

perhaps in place of the lighthouse motif, a suitable photo of a remote-viewer and his "monitor" (his on-site colleague, in a normal state of consciousness) in action. I believe these changes would attract more readers and sell more copies of the book.

The C.I.A. has publicly claimed to have given up its own interest in remote-viewing, and the military, including the Army (except for Atwater, at least) is not talking. While I doubt that anyone claims that remote-viewing is as reliable as, say, aerial photo-reconnaissance, still, throwing away a fairly inexpensive tool (remote-viewing) that can access critical information unavailable by any other means seems both unwise and highly unlikely.

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Mysterious Creatures: A Guide to Cryptozoology by George M. Eberhart. Santa Barbara, CA: ABC-Clio Inc., 2002. 2 volumes, 722 pp. \$185.00 (hardback). ISBN 1-5760-7283-5.

Cryptozoology is the scientific study of purported living animals for which the evidence of their very existence is inadequate. It is thereby 1 of 3 fields of science that I can think of which lack actually known subject matter, the others being exobiology and the origin of life. There is a sense, though, in which cryptozoology has an advantage over these others in that occasionally enough evidence does turn up for a cryptid. The animal then automatically leaves the domain of cryptozoology and enters zoology itself, cryptozoology thereby regaining its pristine emptiness.

New discoveries are still being made, even of relatively large vertebrates in out-of-the-way places, although, of course, most are of inconspicuous animals of various kinds. What fraction of the real diversity of living animals we actually know is difficult to estimate, but reasonable indirect estimates tend to fall between 5 and 20 percent.

So there is a lot of room for cryptozoology, it might appear. Well, not really, mostly because animals such as a new beetle in a rainforest tree or a new mite in the litter below are unlikely to have had any previous contact with people who paid any attention to them. Nevertheless, here is a 700-page book filled with exotica such as the buru ("unknown lizard of central Asia"), the deep-sea spider ("mystery invertebrate of the South Pacific Ocean"), the elephant-dung bat ("small, unknown bat of East Africa"), the griffin ("semimythical bird of central Asia"), the guài wù ("freshwater monster of China"), the Peninsula python ("giant snake of Ohio"), the pygmy elephant ("small elephant of central Africa"), the quagga ("a type of zebra... in South Africa, presumed extinct in the wild since the mid-nineteenth century"), the stripeless tiger ("odd cat of the Indian subcontinent"), the Sumatran hummingbird ("mystery bird of southeast

Asia"), the urisk ("wildman of Scotland"), and the xudele ("cannibal giant of western Canada").

This is a pretty heterogeneous bunch, and it does not exhaust the diversity of epistemic categories in the book. The author's interests extend beyond cryptozoology into other sorts of putative anomalies and even myth, and some of these creep into this book. There are about 600 alphabetical entries, from a few lines to a few pages. Eberhart gives ostensibly descriptive aspects separate from evaluation of them, which is useful, and each entry has its own bibliography, some of which are rather extensive, with Web sites usually conspicuous.

The buru is a 4-m-long animal of northeast India, perhaps a lungfish and perhaps recently extinct. The deep-sea spider, 6 or 7 cm in body length, was photographed by a remote-action camera and is probably an otherwise unknown arachnid. The elephant-dung bat appears to be a known species with a mistaken habitus. The griffin is a well-known mythological animal, perhaps an embellishment from pre-scientific findings of *Protoceratops* fossils. The guài wù is a surprisingly well-attested mammal in the crater lake of a Chinese volcano that erupted in 1702. The Peninsula python had apparently escaped from an overturned carnival truck. The pygmy elephant has been exhibited in zoos but has apparently never been adequately studied to see whether it really is distinct from the African forest elephant. The quagga is a well-known recently extinct animal probably conspecific with a still-extant zebra. The stripeless tiger is presumably just a genetic variant like, say, melanic squirrels. The Sumatran hummingbird may be a misidentified flowerpecker. The urisk is a fairy-like mythical creature. Xudele is a local name for the windigo, a probably mythical creature of the Canadian taiga.

There are also rather extensive sections that categorize the entries and that index reputed sightings geographically. I looked up Ohio because when I was an undergraduate at Miami University some students I knew concocted a monster-hoax that made it into the newspapers, but it is not listed. Neither is a bigfoot-like creature reported near the Ohio River in Illinois in about 1970.

In a subject like cryptozoology, hoaxes are a standard risk. It is less well known, though, that the reverse can also occur, with false claims of refutations of actual evidence. Eberhart is quite well-informed for a non-biologist and tries to be critically objective. He does occasionally make factual errors, but I did not notice any serious ones. It is a bit startling sometimes, though, to come across "possible explanations" such as surviving proto-whales or "an unknown species of giant penguin, 15 feet tall."

Overall, this book is a good compendium, but its too-broad interpretation of cryptozoology does something of a disservice to that subject.

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