Wildlife categorized as “Vermin”

Analysis of the Wildlife (Mis)-management practices in the USA that Is devoid Of ethics and its ecological implications on ecosystems

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Wildlife are also categorized as invasive species, obnoxious animals, pests and mainly as nuisance and problem animals

History of Wildlife Management

- **Public hunting**
- In the USA, before regulated hunting laws were passed, several wildlife species like the Bison and migratory bird species were nearly driven towards extinction. Respective state laws combined with the Federal Lacey Act of 1900, led to the end for market hunters who had engaged in killing large quantities of wild animals to sell wildlife meat and wildlife particles to people outside the state and country.
- The lurking extinction of wildlife species stipulated authorities to introduce state wildlife laws and public land laws for protecting game animals and birds in the 20th century by issuing compulsory hunting licenses and imposing kill limits.
- **Wildlife management** started with regulated hunting in refuge establishments and subsequent restocking of wildlife in game farms for the benefit of hunting interest groups.
- This resulted in wild animals being unnaturally bred, insincerely conserved through "controlled public hunting" of "Vermin" where certain game species were abundantly maintained for recreational sports hunting.

History of Wildlife Management

- **Use of Euphemism's**
- Over the last few centuries, public have bought the branding of wildlife species as problem animals mainly because wildlife hunting is clothed in euphemisms which has eradicated millions of wildlife species from unwelcome territories.

- **Ever since public hunting** was legalized in the USA, vested interest groups have justified their lust for killing by proclaiming hunting as a "cost effective wildlife management tool" by proclaiming that wildlife population is kept in abeyance as their excess population lend themselves to be harvested.

- **Harvesting wildlife**
- The value of an animal's fur and meat determines whether it's a nuisance animal meant to be immediately killed or if its worthy of harvesting.

History of Wildlife Management

- **Refuge establishment for harvesting**
- These so-called protected areas were nothing but recreational grounds to practise killing target animals with hunting practices such as bow hunting, and commercially exploit the game population's skins, body particles.

- **Restocking wildlife (game farming) for the benefit of interest groups**
- On one side the state officials encouraged hunting amongst the public by branding wildlife as "Vermin" and on the other side, created safe havens for preserving economically viable "Vermin" in ranches, to be only hunted (harvested) in game reserves during open seasons.

History of Predator Controls

- In the 1920s it was believed that to maintain and increase populations of game species, predators must be reduced and total "Vermin" numbers must be held in check.
- Game wardens and managers of the state refuges were requested to destroy all predators possible while on patrol.
- Additionally, the Conservation Commission (forerunner of the Division of Natural Resources) employed a "Vermin" exterminator in early 1920's, who was assigned to trap and hunt "Vermin" full time.
- In the 1930s, "Vermin" killing contests were conducted in many counties and it resulted in the elimination of thousands of wild animals.
- During the 1934-35 fiscal year alone, 40 counties sponsored and conducted such contests, believed at that time to be "beneficial."

Source: History of Wildlife Management in West Virginia

https://www.wvdnr.gov/wildlife/magazine/Archive/08fall/Vol8No2historyWildlifeManagement.pdf

The Trophic Downgrading's Cascading effects

- When predatory species are removed from an ecosystem by local extirpation or extinction it leads to an increase in their prey base who end up being targeted as “Vermin” and culled.
- The White-tailed deer is an example of dramatic prey population growth in the United States (estimated population - 30 to 35 million). They became the poster child of causing crop damage in farm lands, for the destruction of selected plant species and also as carriers of diseases.
- Earlier the Columbian deer species were listed in the first group of animals to receive federal protection under the Endangered Species Protection Act - to help them re-establish their population.
- But With their exponential population growth in areas absent of predator controls, the U.S. Fish and Wildlife Service (USFWS) down listed the Columbian white-tailed deer, from being listed as endangered species to as threatened under the ESA in 2016.

The Trophic Downgrading's Cascading effects

- Reclassification / declassification of once protected species promotes and incentivises hunting, illegal poaching etc.

Source: White Tailed Reports - https://www.qdma.com/about/whitetail-reports/

- Earlier to such human interventions, deer population density was naturally regulated by free-roaming, chief deer predators such as wolves, bears, and mountain lions whose populations and habitats have shrunk significantly.
- Legalized hunting has mainly provided an additional meat source to Americans as seen in Texas and Vermont, where the annual deer harvest averages 450,000 animals, delivering up to 14 million pounds of boneless venison.
- Researchers and ecologists have pointed out that non - excess deer population's foraging activities promote the health of the forest reserves by promoting plant biodiversity.
- Positive interactions between herbivores and plant diversity shape forest regeneration

Source: Susan C. Cook-Patton, Marina LaForgia and John D. Parker, Ravenous Deer Might Not Destroy Biodiversity After All, On 22 May 2014, https://doi.org/10.1098/rspb.2014.0261, https://www.wired.com/2014/04/deer-biodiversity/

Targeted & Mislabeled Wildlife

- **Predatory species**

Wolves:

- Wolves and its predatory siblings have been the most commonly persecuted wildlife species in the United States as they are perceived as a threat to humans' livestock and livelihood.
- Wolves are mostly a direct target and sometimes are a collateral damage to its closely relates species, the Coyotes.
- Especially in the U.S, wolves have frequently been listed, delisted and relisted as a highly endangered species. The constant wear and tear of such selective protection renders them highly susceptible to extinction.

