

Chris Servheen

From: T van Manen, Frank [vanmanen@utk.edu]
Sent: Thursday, January 26, 2012 3:31 PM
To: Chris Servheen
Cc: Mark Haroldson; Rebecca Shoemaker
Subject: Workshop

Hi Chris and Rebecca,

A quick update on our preparations for the workshop. We have completed all analyses we had planned. Difficult to sum up in a few bullet points but here goes (all are for the 1983-2001 vs 2002-2011 period; survival based on known mortalities only):

- COY survival decreased from 0.650 to 0.553
- Yearling survival decreased from 0.830 to 0.538
- Subadult survival decreased from 0.950 to 0.911
- Adult F survival did not change (0.95)
- M survival increased from 0.881 to 0.959
- Fecundity decreased slightly from 0.318 to 0.285 (unadjusted for cub mortality before first sighting)
- Lamda decreased from 1.076 to 1.015

Other analyses:

- In Spring/Summer, % body fat declined for bears inside YNP and was stable for bears outside YNP
- In Fall, % body fat for bears declined inside RZ and increased slightly for bears outside RZ
- In Fall, % body fat for bears declined over time, more so for bears in YNP than bears outside YNP
- Cub daily survival was slightly greater outside YNP (but inside RZ) compared with inside YNP or outside RZ
- Yearling daily survival varied more since 2000 than before but did not show strong spatial patterns
- Yearling daily survival was negatively associated with Chao2 estimates from the previous year
- Survival of independent-aged bears in RZ increased slightly for 2002-2011 compared with 1992-2001
- Survival of independent-aged bears outside RZ increased, and approached survival of independent-aged bears inside RZ, during 2002-2011
- Transition probabilities for no cub to cub state was positively associated with the whitebark pine index (adjusted for tree mortality) for the 1983-2011 period
- Hunting-related mortalities occurred closer to trails and outfitter camps, but further from roads, in years of poor WBP crops
- Counts of human-caused fall mortalities of females decreased with; greater whitebark pine index (adjusted for tree mortality); a linear time trend; and model-averaged estimates of Chao2
- Counts of human-caused fall mortalities of males increased with; poor whitebark pine years; a linear time trend; and model-averaged estimates of Chao2

We'll synthesize these results next week and get feedback from the group. Just wanted to give you a 'heads up' on a few major findings.

Frank

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Temporary assignment: