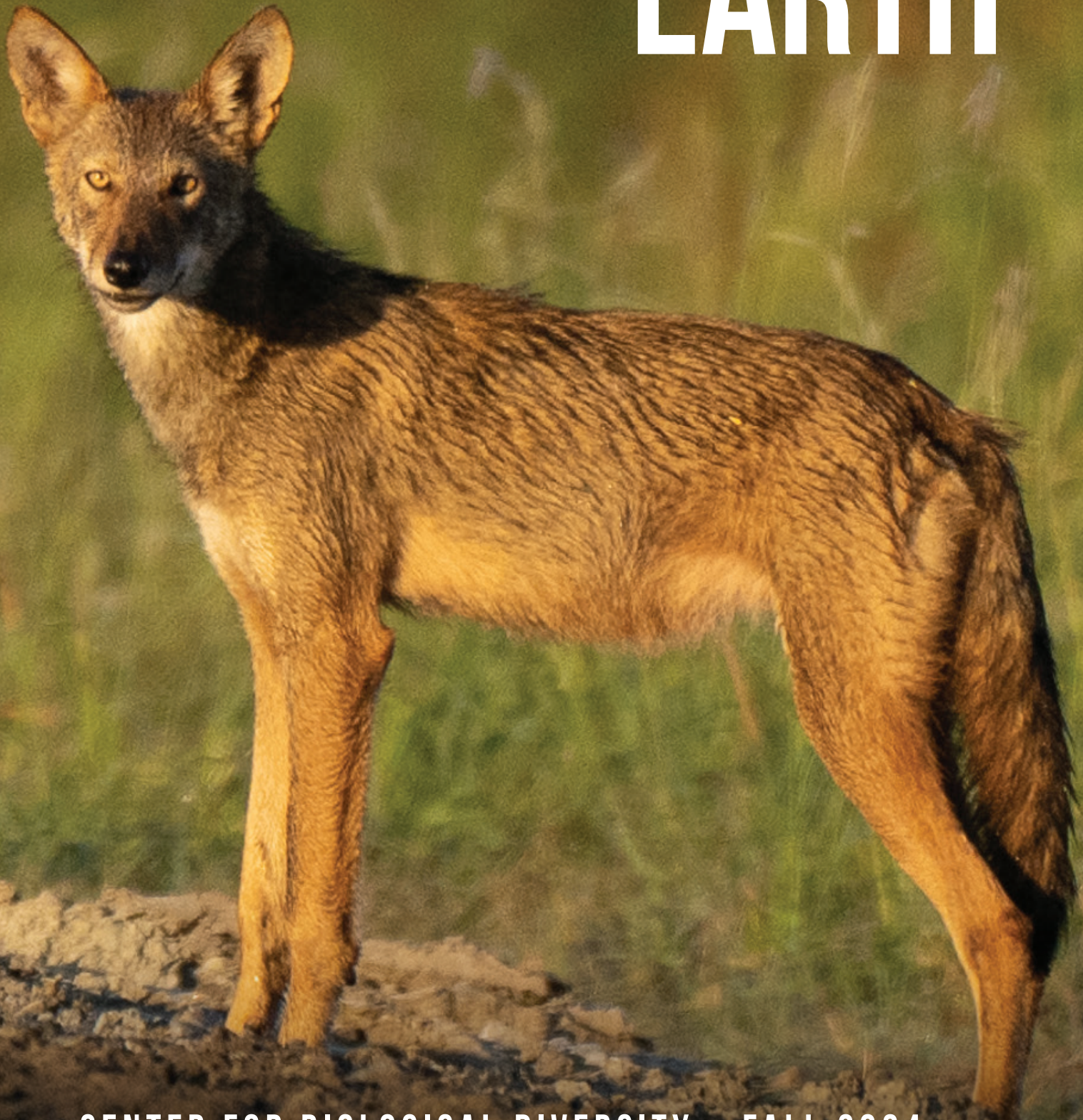


# ENDANGERED EARTH



CENTER FOR BIOLOGICAL DIVERSITY • FALL 2024



# SAVING AMERICA'S RAREST WOLVES

## A WOLF NAMED HOPE

By Will Harlan



Red wolves are the most endangered wolves in the world — fewer than 20 remain in the wild. One of them is named Hope, among very few breeding females still clinging to survival. Like all red wolves, she and her breeding partner mate for life and raise their young together. Their den is nestled in the swamp forests of eastern North Carolina, the only place on the planet where these wolves still wander.

