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Blinkers on the North American Model of Wildlife Conservation

Introduction

The North American Model of Wildlife Conservation was endorsed formally by the Association of Fish and Wildlife Agency in 2002, although it was previously established over a century before. The model was made to help restore fish and wildlife as well as their habitats through a system of policies based on science and management techniques. These laws were endorsed among the United States and Canada and made up into seven tenants:

- 1. Wildlife resources are a public trust
- 2. Markets for game are eliminated
- 3. Allocation of wildlife is by law
- 4. Wildlife can be killed only for a legitimate purpose
- 5. Wildlife is considered an international resource
- 6. Science is the proper tool to discharge wildlife policy
- 7. Democracy of hunting is standard (Organ et al. 2012).

The model has been known to have a heavy focus on hunting practices, relying only on game species and western science views. Other important perspectives are left out, leaving a narrow view. The model fails to incorporate cultural values, social impacts, other non-game species and other perspectives that influence on wildlife. Such a narrow view has been shown to exclude different cultures, social groups, and species that are actively interacting with wildlife, leading to ineffective management practices. These blinkers on the North American Model can be broadened based on inclusivity on an individual to global scale by involving other wildlife enjoyers and Indigenous Peoples while incorporating more wildlife species and by providing sufficient funding.

A Social & Economic Perspective

There are many ways we can improve the narrow view of the North American Model and implement new policies to be more inclusive and accurate to all wildlife enjoyers. One of the main limitations observed is the exclusion of other important wildlife species that are not game

animals (Organ et al. 2012). The model mainly focuses on hunter-based views, excluding many important activities and species that are being neglected. There are many other environmental recreational activities that impact wildlife that should be acknowledged in the model. Enshrining only hunting as the basis to wildlife conservation is inaccurate and exclusive of other wildlife practices, such as bird watchers, fishers, eco-tourists, campers, hikers, and other outdoor endeavors (Mahoney & Jackson 2013). Especially with the decrease in utilitarian activities like hunting, and the increase in mutualistic activities like wildlife viewing, being more inclusive of these other less consumptive activities is important (Larson et al. 2021). During an interview with community ecologist Nate Wehr, he discussed options for including these other wildlife relations into conservation: "implement taxation on equipment that is exclusively used for outdoor recreation such as binoculars, tents, etc. Some other ways to do this would be to require folks to purchase hiking passes or something else that would give them access to the same areas hunters often use" (2022). Wildlife watchers still play a huge role in impacting the environment and conservation measures, so including them into the North American Model is crucial for accurate conservation management of wildlife. With this, it would aid to providing more funding for a larger range of wildlife species that are currently disregarded. The lack in sufficient funding has led to shortcomings in proper conservation works (Larson et al. 2021). The model seems to only incorporate game species or ones that seem economically or politically important, which can be controversial, "By focusing on a handful of important game species, we may be taking away funding or other resources from conservation efforts that could benefit non-game species" (Wehr 2022). This can be a tricky topic to cover, since the conservation of game species does require large areas of land which could indirectly benefit the non-game species that also live in their habitats. The question of whether the indirect management of non-game species should be economically and politically important is constantly debated. Nate Wehr also questions this idea, giving an example of an endangered salamander and bighorn sheep in the same habitat, "If we protect a canyon with an endangered salamander living in it, does it matter whether we protected it because bighorn sheep live there or because the salamander lives there? I don't think there's one right answer to this as both arguments are valid" (2022). Overall, I don't think it would hurt to give other non-game species the recognition they deserve, since they all have different ecological roles in the environment. Other recreational activities or wildlife viewing practices should be accounted for when talking about management of wildlife conservation practices.

