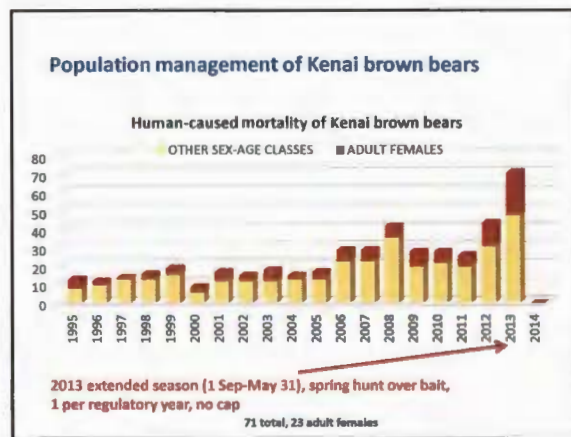
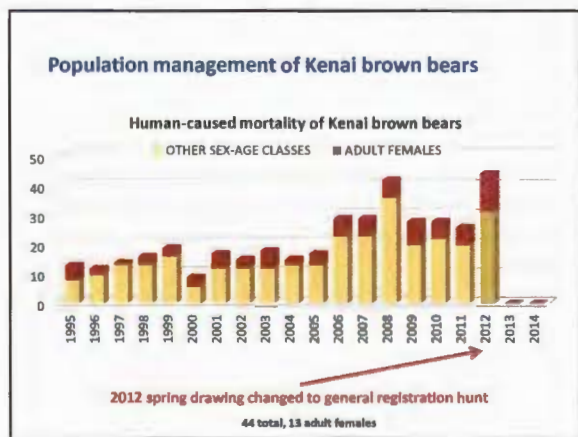
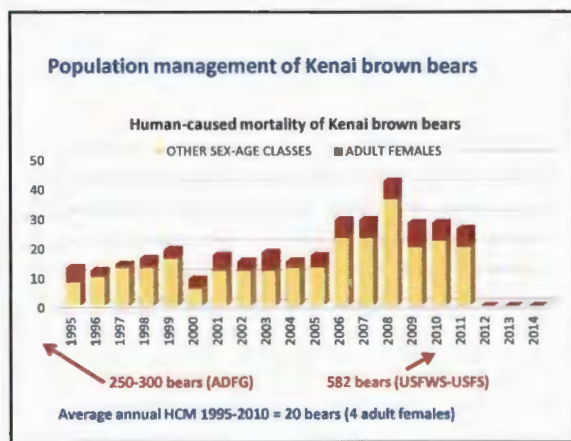
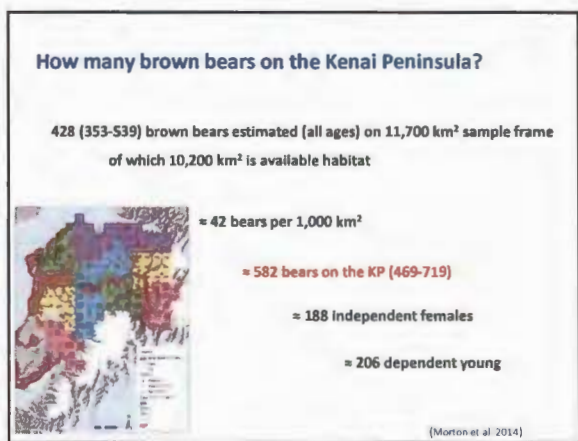
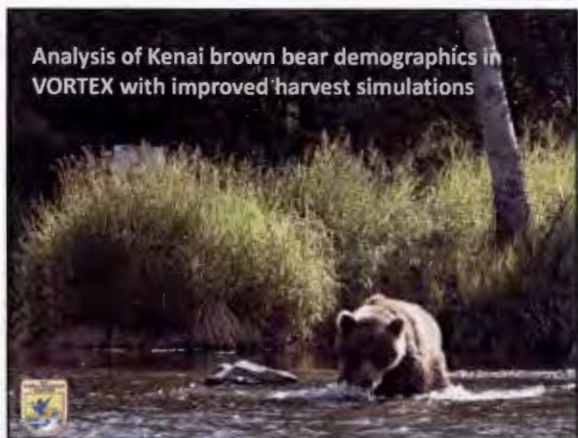
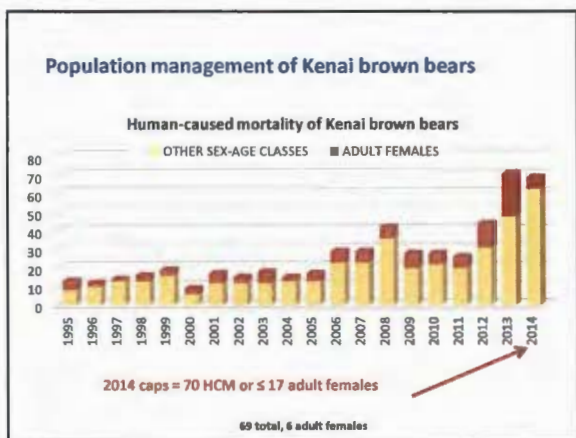


