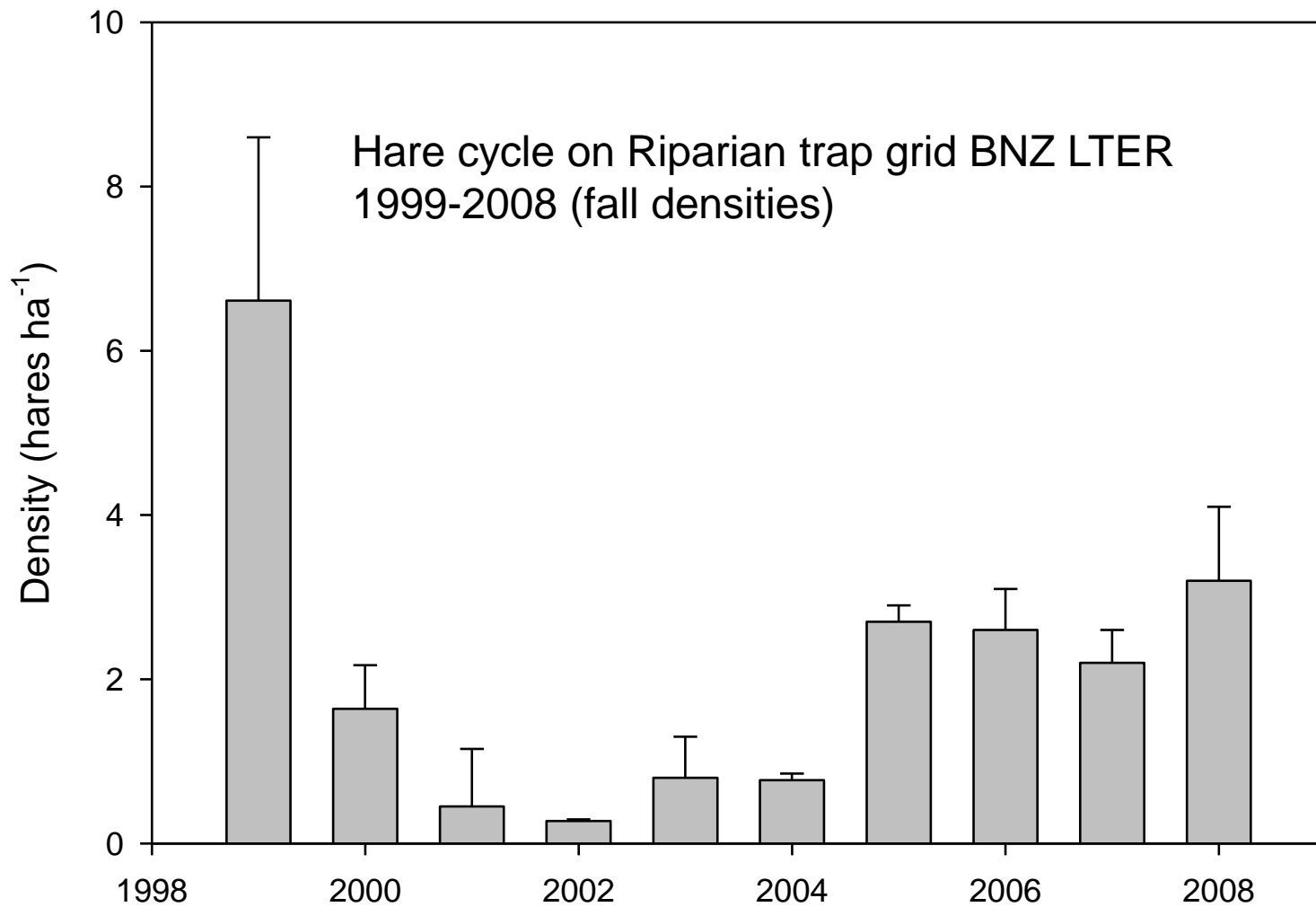


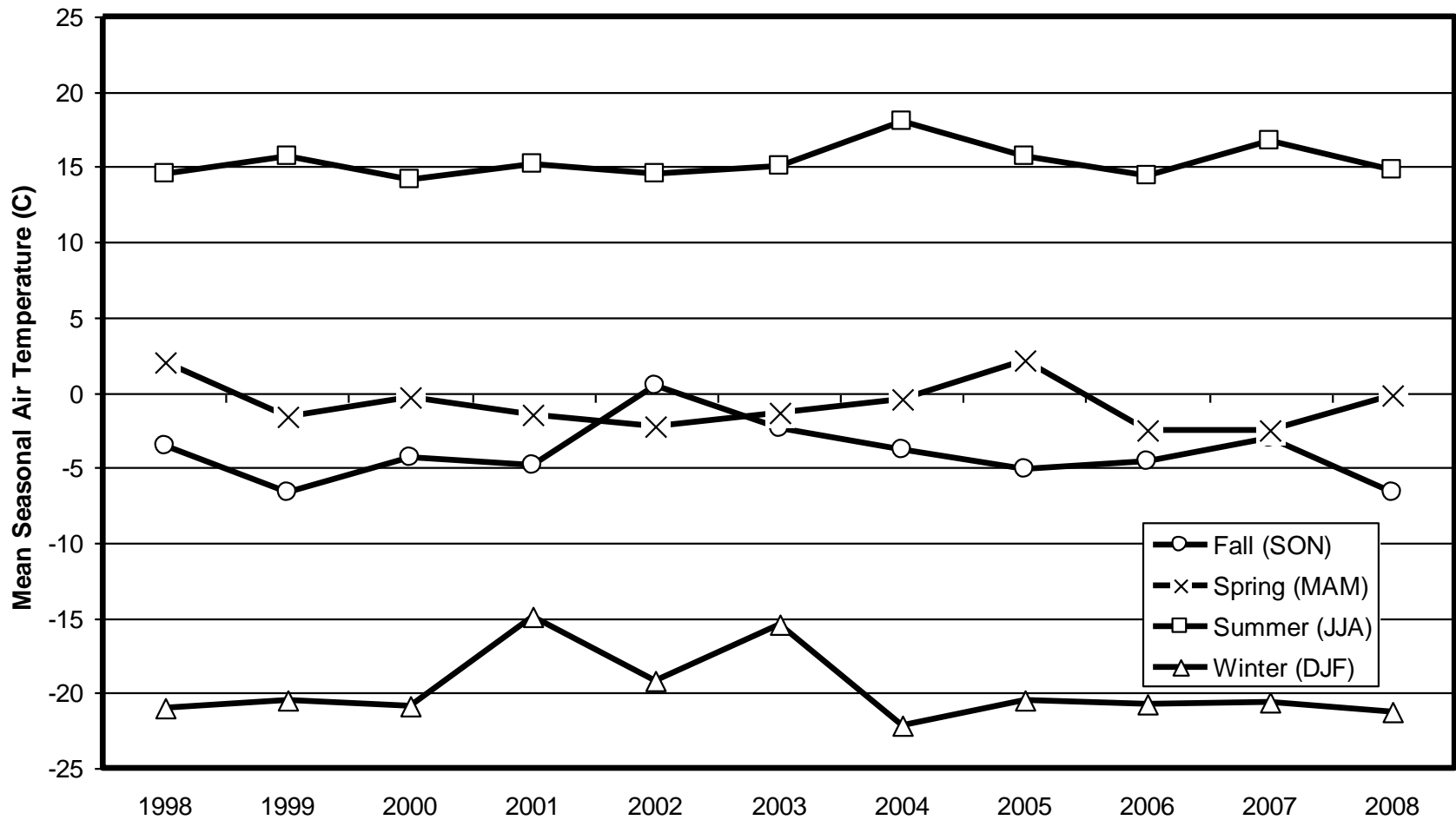
*Demography of snowshoe hares in relation to regional climate