Red wolves once roamed across most of eastern North America from Texas to New York, but by 1960 they had been hunted nearly to extinction. They were rescued by the Endangered Species Act, which established a captive-breeding program and reintroduced them in eastern North Carolina. Their wild population grew to 120 wolves just a decade ago. Unfortunately the Red Wolf Recovery Program was halted in 2015, and the population crashed.

Hope has saved her species: She gave birth to 11 pups in two years, which gave red wolves a fighting chance at recovery. Around the same time, legal action by conservation groups led to a reinvigorated Red Wolf Recovery Program. Since 2022 the population has been increasing, thanks to Hope and her offspring.

Then tragedy struck. Last fall Hope's breeding partner was killed in a vehicle collision along Highway 64 — an increasingly popular tourist highway to the Outer Banks beaches that runs through the heart of red wolf territory.

One of Hope's sons stepped up to help her feed and protect the pups. Six months later he was killed too — along the same stretch of highway as his father. In Idaho contract killers receive thousands of taxpayer dollars to shoot wolves from aircraft, even gunning down wolves on federal national forests. With the support of more than 30 other conservation groups, we filed a petition with the Forest Service asking for a ban on such "predator control" measures.

Five red wolves have been killed in the past 15 months, most along or near Highway 64. Vehicle strikes are now their leading cause of mortality.

The loss of even one red wolf to a vehicle collision has ripple effects across the entire remaining population. Earlier this year one of Hope's daughters — a 2-year-old named Chance — gave birth to five pups of her own. Chance's breeding partner was a captive-bred male named 2444M who had recently been released into the wild. The pair had established a den and foraging grounds, and the pups were thriving. Then 2444M was killed in a vehicle collision along Highway 64. Chance — a first-time, single mom — was unable to feed and care for the pups on her own. This summer, all five died.

Fortunately there's a solution within reach: wildlife crossings. The Center for Biological Diversity is leading a campaign to build wildlife crossings along Highway 64. An anonymous donor has pledged a \$2 million match for red wolf wildlife crossings, and our campaign has already raised \$1 million. Meeting the campaign's fundraising goal of \$2 million is critical to securing federal funding to build the wildlife crossings as soon as next year.

Wildlife crossings along Highway 64 would also benefit more than two dozen other species, including black bears, bobcats, spotted turtles and river otters.

The crossings will save human lives as well. Wildlife collisions kill more than 200 people in the United States every year and cause \$10 billion in damages. Wildlife crossings have been shown to reduce vehicle collisions by 97%. They make roads safer for people and wildlife, and they can save red wolves from extinction.

Although Hope lost her breeding partner and juvenile son to vehicle strikes, she has paired with a newly released captive-bred male. Earlier this year she gave birth to seven pups. For the last red wolves fighting for survival, hope is still alive.

## HELP RED WOLVES

THE WILDLIFE CROSSING FUNDRAISING DEADLINE HAS BEEN EXTENDED TO OCT. 31.  
DONATIONS TO THE MATCHING FUND CAN BE MADE AT [SAVEREDWOLVES.ORG](https://www.saveredwolves.org) OR BY  
CONTACTING GRETCHEN MAIS AT [GMAIS@BIOLOGICALDIVERSITY.ORG](mailto:gmais@biologicaldiversity.org) OR (520) 345-5733.

Will Harlan is the Center's  
Southeast director.





# DOCUMENTING DESTRUCTION

## FIELD WORK FINDS WIDESPREAD CATTLE DAMAGE IN WILDLIFE HABITAT

By Chris Bugbee

Sometimes there's no substitute for going out and seeing something for yourself. When western yellow-billed cuckoos were protected under the Endangered Species Act in 2014, we knew we'd have to keep a close eye on one of the key threats to their survival: cows mucking through some of their most important river and stream habitats in the Southwest.

