



SPOTLIGHT

Celebrating 50 Years of the ESA

The Endangered Species Act was signed into law in December 1973 to prevent the extinction of wildlife both at home and abroad. Fifty years later, it remains one of the strongest and most effective conservation laws in the world. Yet today, as its importance becomes ever more apparent, attempts to hobble the ESA are on the rise in Congress.

In the 1960s, AWI was one of the few organizations campaigning for comprehensive protections for critically imperiled species. An initial victory came with passage of the 1966 Endangered Species Preservation Act, the first federal legislation of its kind. In 1969, AWI's founder, Christine Stevens, testified before a House subcommittee in support of amendments that added protections for species outside

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the United States, among other provisions, and spoke of the cruelty and threat of the exotic pet trade.

That 1966 law was a stepping stone on the path to passage of the ESA, which greatly expanded protections for at-risk species and habitat and set our nation on a bold new course. In the years since, AWI's endangered species advocacy on Capitol Hill has often focused on strengthening ESA implementation and enforcement through more funding and personnel. Testifying before a House subcommittee in 1976, Christine stated, "We are living in the most dangerous era the world has yet seen for the extinction of species. ... A first-class endangered species staff is a necessity in order to do the job that cries out to be done."

On the ESA's golden anniversary, we dedicate this edition of the AWI Quarterly to celebrating this remarkable law. In our feature article on page 13 and in pieces throughout this issue, learn about the inner workings of the ESA, what AWI is doing to save endangered species, and how you can help defend the ESA and the many animals under its protection.

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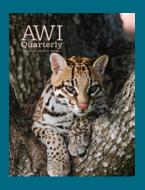
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ABOUT THE COVER

Habitat loss and hunting nearly eradicated the US population of ocelots. Today, ocelots—like this one on a private refuge in Texas—are protected under the Endangered Species Act. In 2017, after USDA Wildlife Services activities in Texas and Arizona threatened ocelots, a lawsuit brought by AWI and allies ensured implementation of ESA-mandated measures to mitigate harm. On the ESA's 50th anniversary, this issue of the AWI Quarterly includes a number of examples of the ESA in action. To learn more about how this landmark law operates to keep vulnerable species from disappearing, turn to page 13. Photograph by Rolf Nussbaumer/NPL/Minden Pictures.

ISSN 1071-1384 (print) ISSN 1930-5109 (online) Tax ID# 13-5655952 · CFC# 10474 Millions of donkeys suffer and die each year to produce ejiao, a gelatin used in cosmetics and traditional Chinese medicines.

ENDING ENGAGEMENT IN CRUEL EJIAO TRADE

In October, Rep. Don Beyer (D-VA) reintroduced the Ejiao Act (HR 6021) to protect donkeys from a burgeoning global trade that has claimed millions of these animals' lives and resulted in terrible suffering. Ejiao (pronounced "eh-gee-yow") is a gelatin derived from boiled donkey hides that is used in cosmetics and traditional Chinese medicines. (See AWI Quarterly, summer 2022.) Although many Americans are unaware of this industry and the immense harm it inflicts on the animals and the communities around the world that rely on donkeys, the United States is a significant importer of ejiao products—approximately \$12 million annually. The Ejiao Act would ban the sale and trade of ejiao products, as well as trade in live donkeys or hides to produce ejiao.

AG APPROPRIATION BILLS ADDRESS ANIMAL WELFARE

The House appropriations committee and the full Senate have approved spending bills for the US Department of Agriculture, and both include important provisions for animal welfare. The House bill expresses Congress's concern about the mounting evidence that fur farms are "potential vectors for zoonotic diseases," including COVID-19 and bird flu, and about the "lack of directives from USDA to mitigate disease transmission to, from, and within such farms." The committee urges the National



PIXEL-SHOT

Agricultural Statistics Service to "make public the data collected in its annual mink survey" in order to better assess public health risks. The House bill also increases funding to strengthen the USDA's "oversight of imported dogs ... to better protect animal and public health."

