Dear Superintendent Green,

The National Park Service (NPS) has released its “Draft Environmental Impact Statement to Address the Presence of Wolves” (DEIS) for Isle Royale National Park and Wilderness in Michigan. The following comments on this DEIS come from Wilderness Watch, a national wilderness conservation organization based in Missoula, Montana. Wilderness Watch has members in every state in the country, including Michigan.

Isle Royale National Park is an island archipelago located in the northwestern portion of Lake Superior. Established as a national park in 1940, the park consists of a main island and approximately 450 smaller islands. Congress designated about 99 percent of the park (132,018 acres) as Wilderness in 1976 under the 1964 Wilderness Act.

Both moose and wolves are relatively recent migrants to Isle Royale. For hundreds of years prior to the early 20th century, the dominant predator-prey dynamic on Isle Royale was between woodland caribou and Canada lynx. After wolves first came to Isle Royale around 1948-50, a famous predator-prey study began researching the dynamics between wolves and moose there in the late 1950s and has continued to today. This research has yielded many important ecological understandings of predator-prey dynamics.

But after decades of inbreeding, the wolf population has dropped to only two, with little likelihood that it will recover, and it may become extirpated from Isle Royale. The new DEIS proposes to import 20-30 new wolves from the mainland over three to five years for visitors and researchers who want wolves on Isle Royale and to allegedly keep the moose population in check. Most, if not all, of the wolves would be collared so researchers could track their every move.

While Wilderness Watch has long worked to protect wolves in Wilderness, we believe the best course of action on Isle Royale is Alternative A, the No Action Alternative, for the following reasons:
1. The 1964 Wilderness Act directs the National Park Service to preserve the wilderness character of the Isle Royale Wilderness.

Congress defined “Wilderness” as follows:

A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.


Congress stated that Wilderness areas “shall be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness ....” Id. § 1131(a). Accordingly, “...each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such areas for such other purposes for which it may have been established as also to preserve its wilderness character.” Id. § 1133(b).

Therefore the primary directive of the Wilderness Act requires the Park Service to preserve the wilderness character of the Isle Royale Wilderness.

2. At least one of the methods proposed for translocating wolves to Isle Royale – helicopter landings in wilderness – would violate the Wilderness Act.

Wilderness Watch appreciates the value of wilderness as a unique place where one can study how nature, including wildlife, functions when left alone. However, as the DEIS indicates, wolf translocation involves actions prohibited by Section 4(c) (1133(c)) of the Wilderness Act—specifically, multiple helicopter overflights and landings. Wilderness areas must be administered in a manner that preserves
wilderness character. An area demonstrates “wilderness character” when “in contrast with those areas where man and his own works dominate the landscape . . . the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain.” 16 U.S.C. §1131(c). The Wilderness Act and the Park Service’s implementing regulations are clear: helicopter flights and landings constitute motorized intrusions that are harmful to wilderness character. Accordingly, the Wilderness Act prohibits the use of motorized equipment and transport, including helicopters, and structures and installations in designated wilderness with only one exception: “except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter.” 16 U.S.C. § 1133(c) (emphasis added).

The justification offered here for broadly authorizing these types of activities falls far short of what the Wilderness Act requires, which is to demonstrate that the project as proposed is necessary to “preserv[e] the wilderness character of the area.” Id. § 1133(b). Unless the agency can make and support this demonstration in the forthcoming analysis of the project, the project cannot proceed. Id. § 1133(c); Wilderness Watch v. U.S. Fish & Wildlife Serv., 629 F.3d 1024, 1040 (9th Cir. 2010) (setting aside agency’s authorization of new structures in wilderness area pursuant to § 1133(c) where agency failed rationally to demonstrate that structures would advance wilderness preservation and no less intrusive approach could achieve that goal). All of the action alternatives presented in the DEIS here would have a major and negative impact on Wilderness. Thus, the agency has a high bar.

Under the Wilderness Act, the Park Service may approve the use of helicopters and other generally prohibited uses to translocate wolves into Wilderness only if the agencies rationally demonstrate that (1) translocating wolves is necessary to preserve wilderness character, and (2) there is no alternative to helicopter use and installations or structures (be they collars or monitoring structures) would achieve that purpose. 16 U.S.C. § 1133(c); Wilderness Watch, 629 F.3d at 1036.