After years of litigation, the U.S. Fish and Wildlife Service designated critical habitat for them in 2021 — 55,550 acres of which overlap with public grazing allotments in Arizona and New Mexico.

Between 2021 and 2023, field biologists from the Center painstakingly surveyed 70% of those lands before or during cuckoo breeding season. We found moderate to significant damage on 80% of the acres surveyed, which is 57% of the rare bird's critical habitat in public grazing allotments in Arizona and New Mexico.

We routinely documented herds concentrated around streams and riparian zones within protected habitats, often leaving bare, denuded ground, destroyed vegetation and streambanks, and polluted, feces-laden water. In many instances cattle were observed damaging important and protected areas illegally and/or in violation of permits.

As the Southwest experiences the worst drought in 1,200 years, the disappointing truth is that federal land management agencies still don't prioritize conservation of water and wildlife. Instead, arid lands are used for growing beef cattle for private profit.

Beef production is a paramount stressor in arid lands. Cattle herds cause irreversible changes in stream hydrology, plant communities and watershed function, resulting in wholesale degradation of rare ecosystems. In the Southwest grazing is implicated in numerous species declines and is recognized by the Fish and Wildlife Service as a central threat to many imperiled species.

For several years, we've had teams of people in the field documenting the damage cattle are doing in the region, including habitat for a host of struggling species. We've walked hundreds of miles, taken thousands of photos, and created a robust set of data that plays a crucial role in our litigation, policy work, and holding government agencies accountable for protecting wildlife.

The stakes couldn't be higher as the climate and extinction crises worsen. If we're going to save what's wild, we have to know what's happening on the ground — and make sure decision-makers do what's right by our wildlife.



Chris Bugbee is a field ecologist and Southwest conservation advocate

# HAPPY AS A (GIANT) CLAM?

## AFTER STEEP DECLINES, SIX GIANT CLAMS PROPOSED FOR PROTECTION

By Lauren Parker

Beaches or mountains? That's my favorite clichéd outdoor question. I'm a beach person — the ocean has always been a place of beauty and wonder as well as home to the species I love most.

So when I was first introduced to giant clams, I fell for them right away. Some have shells more than 4 feet long and weigh nearly 500 pounds. They're exuberantly colorful and can live for decades. What's not to love?

Lately, though, they've been struggling. More and more are being harvested for their meat or as part of the shell trade. In the Red Sea, giant clams have declined by more than 95% from their historical abundance in the 1980s and 1990s. Giant clams have suffered similar rates of decline throughout the Indo-Pacific region and have completely disappeared in a few places. Most countries have laws prohibiting their commercial exploitation, but the international shell trade continues, as does subsistence harvest.

Giant clams are often reef dwellers and play an important role in those fragile reef ecosystems. That also means they're vulnerable to threats from climate change and water pollution. The continued loss of coral reefs could decrease the ability of young giant clams to find suitable hard-surface habitat on which to grow.

In 2016 Center member Dr. Dwayne Meadows — a marine scientist who was working for NOAA Fisheries at the time — submitted a petition, as a private citizen, to protect several giant clams under the Endangered Species Act. When the NOAA Fisheries failed to move quickly, we filed a motion of intent to sue in December 2023.

Happily, this summer the agency proposed to protect six giant clam species: porcelain or China clam, smooth giant clam, true giant clam, devil or tevoru clam, horse's hoof, and Red Sea giant clam. Three of the giant clams proposed for protection occur in the United States — horse's hoof, smooth giant clam and true giant clam — but the NOAA Fisheries has not identified any critical habitat areas.

We're hopeful that protection under the Act will save these clams from overexploitation and get them the help they desperately need. Any assistance given to these giants of the sea will surely help others around them, including coral reefs.



Lauren Parker is a staff attorney in the Climate Law Institute.