The Senate passed its agriculture appropriations bill as part of a three-bill appropriations "minibus" that includes funding for the Protecting Animals With Shelter grant program to assist domestic violence survivors and their pets, and a directive to the Department of Veterans Affairs not to conduct any research involving dogs, cats, or nonhuman primates unless the secretary of veterans affairs "approves such research specifically and in writing pursuant to" certain criteria.

Both the House and Senate agriculture appropriations bills provide funding for Horse Protection Act enforcement and continue to prohibit the USDA from expending funds to inspect horses destined for food, thereby effectively preventing the slaughter of horses for consumption in the United States.

Both bills also address lax Animal Welfare Act enforcement. The House committee report that accompanied the bill encourages the USDA's Animal and Plant Health Inspection Service to "use its full enforcement capabilities under the AWA against chronic violators of the AWA." The Senate report goes further, directing the agency to reform its licensing and enforcement procedures and improve its inspection of licensees and documentation of noncompliances.

The full House defeated its bill, so it will need to be brought back to the floor for another vote. As of this writing, all appropriations bills are a long way from getting signed into law.

THROTTLING SPEED LIMITS IN RIGHT WHALE WATERS

Scientists recently shared a small bit of positive news that the remaining number of critically endangered North Atlantic right whales (NARW) may be slightly higher than previously believed.

The 2021 estimate of 340 individuals was recalculated to 365 due to calf births that year. The 2022 estimate is 356, perhaps indicating a slower rate of decline after a precipitous drop over the prior decade. Even this good news is tinged with a warning however: These new data underscore the urgency of protecting females and their calves from vessel strikes, which pose particular threats to them because of how much time they spend close to the ocean's surface.

Nonetheless, efforts to thwart improvements in the National Oceanic and Atmospheric Administration's vessel speed rule continue. Most recently, the House-passed appropriations bill for the Department of the Interior includes an amendment by Rep. Mike Collins (R-GA) prohibiting any funding to finalize, implement, administer, or enforce NOAA's vessel speed rule. This is on top of legislation introduced earlier (see AWI Quarterly, fall 2023) to prevent NOAA from moving forward with its vessel speed rule improvements until near-realtime monitoring technologies have been deployed. Such technologies are nowhere near ready for use.

To fend off these attacks, AWI has met with dozens of House and Senate offices to ensure they understand the importance of NOAA's proposed rule and have the necessary information to counter false claims raised by the rule's opponents.

Additionally, AWI cohosted a congressional briefing about NOAA's proposed amendments. With staff from over 95 legislators' offices in attendance, speakers emphasized the science behind the proposal, the urgency of finalizing the rule, and the fact that in 50+ years of the Marine Mammal Protection Act, no species has been allowed to go extinct. The speakers urged members of Congress to

support NOAA in continuing this legacy by supporting the proposed rule and blocking efforts to delay or defeat it.

WEAKEN OR WIDEN ESA PROTECTIONS? CONGRESS WEIGHS IN

The Endangered Species Act continues to face attacks in Congress. There are bills to prohibit the listing of species not native to the United States, to allow the government to delist species regardless of recovery status, to delist the gray wolf and grizzly bear specifically, and to prohibit listing of the dunes sagebrush lizard.

The Congressional Review Act (CRA)—which authorizes Congress to overturn rules recently promulgated by federal agencies—has been used to attempt to reinstate the Trump administration's severely limited definition of "habitat" under the ESA and to undo the listing of two lesser prairie-chicken population segments and the uplisting (from threatened to endangered) of the northern long-eared bat. The latter two efforts passed Congress and

were thwarted only by a presidential veto. These "CRA resolutions" are particularly insidious, as the CRA prevents a federal agency from creating another regulation in the future that is "substantially the same" as the voided one—thus it might prove impossible to ever relist these species, even when they are on the verge of extinction.