variability during a 10-year population cycle*

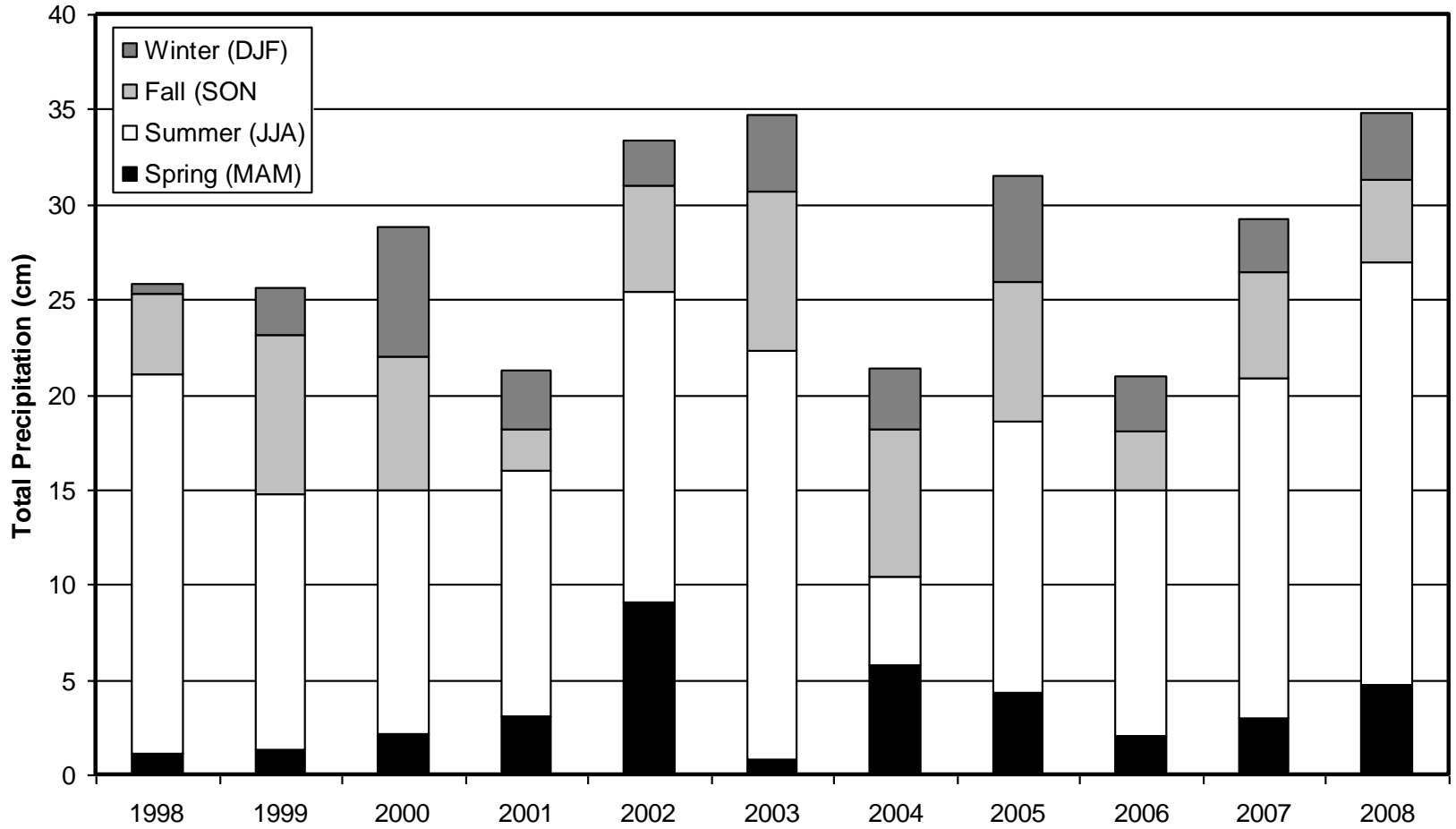
Knut Kielland, Karl Olson and Eugenie Euskirchen

