

HW 3 – Sarah Ward

6.1: Mathematical stability models are useful because they allow us to speculate about a population's 'behavior' in ways that are not observable in the natural world. That being said, the small perturbations that we introduce into the models in order to observe this 'behavior' are not likely to happen in the real world.

6.3: See uploaded notes

2. (Also on uploaded notes)

In chapter 6, α_{ij} represents the rate of change of total growth rates of population i with respect to the population of species j .

In chapter 7, α_{ij} represents the effect of species j , on the population growth rate of species i .

Instead of using an alpha as the variable for two species interactions, I would use an 'a' ij . The book actually does this for its initial discussion of two species interactions, and then in the following paragraph, it switches to using alpha

3. The ultimate result of increasing p is that the system reaches 'steady state' with fewer iterations than it does with a smaller p .

4. Pitch link

https://docs.google.com/document/d/1YkYHkU4ZdJuOsH_u5DHZYcP0D9Cjcv0T853A2qAZ_-4/edit?usp=sharing