Conversely, wildlife champions in Congress have introduced bills to enhance species protections. One example is the Extinction Prevention Act (HR 3494/S 1708), sponsored by Rep. Raúl M. Grijalva (D-AZ) and Sen. Richard Blumenthal (D-CT) to provide much-needed funding for some of the most imperiled domestic species, including butterflies, freshwater mussels, and Southwest desert fish. Another is the Saving America's Pollinators Act (HR 4277), sponsored by Reps. Earl Blumenauer (D-OR) and Jim McGovern (D-MA), which would suspend the use of neonicotinoids or any other pesticide potentially harmful to bees and other pollinators absent a science-based determination that they are safe to use.



EVIN

OLAW Oversight Fails to Protect Mice in Research

INSTITUTIONS that receive Public Health Service (PHS) funding and conduct research using live vertebrate animals are required by law to have an Institutional Animal Care and Use Committee (IACUC) that oversees the treatment of those animals and ensures compliance with the law. In a recent article (see AWI Quarterly, summer 2023), we presented a case study illustrating IACUC-approved misuse and mistreatment of rats at Baylor University. Although Baylor's treatment of rodents may be highly questionable, it is the type of conduct that is often unchallenged by IACUCs because "compliant" and "humane" are not synonymous.

What happens, however, when an IACUC's action (or inaction) is not merely permissive of inhumane treatment,

but a dereliction of its own duty under the law? When this happens at PHS-funded institutions, the National Institutes of Health's Office of Laboratory Animal Welfare (OLAW) is supposed to intervene. Here, we present a second case study illustrating the abject failure of this system.

In August 2022, a whistleblower contacted AWI and alleged long-standing animal neglect and deaths at the University of Missouri-Kansas City (UMKC) over the previous 17 months. The whistleblower alleged that on multiple occasions, mice had been found dead—in varying degrees of decomposition or partially eaten by cagemates—in cages with empty water bottles, even though UMKC's IACUC had been repeatedly informed in writing that staff were finding cages with little or no water. Written complaints



to the IACUC also reported cages with no food; cages dirty beyond acceptable levels (causing physical discomfort to the staff and the mice); mice left in wet cages overnight (risking hypothermia); unreported new litters (resulting in severe overcrowding); and inadequate training and staffing. In all this time, UMKC had allegedly failed to take any discernable action to prevent further neglect and deaths.

OLAW relies heavily on mandatory self-reports to support its policy of "enforced self-regulation." Institutions must submit an "Animal Welfare Assurance" attesting to the institution's compliance with PHS Policy. According to OLAW, once it approves the Assurance, "the institution is in a position to regulate itself. ... If the institution fails to self-regulate, the approval of the Assurance may be restricted or withdrawn by OLAW"—the result of which is a loss of funding.

AWI has since discovered that in the prior two years, UMKC had twice reported to OLAW that multiple mice had been found dead in cages with empty water bottles or, in one case, no water bottle at all. UMKC's first self-report stated that the assumed causes of death were dehydration, and the second noted that UMKC's own investigation "found evidence supporting complaints of dirty cages and inadequate water supply for some cages." As mandated by PHS Policy, UMKC provided a plan for corrective action. After both reports, OLAW thanked UMKC for its cooperation and closed the case.

In September 2022, AWI filed a complaint with OLAW regarding the whistleblower's new allegations, making clear that enforced self-regulation had failed at UMKC. We urged OLAW to suspend UMKC's PHS funds and pause the renewal of its Assurance, which was set to expire a few weeks later; conduct an *unannounced* inspection and an independent investigation; and reconstitute the IACUC.

Despite these new allegations of systemic issues resulting in severe, ongoing animal suffering and death after UMKC twice assured OLAW that it had resolved the problems, OLAW's only "intervention" was to email UMKC our letter and ask them to respond. In their response, UMKC admitted that several more mice had died in cages without water, yet claimed in this instance that they "cannot ascribe [these] deaths to lack of water." Notwithstanding earlier admissions regarding dirty cages, UMKC also responded that cage cleanliness was a subjective matter.

