Selkirk/Cabinet-Yaak Ecosystems (SCYE) Subcommittee of the Interagency Grizzly Bear Committee (IGBC)

Notes from the November 4, 2020 Microsoft Teams meeting (virtual meeting due to COVID-19 pandemic concerns)

SCYE Subcommittee Members calling in:

Chair: Rodney Smoldon (USDA Colville National Forest)

Vice Chair: Ben Conard (USDI Fish and Wildlife Service)

Science Advisor: Wayne Kasworm (USDI Fish and Wildlife Service)

Information & Education (I&E) Taskforce Co-Chairs: Cecily Costello (for Kim Annis, Montana Fish, Wildlife and Parks); and Kirsten Kaiser, USDA Kootenai National Forest

Members: Dan Dinning (Boundary County, ID), Chip Corsi (Idaho Department of Fish and Game), Joel Clark (for Eric Besaw, Idaho Department of Lands) Bart George (for Ray Entz, Kalispel Tribe of Indians), Scott Soults (Kootenai Tribe of Idaho), Neil Anderson (Montana Fish, Wildlife and Parks), Michelle Caviness (for Jeanne Higgins, USDA Idaho Panhandle National Forests), Chad Benson (USDA Kootenai National Forest), Greg Gustina (for Carolyn Upton, USDA Lolo National Forest), Cynthia Weston (for Kurt Pindel, USDI Bureau of Land Management), Christy Johnson-Hughes (USDI Fish and Wildlife Service), Greg Kurz (USDI Fish and Wildlife Service), Hannah Anderson (for Steve Pozzanghera, Washington Department of Fish and Wildlife).

Guest Presenters: Michael Proctor (Independent Research Scientist Trans-border Grizzly Bear Project), Hillary Cooley and Jennifer Fortin-Noreus (USDI Fish and Wildlife Service)

2020 Grizzly Bear Monitoring Update: Wayne Kasworm

2020 Field Season

- Reduced effort due to COVID-19
- One trap team in Selkirk Ecosystem (SE), two teams in Cabinet-Yaak Ecosystem (CYE). No trapping occurred in May.
- Only one USFWS hair snag team in SE (there are usually 4). Additional effort completed by Kalispel Tribe, Kootenai Tribe of ID, USDA Colville NF, Idaho Panhandle NFs, and WA Dept. of Fish & Wildlife.
- Some hair snag effort in CYE by trap crews and Wayne himself.

Selkirk Captures

- 5 males (3 adult, 2 subadult), 1 female (adult with no young) captured
- Female bear and one of the males previously captured
- 1 adult male lost his collar soon after capture

Cabinet-Yaak Captures

- 2 females, 1 male (subadult offspring)
- Both females previously captured

Cabinet Mountains Augmentation Bears

- Female bear captured & processed but not released due to this bear's conflict history. This bear was sent back to the Northern Continental Divide Ecosystem (NCDE) with a radio collar.
- Augmentation Bear 927
 - 2 years old male released in CYE in 2018
 - Moved south of Clark Fork River in 2018
 - Captured at a hunter bait site for black bears
 - Denned in 2018-19 at south end of the Cabinet Mountains Wilderness
 - Moved NW to Whitefish Mountains in 2020
 - Dropped his radio collar in early August 2020
- Augmentation Bear 892
 - 3 years old male released in CYE in 2019
 - Moved north to Yaak but returned West Cabinets and denned in main Cabinets in 2019-20
 - Moved east in 2020 toward Whitefish, MT
 - Killed at a farm in early June incident is under investigation
- Augmentation Bear 923
 - 2 years old female released in CYE in 2019
 - Stayed in West Cabinets and denned in 2019-20
 - Remained in West Cabinets, not yet denned to date

Telemetry Monitoring

- SE: 4 males, 3 females, but one female lost her collar = 6 bears currently collared
- CYE: 4 males, 4 females, but 3 males have lost collars = 5 bears currently collared
- No collared bears in the den thus far

