



FIGURE 18.28. Small populations of the Glanville fritillary (*Melitaea cinxia*) (A) in Åland, south-western Finland, are less likely to go extinct if they are more heterozygous. (B) Meadows occupied by this butterfly are shown by *small black circles*; suitable but unoccupied meadows by *open blue circles*. Sampled populations shown in *green* survived, but those marked by *red circles* went extinct between 1985 and 1996. (C) The y-axis shows the probability of survival predicted from ecological factors; the x-axis shows the average number of heterozygous loci based on six allozyme loci and one microsatellite locus. Contours are the estimated survival probabilities: There is a significant effect of both ecological and genetic factors. The *red circles* are the populations that went extinct and the *green circles* are those that survived; the sizes of the circles are proportional to predicted extinction probability.

18.28A, photo courtesy of Tari Haahtela; 18.28B,C, redrawn from Saccheri I. et al., *Nature* **392**: 491–494, © 1998 Macmillan, www.nature.com