In response to this, OLAW observed that UMKC had seemingly failed to report these "reportable noncompliances" at the time they had occurred, and asked UMKC to report them retroactively. UMKC did that, and OLAW again

expressed its appreciation and closed the matter for the third time in approximately two years. And even as this latest case of neglect and noncompliance was ongoing, OLAW renewed UMKC's Assurance.

Sadly, but utterly predictably, more animals have died at UMKC from lack of water in the year since AWI's complaint to OLAW. In May 2023, UMKC self-reported a few such deaths. According to the whistleblower, however, other unreported deaths have also occurred.

Egregious violations spanning over three years, reported to and summarily "resolved" by OLAW each time despite ample evidence that the problem is systemic and ongoing, shows the system is broken. Following the latest self-report, OLAW actually concluded that the "prompt consideration of this matter by UMKC was consistent with the philosophy of institutional self-regulation," that its actions to "resolve the issue and prevent recurrence were appropriate," and that OLAW "appreciate[s] being informed of this matter and find[s] no cause for further action."

OLAW has written that its relationship with labs is "based on trust." Yet when UMKC blatantly violates that trust and fails to uphold a fundamental tenet of enforced self-regulation, OLAW's response is to praise UMKC and put the matter to rest. OLAW is *legally required* to "suspend or revoke" funding after a "reasonable" opportunity for correction if it determines that the entity fails to meet applicable guidelines, yet it refuses to do so.

Mice do not die of dehydration overnight—it takes days. Such outright neglect, and for something as basic as providing water, is cruelty, pure and simple. These egregious and ongoing violations—which affect mice on active research protocols funded by OLAW's own agency—NIH—raise fundamental questions about oversight and compliance with the law at all levels. Effective intervention from OLAW in this case is all the more important because mice bred for use in research are not protected under the Animal Welfare Act. OLAW is all they have—which means they really have nothing.

UMKC has apparently not taken meaningful action to prevent these flagrant animal abuses from continuing. Absent consequences, why would they? This is the failed oversight system that animal researchers repeatedly claim is so effective—even onerous in its demands. Animal welfare laws may look good on paper, but are toothless if not enforced. This case provides a good example of how OLAW—the purported watch dog—is effectively a paper tiger. &

INVESTIGATION **UNCOVERS DISTURBING DETAILS OF NEURALINK MONKEY STUDY**

Elon Musk and his biotech company Neuralink made headlines recently as multiple news organizations reported on requests for the Securities and Exchange Commission to investigate Musk's claim that monkeys who perished in brain implant trials were already terminally ill and did not die "as a result of a Neuralink implant." The study was conducted at the University of California, Davis, a public university.

An investigation by Wired, which includes veterinary records, contradicts Musk's claims. As Wired reported, the investigation uncovered what regulators acknowledge was at least one violation of the Animal Welfare Act in which, at the request of a Neuralink scientist, staff delayed euthanizing a monkey suffering from a "severe neurological defect." An autopsy showed that the experiment "deformed and ruptured her brain," leaving it poking "out of the base of her skull." Employees reported "poor planning and poor procedure," especially early in the study. For more

than a year, UC Davis has fought against disclosing photographs related to Neuralink's work.

Despite these concerns, Neuralink reported in September that it received approval from a review board to begin recruitment for human trials of the implant in quadriplegic and amyotrophic lateral sclerosis (ALS) patients.

HORSESHOE CRABS MAY SEE RELIEF FROM **TOXIN TESTING**

Hundreds of thousands of horseshoe crabs are used for endotoxin testing in the United States each year, bled for their blood's ability to clot in the presence of toxins. An estimated 10 to 30 percent do not survive the procedure, and the reduced population can also impact other species that feed on the crabs' eggs. (See AWI Quarterly, winter 2021 and winter 2022).