# SAVING GRACE

## OUR WORK TO SAVE RARE BUTTERFLIES

### ISLAND MARBLE BUTTERFLY

**STATUS:** These white and green butterflies with marbled hind wings, thought extinct for 90 years, reappeared in 1998 in Washington's San Juan Islands. **OUR WORK:** With just a few left, we petitioned to protect the species in 2002 and fought to save it for years. Finally in 2020, it was protected under the Endangered Species Act, along with 812 acres of protected habitat.



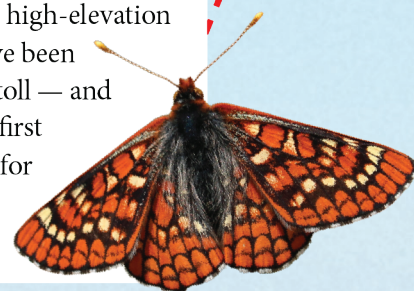
### HERMES COPPER BUTTERFLY

**STATUS:** These small, speckled butterflies in Southern California had long been threatened by creeping sprawl and wildfires. In 2003, 19 of their remaining population were destroyed by fires, leaving them even more vulnerable to extinction. **OUR WORK:** We filed petitions to protect these San Diego butterflies in 1991 and 2004. We had to sue the government three times before they were finally protected under the Endangered Species Act in 2021.



### SACRAMENTO MOUNTAINS CHECKERSPOT BUTTERFLY

**STATUS:** These stunning orange and brown butterflies live only in high-elevation meadows in southern New Mexico. Most of their populations have been wiped out — grazing, sprawl and motorized vehicles have taken a toll — and just 23 individuals were detected in 2021 surveys. **OUR WORK:** We first petitioned to protect them in 1999 and spent two decades fighting for progress. The government finally relented and offered lifesaving protection in 2023.



### BLEACHED SANDHILL SKIPPER BUTTERFLY

**STATUS:** These extremely rare butterflies live in just two of Nevada's alkali wetlands. Water diversions for agriculture have dried up one of their habitats and the other is threatened by a geothermal energy project. **OUR WORK:** We filed a petition for Endangered Species Act protection in 2022, and the government now says listing may be warranted. We hope to know more soon.



### DAKOTA SKIPPER BUTTERFLY

**STATUS:** These small butterflies with hooked antennae and thick, muscular bodies have lost nearly two-thirds of their original range due to loss of native prairie habitat. They are extirpated in Iowa and Illinois and are currently found only in the eastern half of North Dakota, northeastern South Dakota and western Minnesota. **OUR WORK:** The skipper was first identified as needing help in 1978. It was protected under the Endangered Species Act in 2014 following a groundbreaking settlement secured by the Center. Nearly 20,000 acres of its habitat were protected the following year.



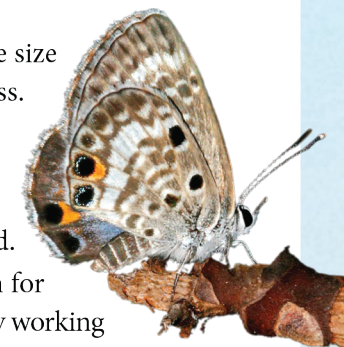
### FLORIDA LEAFWING

**STATUS:** This beautiful butterfly, which looks like a dead leaf when it's resting, was once found in pine rockland habitat but has lost much of its habitat. Today it's found only in Everglades National Park. **OUR WORK:** In 2014, we won Endangered Species Act protection for this butterfly, along with more than 10,000 acres of habitat.



### MIAMI BLUE BUTTERFLY

**STATUS:** Although brightly colored, it's only the size of a human's thumbnail, so it can be easy to miss. It once occurred across coastal Florida but has since disappeared from 99% of its range. It became one of the rarest insects in the United States, dwindling to fewer than 100 in the wild. **OUR WORK:** We secured emergency protection for this butterfly in 2011, and it has since been slowly working toward recovery with the benefit of recent reintroductions.





