

Monday, April 28, 2008

Indrani

1) On pg. 1 "given these difficulties, I felt I needed to try to obtain young and be a surrogate parent to them". I thought we could discuss what we think about the difficulties Heinrich talks about and whether there are any alternatives to his solution.

2) The advantages and disadvantages of uncontrolled (rather less controllable) studies. Are such experiments a necessary part of studying animal behaviour?

3) Who do we think the intended audience is? Heinrich refers to natural selection many times through the first 5 chapters. Is it fair to assume that the average person understands natural selection. If not, is there a responsibility as a science writer to avoid confusion regarding "popular" scientific terms.

Thor

Given the obvious learning ability of ravens and the human parenting that these ravens received, how much weight can Heinrich's behavioral observations carry?

Along with the fact of human parentage, these ravens are never forced to act as mature raven adults because they are ever forced to be independent (p. 65). This cushy lifestyle generates variation from more normal behavior such as food caching (p. 42). Can data collected from these ravens be applied to ravens in general?

Heinrich and his fellow raven enthusiasts are unabashedly anthropomorphic, referring to ravens as children (p. 31) and frequently projecting human emotions and drives without clear justification. Once again, does this compromise the strength of his conclusions? What is the purpose of a book like this, that blends popular animal enthusiasm with animal behavior studies?

Heather

1. What role do you see for Heinrich's genre of scientific writing within the field of biology? In popular culture? How are those different?

2. Where should the particulars of individual variation come up in biological writing? What do we miss by focusing largely on statistical analyses? How do these two methods complement or conflict with each other?

3. What differential roles do subjectivity and objectivity play in Heinrich's writing?

4. The timeline of major events was not entirely clear to me. Is this problematic?

5. How did parents seem to regularly bring bits of deer meat to their offspring when all animal carcasses are eventually overtaken by mobs of juveniles?

6. Why do some raven parents abandon their nests entirely with the introduction of an unfamiliar stimulus, rather than staying to protect their offspring? How might this variation relate to reproductive status and risks of predation?

7. Heinrich speculates that during his field experiments, the relatively subordinate female juvenile did not recruit others to food sources because she did not need to. Why, then, did the relatively dominant male?

8. What proximate and ultimate explanations might there be for the changing colors of tongues over time, varying according to relative dominance status?

8. What different selection pressures might cause such tremendous differences between American crows and ravens, both members of the genus *Corvus*?

Rosie

Heinrich describes the “mutes”, or large volumes of liquid waste the ravens excrete. What is the difference between this and mammal excrement? Does this show any type of adaptation on the raven’s part? (6)

In what other ways does Heinrich suggest that natural selection has acted on the raven’s behavior? (7)

Describe the experiment Heinrich sets up to see if ravens are instrumental in bringing others to a food resource. What confounding variables does he try to account for? Is he successful? (13, 17, 20) How better could he have designed the experiment?

Why does Heinrich say that subordinate juveniles should recruit more than dominant juveniles? What does each have to lose/gain in this situation? (14)

Heinrich wrote a paper about ravens for *Animal Behavior* in which he called them “traveling information centers” (26). What does he mean by this? What is so puzzling about this quality of ravens?

What does Heinrich conclude from his studies on recruitment? How does it fit in with our knowledge of cooperation in animals (reciprocity vs. mutualism)? (30)

On page 33, Heinrich describes Klaus Morkramer’s house. What is the author surprised about when he sees Morkramer’s house? Why? What explanation does he later posit for this curiosity? How does this explain the raven’s fascination with jewelry and baubles? (69). Do you think this is a behavior they have adapted in the wild? Is it beneficial to them in all situations?

How does Merlin’s behavior differ from that of ravens in the wild? Does this suggest he has learned something from living with Duane? (42)

In his study of nine raven pairs, how many were successful in raising their brood? What explanations does Heinrich give for this inconsistency over seasons/pairs? Which does he rule out? (53)

Explain what he did with the pipe cleaners. What does he find with this study? (53-55) What does Heinrich find some amazing about the raven’s handling of the robin’s egg? Why do you think they handle these eggs so carefully? (61,62)

We’ve talked about parent-offspring conflict. In animals in general, when does this occur? What conflict develops in the parent-offspring relationship among ravens? (65)