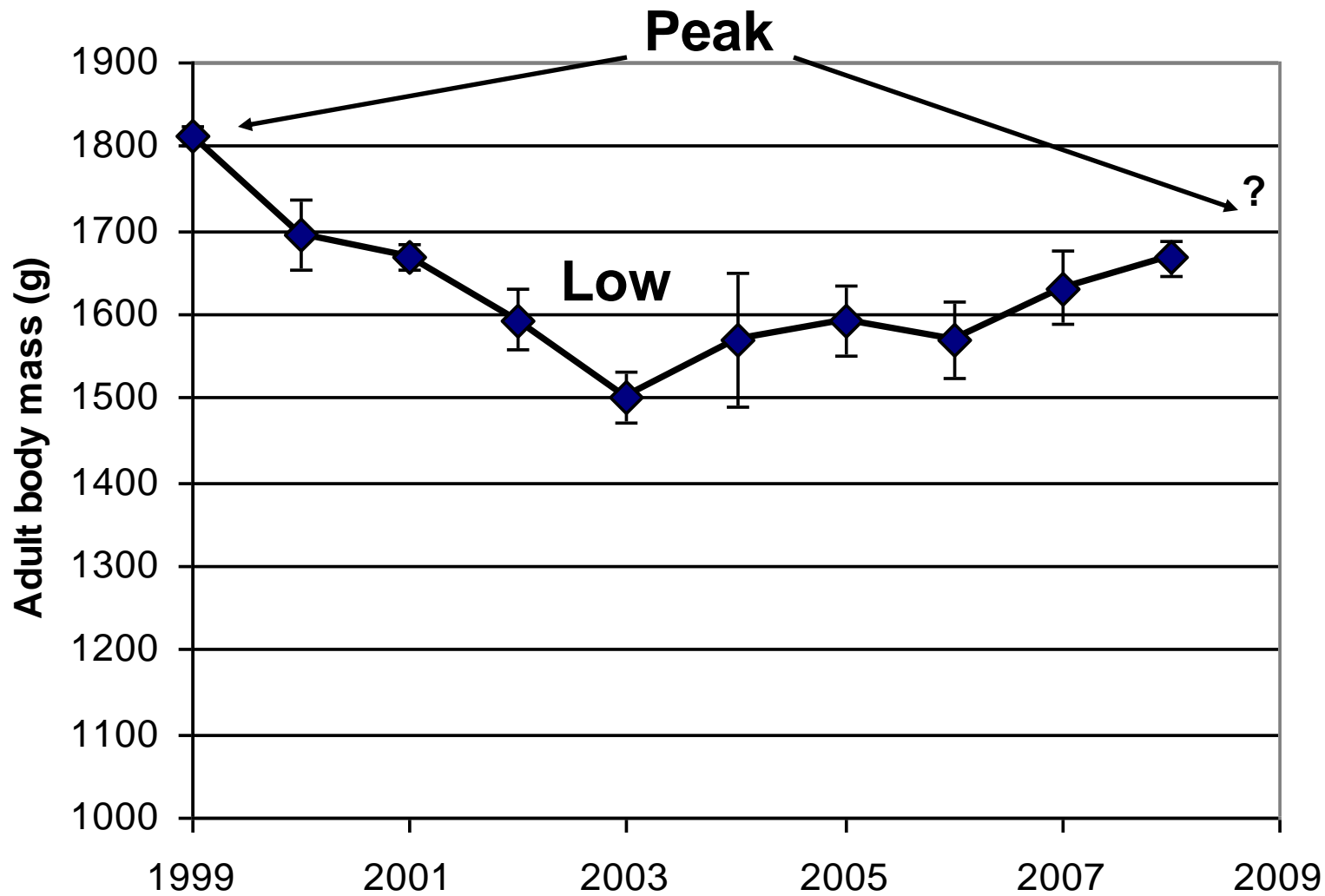




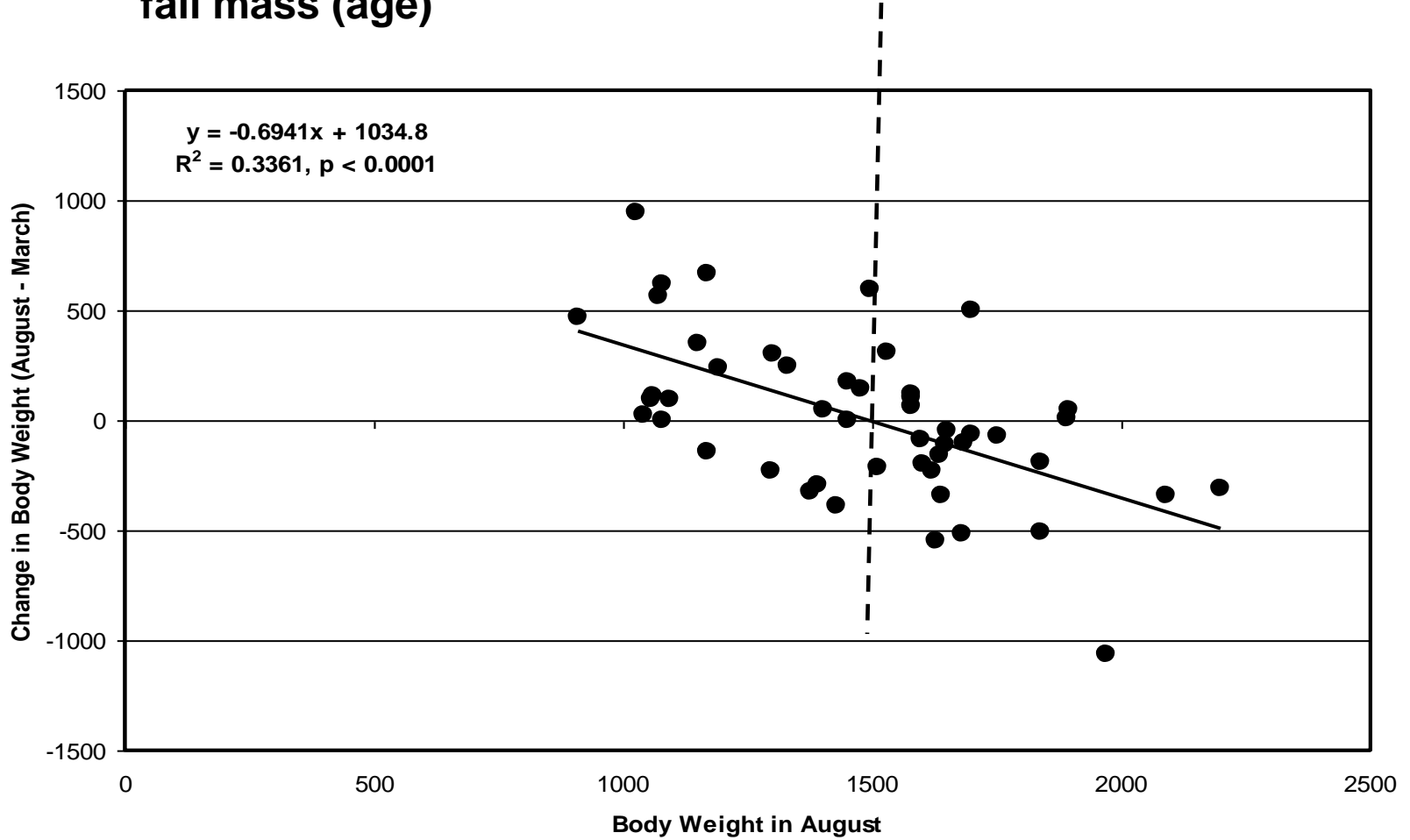


