



BOOK REVIEW

The Real Wolf: The Science, Politics, and Economics of Co-Existing with Wolves in Modern Times. Ted B. Lyon and Will N. Graves. 2014. Farcountry Press, Helena, Montana, USA. 368 pp. \$21.00 paperback. ISBN: 978-1-59152-1228.

Open discussions on wildlife management issues are important to the sound conservation of wildlife resources. *The Real Wolf* claims to attempt to dispel myths and tell the truth about wolves (mostly gray wolves [*Canis lupus*], but also reference to red wolves [*Canis rufus*] or eastern wolves [*Canis lycaon*]) across the world, in North America, and especially in the United States. In making their case, the authors seem to accept any data regardless of quality that support their case, but dismiss, deny, or ignore data that does not support their case.

My perspective on the book is rooted in my role as the head of the wolf recovery and management program for the state of Wisconsin from 1990 through 2013. The Endangered Species Act (ESA) has been a major benefit to conservation of wolves and other wildlife species. The listing for gray wolves was appropriate in 1974, and remained so until the late 1990s or early 2000s.

The purpose of this book, according to Ted Lyon in chapter 2, was to “expose the myths about wolves” and “set the record straight.” In an attempt to dispel myths, the authors create a few myths of their own, and in the process of setting the record straight, present misleading and inaccurate information. Some of the myths presented by *The Real Wolf* include introducing wolves in Yellowstone and central Idaho that were a giant race of Canadian wolf subspecies; presence of small native subspecies of wolves in Yellowstone that existed at the time of the reintroductions; devastation of game populations; exaggerated claims on livestock, risk to humans, economic losses, and wolf abundance and distribution; Mexican gray wolves (*Canis lupus baileyi*) being wolf-dog hybrids; and wolf recovery being used by agencies for other agendas (e.g., elimination of hunting). Below, I address the major myths.

The authors argue that wolves released into Yellowstone were an exotic animal much larger than the original wolves that existed in the area. The authors refer to these wolves as “Canadian wolves,” as if this represents a specific species or subspecies; there is not a recognized subspecies of Canadian wolf. Because wolves were extirpated in Yellowstone and Central Idaho, the only place where wolves could come from was Canada, representing the same species that originally existed in the area. The introduced wolf was perhaps a different subspecies, but like many other large-mammal reintroduction programs, wolves from Canada represented the nearest viable population of the same species. As to reintroduced wolves being much larger, early literature had few examples of weights, but Young and Goldman (1944) report a specimen from Colorado at 57 kg. Thus, it is likely that early Yellowstone wolves also could occasionally reach

sizes as large as 55–60 kg as seen among some recent wolves (Phillips and Smith 1997).

A second myth was that a population of the original wolf of the region, listed as the northern Rocky Mountains wolf (*Canis lupus irremotus*), still existed at the time of the reintroduction. Young and Goldman (1944) listed the northern Rocky Mountain wolf as the original subspecies of wolf in the northern Rockies, but Nowak (1995) lumped it in with the plains wolf (*C. l. nubilus*). In *The Real Wolf*, Cat Urbigkit listed a wolf killed in 1992 as evidence of the northern Rocky Mountain wolf but provides no documentation that it represented this subspecies; the United States Fish and Wildlife Service reported it as genetically similar to wolves in northwest Montana, the Northwestern wolf (*C. l. occidentalis*). The 1992 kill site was within 450 km of where wolves were recolonizing in northwest Montana, well within the range of dispersing wolves (Mech and Boitani 2003). Little evidence was presented on an existing wolf population, and the occasional reported wolves could easily be explained by dispersers from the north.

A third myth is the devastation of game populations by wolves in and around Yellowstone and central Idaho. A reduction in some ungulates in areas of wolf recovery was anticipated and expected. Prior to wolf reintroduction, the Northern Yellowstone elk (*Cervus canadensis*) herd was at an all-time high of over 19,000 elk in 1993–1994 (Vucetich et al. 2005). This population size was not sustainable, and because of high human harvest, drought, winter severity, and predation by wolves, bears (*Ursus* spp.) and cougars (*Puma concolor*), the population declined to about 5,000 elk by 2015 (Northern Yellowstone Cooperative Working Group 2015). Wolves were just one of many factors affecting elk numbers and this herd was down as low as 3,200 in the mid-1960s before wolves were reintroduced (Vucetich et al. 2005). The states around Yellowstone continue to have healthy harvests of elk, and in 2015, the elk count in Montana was 133,726 elk, which was well above the 90,910 goal for the state (Montana Fish Wildlife and Parks 2015). Other ungulates also showed strong population numbers.

A fourth myth in *The Real Wolf* is that wolves are major carriers or vectors of a wide variety of diseases. Graves, in chapter 14, states that Russian scientists list 50 diseases carried by wolves, and implies this is an indicator that wolves are major sources of disease spread. However, a high diversity of parasites is common among large carnivores with broad distribution (Huang et al. 2015), and such parasite diversities are typical for any apex predator. *The Real Wolf* especially focuses on the parasite *Echinococcus granulosus*, a tapeworm that causes Hydatid disease. Graves implies that wolf reintroduction was a major factor in the spread of this parasite and disease. Although wolves are one of the hosts for this parasite, many other mammals, especially dogs, carry the parasite, and the disease had been detected in adjacent Utah as early as the 1930s (Foreyt et al.

2009). Wolves that were reintroduced were vaccinated for the parasite (Foreyt et al. 2009). Human infection by the northern biotype of the disease, occurring in wolves and wild ungulates, is relatively benign and difficult to contract, unless handling scat of infected wolves (Foreyt et al. 2009).

A fifth myth presented is that wolves present a danger to humans. Wolf biologists have acknowledged that wolves can, at times, pose some risk to humans, but the authors exaggerate the claims and incorrectly list a coyote (*Canis latrans*) attack in 2009 in Nova Scotia as a wolf attack (Urban Coyote Research 2016). *The Real Wolf* discusses historical wolf attacks across North America, Europe, and Asia, implying that attacks were common and frequent. An extensive review of worldwide rates of wolf attacks on people by Linnell et al. (2002:5) indicated that “risk of wolf attacks in Europe . . . and . . . North America today appear to be very low.” During 1950–2000, Linnell et al. (2002) found records of only 4 people killed in Europe, 4 in Russia, and none in North America (published prior to human deaths in 2005 and 2010).

In summary, these are just a few of the myths that I found in *The Real Wolf*. *The Real Wolf* may be useful for those who want to have a better understanding of issues being charged against wolves. But for people unfamiliar with actual data being presented, the book will likely confuse or mislead. The book states that it has science in it, but that science is mostly restricted to limited chapters by 3 biologists, hardly supporting the main topics of the book. Additionally, claims of economic impacts are restricted to very biased and exaggerated perspectives. Because of the lack of science and misleading information, I would have a hard time recommending this book. In the end, *The Real Wolf* is mostly a political book that attempts to create negative perspectives on wolves and gain support for such negative perspectives.

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