A nonanimal alternative, the rFC test, exists and has been recognized as a standard method in the European Pharmacopeia since January 2021.

However, the US Pharmacopeia (USP), which sets such standards in the United States, has not allowed the use of the rFC test without prohibitive conditions. The USP was expected to allow the rFC test in May of 2020 but changed its mind after pressure from industry.

Now, an expert USP committee has proposed a new standard, Chapter 86, that includes additional techniques for bacterial endotoxin testing that use nonanimal reagents, signaling potential relief for horseshoe crabs. The proposed USP chapter includes information on how to incorporate nonanimal products into endotoxin testing.

CARE STANDARDS **CONSIDERED FOR CEPHALOPODS**

Currently, there is no federal oversight of the use of invertebrates in research in the United States. In a welcome move, the National Institutes of Health's Office of Laboratory Animal Welfare (OLAW) has recently proposed guidance for the use in research of cephalopods—a group that includes octopuses, squids, and cuttlefish. Increasing evidence indicates cephalopods are intelligent and do suffer pain, and people are often captivated by anecdotes highlighting their seemingly mischievous nature and astonishing problem-solving abilities.

This would mark the country's first attempt to establish guidelines for the care of invertebrates in research and would better align the United States with other countries that have established minimum care standards for these animals. Issues with enforcement notwithstanding (see page 6), the proposed guidance would set standards for internal oversight by Institutional Animal Care and Use Committees and enforcement by OLAW.





Apply for an AWI Scholarship: Tell What Inspired Your Desire to Help Animals

AWI launched its scholarship program in December 2019. To date, we have provided 50 scholarships totaling \$114,000. Available to graduating high school seniors entering college, the scholarship is intended to help develop future generations of animal welfare champions.

Like many animal advocates, AWI Scholarship recipients often cite specific experiences that influenced and reinforced their commitment to animal welfare. For Katja Erringer, her future goals began to take shape in middle school when she volunteered for a local wildlife rescue caring for orphaned birds. "I got to experience how incredibly intelligent and social they are, but also how fragile," she explains.

Amanda Brown credits growing up with companion animals, as well as a particularly revelatory middle school lesson about bat conservation for inspiring her commitment to wildlife. She says, "I had originally been scared of bats, but learning about their ecological importance made me really fall in love with them. I realized that I wanted to study and conserve bats, and wildlife in general."

As a quiet and reserved child, Tyler Woods was coaxed out of his shell by his family's adopted pup, Marley. When Marley was diagnosed with an esophageal disorder, Tyler began researching the condition and looking for ways to help his beloved companion. His interest in veterinary medicine was piqued and he went on to do volunteer work for a local clinic.

These are just a small sample of the life experiences that have motivated AWI Scholarship recipients to pursue fields of study in college that will prepare them for a career helping animals. Such personal stories are an important means for our scholarship review panel to get to know each applicant.

Do you or a high school senior you know have a similar story? An experience that motivated an animal-centric education and career path? If so, an AWI Scholarship could bring that dream closer to reality. So apply today! Questions? See below, and then visit the scholarship website for more info and access to the online application:

Is there a minimum GPA requirement?

No, but we do need a recommendation letter from someone such as a guidance

counselor or teacher who can vouch for the student's academic strengths. Those selected to receive a scholarship will need to provide proof of acceptance to a school with their chosen major prior to funds being disbursed.

Is this a need-based scholarship?

No, but financial need is considered if it becomes necessary to further refine the number of finalists. Students have an opportunity to address financial barriers within the written portion of the application, as well as the option to upload Student Aid Index (SAI) documentation.

Is there an essay required? Yes. We want to hear about the applicant, their experiences, and their thoughts about animal welfare. Applicants can choose from three essay questions. We recommend selecting the topic that most closely relates to the applicant's lived experience and/or future goals.

When and where can students apply?