# HELLBENT ON SAVING HELLBENDERS

## NORTH AMERICA'S LARGEST SALAMANDERS STILL AWAITING HELP

By Tierra Curry

When 19th century explorers in the American East encountered 2-foot-long, 5-pound creatures lurking under boulders in cold rivers, they were at a loss as to what they might be. Debating on whether the slippery beasts were fish, reptiles, or amphibians, they settled on “mountain alligators.” Yet rather than being in awe of the animals’ exquisite adaptations for life on river bottoms, they described them as repulsive and compared their swimming motion to the “writhing of souls in hell.”

Hellbenders have come a long way in terms of public perception and are now sentinels for clean rivers and icons of the wild. With flattened bodies, rudder-shaped tails, grippy toes, and rippled skinfolds for absorbing oxygen, hellbenders blend in perfectly with river rocks. Living fossils, they have survived unchanged for millennia.

But without intervention, they will not survive us.

Dams and pollution have wiped out 40% of hellbender populations, and another 40% live in extinction debt, meaning older individuals survive but cannot successfully reproduce. Once they were found in 15 states from New York to Georgia, yet now only 35 populations are known to be stable and recruiting.

The Center submitted a scientific and legal petition seeking Endangered Species Act protection for hellbenders in 2009. Ten years later the U.S. Fish and Wildlife Service granted protection only to hellbenders in Missouri, leaving animals in the rest of their range high and dry. In 2023 we won a court case challenging that broader denial, and hellbenders are once more under consideration for protection.

New science shows that the critters formerly known as “eastern hellbenders” are likely four distinct species, with each of the major rivers in their range — the Kanawha, Missouri, Ohio, and Tennessee — hosting separate lineages. This means that each of the new species is even more endangered and in need of protection.

The decision on whether to protect hellbenders will be issued in December. You can find an action alert on our hellbender webpage to urge officials to choose the right side of history and protect these wonderful ancient beings — and that protection would safeguard thousands of other species that rely on healthy rivers, too. Including us.



Tierra Curry is a senior scientist and co-director of the Center's Endangered Species program.



# IN THE CROSSHAIRS AGAIN

## A BAN ON U.S. TROPHY IMPORTS COULD HELP SAVE FAMED ELEPHANTS

By Tanya Sanerib

Elephants linked to Kenya's Amboseli National Park are among the most famous and well studied in the world. The population, which spans the Kenya-Tanzania border, includes Echo, Craig and other globally known members of the group.

For almost a quarter-century, they were safe from being shot and taxidermized for trophies. That changed in the fall of 2023, when new leaseholders took over hunting areas. Since then five mature males have been shot in Tanzania, including several “super tuskers” with tusks weighing over 100 pounds.

Even though most of the Amboseli elephants have been identified and named by scientists, only one of those killed has been identified — an elephant named Gilgil. That's because the trophy hunters have stopped posting about their exploits and are burning the elephants' bodies to hide their identities.

