

Are Isle Royale Wolves Too Big to Fail? A Response to Vucetich et al.

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VUCETICH ET AL. (2012) HAVE PROPOSED REINTRODUCING WOLVES to Isle Royale National Park (Lake Superior, Michigan, USA), arguing that unnatural causes (humans) have brought the island wolf population to the brink of extinction. They argue that protecting Isle Royale's ecological integrity—a fundamental tenet of National Park Service (NPS) policy—refutes almost any argument to be made against reintroduction. However, in making their case, Vucetich and his colleagues left out some important facts about the history of wolves on Isle Royale, and I believe they exaggerate the wolf's role in the significance of the island as a national park and as a federally designated wilderness area. Also, they feel that the “question at stake” in considering reintroduction is whether or not to allow a long-term research project to end (p. 134). That is a far different line of reasoning than the welfare of wolves and moose, ecological integrity, wilderness values, or how visitors form connections with the island. That line of reasoning raises a question about Isle Royale wolves similar to one asked about banks in the United States during the economic recession: “Are they too big to fail?”

Vucetich and his co-authors invite broader discussion on the topic of reintroduction, and I hope others will take up that offer, but I think the discussion should be based on all the available information. I present here some of what I think was left out of Vucetich et al.'s article, but which I feel is very relevant to any consideration of wolf reintroduction on Isle Royale.

A historical perspective

The discussion in the 1931 *Congressional Record* accompanying the legislation that created Isle Royale National Park includes a letter by NPS Director Horace Albright that speaks of the island's “exquisite, rugged beauty,” the 2,000 moose and 400 woodland caribou that “in itself will present an unusually fine wild-life spectacle,” and the wealth of flora. He speculates that the good fishing will be a popular attraction for visitors, and he comments

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on the interesting archaeological features to be found on the island. He concludes by saying it is “evident that from a scenic, recreational, scientific, and educational standpoint, here is presented one of the outstanding opportunities for establishment of a great island national park, unique of its kind in the system, and measuring up to the high standards that have been prescribed for such establishment” (NPS 1998: Appendix E).

The reader will note that Albright never mentions wolves. He does not mention wolves because they did not exist on Isle Royale when Congress authorized it as a national park in 1931. They were not there when the National Park Service took over management of the island in 1936. They were not there on dedication day in 1940. Wolf tracks were first reported on the island in 1948, but their presence was not confirmed until 1951 (Peterson 1995). It is true, as Vucetich et al. point out, that one of the park’s current significance statements (those which “capture the essence of the park’s importance to the nation’s natural and cultural heritage”) acknowledges that Isle Royale is world renowned for the long-term wolf-moose predator-prey study (NPS 1998). But neither the park’s emphasis statements (which “flow out of the park significance statements”) nor its purpose statements (which are “based on park legislation and legislative history, other special designations, and NPS policies”) mention wolves (NPS 1998). Wolves and moose are important parts of Isle Royale to today’s visitor, but they are not the reason people advocated for the creation of the park, and they are not the only reason people come to visit the island today.

Wilderness values

Vucetich et al. contend that wolves (along with moose) are *the* icons of wilderness culture on Isle Royale and to lose them would “significantly wound Isle Royale’s wilderness character and important points of connection between people and Isle Royale” (p. 132). There are two problems with this statement. First, it suggests that Isle Royale is a wilderness because wolves and moose reside there. Wilderness is a subjective character made manifest in different ways to different people. Baldwin (2011) points out that when the idea of creating a national park on Isle Royale was first catching on in the 1920s (about 20 years before wolves first arrived on the island), “wilderness was a much less exact word—a word ripe for interpretation, a word that, through the efforts of many individuals, became synonymous with Isle Royale.” In other words, it was the *place itself* that defined wilderness. Given that these discussions occurred at least 40 years before the passing of the Wilderness Act (1964), it is fair to say (and it has been said) that Isle Royale helped to define what wilderness is, and it did so before wolves arrived. Wolves are part of Isle Royale’s wilderness character *now*, but they are relative newcomers.