Apply online any time before March 16, 2024. The online form allows applicants to save their progress should they need more than one session to complete it. Visit awionline.org/scholarship to get started!

SETTLEMENT SECURES RED WOLF CONSERVATION

or more than a decade, the legal advocacy of AWI and allies has helped ensure the continued existence of red wolves in the wild. This year, that work culminated in a historic settlement with the US Fish and Wildlife Service in which the federal agency firmly recommitted to the conservation and recovery of the world's only wild red wolf population, in eastern North Carolina.

In the settlement, which resolves a lawsuit filed by our coalition in November 2020, the USFWS stated its intention to implement adaptive management strategies, prepare captive wolves for release, reduce human-caused

mortality, and engage with community members and stakeholders. The settlement requires the agency to develop annual plans for release of captive wolves and provide annual briefings regarding coyote management efforts for a period of eight years. The first release plan, developed pursuant to the settlement agreement, anticipates the release of between four and six captive wolves, along with pup fostering (adding captive-born pups to wild-born litters), through June 2024.

The red wolf is the only wolf native solely to this country, earning it the moniker "America's wolf." They once roamed



across the eastern and southcentral United States. After decades of persecution and habitat loss, however, the species was declared extinct in the wild in 1980. Only a small captive population remained.

Section 10(j) of the Endangered Species Act authorizes the USFWS to reintroduce populations of threatened and endangered species within their historic range. This includes red wolves—among the first animals listed as endangered under the law. In 1987, in an effort to revive the species, the USFWS released 12 red wolves from the captive population into a designated Red Wolf Recovery Area in eastern North Carolina, and continued to release wolves thereafter. The reintroduction program proved to be a success—so much so that the USFWS called it a model for predator reintroductions. Between 2002 and 2014, the wild population consistently numbered over 100 wolves.

Recovery efforts faltered, however, in 2015. That year, the USFWS suspended its long-standing and successful practice of releasing captive wolves, stopped sterilizing coyotes in the region to prevent hybridization, and began issuing permits allowing wolves to be killed by landowners. By the end of that year, no more than 75 red wolves remained in the recovery area. By the following year, the population had dropped below 50. By 2019, fewer than 18 were left. That year, for the first time in the reintroduction program's history, no pups were born in the wild—nor any the next year. By the time AWI and allies filed our lawsuit, only seven collared animals remained.

Around 2018, the USFWS asserted that the species' 1995 "10(j) rule" permitted only the initial 1987 release of 12 captive wolves into the wild. This novel interpretation stood in polar opposition to the agency's former expressed understanding of the rule and its practice in the field for over 25 years. We alleged in our lawsuit that this reversal violated the ESA, which requires the USFWS to actively pursue red wolf conservation and recovery, and which obligates all federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any threatened or endangered species. By the USFWS's own admission, its decision to stop releasing captive red wolves jeopardized the species' continued existence. Scientists warned that the agency's recent management practices could lead once again to extinction in the wild by 2024.

The lawsuit also asserted that this novel rule interpretation violated the Administrative Procedure Act because it departed—without adequate explanation—from the agency's past practice of releasing red wolves. Public records showed that the USFWS acknowledged captive releases are vital to

the genetic health and viability of the wild population, and the agency provided no plausible explanation for how it could continue to fulfill its mission of recovering the red wolf without releasing red wolves from captivity.

In January 2021, we won a preliminary injunction ordering the USFWS to draft and execute a plan to resume releasing captive red wolves to bolster the plunging wild population. Specific performance metrics were required to ensure a meaningful number of releases within a timeframe that would restart recovery. Pursuant to this order, the USFWS developed a series of three plans that provided for the release of captive individual adults and family groups and for the resumption of pup fostering. Subsequent releases have pushed the estimated wild population back over 20, and wild litters were born in 2021 and 2022 after a two-year absence.

