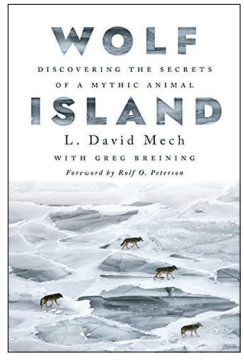
Wolf Island: Discovering the Secrets of a Mythic Animal

By L. David Mech and Greg Breining. 2020. University of Minnesota Press. 202 pages, 24.95 USD, Cloth.



Wolf Island is a fascinating account of Dave Mech's graduate school years, from 1958 to 1961, when he led the first study of wolves on Isle Royale National Park. I have read many of Mech's books over the years including *The Wolf: The Ecology and Behavior of an Endangered Species* (1970; 1981, University of Minnesota Press edition), *The Way of the Wolf* (1991, Voyageur Press), *The Arctic Wolf: Ten Years with the Pack* (1997, Voyageur Press), *The Wolves of Denali* (1998, University of Minnesota Press), *Wolves: Behavior, Ecology, and Conservation* (2003, University of Chicago Press), and *Wolves on the Hunt: The Behavior of Wolves Hunting Wild Prey* (2015, University of Chicago Press), so it was an amazing experience to come full circle with Mech's formative research years 60 years ago as he became the world's foremost authority of wolves.

Isle Royale is a 210 square mile (544 km^2) island national park in the middle of Lake Superior (p. 29). It is technically a part of the state of Michigan but is closer to the Canadian shoreline. Formerly, Caribou, Coyote, and lynx inhabited the island, but they disappeared while Moose in the early 1900s (probably by swimming) and wolves by 1949 (likely by travelling across winter ice) colonized the island (pp. 29–31, 119). This simplified ecosystem, lacking other competitors for both species, such as bears, Bobcats, skunks, and the aforementioned creatures (p. 32), made for an ideal study for the team.

We are taken back to Mech's first days discovering the park; we metaphorically travel with him as he explores the island by foot in the summer, often travelling like a wolf by hiking 32 km (20 miles) a day to collect scats (pp. 25–26), which was a main objective of the study (p. 18). He rarely saw wolves, with his record summer (1959) being when he saw three wolves all field season (pp. 75, 82). Collecting scats provided real info of diet (pp. 72–73) while finding wolf tracks and making those rare sightings was exciting for Mech but didn't really tell him much other than wolves seemed to travel in small groups in the summer (p. 75). The winter field season involved flying over the park in a small plane and counting Moose and wolves as well as observing their interactions.

Mech quickly realized that the core of his research findings would be related to aerially tracking wolves in the winter. He frequently observed them from up in the sky; in fact, in winter 1960 alone he saw wolves for 35 hours and saw 33 hunts involving 66 Moose (p. 108)! He discovered that the big pack of 15 wolves on the island would kill one Moose every three days (p. 108). These extensive sightings made Mech the world's authority by default, as he noted throughout the book, because no one else was really studying them at the time (e.g., p. 81). There are fascinating accounts of wolf behaviour and wolves travelling on the island. I especially liked reading about the large pack scenting a cow and two calves 2.4 km (1.5 miles) away, sniffing the air while wagging their tails and then going straight toward them (p. 88). I had read about this encounter previously in a couple of his other books (e.g., pp. 15, 197 in *The Wolf*; p. 31 in *Wolves on the Hunt*). Even though this memoir came well after those other publications, it felt more personal given that we were essentially reading Mech's original field notes which was provided in more detail than the other sources. I also liked reading about Mech getting dropped off by his pilot, Don Murray, to investigate a wolf-killed Moose against his recommendations for fear that wolves might attack him (pp. 2–4, 6). As Mech snowshoed to and approached the kill, he lifted his park service issued pistol instead of his camera; the wolves instantly ran away and Mech—60 years later—still regrets that decision (p. 89)!