Genetic Sampling

- Hair samples collected from captures, rub trees, corrals with cameras, incidentals
- DNA analysis of hair samples used to determine species, sex, individual genotype, and parentage
- DNA analysis used to document gene flow / effective linkage in support of eventual de-listing of SCYE grizzly populations.
- 2019 SE results
 - 650 bear hair samples, of which 385 were grizzly
 - 37 individual grizzly bears identified (20 females, 17 males)
 - Grizzlies detected at 23 hair snag corrals, 26 rub trees, and 10 opportunistic / capture
- 2019 CYE results
 - 553 bear hair samples, of which 253 were grizzly
 - 39 individual grizzly bears identified (9 females, 30 males)
 - Grizzlies detected at 6 corrals, 30 rub trees, and 14 opportunistic / capture
 - Bears detected at corrals did not show up with any other method
 - Rub trees appear to be skewed towards detecting male bears
 - 20 grizzlies detected in Cabinets, 19 in Yaak (pretty even split)

Females with Cubs

- SE 3 unduplicated females with cubs of year thus far
- CYE 5 unduplicated females with cubs thus far

• Breeding synchrony - females reproducing in the same year can lead to higher numbers for that year

Mortalities

- SE 2 bears
 - Subadult male killed in the spring (under investigation)
 - Subadult female struck by vehicle on Highway 1 about 3-4 miles south of US / BC border
- CYE 1 bear
 - Adult male tagged in BC, killed by black bear hunters this fall (mistaken ID)
 - 2 assumed mortalities are <u>not</u>dead
 - 2 orphaned cubs were assumed mortalities in 2018
 - Hair snag samples / photo ID confirmed these cubs as having survived and still together.
 - Wayne will adjust mortality figures from 2018.
 - If cubs are orphaned late in the year there is a better chance of survival.

<u>Question</u>: How many "new" bears have been identified by DNA sampling? <u>Answer</u>: Haven't had time to answer that yet (perhaps 2-4?).

2020 Human / Bear Conflicts: Wayne Kasworm

- ID Fish and Game received several reports of grizzlies getting into livestock feed, beehives, chickens and fruit.
- Traps were set but were not successful.
- Little conflict activity reported in the Montana portion of the CYE so far.
- Good huckleberry crops in 2020 may have contributed to fewer conflicts reported.

I&E Grant Proposals for 2021: Wayne Kasworm (for Kim Annis)

- IGBC has \$36K to distribute between the ecosystems for I&E projects.
- Wayne has 3 proposals so far. Proposals need to be submitted to him by November 6.

2020 BC Hair Snag Effort Update: Michael Proctor

- Trans-border Grizzy Bear Project (TBGBP) and BC government have been implementing conservation measures for the South Selkirk Mountains grizzly bear population for 15 years.
 - Securing habitat in linkage zones
 - Providing fencing and other support to residents, agriculture interests
 - Monitoring the bear population over time
 - Implementing a non-lethal conflict response program
- TBGBP completed a management plan for grizzlies for the SCYE in 2016 considered as 'Advice to Government'. This plan divided the SE into 5 Bear Management Units (BMUs).
- TBGBP has been assessing mortality rate in the 5 BMUs but was not determining numbers of females with young; a recovery parameter on the US side of the SE.
- The 2020 2021 hair snag effort is a one-time DNA survey of the BC portion of the SE designed to:
 - Determine the density variation of bears
 - Determine the number and distribution of female bears, including reproducing females
 - Assess habitat connectivity within and between neighboring ecosystems
- Study design

- Hair snag corrals set up in a 6 km x 6 km grid. Smaller cells (5 km x 5 km) would have allowed for the maximum sampling of females. However, cell size had to be increased due to available funding.
- 2020 Survey area was from Highway 2 east (based on available funding) = 77 cells
- Sampling sites moved one time per season within a cell
- Lots of hair samples and photo documentation collected. DNA analysis has yet to be done.
- 2021 Effort
 - Depending on funding, sample west of BC Highway 6 (41 cells).
 - Funding for 2021 looks probable.
- This research is intended to contribute to an international level of analysis of the SE grizzly bear population.

