* Island Anolis lizards are threatened by rats
* Lost of genetic diversity after rats invasion – loss of alleles and heterozygosity
* Effect of inbreeding - Loss of heterozygosity advantage and unmasking of deleterious recessive alleles – loss of fitness – inbreeding depression
* Inbreeding isn’t necessarily inbreeding depression – inbreeding depression only when there is a loss of fitness
* Measuring fitness in the wild population is difficult
* Most animals outbred
* When have inbreeding, increase in mortality
* Purging – we are all carrying deleterious mutation – mutation load is the proportion of variance that is deleterious and they tend to be recessive because if they are dominant, they get selected out of the population rapidly
* Purging – selection is most effective in large population – following bottleneck – small population – higher heterozygosity and masking of deleterious alleles
* Purging is not always true
* These populations (in green – white tiger slide) may have their proportion of deleterious alleles purged out