

illustrated with reproductions of his fine landscape sketches and block diagrams, give the book something of the character of an anthology. The bibliography itself is a contribution that will be appreciated by collectors and scholars. Undoubtedly the book will become an indispensable source of reference for geomorphologists.

In his generally favorable review of the first volume (*Science* **146**, 1665 [1964]), J. Hoover Mackin expressed reservations regarding the great length of the book, due partly to the inclusion of topics not directly related to geomorphology. He estimated that the entire work of three volumes would run to around 2000 pages. This estimate will surely prove too small; for now, with 1568 pages behind them, the authors announce that there will be not one but two more volumes. Size, however, is no longer the only problem for the aspiring reader; the second volume is so expensive that many students will not be able to buy it, and the publishers have announced that the first volume is out of print.

Mackin also took exception to certain judgments of Davis's work which he considered unduly harsh, but he withheld free use of his cudgel until the authors could have their full say in volume 2. As it has turned out, Chorley and company have treated Davis with a respect bordering on affection. To be sure they are critical of the Davisian system of geomorphology, mainly on the grounds that it was qualitative and all too little concerned with the dynamics of landscape modification. But the net effect of the book is to magnify rather than detract from Davis's accomplishments.

As a person, Davis emerges as "a Victorian gentleman—proud, disciplined and aloof." As a scientist he is given full credit for demonstrating the dominant role of fluvial processes in arid regions, and more generally for stimulating advancements in most branches of geomorphology. As an educator he is credited with establishing geography as a respected academic discipline in the United States. His major biographical essays on John Wesley Powell and Grove Karl Gilbert are praised as substantial contributions to the history of geological thought.

Members of the Davis Protective Society may now lay down their cudgels.

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## Problematic Creatures

**Bigfoot.** The Yeti and Sasquatch in Myth and Reality. JOHN NAPIER. Dutton, New York, 1973. 240 pp. + plates. \$8.95.

Supposed sightings of Yeti and Sasquatch are disappointing evidence in favor of large manlike creatures' living in the mountains of Asia and the Pacific Northwest or anywhere else. The eyewitness always turns out to be a victim of a hoax, commercially implicated, inept at keeping live specimens from getting away, tardy about seeking medical corroboration of rape, or otherwise less than credible. Then, too, honest men make honest taxonomic mistakes about real creatures glimpsed at a distance, or in poor light, or among bushes. Real creatures, however, keep leaving marks behind them in snow or mud, thereby providing tangible evidence for the skeptical and the credulous to throw at one another.

In the Himalayas eight different mammals have played a part in keeping alive the Yeti legend, which, alas for its zoological respectability, seems to depend on a selection of tracks produced by some quadruped moving with a particular gait under the right conditions of snow crust, melting, sublimation, or other processes. A ninth mammal—man himself—adds further confusion: accidentally in the Himalayas by treading barefoot or shod in the tracks of a fellow pilgrim (or perhaps of a snow leopard), deliberately on the Pacific coast by using footprinting devices of various degrees of sophistication. Not all tracks are fakes, according to the author, himself an authority on human walking patterns; indeed, he is impressed by how genuine some tracks seem to be, and how sad it is that at Bossburgh, Washington, the local Sasquatch has a club foot. No hoaxer, the author believes, would be sick enough to create a deformed Sasquatch, strong enough to trundle heavy footprinting equipment through the coastal forests, or smart enough to cover up a conspiracy of counterfeiters operating between California and British Columbia. On the other hand, living off the edible resources of the western mountains would be tough going even for isolated individuals of a large manlike animal, let alone for the populations needed to keep it off the list of endangered species. Also, its waste-disposal habits would have to be a good deal tidier than those for which man himself is noted.

The author's fence-sitting is unlikely

to satisfy the extremists; but in a twilight zone of fact and fiction, who cares about scientific realism? Attributing survival value to a belief in the abominable snowman may be going a bit far, but the author has obviously had a wonderful time on his excursion into the art of the insoluble.

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## The Study of Amphibia

**Evolutionary Biology of the Anurans.** Contemporary Research on Major Problems. Proceedings of a symposium, Kansas City, Mo., Aug. 1970. JAMES L. VIAL, Ed. University of Missouri Press, Columbia, 1973. xiv, 470 pp., illus. \$20.

It is a fact about the study of the modern Amphibia in the second half of the 20th century that it has still been possible to recommend Noble's *Biology of the Amphibia*, first published in 1931, as a better-written overview and a more intellectually satisfying introduction to this group than anything done since. The book here reviewed does not provide grounds for altering that recommendation.

The title of the volume is itself a misnomer. The phrase "evolutionary biology" currently has much wider implications than these papers would indicate. "The Evolution and Classification of Frogs" would have been a better title. In this regard, the tenor of the book is set by the first chapter, by Frank Blair, which purports to identify "the salient problems in Anuran evolution and those areas of investigation likely to produce significant resolution."

The symposium from which the book results was held in 1970, but the editor advises us that "the contributors have allowed me to revise and elaborate upon their manuscripts until press time in 1972. Thus the papers published here have a recency and a greater body of evidence than the original publications."

The succeeding chapters do provide an impressive fund of information, but the resolution of salient problems that Blair hoped for is not achieved.

Between Noble's book and the present one there came into prominence (all at about the same period, in the late '50's and early '60's) four hypotheses or discoveries that looked especially promising for exactly the topics this book covers: the Orton classification of frogs by larval types (1953,