IGBC Recovery Office Update: Hillary Cooley and Jennifer Fortin-Noreus

Grizzly Bear 5-year Review

- Required by the Endangered Species Act (ESA) to determine if the status of the species should change
- Covers all 6 grizzly bear recovery zones in the lower 48 states
- Comments were collected from the various agencies responsible for grizzly bear / grizzly habitat management.
- The document does not "act" on anything but provides policy recommendations.
- Expected March 2021 completion date

<u>Question</u>: Are comments being sought on policy recommendations? <u>Answer</u>: If there is a proposed rule that derives from the review, comments would be taken on the rule.

Methodology for Creating "May be Present" Maps for Grizzly Bears

- Maps are developed by the USDI Fish and Wildlife Service (USFWS) across all 4 states (ID, MT, WA, WY).
- Maps are an ESA requirement for major construction projects and encouraged for all other types of projects.
- "Action" agencies (those which manage grizzly bear habitat) request the maps from the USFWS if the species is present.
- "May be present" maps are not equal to maps of occupied habitat. There is a much lower bar for the former compared with the latter.
- Need for the maps:
 - There is no existing methodology to determine where grizzly bears may be present.
 - Grizzly bear populations are expanding outside of recovery zones.
 - USDA Forest Service (USFS) and USDI Bureau of Land Management (BLM) have the primary land management responsibility across the range of grizzly bears. Many units of these agencies are currently or soon will be revising their land management plans.
 - To support long-term planning, the USFS and BLM need to understand what management actions and measures may be needed to support grizzly bear recovery. Identifying where bears "may be present" is the first step in the process.
 - The methodology will provide clarity / consistency to how USFWS determines where bears "may be present." It will provide consistency for consultation across recovery zones.
 - The maps will assist the action agencies in project effects evaluations and inform coordination with USFWS on best management practices that may be needed to minimize or avoid adverse effects to bears.

- Development of the Methodology
 - USFWS engaged with Federal, State, and Tribal partners to develop mapping methodology.
 - Partner agencies are critical in gathering data on current grizzly distribution and verifying outliers.
- Verifying outliers
 - 5 criteria used for verifying sightings, along with credible location: 1) sightings with supported evidence; 2) good quality reports verified by a State, Federal, or Tribal biologist; 3) radio collared bear locations; 4) mortalities; 5) conflicts
- Mapping Methodology
 - 10-year "moving windows" GIS analysis
 - 12-digit HUCs (watersheds)
 - One or more sighting / radio location "turns on" the HUC in which the sighting / radio location occurred, and all adjacent HUCs.
 - "May be present" maps will be updated annually.

Questions and Answers

<u>Question</u>: With the current levels of population growth, the SE can likely sustain more human-caused mortality than the present numerical objective of no more than 2 bears from 2018-2022, and still have a growing population. Perhaps a growth objective along the following lines would be more appropriate for current times "Limit human-caused mortality, including management removals, to allow the population to continue to grow at a rate of $\geq 1.x\%$ " or incorporating survival rate into the objective instead.

<u>Answer</u>: Perhaps it is time to revisit the no more than 2 bears target to see if there is a more reasonable number of mortalities to have as an upper limit objective.

<u>Question</u>: With mapped grizzly bear populations across the globe, the distribution of bears is defined by the presence of reproductive females. How do we transition from the "may be present" mapping to actual bear distribution?

<u>Answer</u>: The "may be present" mapping should not be confused with actual distribution of bears. The "may be present" maps are intended to be a standardized tool to use for project level consultation between the action agencies and USFWS.

<u>Question</u>: Why is it that bears killed outside recovery zones are counted towards recovery zone mortalities, but those same bears are not counted towards recovery zone populations?

<u>Answer</u>: Grizzlies killed within 10 miles of a recovery zone are counted towards annual mortality estimates for that recovery zone. Females with cubs within 10 miles of a recovery zone are counted towards the recruitment estimate for that recovery zone. It works both ways.

Transfer of Subcommittee Duties

• Ben Conard has taken over the chair position of the subcommittee since Rodney Smoldon's term has expired as of this meeting. Jeanne Higgins is the new vice-chair. Someone in Wayne Kasworm's office will take over the administrative duties (agendas, meeting notes, annual accomplishment reports).

Next Meeting

• Ben or Wayne will send out an agenda and arrange a date and time for the next (likely virtual) meeting to take place.