The Wilderness Act contains a narrow exception to allow otherwise-prohibited activities—such as helicopter use—only where such activities are necessary to meet the minimum requirements for administration of an area for the purpose of the Wilderness Act. 16 U.S.C. § 1133(c). In other words, the exception applies only where the otherwise-prohibited activity will affirmatively advance the “‘preservation and protection’ of wilderness lands ... in their natural, untrammeled state.” Wilderness Soc’y v. U.S. Fish & Wildlife Serv., 353 F.3d 1051, 1061 (9th Cir. 2003) (en banc) (quoting 16 U.S.C. § 1131(a)).

3. Alternative A best protects Isle Royale’s wilderness character. The 1964 Wilderness Act defines wilderness in part as “untrammeled” or unmanipulated. That means humans should not manipulate the wolf population at Isle Royale but should let Nature and the wolves themselves determine their fate
The Wilderness Act charges “each agency administering any area designated as wilderness [with the responsibility of] preserving the wilderness character of the area.” 16 U.S.C. § 1133(b). As the Ninth Circuit stated in High Sierra v. Blackwell:

The Wilderness Act twice states its overarching purpose. In Section 1131(a) the Act states, ‘and [wilderness areas] shall be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for the future use and enjoyment as wilderness, and so as to provide for the protection of those areas, the preservation of their wilderness character,’ 16 U.S.C. § 1131(a) (emphasis added). Although the Act stresses the importance of the wilderness areas as places for the public to enjoy, it simultaneously restricts their use in any way that would impair their future as wilderness. This responsibility is reiterated in Section 1133(b), in which the administering agency is charged with preserving the wilderness character of the area.

High Sierra Hikers Ass’n v. Blackwell, 390 F.3d 630, 648 (9th Cir. 2004) (emphases in original); see also Id. at 645 (citing 16 U.S.C. 1133(b)). The goal to translocate wolves is not necessarily coextensive with the statutory mandate to preserve wilderness lands in their untrammeled state and thus it is questionable to use it to invoke the exception to the Act’s prohibitions. See 16 U.S.C. § 1133(c). Translocation of a wildlife species is an act of trammeled.

The wolves should also remain un-collared. Collaring the wolves would make them and the Wilderness less wild and more like a managed zoo population than a wild and free wolf population. As Wilderness Act author Howard Zahniser famously wrote in his 1963 essay, “With regard to areas of wilderness we should be guardians not gardeners.” To which we add, also “not zookeepers.” (Howard Zahniser, “Guardians Not Gardeners,” Living Wilderness, Spring-Summer 1963, p. 2.)

The agencies must also demonstrate that structures or installations (e.g. electronic tracking devices) are necessary to meet minimum requirements for administration of the area for the purpose of the Wilderness Act. The number of collars, their duration of use, and the potential effects of their use are not clearly disclosed and analyzed. Thus, the DEIS is not only insufficient in determining what may be the minimum necessary under the Wilderness Act, it is also deficient from lack of disclosure and analysis under the National Environmental Policy Act (NEPA).

4. Alternative A lets the wolves decide their future, if any, on Isle Royale.
One of the principles of wilderness stewardship is to let Nature decide on issues like the wolves on Isle Royale, rather than imposing human domination and human choices on the wilderness landscape. To fail to do so is an imposition of human will, a trammeling of the wilderness.

In February 2015, for example, two wolves crossed the ice bridge to Isle Royale from the Grand Portage Reservation on the Minnesota mainland. They stayed there for five days, but then quickly returned to the mainland before they could be trapped by weakening ice, and despite the abundant moose to eat. (DEIS, p. 53.) Isle Royale may not be the Mecca for wolves that we have often heard, and those two wolves may have sensed something about the island (such as its relatively small size) that prompted them to return to the mainland. Over the years, other wolves have also fled Isle Royale during ice bridge winters. If mainland wolves want to come to Isle Royale during ice bridge winters (and we recognize there may be fewer ice bridge winters recently than before), we should allow them to make those choices. The mainland wolf population is fairly robust, and opportunities to immigrate to Isle Royale have been and will continue to be available if the wolves choose to do so.

