



Zoo Matchmaker

Extension 2 – Mendelian Genetics

The Disease Resistance Scenario from the Zoo Matchmaker program was based on the assumption that the gene conferring distemper resistance was recessive and caused by a single gene.

1. What crosses between tigers would need to be performed and what results would be needed to be sure that the gene was recessive?

2. (For upper level students) If feline distemper was polygenic, what would the distribution of individuals for feline distemper in the population look like, i.e., in what ways would the population differ and why?

3. What animals in the U.S. have been near the brink of extinction? Name some species that have been saved from extinction? Which have not? Can you think of reasons why some animals receive more conservation support than others?