Targeted & Mislabeled Wildlife

Coyotes:

- Coyotes are gruesomely killed by guns and cyanide bombs and hunted in wildlife hunting contests all throughout the U.S.A.
- Culling wolves and coyotes' mostly backfires and is ineffective in curbing livestock losses as when these predatory resident species are exterminated, their complex packs fragment and disperse, causing increased predation. Thereby stray wolves and alienated coyotes take over, causing twice the loss to nearby farmlands and livestock's.
- When Coyotes population is regulated by wolves, bears and mountain lions, they play an important role in keeping the ecosystem healthy by keeping at bay the rodent population and restoring the food chain. Moreover research has established that Whitetail deer population decreases when coyote population increases.

Source:

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0113505

https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0079713

https://www.audubon.org/magazine/may-june-2011/ghost-dogs,

https://urbancoyoteresearch.com/coyote-info/coyote-relationships-other-animal-species

The USDA's APHIS U.S. Fish & Wildlife Services (FWS) & its Collateral Damage

- Although the USDA's APHIS Wildlife Services (WS) exists to effectively manage wildlife and facilitate coexistence of people and wildlife, at best their objectives are misaligned in nature, as their "wildlife management" work involves killing millions of wild animals on a yearly basis.
- FWS "wildlife management" in the past few years alone included,
  Killing 2.3 million animals in 2017 ,
  Killing 2.7 million animals in 2016 ,
  Killing 3.2 million in 2015.

21,184 beavers, 997 bobcats, 415 gray wolves, 407 black bears, 334 mountain lions and 535 river otters also died in 2016 at the hands of the government agency. In 2016 alone, 2790 animals were unintentionally killed.

Source: https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/pdr/?file=PDR-G_Report&p=2017:INDEX:
https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/pdr/?file=PDR-G_Report&p=2016:INDEX:
https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/pdr/?file=PDR-G_Report&p=2015:INDEX:

- The FWS despite being an entity imposed with the responsibility of protecting the endangered species it has established where its priorities lie, i.e. protecting the interests of livestock producers and property owners.

- Despite of the mounting evidence of the atrocious practices undertaken by this department and its ineffectiveness, the FWS continues using all forms of inhumane leg traps, lethal poisons and weapons in "managing wildlife."

Methods used for wildlife management

Analysis of the ecological implications of "Wildlife Harvest" on ecosystems :

- Harvest has the potential to cause three types of genetic change: alteration of population subdivision, loss of genetic variation, and selective genetic changes.

In "Selective harvest focused on sexual signal traits can lead to extinction under directional environmental change", it has been rightly pointed out that, *"when there is directional environmental change, selective harvest of males with the largest secondary sexual traits can lead to extinction in otherwise resilient populations. When harvest is not selective, the males best suited to a new environment gain most of mating's and beneficial alleles spread rapidly. But when these best adapted males are removed, however, their beneficial alleles are lost, leading to extinction."*

Knell, Robert & Martínez Ruiz, Carlos. (2017). Selective harvest focused on sexual signal traits can lead to extinction under directional environmental change. Proceedings of the Royal Society B: Biological Sciences. 284. 20171788. 10.1098/rspb.2017.1788.

- Ecologists emphasize that manmade alterations have the potential to adversely reshape the ecology of harvested systems.

Eric Palkovacs et.al. in "***Ecology of harvest-driven trait changes and implications for ecosystem management***" **have reviewed a host of such cases.**

- Richard Bischof's team in the "*Regulated hunting - reshapes the life history of Brown Bear*" paper point out how the recovery of carnivores across North America & Europe, following their extirpations in their 19th & the early 20th Century did not automatically regenerate apex predator demography's, life history's or re-establish their feeding, breeding & territorial patterns.

Bischof, R., Bonenfant, C., Rivrud, I.M. *et al.* Regulated hunting re-shapes the life history of brown bears. *Nat Ecol Evol* 2, 116–123 (2018). https://doi.org/10.1038/s41559-017-0400-7

CONCLUSION

Biological controls – A humane alternative in controlling wildlife populations

- Supporting predatory wildlife comeback should become a core element of wildlife conservation; Reintroduction of predators to reduce the excess prey base in mismatched areas would be a humane and sensible alternative to the indiscreet culling of wildlife.

- In biological control, predators specific to the resident excess prey animals are introduced to balance out the situation, their populations in turn being balanced by the resulting decline of the targeted excess prey base. Hence, advocating the introduction of biological control predators, particularly the wolves to restore the balance in the eco system is required.

- Managing excessive wildlife populations can address scarcity of wildlife population elsewhere, by rewilding measures or by capturing "problem animals" from densely populated areas and relocating them in areas which need them as a prey base.

- **Non lethal, humane methods to keep away wild animals**

There are umpteen number of cost effective, humane alternatives such as using contraceptives, sterilization, translocation and humane deterrents such as fencing, use of sonar alarms and spraying dingo urine, all of which are promising and are sustainable adaptations.

References and Resources:

- Wildlife Policies in the U.S. National Parks by Frederic H. Wagner, Ronald Foresta, R. Bruce Gill, Dale. R. McCullough, Michael R . Pelton, William F. Porter, Hal Salwasser

- Surplus Population: A Fallacious basis for sport hunting by Davi S. Favre, Gretchen Olsen

- Redefining Vermin: A Short History of Wildlife Eradication by Lawrence P. Gooley in Adirondack Almanack.
https://www.adirondackalmanack.com/2014/04/redefining-vermin-a-short-history-of-wildlife-eradication.html

- History of Wildlife Management in West Virginia
https://www.wvdnr.gov/wildlife/magazine/Archive/08fall/Vol8No2historyWildlifeManagement.pdf