

Memorandum

To: Jennifer Vashon
From: Randy Cross
Date: April 1, 2008
Subject: 2008 Bear Den Summary

The 2008 den crew included myself, contractors Kendall Marden and David Pert, and volunteer, Dominic Grenier, from Quebec. Snow depths were higher than average this winter in all 3 study areas. However, crusts allowed for generally easy travel conditions (for us - and the bears, when they chose to run from us). We pulled collars from bears in Spec in mid-Dec and early January (5 dens) and began working regularly on Jan 10 just at the end of an extensive thaw (Jan. 6-12) (temps up to 50^o with some rain). We finished the season on March 25 at Spec Pond after the coldest week of cub work in my career. This included sleet, a blizzard with very high winds for 3 1/2 days, and temps of -13^o and -20^o on the mornings of March 24th and 25th. The entire crew was sick with colds during most of this trip.

Bradford Study Area

In the BSA, we visited 28 dens (14 solo, 6 yearling, and 8 cub dens). We handled 15 yearlings (7F, 8M; avg. wt. = 56.5 lbs) and 20 cubs (8F, 12M). Cub survival was low at 65% (15/23) with 4 whole litter losses (all first litters) accounting for 6 of 8 cubs not present as yearlings.

Two solo bears escaped capture (1980, 2241) and one cub mother (2245) who returned to her cubs after being syringe-poled and darted with no effects. One male yearling weighed a new record 96 lbs. This male was part of a litter of 4 yearlings whose aggregate weight was 281 lbs. This large ground nest contained over 500 lbs. of bear including the mother's weight of 225 lbs.

A male cub was accidentally swatted by its mother (2221) as she was injected. Despite appearing nearly lifeless for about 2 hours, this cub recovered well and after a night at the Veazie Vet Hospital was placed with a surrogate mother (1925) the following day.

Downeast Study Area

In the DESA, we visited 21 dens (6 solo, 7 yearling, and 8 cub dens). We handled 13 yearlings (7F, 6M) and 20 cubs (9F, 11M). The average yearling weight of 37.3 lbs is similar to the 2006 weights here, but lower than we have seen in the other 2 SA's for the last few years. After removing dens affected by orphan introduction, cub survival was relatively low as well at 67% (10/15). This year's cub production appears quite high for an even year in this SA (only 3 litters in '06 and 1 in 04). We failed to capture 2 cub mothers (2145 and 2319) who both returned to their cubs. We had intended to remove 2145's collar.

On May 18, 2007, we treed 2348's 2 cubs with hounds. We fashioned an expandable collar and placed it on the 12 lb. male cub. This bear carried the collar to the den and had plenty of neck room on the collar at 50 lbs. We tested the battery life guarantee on a Lotek GPS collar placed on 2144. This collar quit transmitting the night after we removed it from her. We had riveted an ear tag transmitter to the package as a safeguard (not willing to risk a \$3,000 package to save \$12/month in battery life). This transmitter would have allowed us to recover this expensive unit even if we had scheduled the den visit a day later. New camp owner, Doug Randall, has been very gracious in allowing us to continue using his camp in Beddington as a base of operations.

Spectacle Pond Study Area

In the SPSA, we visited 42 dens (21 solo, 9 yearling, and 12 cub dens). One of the solo dens was a 258 lb. pregnant female (2436) handled on Dec. 12 in Presque Isle. We handled 16 yearlings (7F, 9M; avg. wt. = 42.7 lbs.) and 28 cubs (9F, 19M). Yearling weights might not be directly comparable to other years as one of these dens was visited on December 13 (2 yearlings) and four were in late March (7 yearlings). Cub survival was quite good at 83.3% (10/12 – one of the 2 missing cubs was harvested by a bait hunter). The preponderance of male cubs (more than 2:1) is curious. Cub production on even years here is no longer the occasional exception as it was for at least 20 years through the 80s and 90s.

We deployed 14 Sirtrack GPS collars (and 1 Lotek) in an effort to estimate the density of females in a portion of the study area (this was last done in 89). ID 2464 had 3 large cubs and weighed 180 lbs. on February 21 after sustaining a serious trap injury on June 26, 2007. Remarkable weights include: ID 969 at 215 lbs. on March 21 with a yearling in her den, and 23-year old, 2003 at 226 lbs. on February 22. Our work here was compounded by having to dig through 6-8 feet of snow to reach the den entrances. Finding and exposing the entrance often took longer than handling the bears inside. Despite this, we completed 24 dens (52 bears) in 7 days in late March including travel up and back.

Summary

We handled 199 bears from 91 dens. Five adults escaped handling. We handled 43 yearlings (21F, 22M) and 68 cubs (26F, 42M; 2.43 cubs/litter). There were no 4-cub litters and only one single-cub litter this year. Cub survival was slightly lower than recent years at 70.0% (35/50). Yearling weights averaged 46.9 lbs. in all 3 study areas combined. We weighed a total of 2016 lbs of yearling bears.

In an effort to reduce collar costs, we placed many collars with minimal battery life (less than 14 months left) on 16 bears (7 Spec Pond, 5 Bradford, 4 Downeast). These were deployed with magnets attached loosely with elastic bands in hopes of saving a month or more of battery life.

We removed 11 collars from adults (8 in Spec Pond – 2003, 2007, 2022, 2251, 2436, 2444, 2464, and 2470; 2 Downeast – 2339 and 2426; and 1 in Bradford – 2310). In addition to these, we chose not to collar 6 yearlings (3 in Spec Pond, 1 in Downeast, and 2 in Bradford). Two bears escaped that we had planned to pull collars from (2145 and 2241) neither of which will likely be on the air next year. These bears were all denned outside of our study area boundaries. We now have 96 active collars (38 Spec Pond, 32 Bradford, and 26 Downeast) including 15 yearlings and 6 bears with 2-year old leather segments.

We hosted only 131 guests on 17 days including groups from colleges (UM-23, Unity-23) and legislators from the Fish and Wildlife Committee (24). Media included 3 small outdoor cable shows, the newspaper, Village Soup from Camden, and a freelance photographer from Presque Isle.

Two bears reused dens from past years. ID 1847 reused her den in a hollow cedar from 3 years ago and 2214 reused her den from last year. In all, we weighed 13,848 lbs of bear during the winter.

