BASIC SUMMARY

## Miller (2004)

Genetically-effective population size $=N_{\mathrm{e}}$; those animals contributing genes to the population

Sample of tissue from 110 bear specimens in museums, 1912-1981
Sample of tissue from 136 bears captured 1992-1999
Sample of 8 microsatellites
$N_{\mathrm{e}}$ during 1912 to 1981 approximately 80
$\boldsymbol{N}_{\text {e }}$ during the 1990s approximately $>\mathbf{1 0 0}$

Estimated ratio of $N_{\mathrm{e}}$ to total population size $\left(N\right.$; or $\left.N_{\mathrm{e}} / N\right)$, where N is obtained from total population estimates obtained by other means.
$\mathbf{N}_{\mathrm{e}} / \mathbf{N}$ is approximately 0.27 (0.09 to 0.92 )

Previous estimates of $N_{\mathrm{e}} / N$ for bears
Allendorf et al. (1990) = 0.20-0.38
Paetkau et al. $(1998)=\mathbf{0 . 0 4 - 0 . 1 9}$

## Kamath et al (2015)

Sample of 729 bears, including those sampled by Miller
Sample of 20 microsatellites
$N_{\text {e }}$ during 1980s approximately 100
$\mathbf{N}_{\mathrm{e}}$ during early 2000s approximately 450
$\mathbf{N}_{\mathbf{e}}$ harmonic mean for entire period 1982-2007 approximately $\mathbf{2 1 3}$
$\mathbf{N}_{\mathrm{e}}$ for "current population" is approximately $\mathbf{2 8 0}$
$\boldsymbol{N}_{\mathrm{e}} / \mathbf{N}$ is approximately $\mathbf{0 . 4 2 - 0 . 6 6}$