To capture wolves from the mainland and import them to Isle Royale may in effect be akin to imprisoning them on an island that is not of their choosing.

5. Alternative A recognizes the principles of island biogeography.

Island biogeography informs us how on islands some species arrive and some species become extirpated at rates higher than the nearby mainland. On islands, species composition tends to be less complex, fewer in number, and much more volatile than on the mainland.

As the DEIS states, “Organisms that live on islands tend to have more dynamic population swings (higher highs and lower lows) and are more often subjected to extinction events, with colonization and immigration dependent on island size, distance to mainland, length of isolation (time), chance events, habitat suitability and human activity, to name a few influencing factors. As a result, species change over time and local extirpation is natural, as is establishment and re-establishment of new populations. This theory is termed island biogeography.” (DEIS, p. 3.)

Both wolves and moose are relatively new migrants to Isle Royale, replacing woodland caribou and Canada lynx that had lived there for hundreds of years. There is no evidence of wolf habitation on Isle Royale earlier than 1948-50, not even in the archeological record. This recent and somewhat ephemeral presence is in keeping with island biogeography. It may also mean that wolves become extirpated in the near-term future.
A study of the presence of wolves on islands off the coast of British Columbia found that “[t]he distribution of wolves on islands may be dynamic, with occupancy by solitary Wolves or packs being ephemeral.” (Darimont, Chris T., and Paul C. Paquet. 2002. The Gray Wolves, *Canis lupus*, of British Columbia’s central and north coast: Distribution and conservation assessment. Canadian Field Naturalist 116(3): 416-422.)

Even if wolves become extirpated from Isle Royale, that extirpation may merely be following the principles of island biogeography. And, as the article about British Columbia wolves points out, that extirpation may not be permanent.

The Final EIS must more thoroughly analyze the dynamics of island biogeography on wolf presence, dispersal off the island, and possible extirpation.

**6. The Final EIS requires more careful analyses of the theories that moose without wolves will eat themselves out of house and home and that more wolves mean fewer moose.**

The DEIS assumes that the loss of wolves on Isle Royale will automatically result in a huge upward surge in the moose population, and that the moose population will be unable to come to any equilibrium without endless boom and bust cycles. This assumption needs to be better analyzed in the Final EIS.

Even if these assumptions may be true, it should not necessarily be cause for alarm in designated Wilderness. In wilderness, that’s how the system will function until something in nature sends the island’s evolution in another direction. Wide swings in moose or balsam fir populations may not be at all unnatural in a wilderness setting. But our human desire to manage everything often intercedes and we feel we must “rescue” or “restore” a doomed wolf population or “manage” a moose population that we don’t have the wisdom or patience to allow Nature to do.

Dr. Franz Camenzind, in his lengthy submission on the Isle Royale wolf-moose issue, wrote, “The Wilderness Act also recognizes that natural processes and fluctuating populations are important components of wilderness character.”

And the often-assumed correlation that “wolf presence = moose population kept in check” may not be true, either.

Dr. Camenzind, in his above-mentioned submission on the Isle Royale wolf-moose issue, also wrote:

> During the same period [post-parvo 1980-2010] moose numbers fluctuated widely- as they did before the arrival of wolves. The literature suggests that part of the more recent fluctuations can be attributed to severe winters and above normal summer temperatures accompanied by heavy winter tick
infestations. And, of course, there is the predatory role of wolves. A publication by M. Nelson, R. Peterson and J. Vucetich (2008. The George Wright Forum. Vol. 25, No. 2) concludes that “These discoveries (50 years of moose-wolf interactions on Isle Royale) suggest wolves are the proximate, but not ultimate, cause of most moose deaths.” The article went on to say that: “That is, wolves seemed to have relatively little impact on moose abundance.” And last, the article stated that: “Most importantly, most of the fluctuations in moose abundance are attributable to factors that we have yet to identify.” I don’t pretend to say that wolves are not a major factor in lives of Isle Royale moose, only that they are far from being the only, significant factor.