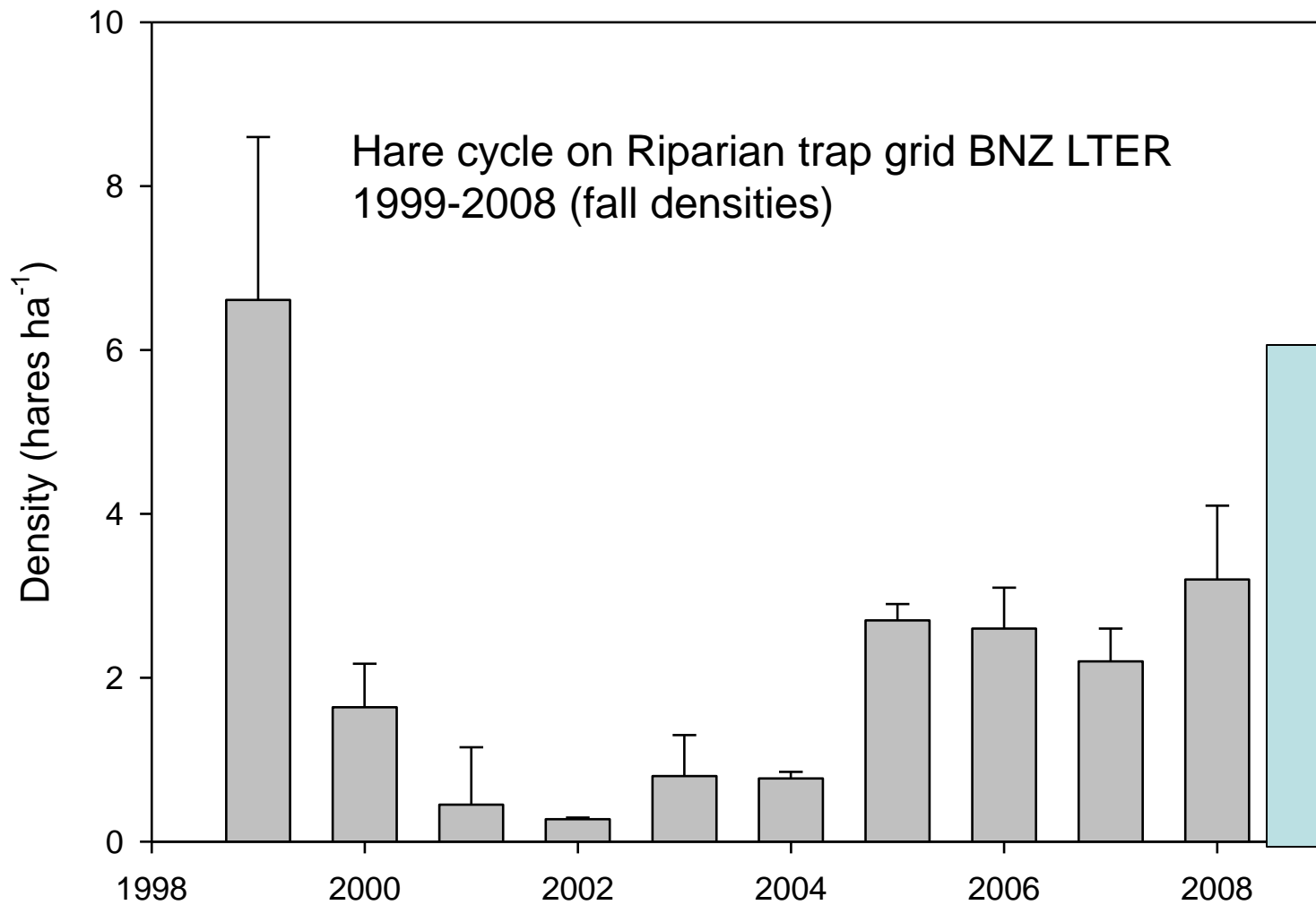




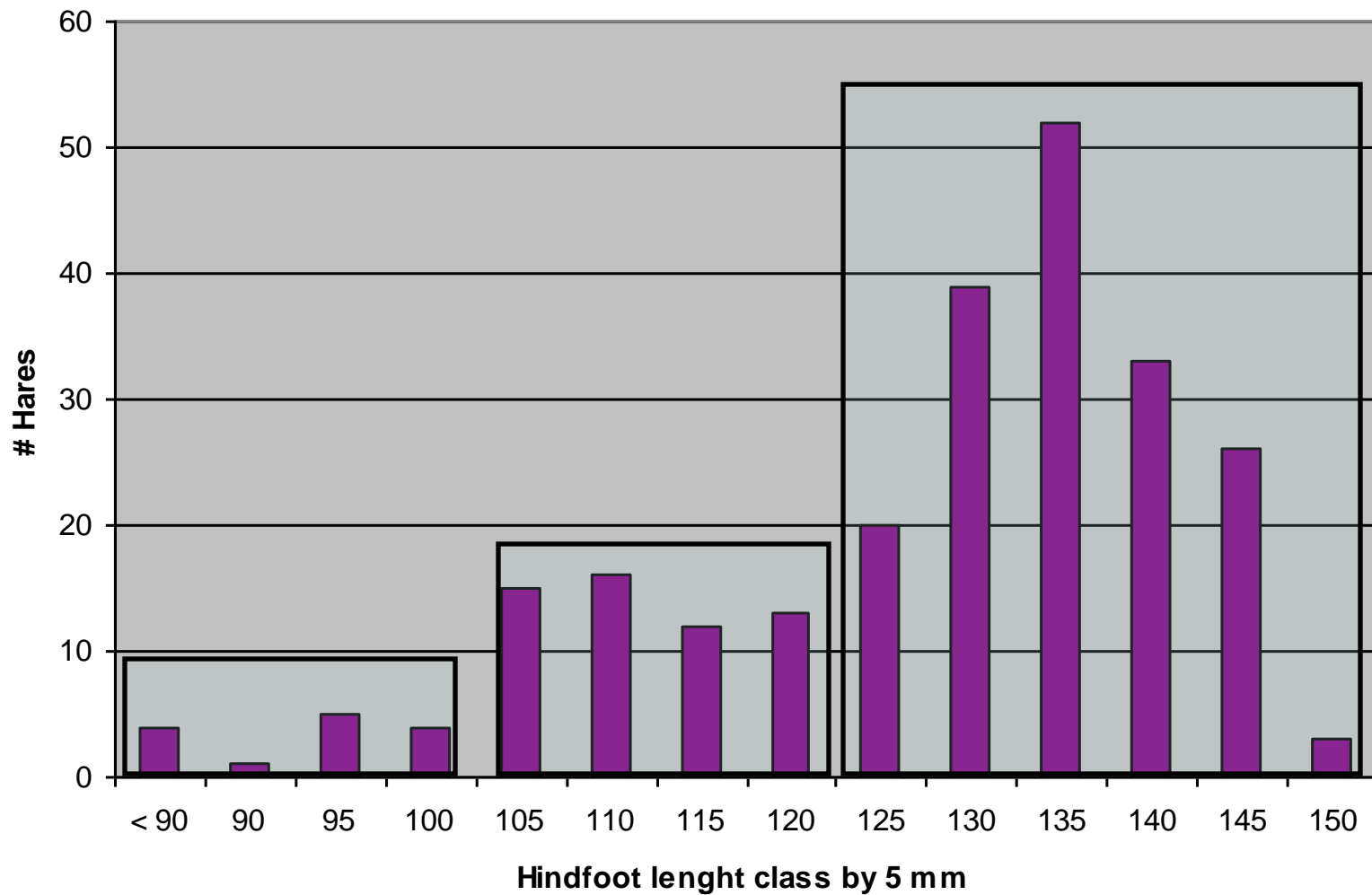


Over-winter changes in body mass of hares depends on fall mass (age)