There were some comical stories throughout the book, such as Mech surviving on road-kill as a "starving" undergrad (pp. 14, 116) and his exotic taste for many wild species including Muskrat, Raccoon, Opossum, beaver, and bear, some of which died during research endeavours (p. 150). There were also many accounts of a frontier-like lifestyle where he would chop ice from the thawing Lake Superior and store it in sawdust for use in early refrigerators, something I had never even thought about doing given modern living—I especially like the glossy picture of ice chunks in his small boat! There are also great descriptions of him living in rustic cabins with his wife and young children at the edge of the Isle Royale wilderness, next to the last of the commercial fisherman of a bygone era. And something completely new to my understanding about the man was Mech's disenchantment with religion and politics (pp. 151–152) and how he almost left the wildlife career, spending a year in a doctorate program in American Studies (p. 156) before leaving there for financial reasons (i.e., he had a family to support). Somewhat fortuitous, he found a postdoc position working on radio-tracking research in its in-

fantile stage, right across the street at the Museum of Natural History in Minneapolis (p. 157). That jump started his career that many of us now know much about given his many publications.

The most important finding in Mech's early research was that wolves failed much more than they succeeded in killing Moose, with a <8% success rate when they managed to get a Moose to run; standing Moose were basically immune to wolf attacks (p. 154). This has been confirmed time and again in future work that Mech and his collaborators have performed on a myriad of prey species which are documented in the aforementioned publications. One big change from Mech's grad school research to current knowledge was the illusion that wolves and Moose reached equilibrium at populations of 21–22 wolves and ~600 Moose on the island (p. 161). After Mech's work on Isle Royale, subsequent investigators discovered Moose going up to 2400 individuals and wolves all the way to 50, before both populations subsequently crashed (pp. 161–162). In short, there was no mythical 'balance of nature'; instead, weather—especially winter snow fall—climate change, and disease influenced populations (pp. 162–163).

The last chapter of the book brought us to modern times, nicely summing up the past 60 years of Mech's research findings at his various study sites, including Superior National Forest in Minnesota, Alaska's Denali National Park, Yellowstone National Park, and Canada's Ellesmere Island in the high Arctic (pp. 163–164). One of his most important discoveries, after an amazingly long and productive career, was that weather trumps all else in determining whether animals live or die (p. 165). Wolves typically do better in more severe winters because prey become more weakened. Mech concludes with a discussion of how wolf recovery has exceeded all expectations, with over 6000 wolves now living in the Lower 48 with some populations expanding and still being discovered in new areas (p. 167). We also come full circle on Isle Royale where wolves were dying out on the island after ~70 years of inbreeding with only two non-reproducing, related wolves remaining on the island in 2016 (p. 171). Mech originally did not want the park service to intervene but once he saw the population's inevitable demise he had a change of heart and supported wolves being reintroduced from nearby source populations (p. 172). As of early 2020, 12–14 restored wolves call the island home, providing a unique opportunity to study the success of wolf translocation (p. 174).

Writer Greg Breining did an admiral job combing through Mech's original and highly detailed field notes, his early publications, as well as extensively interviewing him to put together a highly engaging account that wolf aficionados, lovers of wilderness and national parks, and people that enjoy wildlife biology and natural history stories will appreciate. It was exciting to go back 60 years to when wolf research was in its early stages; there are even 16 pages of glossy colour pictures to bring the story to life. It is an easy read and follows Mech's graduate years in order of summer and winter field seasons. Numerous anecdotes bring his experience to real life and allowed me to appreciate the context of all of his other books a little more. There was a map at the beginning of the book (pp. xii–xiii) which I found crucial for locating place names frequently mentioned throughout the text; most locations (e.g., lakes, bays, coves, cabins) were there but some were not, such as Crow Point (pp. 52, 119), Hat Island (p. 102), Island Mine Trail (p. 106), and Gull Rocks (p. 132). It would have been helpful to have a few more detailed maps within some of the chapters, such as the account from 4 March 1960 when he observed multiple chases of wolves on Moose during his seven hours in the air (pp. 99–101). Other than that minor quibble, I wholeheartedly recommend this book. It is well worth the read!

Jonathan (Jon) Way

Eastern Coyote/Coywolf Research, Osterville, MA, USA