Megan Cheshire Blinkers on NAM EFB390 Dr. Gurarie

The North American Wildlife Conservation Model was produced in the 20th century in response to drastic overharvesting and exploitation of relevant game species of wildlife. Resource exploitation drove the expansion of human settlement across the continent; whether it be of mineral, flora, or fauna origin (Turner 1935). Today in the 21st century, as a nation, we understand our direct relations with the environment [on an individual scale] can have global effects. We engage with our local environment within the bounds of policies implemented to uphold current ecosystem services and function. Modern policy is currently implemented according to the science and data we have available to properly suit it for the context of a setting. We are able to implement documents that can consider dynamic processes in the environment we newly understand to better conserve biodiversity. Looking back to previous documentation and policy that did not have the technology and resources we do today, lapses are evident. The 20th century North American Wildlife Conservation Model leaves out several considerations of means of wildlife conservation relevant in our modern society today.

The model was first drafted after society's first direct encounter with its power to drive species to extinction. Once one of the most abundant birds in the world, the last passenger pigeon died in 1914 after suffering immense overharvesting and habitat destruction it was previously exposed to throughout the expansion of North America. Traveling in large flocks that could cause spans of sky to go dark, it was attainable to capture several at a time by using guns or nets. By the late 1800s the trade of the pigeons had been commercialized (used for meat and live targets for trap hunting) and their populations consequently diminished (Fadelli 2022).

Rapid industrialization throughout the 19th century led to a new scale and power of machines and weaponry. However with later urbanization, hunting became a skill necessary for a smaller group of people, and harvested wildlife was to be transported *en masse* to cities to accommodate increasing populations [when markets arose]. Consequently, people who lived in cities with more free time [not surviving off land, but resources provided] had an opportunity to engage with "the chase" of wildlife and engage with hunting as a sport. Conflicts within the

United States soon arose between market and sport hunters, disputing whether the profit on wildlife is to be made for dead animals, or alive animals [for the pursuit] (Organ et al 2012). The sport hunters ended up organizing and developing the first refuges for wildlife (i.e. Carroll's Island Club 1832) and laws to protect game (Organ et al 2012). This time period's desire of controlling wildlife populations is a step towards their conservation; awareness of how and why we interact with wildlife perpetuated a framework to integrate a means of sustainability to harvest. However, the continuous advancements of industrialized technology on large scales perpetuated a need for guidelines of sustainable harvest on an urgent and broad scale. Developed throughout the 20th century, The North American Model of Wildlife Conservation was finally published in 2001.

Further, "the sportsman versus the hunter" is one of the first disputes over wildlife humans have historically had deriving from differences in social, cultural, and political values. As humans came into contact with wildlife over early expansion, different values became associated with hunting and wildlife. Humans' direct need to rely on the land became distant, as did the value of the pursuit in the hunt and taking the life of something once wild. Today, we see the true distinction of these cultural values in disputes regarding how local wildlife is managed. In particular, research on feral pigs was indicative of how bad they were for the environment (Wehr 2022). Yet, the native Hawaiians have a cultural connection to this species and value them to traditionally hunt. Although it would have been the best resolution to the environment and non-indigenous peoples, researcher and community ecologist, Nate Wehr, recommended managers not to entirely eradicate the pigs. Instead, Wehr suggested eradicating the pigs in select areas with rare species or where it was difficult for pig hunters to access; in an effort to strike a balance between the indigenous and non-indigenous values and perspectives. Nevertheless, it is a challenge to work with several communities and perspectives into policy making because it makes the research process inherently more complex; although there is the benefit of integrating more perspectives, the process to implement is ultimately slowed down (Wehr 2022).

In the North American Model of Wildlife Conservation, wildlife are managed according to the needs of humans, rather than to what would best benefit their health and well-being. This is evident not only by the model's application, but also in its diction of the published document itself. The wording used to reflect parameters manifests further anthropocentric aspects to conservation and management including objectifying animals as a resource to extract (Eichler &

Baumeister 2018). The "wildlife" mainly regarded in the model are game species deemed relevant to economy, politics and lifestyle; rather than "wildlife" suiting its proper definition of "the native fauna (and sometimes flora) of a region" (Oxford Language).

