## Exam 2

## Due April 25th.

Answers will be graded highest if they are evidence based, logically organized and clearly articulated.

Answers should be submitted to Haoyu via email as a PDF document (no longer than 3 pages, no need to include the questions again in your answer)

**Q1:** A change in the strength and spread of a disease of orange trees wiped out groves from Florida. You are the governor of the State. You decide to restore this land. Describe what aspects you will have to consider in order to maximize benefits for the human populations and the natural areas? (You have against you the conservative groups that consider this project a waste of tax money and the environmentalists that want a carefully drafted and executed project with real effects. You need to please both. Use what you have learn in this and other classes to support your strategy.)

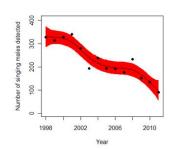




**Q2:** The Nature Conservancy has recently acquired a 400-acre piece of degraded land north of Okeechobee that is prime for dry prairie restoration, much needed for the endangered Florida Grasshopper Sparrow. You have been tasked with reintroducing native flora, for which you will need to collect the adequate propagules and decide whether to seed or transplant. Contrary to what one might believe, dry-prairies vary substantially in the local diversity and composition of plant species. Even small changes in elevation and fire regimes can result in different vegetation associations. Dry prairie is an essentially treeless, pyrogenic community with a ground cover diverse in regionally endemic plant taxa, including grasses, herbs, and shrubs.

Outline the different factors you should take into consideration when selecting the species and the type of propagules to collect. Explain how those factors will influence your recommendations for how to reintroduce groups of species (different combinations) and for future management.





Q3: What effect does Climate Change have on invasive species' expansion and their ecological impacts and how?