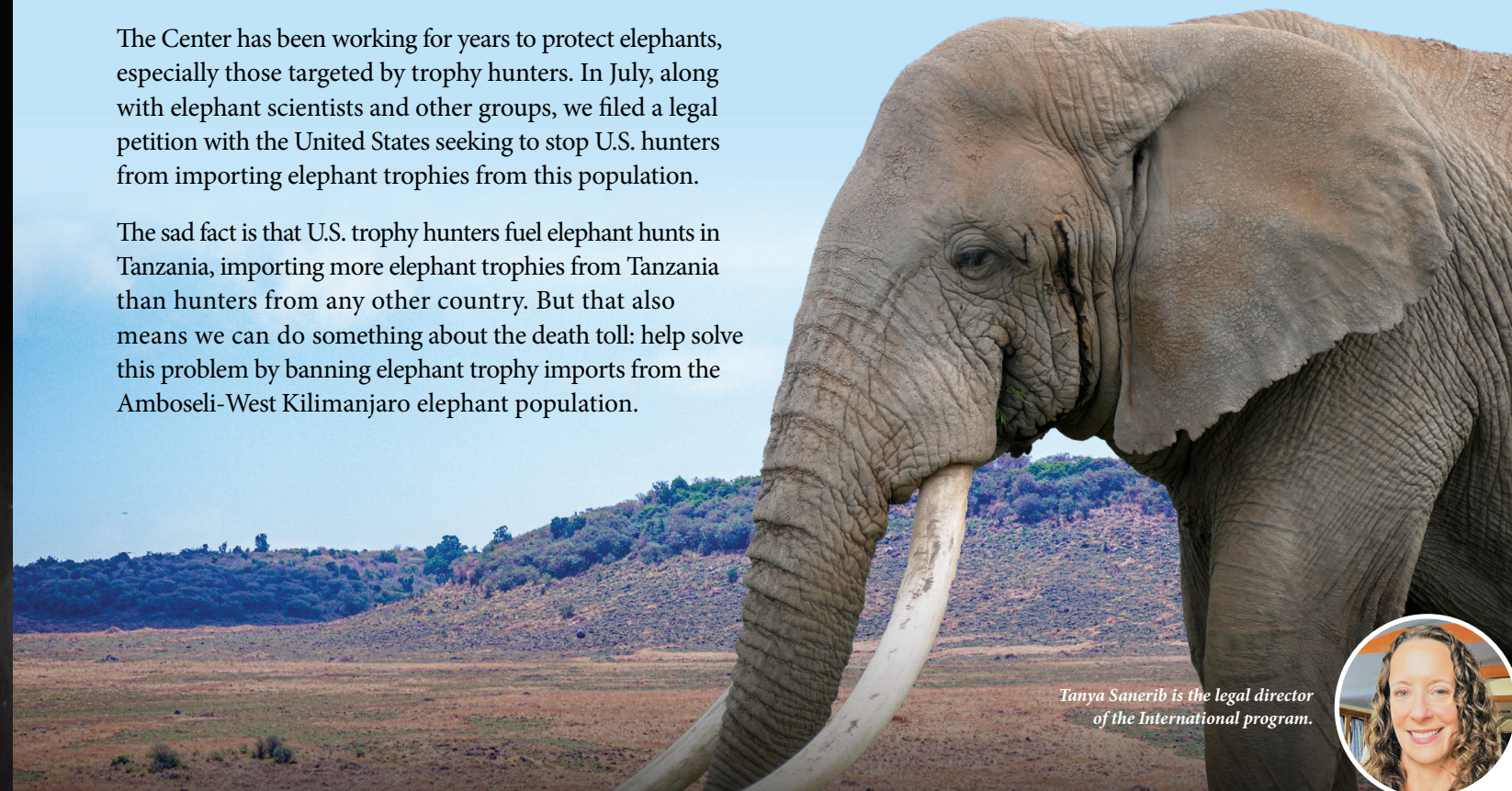
The Center has been working for years to protect elephants, especially those targeted by trophy hunters. In July, along with elephant scientists and other groups, we filed a legal petition with the United States seeking to stop U.S. hunters from importing elephant trophies from this population.

The sad fact is that U.S. trophy hunters fuel elephant hunts in Tanzania, importing more elephant trophies from Tanzania than hunters from any other country. But that also means we can do something about the death toll: help solve this problem by banning elephant trophy imports from the Amboseli-West Kilimanjaro elephant population.

Decades of research into these elephants by Cynthia Moss, Joyce Poole and other scientists has vastly expanded our understanding of these remarkable animals and changed how they're managed and conserved. Thanks to this long-term research, we know much more than we used to about their mating behaviors and social structures — for instance, that these elephants have names for one another.

It's disheartening to see these incredible animals being killed for decor and suffering rippling through their communities. We're losing globally unique “super tusk” genes, but those mature males are also important leaders, keeping younger males in check and teaching them crucial behaviors.

A trophy import ban, and permanent protection for Amboseli elephants, will ensure that these animals' unique traits and important contributions to science will endure long into the future.



Tanya Sanerib is the legal director of the International program.



# WHITE-TAILED PTARMIGANS

## PROTECTED UNDER ENDANGERED SPECIES ACT

In response to a petition and litigation by the Center, the U.S. Fish and Wildlife Service has finally protected Mt. Rainier white-tailed ptarmigans under the Endangered Species Act.