Each relevant game species is managed accordingly, rather than fit with the larger role they play in their ecosystems. Wildlife are not met with the proper value they hold in sustaining trophic levels, and environmental checks and balances through several interactions. Moreover, agreements and policies tend to be far more politically driven than what would best benefit wildlife (Wehr 2022). It is noted in the most recent technical review of the Model, it is noted that the resulting model reflects the unique temporal and social circumstances of Canada and the U.S. [as "North America" did not apply to Mexico at the time] (Organ et al 2012). It is concluded by recommending further work to compare how different temporal and social circumstances have led to varying approaches to conservation and identify what can be learned from these comparisons to advance modern policy-making on a larger scale (Organ et al 2012).

Additionally, monetizing wildlife as natural resources has contributed to a capitalist society that chooses commercial value over wildlife's perseverance. By choosing to focus on the abundances of a few relevant game species, conservation focus has not been given from several other important, interacting species within a given ecosystem (Donovan 2011). However, although funding or other resources may be taken away from conservation efforts that could benefit non-game species, game species often require large tracts that can consequently indirectly benefit non-game species (Wehr 2022).

Furthermore, hunting and fishing is regarded as the only form of active and direct conservation and management the public is able to engage in in order to partake in wildlife management. The American System of Conservation Funding is founded upon the revenue and excise tax collected on the sale of hunting and fishing licenses and specific hunting and fishing equipment ("American System of Conservation Funding: Association of Fish & Wildlife Agencies" n.d.). We see more issues with this fact today than ever before as hunting and fishing licenses continue to decline ("Decline of Hunting and Fishing" n.d.). The current conservation funding model [at state level] is characterized as a user-pay, user-benefit model and it faces collapse as a direct consequence of this. To this day, the sport-men derived funds comprise between 60 and 90 percent of the typical state fish and wildlife agency budget (Organ et al 2012). However with declining participants, a need to diversify conservation funding is clear.

Nate Wehr proposes implementing a tax on equipment exclusively used for outdoor recreation, offering an additional opportunity for individuals from all economic classes to be involved in wildlife management, even though they are regarded as a "public trust" (Wehr, 2022).

Additional research on recently enrolled undergraduates demonstrates interest in a need to broaden support of conservation funding (Larson et al 2019). Societal values are in constant flux as new minds are brought up in new environments, and relationships to them. There is a need to consider the values of upcoming generations impact on policy change, especially to historic standing documents that may not get often discussed that offer a framework to policy-making and management to our environment (Burroughs 2022). The social license to hunt model (SLH) considers these changing values' immediate influence on policy change, encouraging current policy to reach the broader public so it can be better assessed [by them] how their wildlife is being represented and managed (further examples today include wild horses and wolves in the west) (Darimont et al 2020).

Recently at the Wildlife Society conference in Spokane, a new emerging view wants to transform state departments across the country concerning fish-and-game into agencies that "emphasize the intrinsic value of individual animals and healthy ecosystems", shifting focus from hunting and more resources devoted towards non-hunted and fished species (McKean 2022). This view is fitting to the grounded values of indigenous-led stewardship; Grounded in their interactions with nature as being spiritual, a sustainable livelihood emerged supporting them for generations. They were inspired by their intimate relationship to wildlife and their habitats, developing a long relationship they developed stories of to inform next generations of the values and knowledge they retain; carrying out decisions and action overseen and led by individuals who live locally, and bear the consequences of its management directly; and upholding the decisions made today impact the generations that come after us (Artelle 2019). These foundations are especially notorious because the derived teachings from the indigenous's historic relationship with nature are supported by advancing science developments. Transitioning to a mindset of approaching each individual in the environment with the same respect could enable enormous benefits, especially in the face of climate change.

Furthermore, the North American Model of Wildlife Conservation is not equipped to address habitat loss and climate change. It will be increasingly important to have management and policy catered to the direct effects of the violent effects of each. This may involve

implementing measures to protect and restore habitat, as well as adapting conservation efforts to account for the impacts of climate change on wildlife populations.

The North American Model of Wildlife Conservation needs to shift its focus of conservation efforts from the needs of humans to the needs of wildlife. Conservation measures that prioritize the health and well-being of wildlife populations but be supported, rather than the human uses of wildlife. Consequently, this could allow for a more broad platform to enjoy wildlife in various areas and utilize a variety of equipment to appreciate their different qualities (small to large) to be taxed and used for their conservation. More conservation enables more areas to be researched and species to be discovered, and more curious natural enthusiasts to explore these places and money to be put into their sustainment.

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