The second problem with this statement is that it suggests wolves and moose are the only points of connection for people to make with the island. Any park interpreter will tell you that people make connections with a place by identifying with the intangible values (solitude, isolation) as well as the tangible resources (wolves, moose). People see in Isle Royale and in wilderness something beyond themselves and even beyond time. That is to say, Isle Royale and its wilderness character transcend the presence of wolves and moose. True, they are prominent members of the island community, but in their absence, will not people still see in the island experience opportunities for challenge and adventure, for connection with higher ideals and with those things closest to their hearts? Will people not still revel in the sound of

loon calls at night or the sight of the northern lights, or the sense of distance and isolation? People connect with Isle Royale for many reasons. Wolves and moose are not the entirety of the island's worth.

The authors anticipate criticism of their using the term "ecosystem health" to justify reintroducing wolves because they feel it could be seen as a veiled attempt to preserve "vignettes of a primitive America" or as a contradiction to NPS management policies, which allow for "natural processes" to be a guiding principle in resource management. In their attempt to preemptively refute this argument, they affirm their belief that primitive America is gone and "natural process" is an outdated concept. "The weakness of the detractor's position," they write, "arises from the concept of *natural* being fraught with debilitating dilemmas that have remained intractable despite being considered for more than two millennia. The concept of 'natural' is increasingly difficult to make sense of because of human impact on the planet" (p. 133). It is true that it is difficult to adequately define "natural," but if that word is difficult, "wilderness" is significantly more so. It too has been extensively debated and with far more polarizing results (Cole and Yung 2010; Baldwin 2011). Wilderness is a human construct that, unlike "natural," has not changed because of human impact on the planet; rather it was *created* by human impact on the planet. This makes the idea of wolves and moose being the epitome of Isle Royale's wilderness soul all the more tenuous. If wolves and moose "make" a place wilderness, do we give such a title to all of northern Minnesota, Wisconsin, and upper Michigan, where wolves are thriving and moose, though less common, are also found? No, in part because there is a significant human presence in those areas that refutes the assignment of that word. So if wolves in northern Minnesota, Wisconsin, and Michigan do not make those places wilderness, what elevates Isle Royale to the status of a wilderness? I submit that Isle Royale's isolation and the lack of a permanent human presence are perhaps the two leading factors, but that there are a host of other tangible and intangible values that contribute to the island's unique status.

Island ecology

Isle Royale, like any place, is a dynamic system, maybe more so because it is an island. Populations of any plant or animal on an island lead a precarious existence because of the isolation that comes with distance from a fresh gene pool. To say that the extinction of wolves on the island will "significantly diminish its ecosystem health" (because of the cascading effects of increasing moose severely impacting the vegetation) is only partly true. Just as our changing climate makes it a near certainty that wolves will never again be able to cross an ice bridge and recolonize the island on their own, it is also unlikely new moose will make the crossing. This is not because they physically cannot make the trip—if they originally arrived by swimming (Peterson 1995), then they can probably do so again—but the arrival of new individuals is further hampered by a declining source population in Minnesota and Canada (Dybas 2009; Lenarz et al. 2010; Lenarz 2012), so who will be left to cross over? And what will they find when they come? Hotter summers and milder winters will challenge the tolerance thresholds of moose, while a predicted shift in the forest types of the north may make it difficult to find appropriate food. Will a future Isle Royale be able to sustain a moose population? If not, what happens then? Do we continue to bring wolves, then moose, then wolves again over to

Isle Royale in order to sustain a research program or a particular vision of what the island is supposed to be?

Beyond naturalness

Vucetich et al. note that “ecosystem health may well be superseding non-intervention as a central value of wilderness” (p. 135). This is true. Cole and Yung (2010) advocate for more hands-on management of parks and wilderness areas in the face of a changing climate, but they provide evidence for choosing interventions that will transform ecosystems into conditions more resilient to future climates. Does wolf reintroduction create such conditions? More to the point, as moose—a species far more vulnerable than wolves to the changing climate—continue to decline in Minnesota and Ontario and the southern limit of their range shifts north, it seems likely they will similarly decline on Isle Royale. If there comes a time when moose are gone, will there be a discussion about reintroducing them because wolves need a more reliable food source than beaver or snowshoe hare? This may be a question for a much later time, but we are starting down that path now as we discuss the future of wolves. With wolves thriving in the Great Lakes states, it makes sense that they would continue to exist on Isle Royale if winter ice conditions facilitated their ability to cross over the lake. But as moose struggle at the southern edge of their range, it appears they will not be a common presence in the area that would likely be the source population for immigration to the island (i.e., northern Minnesota and northwestern Ontario). So any future discussion of moose reintroduction hinges very heavily on managing for resilient ecosystems.

