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Class 23: Sociobiology as Science

Study questions: Alcock ch 4-5

1. Describe one study supporting the adaptationist claim that EPCs by female red-winged blackbirds are adaptive. (See p 58)
2. Are female red-winged blackbirds adaptively selective in their choice of a male for EPC? See p 59.
3. What could cause a non-adaptive change in the evolution of social behavior? (p 60-61)
4. Explain why Alcock spends so much time (space) on discussion of a short preliminary report by David Barash on mountain bluebirds. (See pp 65-71)
5. How is the comparative method used by adaptationists (sociobiologists) to test hypotheses about adaptive social behavior? (p 72-73)
6. What is wrong with the arguments presented by Robert Ardrey in his book, *The Territorial Imperative* ?
7. “Humans and chimps are, after all, the only species among the 4000 species of mammals in which male relatives form groups to raid other groups while living in and defending the area of their birth.” (p 76) Where would you look for possible exceptions to this claim?
8. See Appendix, ch 4: Q2. Male red-winged blackbirds are observed interfering with the foraging activity of mates that have engaged in EPCs with neighboring males. Hypothesis: this is adaptive because it enables males to reduce investment in offspring likely to carry another male’s genes. Alcock proposes several questions concerning use of the comparative method to test this hypothesis. See p 226.
9. See Appendix, ch 5: Q2. Suppose someone said to you that given a choice between a cultural explanation for human behavior and a sociobiological one, you ought to give precedence to the cultural explanation because our behavior is so obviously shaped by the culture in which we live. How would you respond (if you were a sociobiologist)?
10. See Appendix, ch 5: Q1, first question. (The other questions are also interesting.) In the study of EPCs by birds, are there gender biases in the topics of study? Are male and female scientists different in their approaches and biases? (See Alcock’s wordings of several questions on p 227.)

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