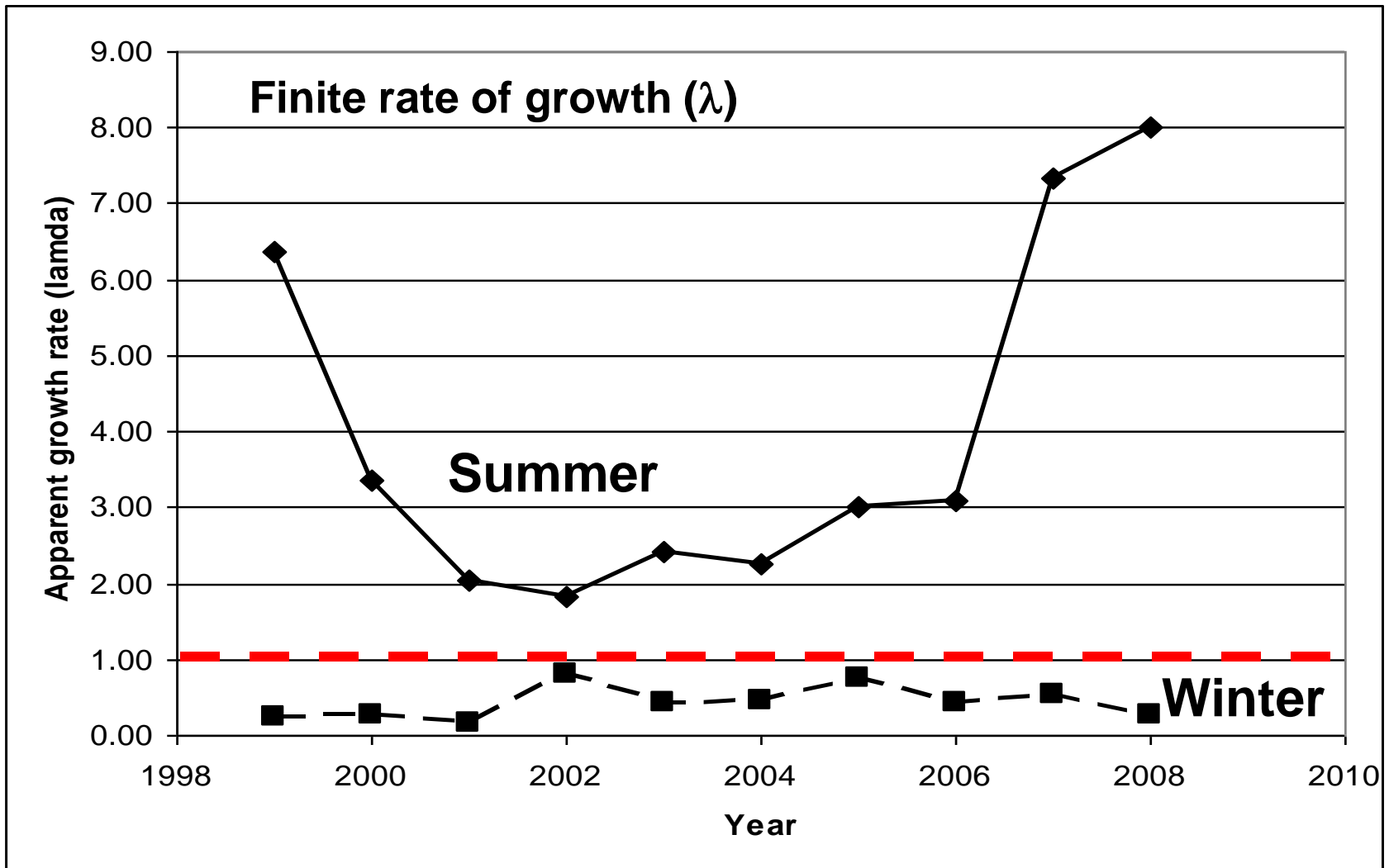


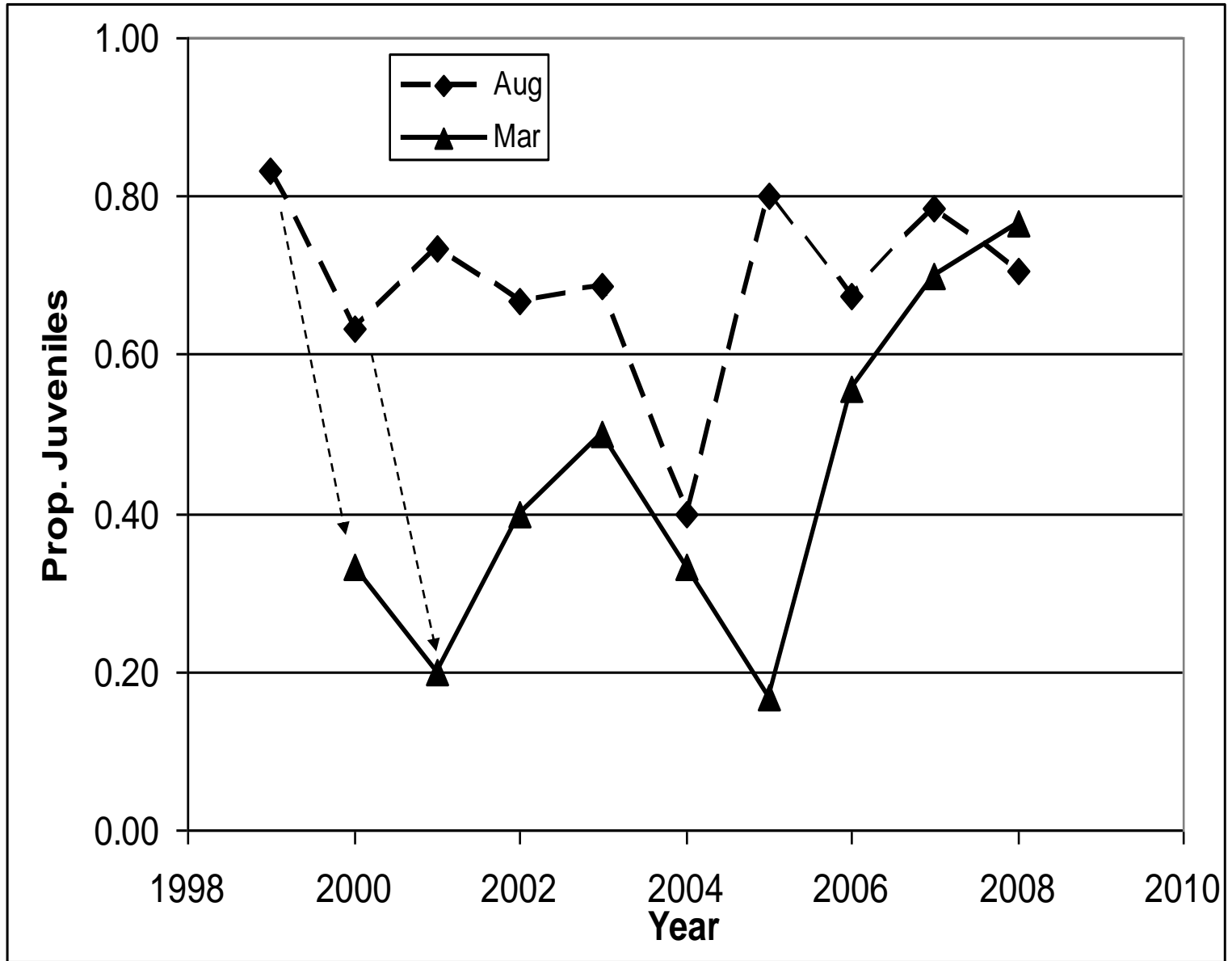


Distribution of hind foot lengths (mm) August trap session



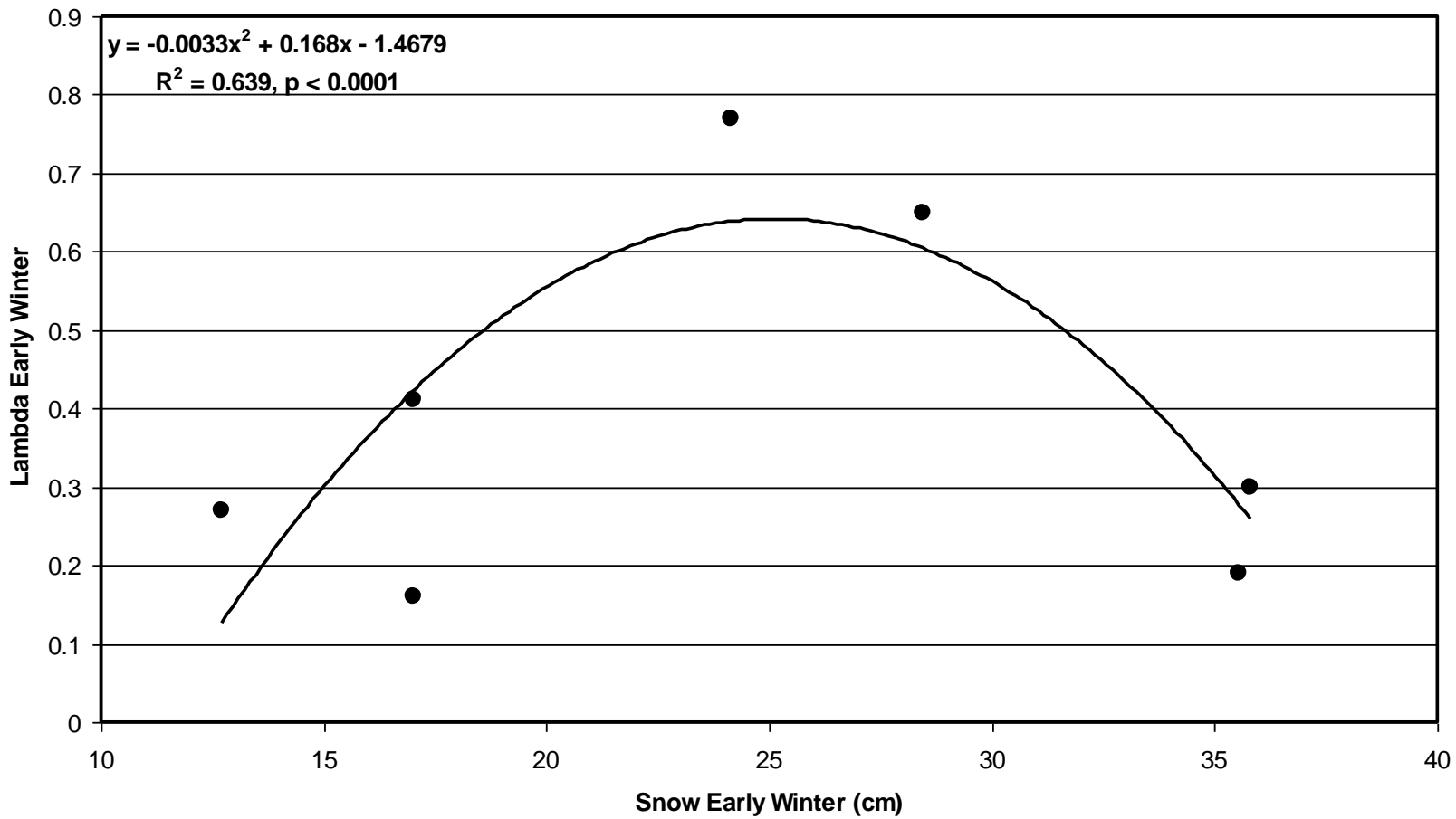


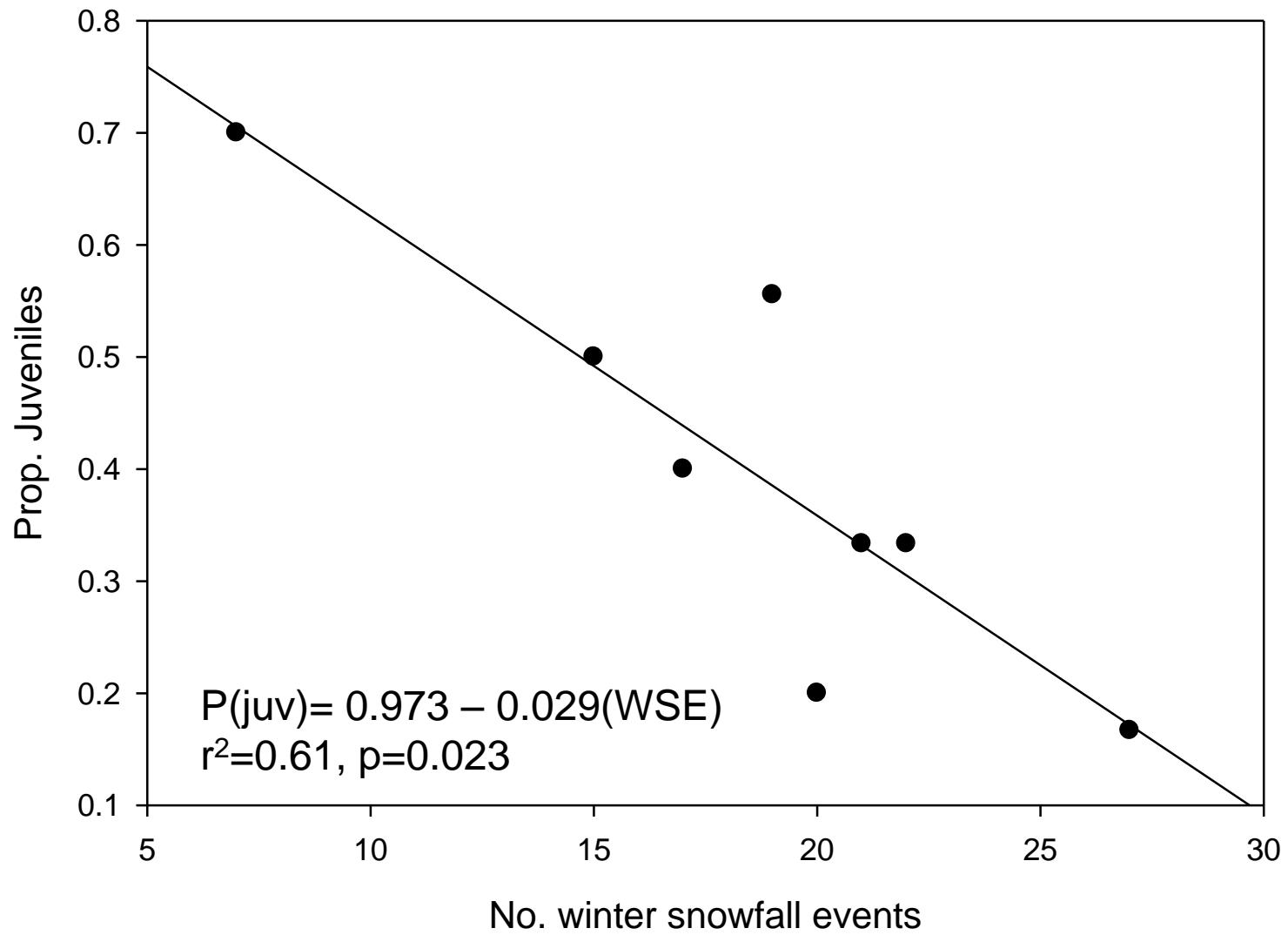




Climate factor	Demographic Factor	Var. explained (%)
Snow depth	Pop density	26 (-)
Summer ppt	Pop growth	18 (+)
Summer GDD	Pop growth	32 (- + -)
E. Winter snow	Pop growth	64 (- + -)

**Mass of adult hares inversely related to winter ppt (P=0.027),
but not winter temp (P=0.184)**





Pop summary:

- 1. Recovery of the hare population during 2005 – 2008 follows w/ one-yr time lag above normal temps for October and below normal snow fall**
- 2. Start of pop recovery also came on the heels of two major wildfire years, which were associated with much higher over-winter survival of juvenile hares.**









Monthly survival estimates (K-M) of snowshoe hares on the LTER Black Spruce and Riparian trapping grids 2008-2009