(Submission Attached.)

These factors need to be thoroughly analyzed in the Final EIS.

7. The DEIS doesn’t adequately analyze whether the Proposed Action will succeed, and therefore the likelihood that this translocation must be repeated.

The result of the experiment with wolves on Isle Royale over the past 65 years seems to show that wolves cannot survive in perpetuity on Isle Royale. There isn’t evidence that Isle Royale can sustain a wolf population over the long term, which itself attests to how “unnatural” the proposed translocation is. Will the National Park Service perpetually have to “freshen up” the wolf gene pool on Isle Royale as inbreeding takes its toll? As Dr. Camenzind states it,

And again, how long will it be before additional wolves have to be imported to again avoid the perils of inbreeding? When does this wolf population shift from being free-ranging to becoming a routinely manipulated population experiment in a natural island impoundment? Where is the wildness and naturalness then? Importing wolves may provide a short-term fix, but it is not a long-term solution.

8. The petition to list the moose on Isle Royale (and elsewhere) under the Endangered Species Act must be analyzed in the Final EIS.

The DEIS mentions the petition to list the moose under the Endangered Species Act (ESA), and indicates that the U.S. Fish and Wildlife Service has initiated a 12-month status review as a response to this petition. (DEIS, p. 43.) Later the DEIS mentions, “The listing of moose by the US Fish and Wildlife Service under the Endangered Species Act would not be expected to adversely impact moose on Isle Royale.” (DEIS, p. 77.)
But the DEIS contains no analysis of what the potential listing of moose under the ESA would mean for moose and wolves on Isle Royale. The DEIS merely states, “The listing of the moose by the US Fish and Wildlife Service under the Endangered Species Act would not be expected to adversely impact wolves on Isle Royale.” (DEIS, p. 85.) This unsupported supposition is completely inadequate. If the moose are listed under the ESA and their population begins dropping (as some climate models suggest), the NPS may be under legal obligation to begin wolf control on Isle Royale. It doesn’t make any sense for the NPS to import wolves now to Isle Royale, only to face the possibility that the NPS might have to kill those wolves if the moose are listed and begin to decline.

The Final EIS must thoroughly analyze what the potential listing of moose under the ESA means.

9. **The many uncertainties surrounding climate change argue against importing more wolves.**

The DEIS does not directly analyze the long-term impacts of climate change on Isle Royale, and the Final EIS must do so. Some of those impacts include the eventual and potential loss of moose, and the loss of balsam fir from Isle Royale.

The National Park Service’s own preliminary analysis of climate change shows that in three of the four scenarios that the model ran, moose will eventually disappear from Isle Royale. (NPS, personal communication.) If this is the case, why should we degrade Isle Royale’s wilderness character now by importing more wolves to feed on a moose population that may itself become extirpated?

A new scientific article also casts doubt on the wisdom of trying to perpetuate moose in a warming climate. An article published in *Global Change Biology* in 2017 examines the vulnerability of tree species to climate change across the eastern United States. The study particularly notes the vulnerability of balsam fir (*Abies balsamea*) to climate change. Balsam fir, in fact, was ranked as the most vulnerable species of the 40 species examined. The implication for Isle Royale is that balsam fir could diminish or disappear from Isle Royale. With balsam fir as an important winter food for moose, this new study further shows the folly of human manipulation of the Isle Royale Wilderness, despite the best intentions in doing so. (Brendan M. Rogers, Patrick Jantz, and Scott J. Goetz, "Vulnerability of eastern US tree species to climate change," *Global Change Biology* doi:10.1111/gcb.13585.)

The Final EIS must more thoroughly analyze the impacts of climate change, its implications for wolves and moose, the potential loss of balsam fir, and other significant impacts.
We can provide copies of all the articles referenced in our comment letter, but the PEPC Planning, Environment, and Public Comment form does not allow the attachment of articles in a pdf format.

Please conduct the additional analyses that we have requested, and please change the National Park Service’s preferred alternative to Alternative A, the No Action Alternative. Please keep us on your contact list for further steps in this process.

Sincerely,

Kevin Proescholdt
Conservation Director