RC 039



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### Sex and age distribution of 184 brown bears killed in 2012-2014

SEX	AGE	2012	2013	2014	TOTAL
MALE	ADULT	8	12	26	46
	SUBADULT	9	19	24	52
	YEARLING/COY	*3	6	0	9
FEMALE	ADULT	13	23	6	42
	SUBADULT	8	11	12	31
	YEARLING/COY	3	0	1	4
TOTAL	ALL AGES	44	71	69	184

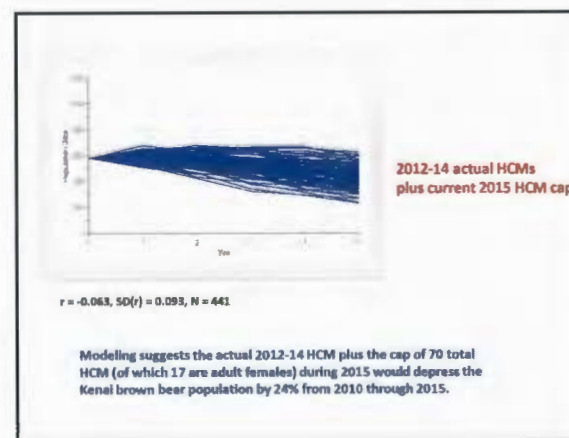
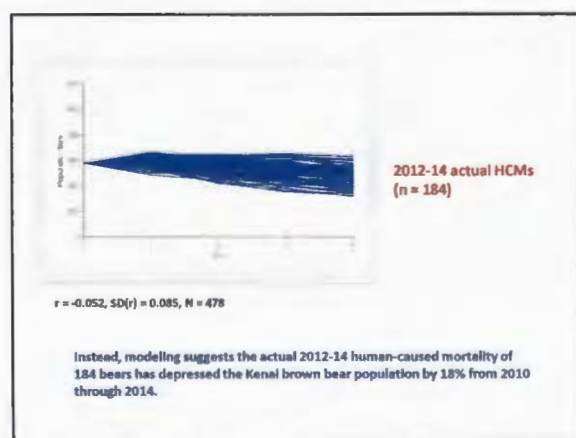
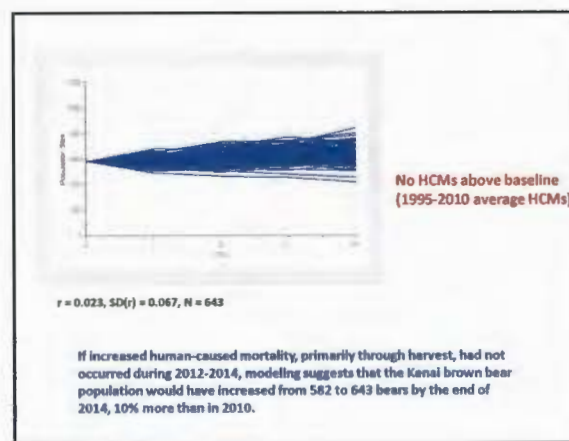
\*includes 1 unknown age