These ptarmigans, a type of grouse, live year-round above the tree line in the Cascades, from southern British Columbia to Mt. Adams in southwest Washington. In winter they rely on dry, fluffy snow to bury themselves and stay warm — but climate change is resulting in more rain-on-snow events that create hard crusts unsuitable for the birds. In summer, ptarmigans prefer wet meadows created by melting snowfields and glaciers that are rapidly disappearing.

The tree line is also moving up and threatening to eliminate the birds’ meadows altogether. Ptarmigans are poorly adapted to warm temperatures, showing stress above just 70 degrees Fahrenheit.

The Center first petitioned for their protection in 2010. It’s taken the Service 14 years to provide protection, when under the law it should have taken just two.

The smallest bird in the grouse family, white-tailed ptarmigans are one of the few animals that live on alpine mountaintops throughout their entire life. They’re adapted, from head to toe, to thrive in a frigid climate — from feathered, snowshoe-like talons to their seasonally changing plumage to their remarkable ability to gain body mass during harsh winters. But as hotter temperatures sneak up the mountainsides, pushing the tree line — and the ptarmigans — to ever-higher elevations, there may be no more room to rise in the near future.

The ptarmigans also serve as an important warning about the costs of the climate crisis, including losing the snowpack that keeps the region’s streams cool and flowing throughout the summer.

The next step, we hope, is safeguarding this bird’s most important habitat. That’s vital because we know that species with protected habitat are twice as likely to be recovering as those without.



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# FROM THE DIRECTOR:

## REMARKABLE PLACES

The Okefenokee is the wild heart of the Southeast. Safeguarding one of the world’s largest intact freshwater ecosystems, the Okefenokee National Wildlife Refuge is a place of wonder, from the ethereal beauty of Spanish moss draped over cypress bowers to the hulking forms of massive alligators sliding over mud banks and snapping turtles gliding through the tea-brown water.

But this vast swamp’s cypress sanctuaries and longleaf pine uplands are threatened by plans to strip-mine for titanium dioxide and other minerals not even 3 miles from the refuge’s border. The mine would suck 1.4 million gallons of water from the aquifer beneath the swamp.

The Center has been fighting to save this incredible place for years — a fight that continues today.

We know that curbing the loss of animals and plants also means protecting places, large and small. In the Southeast that includes the Okefenokee in Georgia and pine rocklands near Miami. Pine rocklands are one of the rarest habitats on Earth: Just 3% of their historic extent remains. They’re home to gopher tortoises, indigo snakes, and some of the last Miami tiger beetles.

In New Mexico’s Permian Basin, now one of the largest oilfields in the world, production has increased nearly tenfold since 2010, leading to more air, water and climate pollution — not to mention threats to endangered species like recently protected dunes sagebrush lizards. We’re ramping up our work there to make sure the diversity of life survives this brutal onslaught.

Ash Meadows, where we’ve fought lithium mining, is a lush oasis in the Mojave Desert where dozens of springs form expansive wetlands. The wildlife refuge harbors 25 species of fish, plants, insects and snails that are found nowhere else on Earth, giving it one of the highest concentrations of endemic species in North America.

All of these places, and more, are locations where the Center has staff laser-focused on using science, law, political muscle and grassroots organizing to ensure a better future for all who live there. It’s vital, lifesaving work, and I’m grateful for your support in protecting these remarkable places with us.



A handwritten signature in black ink, reading "Kieran Suckling".

Kieran Suckling  
Executive Director







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**T**he Center for Biological Diversity's decades-long history is unmatched: We've secured protections for more than 750 species and more than half a billion acres of wildlife habitat. Help us continue this extraordinary legacy by joining the Owls Club.

By leaving a legacy gift through a bequest or making the Center a beneficiary of your retirement plan or other estate plan, you'll be supporting the fight to save endangered wildlife for generations to come. To learn more about your legacy giving options, please call us: (646) 770-7206 or email [owlsclub@biologicaldiversity.org](mailto:owlsclub@biologicaldiversity.org)

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## ENDANGERED

# EARTH

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