Questions for the Record (QFR)
Dr. Peter Kareiva
Pertinent to Subcommittee on Water, Wildlife and Fisheries March 25, 2025
Legislative hearing on H.R. 845 (Pet and livestock Protection Act of 2025) and H.R. 1897 (ESA Amendments Act of 2025)

Why do you say the wolves are not recovered when their numbers are above recovery plan goals?

- Scientific understanding has evolved drastically since the 1990s, when the original recovery plan goals were created - before GPS collars, DNA sampling, or today's ecological modeling existed. We don't manage wildfire, disease, or economic policy using 30-year-old data. Science has advanced. Our understanding of wolf ecology has improved. If we want to manage wolves responsibly, we need to update recovery plan goals to reflect current data before we can even begin to say wolves are recovered.

  The Endangered Species Act defines a species as endangered if it faces extinction within all or a significant portion of its historic range. Today's gray wolves, at best, occupy 15% of their historic range. That means large areas like the Southern Rockies, parts of California, the Pacific Northwest, and the Northeast remain unoccupied, even though they offer highly suitable habitat. That is a far cry from full recovery. To put that in perspective, the Bald Eagle was not delisted until it had recovered across nearly all of its historic range. We should expect the same for gray wolves.

You talked about competing interests and conflicts being mitigated by science. Can you give an example with wolves?

- Minimizing livestock depredation through non-lethal methods is a great example of how science can help resolve long-standing issues. We now have peer-reviewed research showing that non-lethal deterrents like fladry, range riders, and removing dead carcasses can reduce conflicts far better than lethal removal. In fact, scientists have discovered that lethal control can even exacerbate conflicts by destabilizing pack structures, leading to unpredictable wolf behavior and increased livestock losses.

  Science also shows that wolves tend to target sick or weak animals, which can improve the overall health of elk and deer herds, and helps slow the spread of diseases like Chronic Wasting Disease. While wolves may affect elk behavior in

certain areas, overall elk populations in many regions remain stable and in some cases, overabundant. These findings should help land managers balance maintaining both healthy ecosystems and sustainable hunting in the lands they oversee and, ultimately, reduce friction between all stakeholders.

There are also projects underway that are using GPS collars and strategic grazing patterns to keep cattle away from known wolf activity and toxic plants. These kinds of pilot programs show what's possible when we root our solutions in science instead of politics.

There was much discussion of the weaponization of the ESA. You are a biologist. How do you react to those charges that the ESA has been weaponized?

- Calling the ESA 'weaponized' is a political distraction. At its core, the ESA is indeed working as it was intended to. The ESA was designed to identify species at risk, protect their habitats, and ensure that science — not politics — guides conservation decisions.

  I would encourage anyone who sees the ESA as a weapon to look more closely at the science and at the cascading benefits of conservation. Protecting endangered species is not a partisan act. It's an investment in resilience, health, and the long-term viability of the natural world we all depend on.

Are wolves dangerous to humans?

- No. Over the last 100 years, there have been no fatal wolf attacks on humans in the contiguous US. Wolves are naturally wary of humans and avoid contact when not habituated or harassed. Recent studies show that the risks associated with a wolf attack are technically "above zero," but so low that it's statistically negligible– far lower than being struck by lightning or injured by a domestic dog.

How many wolves are there in MN? In the Great Lakes region as a whole?

- There are nowhere near 8,000 wolves in Minnesota or the Great Lakes region, to be clear. According to the Minnesota Department of Natural Resources, the state had an estimated 2,919 wolves during the 2022 to 2023 winter season.

  Across the broader Great Lakes region, including Michigan (726), Minnesota (2,919 wolves), and Wisconsin (1,007 wolves), the estimated total is about 4,652 wolves as of 2023. But again, those numbers vary depending on the state's

counting method, and many of these states have faced criticism for overestimating population size or relying on outdated or imprecise models.

Why do we protect predators with carnivore teeth?

- The ecological importance of a top predator such as the gray wolf is undeniable. We have known for years that wolves affect their environment relative to their abundance. As top-level predators, they are influential in shaping and maintaining the structure of their natural communities.