A cultural Perspective

Within the North American Model, they propose that science is the basis for understanding management strategies, along with the idea that wildlife is a public resource that everyone should have equal access to. These claims are misleading when considering a cultural perspective (Artelle et al. 2019). When addressing Indigenous practices, they are completely left out of the model and are underrepresented. Indigenous Peoples don't follow science perspectives, they have their own cultural values and practices when it comes to wildlife interactions, which is not covered in the model. Because of this, native people could be limited to certain resources, contradicting the tenets of wildlife being an "international resource" and being publicly available. They have an unfair advantage since all their values are left out, causing cultural discrepancies and a lack of inclusivity (Eichler & Baumeister 2018). It's important to consider the differences among culture and societal values when managing wildlife. The social license to hunt (SLH) is indicative of these perspectives, considering the differences among society and policy change (Darimont et al. 2020). This model encourages the broadening of current policy of the NAM to better represent wildlife an its management among a dynamic society. This can be implemented through other management practices that consider changing cultures that practice other hunting regimes. A trans-boundary framework for wolf management in Yellowstone was recommended to include different views and practices of wildlife management. This method includes a model that transitions along areas of Yellowstone with different goals and objectives. They suggested to have some locations that would allow wolves to move from a protected environment to a hunted one. This would allow the wolves who primarily live in the Yellowstone National Park to transition into a hunted area from a protected one without being vulnerable to hunting around the park's boundary (Smith et al. 2016). When asked about including both non- and Indigenous cultures when making management recommendations, Nate Wehr discussed with experience with feral pigs in Hawaii, "try and strike a balance between the indigenous and non-indigenous perspectives" (2022). He made this recommendation to management efforts based on his observations of differing hunting values of the pigs. On one hand, the feral pigs were viewed as destructive to the environment, so there were management actions for eradication of the species on the island. However, native people on the land viewed the pigs completely differently. Native Hawaiians formed a cultural connection historically to the feral pigs and had a lot of value to them as a game species. So as Nate Wehr

mentioned, to balance the differing values on the island he proposed eradication only in select areas so that among places where the natives were, they could continue on their cultural practices and hunt the feral pigs, while eradicating them in another area environmental purposes. He implied eradicating the feral pigs among areas with rare species and areas that were more difficult to access by the native hunters, closing that gap a little and providing a balance between the differing views. We can learn a lot from Indigenous practices, there is a major disconnect to the role of wildlife in their ecosystems. It has been talked about how "sophisticated Indigenous management systems" are removed among management plants today, which has caused a lot of disruptions among the environment. Such examples discussed were wildfires of Sierra Nevado and the endangerment of their native plant species that was once abundant based on horticultural practices of the native people (Cooney 2020). Western views have overrun management practices and a shift from hunter-gatherer views to consumer-profit, which leads to the neglect of effective environmental and wildlife conservation.

An Ecological perspective

Currently, wildlife is managed individually at the species level, rather than a component of the larger context of ecosystem and their interactions within. Nate Wehr brought up good examples of this perspective as mentioned earlier, "by focusing on a handful of important game species, we may be taking away funding or other resources from conservation efforts that could benefit non-game species" (2022). This is a clear example of the neglect on the bigger picture when planning to manage a species. Full eradication may not be beneficial to the overall ecosystem that a species is a part of. When looking at white-tailed deer, they are very detrimental to the ecosystem, but they are left to be in high populations because they are a crucial game species for hunters to enjoy. Their impact on the environment is neglected because they are a popular sporting animal. On the other hand, it is common among white-tailed deer and wild turkeys to have reductions in biodiversity quality, since societal standards are game-hunter forward, rather than based on actual biological conservation management (Cooney 2020). Wehr also spoke on this topic earlier, how non-game species can indirectly be affected by the management of popular game species since they are among the same area. The impact of one species can indirectly affect another species within the ecosystem, since all organisms can be linked in some way. The research of wolves among Yellowstone National Park touches on this issue, stating that previous assessments based on harvesting of wolves don't take into account the social effects of their pack structures. They discuss that the death of a high standing wolf could cause detriment to a pack. Potentially, a hunted breeding female wolf could cause major problems of reproduction within a pack in that year. Hunting of a male could possibly disrupt the effectiveness of a pack's own hunting abilities or competitive standing with another pack. Suggestions to limit harvesting rates of the wolves within a boundary of the Yellowstone National Park to reduce the rate of "social disruption" among the wolf packs and to the higher ranked wolves within packs were made (Smith et al. 2016). This is a common theme with many different game species and acknowledgment of their social structure and standing within an ecosystem is crucial for ultimate reduction of disruption among a species group.

