



EVOLUTION

The First Domestication: How Wolves and Humans Coevolved. By Raymond Pierotti and Brandy R. Fogg. 2017. Yale University Press. (ISBN: 9780300226164). 344 pp. Hardcover, \$38.

The First Domestication explores the concept of canid domestication by examining the evolutionary and historical interactions between wolves, wolf/dogs, and humans. Of particular interest to the authors is the contrast between the traditional European relationship with wild and semi-wild canids and that of indigenous peoples. Central to their discussion is the understanding that domestication of canids is a two-way fluid association between the animals and humans, stemming from deliberate choice and biological interdependence on both sides of the relationship. They present the very interesting idea that domestication originated from humans and wolves sharing “similar ecological roles

as efficient group-hunting predators taking large prey, both benefit[ing] from cooperative food sharing. . . . Humans adopting lupine social strategies could explain why wolves are easily assimilated into human social groups.” They present an extensive review of the present understanding and analysis of canid domestication, with a significant critique of conclusions drawn from a wide range of approaches, including anthropological, skeletal, and DNA analysis. The importance of truly understanding the distinction between domesticated canines and wild wolves is vividly highlighted in Pierotti’s descriptions of several legal cases regarding so-called wolf attacks.

Pierotti and Fogg present the human connection to wolves (and to other wild canids, such as dingos) as being significantly more positively and holistically understood and used by indigenous peoples around the globe than by Western Europeans. They cite many examples of mutually positive interactions between native peoples and canids. Of particular interest is the authors’ interpretation of indigenous stories for sources of information on the evolutionary association between humans and wild canids. Stating that Western scholars “invariably ignore” these stories, considering them fairy tales or myths, the authors suggest that instead these “stories” can be used as valuable sources of information regarding the long-standing relationship between humans and large, nondomestic canids. They note that traditions of a “wide range of [North American] tribes tell how they learned to hunt from wolves or by hunting alongside them.” Their analysis of these stories is fascinating, although at times (such as in the chapter devoted to wolves and coyotes) it strays puzzlingly far from the central concept of coevolution between man and canids.

Many of the concepts in *The First Domestication* are presented in an interesting, informative, and unusual way, combining an anthropological approach with biological approaches to the question of canid domestication. The book’s incorporation of

indigenous traditional “mythology” in establishing biological history is, in itself, a reason to read it. The book is not without flaws, however. The extensive literature review in the first few chapters could have benefited from more careful editing to streamline the discussion. In several instances, concepts are supported by personal anecdote—interesting and intriguing, but questionable, from a scientific point of view, in drawing wide conclusions from a very small sample size. There is little doubt that Pierotti and Fogg are deeply sympathetic with indigenous peoples and present a strong and interesting description of their cooperative interactions with wolves and other wild canids. However, their condemnation of Western European interactions with the natural world is painted with a very broad brush and, at times, without the careful reference support seen in other areas of the book. For example, for a text heavy with references, the authors’ sweeping assertions that the church is “obviously” the reason why “wolves are hated and feared by Americans” at the end of their “Wolves and Coyotes” chapter has no supportive reference or data. Despite these issues, *The First Domestication* is worth reading for those interested in the history of domestication. Furthermore, the text is interesting in its sympathetic incorporation of Indigenous peoples’ culture and tradition as part of biological analysis.



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GENETICS

The Gene: From Genetics to Postgenomics. By Hans-Jörg Rheinberger and Staffan Müller-Wille. 2017. University of Chicago Press. (ISBN: 9780226510002). 176 pp. Softcover, \$25.00.

When you ask laypeople to describe a gene and its function, you will likely get a variety of