NPS management policy, too, is moving toward considerations of adaptation and ecosystem resilience. Two of the goals in the NPS Climate Change Response Strategy (NPS 2010) are to “incorporate climate change considerations and responses in all levels of NPS planning” (Goal 5), and “implement adaptation strategies that promote ecosystem resilience and enhance restoration, conservation, and preservation of park resources” (Goal 6). Part of adaptation is “to reduce the risk of adverse outcomes by increasing the resilience of systems and supporting the ability of natural systems and species to adapt to change.” If there comes a time when a decision will have to be made on the reintroduction of moose, consideration will have to be given to the potential for an adverse outcome.

Looking ahead

Isle Royale wolves are not too big to fail. But then we are not talking about failure; we are talking about change. This change may be human-caused, but we cannot disregard the fact that humans have been coming to Isle Royale for thousands of years. Humans are a part of Isle Royale’s history. However one might feel about the cause of the wolf’s decline and extirpation from Isle Royale, there are hard truths to consider about their future viability on the island and that of moose as well. Pragmatic management in the face of a changing planet requires us to “articulate goals and objectives for parks and wilderness that are founded in a perspective that views humans as part of, rather than apart from, nature” (Cole and Yung 2010).

Wolves are an important part of the Isle Royale ecosystem, but they are only one of the most recent parts. Before wolves and moose, there were coyotes and caribou, and that

relationship lasted for thousands of years before the arrival of human hunters put them on the path to their demise and ushered in the modern era of predator and prey (Cochrane 1996). Now we are faced with the imminent departure of wolves from the island scene, and it seems likely they will be followed by moose because many of the same factors influencing wolves are also at work on moose—climate change and its effects on habitat being the most prominent—and those factors are sure to be enhanced by the loss of a top predator.

I agree that wolves play a critical role in balancing today's island ecosystem, but ecosystems are dynamic, and change is a natural part of that dynamism. I think we need to look at the question of reintroduction through a broader lens. We should acknowledge the iconic stature of the island's wolves and moose and public interest in their welfare, but we should also be mindful of the island's longer history, and we should critically and objectively analyze the uncertainty of its climatic future. The island's wilderness character will survive as will the things that make it a national park—scenic, recreational, scientific, and educational values; solitude; and the relatively unbiased operation of ecological cycles on the landscape.

References

- Baldwin, A.T. 2011. *Becoming Wilderness: Nature, History, and the Making of Isle Royale National Park*. Houghton, MI: Isle Royale and Keweenaw Parks Association.
- Cochrane, J.F. 1996. *Woodland Caribou Restoration at Isle Royale National Park: A Feasibility Study*. Technical Report NPS/NRISRO/NRTR/96-03. Denver: NPS.
- Cole, D.N., and L. Yung. 2010. *Beyond Naturalness: Rethinking Park and Wilderness Stewardship in an Era of Rapid Change*. Washington, DC: Island Press.
- Dybas, C.L. 2009. Minnesota's moose: Ghosts of the northern forest? *BioScience* 59: 824–828.
- Lenarz, M.S. 2012. 2012 aerial moose survey. Minnesota Department of Natural Resources. Online at http://files.dnr.state.mn.us/recreation/hunting/moose/moose_survey_2012.pdf. Accessed 17 July 2012.
- Lenarz, M.S., J. Fieberg, M.W. Schrage, and A.J. Edwards. 2010. Living on the edge: Viability of moose in northeastern Minnesota. *Journal of Wildlife Management* 74: 1013–1023.
- NPS [National Park Service]. 1998. *Final General Management Plan and Environmental Impact Statement, Isle Royale National Park, Michigan*. Denver: NPS.
- . 2010. *National Park Service Climate Change Response Strategy*. Fort Collins, CO: National Park Service Climate Change Response Program.
- Peterson, R.O. 1995. *The Wolves of Isle Royale: A Broken Balance*. Minocqua, WI: Willow Creek Press.
- Vucetich, J.A., M.P. Nelson, and R.O. Peterson. 2012. Should Isle Royale wolves be reintroduced? A case study on wilderness management in a changing world. *The George Wright Forum* 29(1): 126–147.

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