**KEY**

What population trends do you see? What differences do you see between scenarios?

**40% female populations increase much more rapidly than 90% female populations (depending on which cards are drawn, there may not be much growth at all in 90% female populations). When herbicide exposure is introduced, those populations grow more slowly than non-herbicide populations.**

Does herbicide appear to affect population dynamics before introduction of chytrid?

**Yes, herbicide has some non-lethal effects on frogs, since frogs that have previously been exposed have fewer offspring. Students may see that their herbicide-exposed populations are not growing as rapidly as populations with the same sex ratio that have not been exposed.**

Do there seem to be differences between scenarios in the proportion of frogs reproducing? What consequences could this have?

**90% female populations have very few frogs reproducing – there may only be one “male” reproducing the entire time. In a similar situation in nature, this will lead to less genetic variation. This could make the population more susceptible to certain diseases or may make it less likely to adapt to new environmental challenges.**