

**Biological Anomalies: Birds** by William R. Corliss, Glen Arm, MD: The Sourcebook Project, 1998. xx pp. \$00.00. ISBN 0-915554-32-1.

*Biological Anomalies: Birds* is one of a series of books by William Corliss that describe biological phenomena that are not easily explained by accepted theories. This particular book deals with all aspects of avian biology, and is organized into sections with headings such as external appearance and morphology, behavior, fossil records, genetics, and unusual talents and faculties. Each section includes subsections in which a particular aspect that the author found to be anomalous is described in some detail with appropriate references. It is clear that Mr. Corliss has done a monumental amount of research to put this book together.

For each topic, Mr. Corliss provides a brief description followed by a data evaluation, an anomaly evaluation, a list of possible explanations, and a relationship to similar phenomena. He then provides a detailed description of the anomaly with a number of examples. The data evaluation involves rating the adequacy of documentation of the particular subject that the author deems to be anomalous. Well-documented phenomena are rated as a "1" while totally unsubstantiated information is rated as a "4", with intermediate ratings for data of intermediate quality. Similarly, the anomaly evaluation uses a rating of "1" for anomalies that are not explained at all by existing theories and goes down to a rating of "4" for non-anomalies.

The book is full of fascinating facts. Some of these, such as the observation that in most raptors (hawks and owls) the female is larger than the male, are well-known to most people interested in birds. This section describes some of the prominent theories that have been put forward and reasons why they might not be valid. A graph is presented that shows a correlation between the type of prey favored by species versus the degree of size difference, with the largest difference among species that favor other birds as meals. Thus the more difficult it is to catch prey, the greater the difference in size. Many other unusual phenomena are presented that are probably not known to most readers, such as birds that smell bad, egg mimicry, tongue adaptations, and whisper songs. One behavior that many people have marveled at is the ability of a flock of birds to simultaneously change direction. How they accomplish this without a host of mid-air collisions is a mystery. The book describes some of the findings of investigators and their theories to explain this phenomenon. The most widely accepted explanation is the chorus-line effect, which posits that birds are cuing off the movements of birds at the front of the flock, but other ideas such as telepathy, morphic fields, and chaos theory have had proponents.

The presentation of these strange phenomena is primarily to illustrate the author's contention that natural selection cannot adequately explain how many of these phenomena developed. He repeatedly refers to a section of the book that discusses the complexity of vertebrate eyes as a prime example of how evolution fails as an explanation. Most of the scientific basis is presented

in another book of the author's (*Humans II*). Instead, the author uses this particular section to demonstrate a clear hostility toward evolution. Exactly what he does believe is not clear. He refers to "extreme evolutionism and equally extreme creationism" and makes the statement that "Finally, one might conceive, as science fiction writers sometimes do, that biological evolution is controlled by entities that are *not* supernatural!" He doesn't clarify further on whether he is referring to a god or to our planet as a petri dish for an alien scientist! Without the scientific basis for the anomaly of the vertebrate eye presented in this volume, it is hard to judge the degree of this anomaly, but many invertebrates have eyes and some, such as the octopus and certain spiders, apparently see quite well, so the giant leap to vertebrate eyes may not be as great as he purports it to be. Nevertheless, it is difficult to understand how a few of the phenomena described might have developed by evolution as we understand it today. A section on the avian respiratory system is one of the best examples presented by the author. The one-way stream flow of air through the avian lung is unique among vertebrates and appears to represent a more efficient and more sophisticated solution to respiration than is found in mammals.

The book has a good discussion of the "birds evolved from dinosaurs" controversy. Paleontologists carefully study small dinosaurs with bird-like features for signs of feathers or pre-feather like structures. The perfection and complexity of the modern feather and the absence of evidence for featherlike scales in the fossil record are one of the major points the author harps on in his criticism of natural selection.

There appear to be few errors in the science presented, although a nitpicker could point out that Ruddy Turnstones are not plovers (page 64) and trogons are found in North America (page 78). Convergence of unrelated species is an interesting and well-documented phenomenon, but convergence of the Redstart of Europe with the American Redstart seems to be quite a stretch (page 113). The author criticizes Darwin's theory that bright plumage enhances sexual selection, yet studies have shown it to be true for some species. Male Red-winged Blackbirds flash bright red shoulder patches to advertise to females. If these patches are painted black, the bird loses out on territory and mating opportunities. Studies with other species have shown that females prefer brighter plumage. The suggestion is presented that, like poisonous tree frogs, brightly plumaged birds advertise their unpalatability. Pheasants, ducks, tanagers, orioles, bluebirds, hummingbirds, and warblers are a few examples of colorful birds that make fine dining for an array of predators.

There are some interesting omissions in some of the species mentioned in certain accounts. The discussion of siblicide, where the stronger of a pair of offspring will kill or push from the nest the weaker offspring did not include the Bald Eagle, one of the best known examples of this phenomena. In another section, on discontinuous populations, the situation of the Magpie is not considered. The Magpie is widespread in Eurasia including temperate Western Europe where it is abundant and competes well with other corvids. The Black-billed Magpie (considered conspecific with the Eurasian bird, at least until

recently) is generally found only in the relatively arid and cold parts of North America and is absent from the Eastern U.S., which is similar in climate to much of Europe.

Despite the irritating swipes at evolution, the book will be fascinating reading for people with a great interest in birds and will stimulate much discussion about how evolution works.

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**The Illustrated Encyclopedia of Ancient Earth Mysteries** by Paul Devereux. London: Cassell, 2000. 192 pp. \$24.95. ISBN 0-7137-2764-0. Distributed in the United States by the Sterling Publishing Company.

What are “ancient earth mysteries”? They are not dinosaur fossils with feathers or unexplained Precambrian rock formations. Rather, in Paul Devereux’s latest book, they comprise a disparate group of archeological sites, historical figures and events, and unusual natural phenomena. Devereux assigns this group to a “gray” zone between mainstream archeology and pseudo-archeology. I believe most mainstream archeologists would prefer the latter term for this book’s contents.

Indeed, much of *Ancient Earth Mysteries* treads on the outer fringes of science. This is seen in the unifying theme of the book; namely, that there are mysterious “forces” that pervade the earth’s crust and blanket its surface. Some of these “forces”, which are claimed to be manifestations of “earth energies”, are said to be detectable by modern dowsers and psychics. Dowsers claim, for example, that many ancient sites, such as Stonehenge, are surrounded by patterns of “earth energies”. This claimed connection between “earth energies” and famous archeological sites leads to still another claim, namely, that Neolithic and later cultures located their ritual structures where they perceived concentrations of these “earth energies”. Modern dowsers and psychics are simply recovering lost knowledge. “Psychic Archeology”, one of the entries in this encyclopedia, is actually widely used today by avant-garde amateurs in their exploration of ancient sites. Obviously, this is not science as defined by the logical positivists because the phenomena involved cannot be sensed by all *normal* people!

Before you throw up your hands at these New Age beliefs, you should be aware that earth mysteries have a surprisingly large following in both Britain (where this book was published) and the United States. Devereux’s *Encyclopedia*, therefore, has considerable market value. Devereux, in fact, is a recognized authority on earth mysteries and, believe it or not, a rather *conservative* one at that. To illustrate, his Encyclopedia entries on Ancient Astronauts and Crop Circles are suitably negative. *Ancient Earth Mysteries* could have been