  The presence and activities of wolves benefit numerous other species, helping determine the numbers and kinds of mammals, birds, and plants in an area. For example, bears, weasels, ravens, and eagles often scavenge on deer carcasses left by wolves. Wolves alter the feeding behavior of deer, which limits over-browsing and prevents the destruction of plants and habitats vital to many species of birds. When wolves recolonize areas, they induce vegetative changes, allowing for the return of beaver and migrating birds previously driven out of denuded habitats. Predation by wolves also removes animals that are weaker genetically or harbor sicknesses.

  As selective predators, wolves provide a protective gauntlet that can help slow the spread and prevalence of Chronic Wasting Disease (CWD) - the ultra-lethal degenerative neurological illness now invading cervid populations and decimating wildlife-rich ecosystems across the American landscape.

What will be the impact on NOAA of recent cuts to its staff and funding?

- Slashing NOAA's budget may seem like a quick way to save money, but the long-term consequences are serious. These cuts undermine critical scientific research, disrupt wildlife monitoring, and threaten industries like farming, fishing, and hunting that depend on healthy ecosystems. NOAA's work directly supports farmers, fishers, and rural economies with data that informs weather forecasting, fish stock management, and climate resilience. Without adequate funding and staffing, that science stalls and uncertainty increases. Yes, fiscal responsibility matters. But gutting agencies like NOAA risks the health of our environment and our local economies. With proper funding and staffing, NOAA can deliver smart, bipartisan solutions that protect natural resources and ensure taxpayer dollars are used effectively.

Why do we need federal biologists as well as state biologists to sensibly implement the ESA?

- Collaboration between federal and state biologists is critical for effectively implementing the ESA. Many endangered species occupy large habitats spanning multiple states. Federal biologists can develop a comprehensive, ecosystem-wide approach that accounts for the entire ecosystem that endangered and threatened species depend on. In turn, state biologists can provide expertise on local biota necessary for efficiently implementing tailored conservation efforts in alignment with federal plans.

  Currently, Idaho, Montana, and Wyoming have vastly different wolf management plans with different hunting regulations – this can be problematic as wolves are an extremely mobile species that do not abide by state boundaries. Inconsistent management plans can lead to disruptions in genetic connectivity and dispersal within the Northern Rocky Mountain Distinct Population Segment. These problems could be entirely avoided if the states worked collaboratively on one management plan.

What are some of the benefits of having wolves on the landscape, and do you think these benefits can be achieved while also taking care of ranchers' livelihoods?

- Wolves provide positive impacts to both the environment and the economy.

  Wolves play a key role in keeping ecosystems healthy. They help manage prey populations, prevent overgrazing of critical habitat by ungulates, and limit the spread of disease by targeting sick animals. One example is chronic wasting disease, which is spreading rapidly through deer populations in parts of the country. Wolves have been shown to reduce the spread of chronic wasting disease in deer populations by removing infected individuals early.

  There is a major economic value of having wolves on the landscape. NPS estimates that wolf watchers bring $35M in tourism dollars to the greater Yellowstone area annually. Moreover, a 2013 NPS report shows that 3,188,030 visitors to Yellowstone National Park that year spent almost $382 million in the surrounding communities. That spending supported 5,300 jobs in the area.

  Research shows that wolves improve human safety by reducing car accidents with deer. Wolves influence the way that deer utilize their environment, making

them more cautious of areas where wolves tend to hunt, including corridors like roadways. A study found that wolf presence reduced deer collisions by 24%, saving about $10.9M per year in Wisconsin alone.

Wolves and ranchers can thrive on the same landscape, and there are already many ranches that do so. The best available science tells us that non-lethal methods – livestock guardian dogs, electric fencing, range riding, fladry, and carcass management – are the best way to protect livestock from wolves. The Blackfoot Challenge is a great example of a ranching community that has learned how to live with a host of carnivores, from wolves to grizzly bears. It’s not a question of either wolves or ranching, we can have both. Science allows us to plan for both.