

**Forester et al. (2013) Integrating ensemble species distribution modelling and statistical phylogeography to inform projections of climate change impacts on species distributions**

1. What were some of the main pitfalls of SDMs mentioned, and which do you think is the hardest to grapple with? What other ways of managing the problems associated with SDMs can you think of, apart from phylogeography as proposed here?
2. This paper claims that SDMs should only be used for species where the climate-distribution relationship is stable. What does this mean for our project? Is it appropriate to use SDM's? What else could be used?
3. And what about a stable land use - distribution assumption? Is that even a thing, and if it is or should be a thing, then should we expect stability?

**Wyatt et al. (2020) Ecological niche modeling and phylogeography reveal range shifts of pawpaw, a North American understory tree**

4. This paper used ecological niche modeling (i.e., SDMs) along with genetic analysis to infer past and future optimal pawpaw habitats. Where available, should we concern our project with genetics / phyogeographies? Why or why not?
5. This paper states that a majority of distribution shifts have occurred as a result of gradual environmental change. How do you think potentially rapid climate change will impact the distribution of different organisms with varying dispersal types? Rank the following for this impact: amphibians, birds, insects, fishes, mammals, plants, reptiles.
6. Do you think SDMs could show the effects of land use change as well as how they might show the effects of climate change?