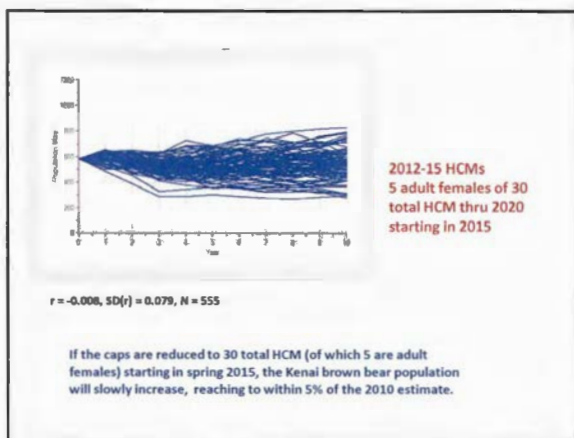
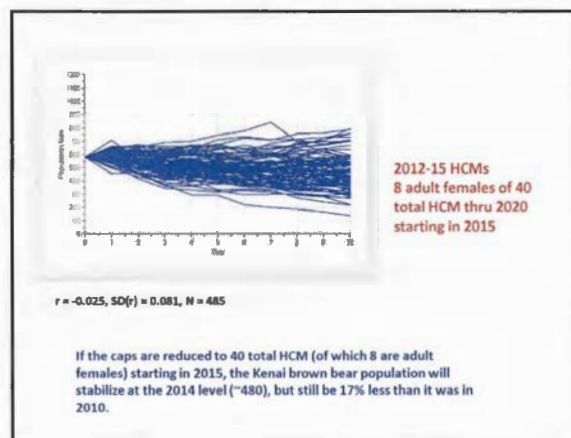
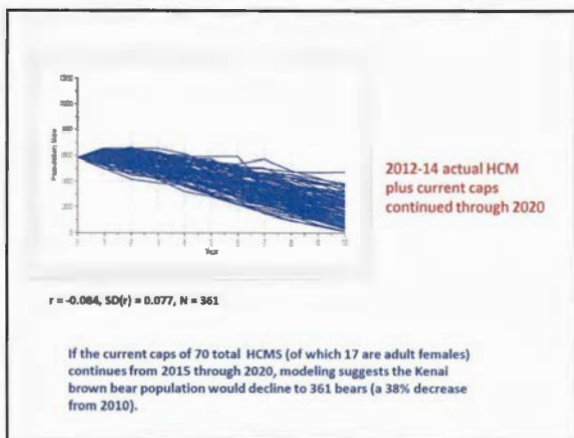
### Population demographics used in VORTEX

- ✓ Based on data 1995-2014
- ✓ Polygynous system with 100% of adult males breeding
- ✓ Reproductive age = 6 years
- ✓ Maximum breeding age = 26 years
- ✓ 50% males, 50% females
- ✓ Adult females breeding = 34%
- ✓ Initial population of 582
- ✓ Assumes telemetered population of adult females is representative of peninsula-wide population
- ✓ Assumes stable age distribution, no density-dependent mortality

Based on Farley 2011, 2013; Morton et al. 2014, ADF&G harvest data 2012-14 (revised with teeth ages)

$N_t = N_{t-1} + \Delta N$





**SUMMARY**

Kenal brown bear population was estimated at 582 in 2010, increased to 590 in 2011 but is now at 478, 18% less than it was in 2010.

Modeling suggests caps of 40 bears and 8 adult females are necessary to prevent further decline of the estimated Kenal brown bear population at the end of 2014.

Modeling suggests caps of 30 bears and 5 adult females would allow the population to grow gradually almost to its 2010 level by 2020.