

Comments and Study questions for Dugatkin Chapter 13. Habitat Selection, Territoriality and Migration

Ethology and Behavioral Ecology
Spring 2007

1. We will cover ideal free distributions and resource defense models in greater detail in class.
2. Why should it pay an animal to observe others to determine territory suitability? Does the fact that many animals do this surprise you?
3. What is the **dear enemy effect**? Why should territories be stable once they are set up? Why should adjacent territory holders "forgive" others intrusions quickly and why should adjacent owners attack intruders? We will discuss prisoner's dilemma when we discuss game theory in a week or two.
4. What are **parentals**, **sneakers** and **satellites** in sunfish? What is the genetic basis if any of these behaviors and the relative advantages/disadvantages of each? We will consider this sort of system later when we consider game theory.
5. The pied wagtail example is important (conditional territoriality and joint territories): read it and we will probably cover it in class.
6. We have already considered helping at the nest in Florida scrub jays. Consider the advantages of helping beyond indirect fitness benefits. What is territory budding (not division) and how is it accomplished?
7. What is **optimal skew theory**? We will talk about this later when we consider parental care.
8. We considered it earlier but note again the use of planetariums to establish migration cues. Be able to explain how they are used and what the birds cue on.
9. I find the magnetic butterfly example puzzling to say the least. Any ideas why Dugatkin included this one (read it all first) – especially with a whole figure?
10. What is **zugunruhe**? Is it heritable and is it changing?
11. We briefly considered the salmon example earlier; please review it.

Judy Stamps is a very prominent behaviorist who recently received what can be seen as a "lifetime achievement" award from the Animal Behavior Society. Read her interview, it is really fun and she has a real knack for explaining things. Notice why she began to work on juvenile *Anolis* and pay close attention to what she says about body size and territory quality.

Look over questions 2 (relate to early in the course when we considered bacteria and later, cognition) 3 and 4.