebook Page

Vice-Chair Position on the Subcommittee

- History: Chair and Vice-chair came from the land management agencies. After 2 years the Vice-chair moves up to the Chair
- Leave it open to whomever is interested in the Vice-chair position?
- USFWS is willing to serve as the next Vice-chair. Ben Conard volunteered. Ben becomes the next Vice-chair at the end of the November meeting when Rodney moves up to the Chair position.

Border Patrol Participation in Subcommittee Meetings

- Subcommittee to issue an invitation to Border Patrol to attend the Subcommittee meetings.
- Rodney to talk to the Sector Chief on Thursday at the Border Management Team meeting.

Wayne Kasworm – NCDE/GYE update

- GYE – 6 lawsuits challenging the final delisting rule – consolidated into the Montana District Court.
- 3/13 hearing – plaintiffs filed for summary judgment, FWS asked for a stay.
- Judge – split decision – denied both motions. He wants to move on with the litigation before the hunting season. Court date not set.
- WY hunt for this fall – 24 bears, of which 12 bears inside the Demographic Monitoring Area. No limits on sex/age outside the DMA. Limit of 2 females in the DMA.
- ID – hunting season for 1 bear. Details not set, yet.
- Great Lakes wolf delisting rule – court decision shortly after the GYE was delisted. Judge affirmed ability to delist a DPS, but must explain how to manage the remainder.
- NCDE – subcommittee working on finalizing the conservation strategy. Addressing public comment. Draft completed by the June IGBC meeting.
- 3/23/18 Sec Zinke restarted the process for completing the North Cascades EIS for evaluating restoration of grizzly bears. Decision by the end of the calendar year. 10J rule for that population would be proposed (Experimental Population has more flexibility for managing)

Wayne Wakkinen Retirement in August

- The Subcommittee would like to acknowledge Wayne's contribution to the Subcommittee as well as to grizzly bear research and recovery in the Selkirks.
- SCYE Subcommittee will present Wayne with a token of their appreciation at the next meeting.

Next Meeting: November 8th in Libby, MT.