Day 1 MORNING: Workshop Welcome & Monitoring Needs - Panel Q & A

Asked To	Asked By	Q & A
Dan Farr	Eric Neilson	Did abandoning the snow tracking by ABMI also mean that the snow tracking data do not cross walk/integrate with the camera data such that a longer dataset including both cannot be assembled? **Dan's reply:** Yup - there's essentially 2 datasets. This paper describes the ABMI's snow tracking protocol: https://cdnsciencepub.com/doi/10.1139/Z08-099. Other snowtracking papers: https://www.sciencedirect.com/science/article/abs/pii/S0006320707000912?via%3Dihub, https://abmi.ca/home/publications/51-100/66.
Mark Boyce	Samantha Widmeyer (she/they) - BC Gov - Skeena	Apps are a great idea but we keep running into the challenge of low hunter participation - do you have any recommendations on how to address this? **Mark's reply:** it is a challenge. In AB have iHunter and iHuntlog. With the moose app, it started at 20% participation and dropped off to 10%. Could make it mandatory (e.g., must participate to get a tag next year). **Brian Joubert**: Derek Keeping has done a ton of work on cyber tracking for occurrence, density, abundance. His work is mostly in sandy places like Botswana, but the results have been impressive. Low tech, lower cost, often super useful. E.g., https://www.sciencedirect.com/science/article/pii/S0006320717317780?via%3Dihub
Mark Boyce	Curtis Stambaugh	I'd challenge your statement that 'on average WMUs get surveyed every 10 years in Alberta'. I agree there are some very large/expensive northern units with very little allocation (a few antlered tags) have not or get very little monitoring attention, but intensively managed units with multiple species concerns and multiple pressures get surveyed much more frequently. This is to your point of prioritization constraints between monitoring and management. **Mark B's reply:** as of 2012 this was the govt's target but in many units it's an overestimate and for others, as you indicated, there is a need to know that gives us more frequent monitoring. But over the 99 WMUs that have a moose season, I suspect that once every 10 yrs is not far off.
GENERAL	Rebecca Viejou (fRI Research)	For populations with long term aerial data sets: how challenging is it to maintain a consistent time series of data as new monitoring methods are adopted? Are some new methods better than others in that regard? **Dan's reply:** next session includes an element of aerial surveys that may be informative.

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		Mark B's reply: consistency is nice but hard to acquire year after year with the same technique. But when best available science suggests we should use something else, maybe bias associated with one method over another. Best we can do. **Mark E's reply:** having part of study design to crosswalk data and to monitor using both methods to calibrate data helps with moving forward.
GENERAL	Brett Furnas (CDFW; California Dept Fish and Wildlife)	Are population estimates required for regulated hunting or our indices and harvest metrics sufficient? **Mark B's reply:** we would be in trouble if so. We don't have data to support management decisions most of the time. Management will go on. Harvest data may be informative. Various information contribute to our understanding. Monitoring is an optimization process; how much data is needed is always a challenge.
GENERAL	Paul Frame (Gov. AB)	So in that context, does a consistent method really matter? **Dan's reply:** ABMI changed methods to monitor mammal relative abundance from snow-tracking to remote cameras. ABMI decided not to calibrate. Arguments against using both methods and calibrating was that there were limited resources and calibration efforts would take away from other work (fulsome implementation, testing & developing analytical techniques etc.).