



Go Beyond: Science Journal

Why do species invasions matter?

In this 1994 lecture, Dr. Vitousek called biodiversity loss irreversible. Stories such as Jurassic Park have played with this idea in a fictional way. Now, in 2013, recent developments in science have allowed researchers to implant embryos from rare species into more common species, creating a host mother that is a different species of animal from the offspring. Using your science journal to record your thoughts, explore and research the questions below.

- Do you think it may one day be possible to re-introduce a species that has gone extinct in real life?
- In terms of real world populations, do you think that this type of research could change the statement that extinction is irreversible?

1. Without looking anything up, write down or sketch out your answers.
2. Ask a family member, friend, or teacher the same question and write down their answers.
3. What are the common answers you've collected? Write or sketch the common themes/ideas.
4. Devise your own strategy for digging deeper (ask a scientist, check out university and government agency websites like NOAA and NASA, go to the library, ect.) until you are satisfied that the answer makes sense to you.
5. Summarize what is known and unknown about extinction, and reintroduction. Also note what evidence there is in supporting what is known and how the evidence was obtained.
6. Rate the answer you've come up with on a scale of 1 to 10, 1 being weak with lots of uncertainty, 10 being perfect.
7. Do you think this type of research is ethical? Why or why not?

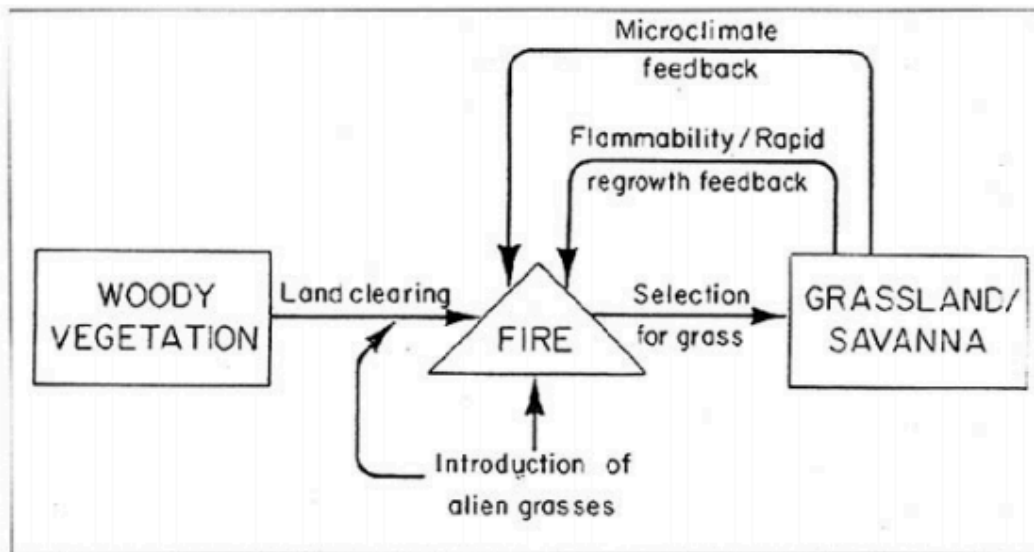


Figure 11.3. Grass invasion and the grass-fire feedback. Land clearing and grass introductions act synergistically to convert forest to grassland or savanna, once conversion has occurred, two feedbacks operate to maintain grass dominance. The hot, dry, windy microclimate of grasslands, and the inherent flammability of grasses favor fire, and the rapid regrowth of grasses following fire keeps communities fire-prone. From D'Antonio and Vitousek (1992).