

Tracks and Shadows: Field Biology as Art

By Harry W. Greene. 2013. University of California Press, 2120 Berkeley Way, Berkeley, California 94704-1012 USA. xiii + 280 pages, 29.95 USD, Cloth.

Harry Greene, a professor at Cornell University, is the author of the classic herpetology book *Snakes: The Evolution of Mystery in Nature*. His new book is part memoir, part profile of the great herpetologist Henry Fitch, and part meditation on snakes and the quest to understand them.

In many ways this is a tale of two herpetologists: Fitch and Greene. Henry Fitch was born in 1909 and although educated in a one-room school-house he went on to become a professor at the University of Kansas. Before arriving in Kansas, he was drafted into the army during World War II, serving as a medic in Europe.

After the war, Fitch eventually landed a job with the University of Kansas in 1948. A dedicated field biologist, Fitch published nearly 200 scientific papers and although he is mainly known as a herpetologist he also published papers on plants, snails, spiders, mammals and birds. His most amazing contribution is a 50-year study of the snakes of the Natural History Reservation owned by the University of Kansas (and now re-named the Fitch Natural History Reservation in his honour). He continued conducting field work into his 90s. When queried by Greene about his favourite animals, Fitch replied “Alligator lizards, copperheads, and garter snakes, because of their interesting natural histories” (page 228).

Harry Greene’s father was in the US air force and the family moved repeatedly. Before Greene finished high school he had lived in five different states. He had an early and profound interest in nature, particularly snakes. At age 12, having met herpetologist Charles Carpenter, Greene announced to his parents that someday he too would be a professor of herpetology. His first publication, a brief note on the vestigial defensive display of a species of blind cave salamander, was published when he was just 16 years old. After graduation from high school he got to spend the summer working with Henry Fitch. To help pay his way through university, Greene got a job as an ambulance worker, dealing with car crashes, heart attacks and more than his share of death. Greene was drafted into the army during the Vietnam War and, like Fitch, served as a medic. Greene fully expected to be sent to Vietnam, but ended up being stationed in Germany, where he spent nearly two years before returning to civilian life and graduate

school back in the USA. Fascinated by snake behaviour, Greene examined behavioural ecology from an evolutionary point of view, first in coral snakes for his master’s thesis and then in constrictors for his PhD.

While part one of the book explores the background of Fitch and Greene, part two, focuses more on snake biology, ecology and evolutionary history. Greene has managed to turn his research on snakes into a global pursuit resulting in stories about Terapielos in the rainforests of Costa Rica, Green Anacondas in Brazil, Green Bush Vipers in Uganda, and a 15 year study of Black-tailed Rattlesnakes in Arizona. Along the way Greene muses about the co-evolution of primates and snakes. The first snakes evolved over one hundred million years ago. It doesn’t seem unreasonable that the early constrictors preyed upon early primates, possibly shaping their evolution and contributing to people’s fear and fascination with snakes.

There are many books filled with empty facts about animals and there are also many about people’s personal experience with nature, but lacking intellectual depth. Greene’s book offers fascinating insights into snake biology and evolutionary history from a true expert, but also portrays the human side of exploring nature, conducting science and struggling through life. This fusion would not work without Greene’s evocative writing that captures both the richness of biological life and the fragility of our own lives. This is not just a book for snake lovers, but for anyone enthralled by nature and life itself.

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