Conclusion

The current implementation of the seven tenants ruled by the North American Model of Wildlife Conservation is not inclusive based on different culture, non-game species or other wildlife activities based on social, economic, cultural, and ecological perspectives. The perspective of this model is extremely narrow and should be broadened on an individual to global scale. Incorporation of methods to balance out differences based on cultural standings should be addressed, as well as including other recreational and non-consumptive wildlife activities that affect wildlife indirectly to directly. Additionally, providing taxes on certain outdoor equipment could help proper conservation of non-hunter activities while providing additional funding to other non-game species. Instead of making decisions based on individual species', looking at the overall ecosystem and how each species interacts with each other and effects one another is important. To have more diversity within the model, these perspectives should all be considered to provide sufficient conservation of wildlife throughout North America and Canada. The view of wildlife should not be as a resource, but as a valued asset to an array of systems that are cultural, ecological, social, and economic.

References:

- Artelle, K. A. 2019. Is Wildlife Conservation Policy Based in Science? American Scientist 107:38–46.
 - https://go.gale.com/ps/i.do?id=GALE%7CA579092378&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00030996&p=AONE&sw=w&userGroupName=nysl_ca_ind
- Cooney, J. M. 2020. Fair Chase Colonialism: An Environmental Justice Critique of the North American Model of Wildlife Conservation (Pt 2). 2020, December 12. https://jaymcooney.wordpress.com/2020/12/12/fair-chase-colonialism-part-2/
- Darimont, C. T., H. Hall, L. Eckert, I. Mihalik, K. Artelle, A. Treves, and P. C. Paquet. 2021.

 Large carnivore hunting and the social license to hunt. Conservation Biology 35:1111–1119.

 https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.13657
- Eichler, L., and D. Baumeister. 2018. Hunting for Justice: An Indigenous Critique of the North American Model of Wildlife Conservation. Environment and Society 9:75+. https://go-gale-com.esf.idm.oclc.org/ps/i.do?p=GRNR&u=sunycesfsc&id=GALE%7CA557313051&v=2.1 &it=r
- Larson, L. R. et. al. 2021. The future of wildlife conservation funding: What options do U.S. college students support? Conservation Science and Practice 3:e505.

 https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/csp2.505
- Mahoney, S. P., and J. J. Jackson. 2013. Enshrining hunting as a foundation for conservation the North American Model. International Journal of Environmental Studies 70:448–459. https://www.tandfonline.com/doi/full/10.1080/00207233.2013.801178?casa_token=6S-E7DzDZ7AAAAAA%3AmWkzADqMyqHXWBIjDB4N9x9em_FFwG10pcvo9Bkl88EjdTuGf4mJU6oYUbNLcabQizvkvJMunYELAA
- Organ, J.F., V. Geist, S.P. Mahoney, S. Williams, P.R. Krausman, G.R. Batcheller, T.A. Decker, R. Carmichael, P. Nanjappa, R. Regan, R.A. Medellin, R. Cantu, R.E. McCabe, S. Craven, G.M. Vecellio, and D.J. Decker. 2012. The North American Model of Wildlife Conservation. The Wildlife Society Technical Review 12-04. The Wildlife Society, Bethesda, Maryland, USA.
- Smith, D. W., P. J. White, D. R. Stahler, A. Wydeven, and D. E. Hallac. 2016. Managing wolves in the Yellowstone area: Balancing goals across jurisdictional boundaries. Wildlife

Society Bulletin 40:436–445.

https://wildlife.onlinelibrary.wiley.com/doi/full/10.1002/wsb.677

Wehr, N. November 28, 2022. Email interview.