

### **Questions. Chapters 1-3.**

Lee Hannah (the author) states that because greenhouse emissions are unlikely to be curtailed within even the lower bounds of safety for ecosystems and species we should then adapt our conservation strategies to cope with the stresses of climate change. Do you agree with this statement? What kinds of adaptations to conservation thinking should we start employing?

Thomas et al. make a very clear distinction between the phrases “going extinct” and “committed to extinction.” What is this difference?

Why does Thomas suggest that centers of endemism are more susceptible to increased extinction risks from climate change in the future? Do you agree with this logic? How should this influence our thinking about conservation priorities?

Although the IUCN is currently working to change their ‘red list’ criteria in order to account for the danger of climate change, they initially made it clear that Thomas et al.’s model was not applicable: i.e. they could not red list a species because it was at risk of extinction from climate change. Why was this? And was this indicative on a failure in our conservation thinking at the time? Do you think we have improved?

So far we have been talking almost exclusively about species: losing 1 million species, listing species as endangered on the Endangered Species Act/Red List, etc. What about ecosystems? While the UNFCCC does have a goal to, “allow ecosystems time to adapt naturally” to climate change, can we no longer consider conserving ecosystems a viable goal? Are species a better conservation unit when it comes to climate change?