## BOOK REVIEW: *The Human Nature of Birds*

by William E. Davis, Jr.

*The Human Nature of Birds* by Theodore Xenophon Barber, St. Martin's Press, New York. 1993. 226 pages, 12 color photographs. $19.95 (cloth).

Do animals other than humans "think," and are they "intelligent?" In recent decades this question has been looked at in some depth by scientists, and the controversy over intelligent versus automatic, machine-like, genetically programmed response continues today. The move to reexamine the concept of animal intelligence was spearheaded by Donald Griffin, whose books contained documentation that birds and other nonhuman animals behave in flexible ways that suggest intelligent responses to environmental constraints. *The Human Nature of Birds* examines this question with regard to birds.

The book is divided into twelve chapters and three appendices. The chapters deal with avian intelligence, flexibility, languages, music, and play, and include a number of detailed case studies of individual birds. Some more general chapters deal with personal friendships between birds and humans, reasons why birds have been misunderstood, animal intelligence in general, and what the author views as the significance of all of this. One appendix suggests how you can experience birds as intelligent individuals.

The book purports to be a scientific look at avian intelligence, but the general writing style, language, and selectivity of the data presented do not support this contention. The subtitle—*A Scientific Discovery with Startling Implications*—suggests that this is not going to be a dispassionate, objective, and evenly balanced presentation. In fact, the book is a long, polemical argument that criticizes the scientific establishment for its anti-anthropomorphic (attributing human characteristics to nonhuman animals) stance, and attempts to convince the reader that new scientific discoveries show a world in which intelligence is found in birds, other vertebrates, and even in the insect world.

Frankly, I found the word "intelligence" used in so many ways, and extended by definition into so many areas, that it ceased to have any clear or useful meaning. For example the phrase "navigational intelligence" (page 3) was used for birds and "instinctual hydroengineering intelligence" for beavers (page 111). The section "Intelligent Hymenoptera" included a discussion of communication among ants by chemical signals (pheromones) (pages 135-137). In many cases, behaviors are presented as (or implied to be) intelligent responses (e.g., cichlid fish "deceptively pretend they are dead until a smaller prey fish approaches close enough to snap and eat" [page 133]), without any discussion of the possibility that they are an instinctive response programmed into the animal's genes. The author presents numerous examples of tool-making and tool-using birds, and then says, "An important conclusion emerges from

these data: Birds are capable of *intelligently* using tools or tool substitutes . . ." However, he presents no evidence to support the use of the italicized word intelligent and does not explore alternative explanations.

The author seems to equate flexibility of behavior and intelligence (e. g., ". . . birds intelligently or flexibly maintained sufficient territory to meet their needs," or "Birds can flexibly shift their age-old food preferences when it is the intelligent thing to do" [page 15]). Clearly, all animals respond with some degree of behavioral flexibility to changes in their environment, but I find little justification for describing this flexibility with the word "intelligence."

Another problem I had with the presentation was the tendency of the author to make very anthropomorphic statements (e.g., "They sing at times simply because they are happy . . . or to entertain their flockmates" [page 51]) but not support these rather dogmatic statements except by quoting or referencing another very anthropomorphic source. How does he know they are happy? What is happiness to a bird? Sometimes the author hedges a bit. For example, in the section on "Avian Fun, Play, and Dance" he states, ". . . indulging in sunbathing, flying, and singing as if they were recreational activities." Notice the author's use of the words, *as if*, to mute his anthropomorphism.

The author has laudable but rather naive goals when he suggests that some of the researchers he quotes or references ". . . are the forerunners of a reinvigorated human race that will live in increasing harmony with birds and other living things as the message of this book spreads" (page 97). This suggests to me an evangelical zeal rather than a balanced scientific analysis. He begins the last chapter with, "As people begin to see willful intelligent awareness where they previously saw only machinelike processes, their relationship to nature and the universe will change drastically. As the humanlike qualities of birds and other animals penetrate deep into the consciousness of a new generation, humanity's philosophy of life will turn around along with human cultural institutions." Later in the same chapter, he continues, "The avian revolution will be complete when the new generation accepts as natural that people and birds can understand each other and relate to each other not only as equals but also as friends." Again, these are laudable goals, but they are phrased in the language of sentimentality rather than the language of science.

In one sense, the author defeats his own purpose. He tries to free up the "scientific" approach to studying birds by anthropomorphizing them—stressing how "human" birds are. But in the process he replaces the constraint of looking at birds as "machines" (which he claims, I believe incorrectly, that science currently does) with the constraint of looking at them as "humans." Clearly they are neither. Birds are birds, humans are humans, and ants are ants. They each evolved fascinating behavioral and physiological mechanisms for coping with their environment. But the mechanisms in most cases are not the same. To equate human and bird intelligence is self-defeating. There are parallels between

humans and birds because both groups have faced in their evolutionary histories similar environmental problems that had to be "solved" in an evolutionary sense if the organisms were to survive, and because we share a common genetic ancestry and thus many physiological systems (e.g., anaerobic respiration). But each group has evolved under a different set of selective pressures, and each group has evolved different behavioral and physiological solutions to survival. I do not think that the evidence presented justifies equating human "intelligence" and other animal "intelligence." Certainly, there are differences in degree, and possibly in kind, and to argue that they are comparable, and thus to justify treating other organisms anthropomorphically is, in my opinion, a mistake. It diminishes our ability to fully appreciate, with our own unique rational and aesthetic capabilities, the behavior of animals other than ourselves, and their unique capabilities. I really prefer to study and appreciate birds as birds and not as people.

This book is not without merit. It is really quite a good primer on bird behavior and certainly makes for interesting and enjoyable reading. The description of case histories of individual birds (and other animals) and their relationships with humans is absolutely fascinating. The list of references in the endnotes, alone, is probably worth the price of the book. But if you read this book, be sure to have a saltshaker handy, and every time you read "surprisingly," "creatively," ". . . decide intelligently," "sensibly," "shocking discovery," ". . . than previously imagined," — take a grain of salt.

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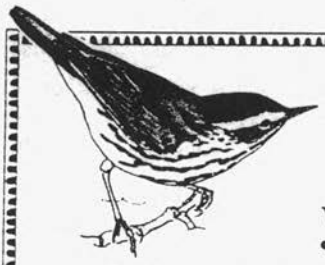

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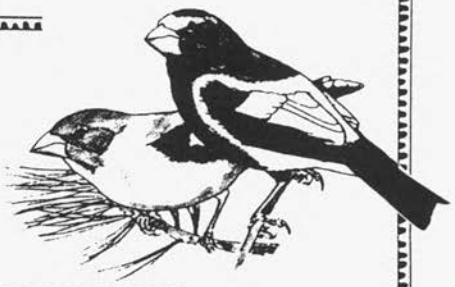

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