This is the fourth successful lawsuit AWI and allies have filed since 2012 on behalf of red wolves. The first and second actions, initiated in 2012 and 2013, were brought against the North Carolina Wildlife Resources Commission, challenging its decision to allow coyote hunting in areas occupied by red wolves, which are easily mistaken for coyotes. The 2012 case was resolved in our favor, and the 2013 case resulted in an agreement that banned coyote hunting at night throughout the recovery area and during the day on public lands in the area, and required the issuance of permits to kill coyotes on private lands.

We again sued the USFWS in 2015 for issuing permits that allowed private landowners to kill any red wolf on their land regardless of whether the wolf was causing trouble—and for discontinuing programs vital to maintaining the red wolf population. In 2018, the court held that this violated the ESA and prevented the agency from issuing additional permits to kill red wolves without first demonstrating the wolves are a threat to the safety of humans, livestock, or pets. The court also ruled that the USFWS had failed to administer the red wolf program in furtherance of the purposes of the ESA and was likely to jeopardize the continued existence of the species.

This latest settlement represents a fundamental reset. It signals a durable commitment from the USFWS to recover red wolves in the wild, and a return to a management approach once heralded as a model for reintroduction efforts. Ideally, it will usher in a new era in our red wolf advocacy—a shift from litigation to collaboration and education to ensure that the species recovers and thrives. We hope that with this settlement in place, the howls of America's wolf will be heard on the landscape for generations to come—a lasting legacy of AWI's efforts to protect one of the world's rarest animals. &

SEEKING TO RESTORE ESA REGULATIONS

In June, the Biden administration proposed regulations aimed at restoring Endangered Species Act implementing regulations that were weakened in 2019 under the prior administration. Those rollbacks curtailed protections afforded to threatened species, allowed consideration of economic factors in listing decisions, undermined the critical habitat designation process, and thwarted interagency consultation (provided for in Section 7 of the ESA) regarding development project impacts on imperiled species. The rollbacks sparked outrage, including more than 800,000 public comments, and letters signed by 35 US senators and 105 representatives in the House. Ten states, the District of Columbia, and over 30 tribes also opposed them, and they were successfully challenged in federal court.

In August, AWI joined other organizations in calling on the administration to fully restore the regulations. In our comments, we expressed support for the proposal's restoration of threatened species protections, its confirmation that economic factors should not be considered in listing decisions, and its emphasis on the importance of tribal consultation.

However, we asserted that proposed revisions to many of the 2019 changes to the Section 7 regulations are inadequate. In particular, the proposed revisions could arguably still allow for piecemeal destruction of essential habitat, do not ensure adequate consideration of the full scope of a project's consequences, permit offsite mitigation to compensate for onsite

The poaching of elephants to feed the ivory trade is a topic of continuing concern at CITES Standing Committee meetings. harm to species, and do not fully restore important expert consultation requirements. While the Biden administration's proposed regulations are encouraging, greater steps are needed to protect imperiled species from the increasing threat of habitat loss exacerbated by climate change.

CITES STANDING COMMITTEE WEIGHS ISSUES OF COMPLIANCE

Over 700 delegates met in Geneva for five days beginning in late November to deliberate over a full slate of issues at the 77th meeting of the Standing Committee to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). AWI was represented at the meeting by DJ Schubert and Sue Fisher.

Compliance matters dominated the committee's discussion. It approved several recommendations to suspend trade, maintain trade suspensions, or threaten suspensions against nearly two dozen countries failing to comply with CITES with respect to both trade in specific species (e.g., sharks, tigers, parrots, other birds, and elephants)

and/or broader implementation matters (e.g., inadequate national laws to implement CITES, failing to comply with certain CITES resolutions, or a wholesale failure to comply with CITES).

For the illegal trade in totoaba (the fishing of which is also driving the vaquita porpoise to extinction), the committee directed Mexico to continue to report on implementation of its Compliance Action Plan (see AWI Quarterly, summer 2023) and asked the secretariat to conduct missions to Mexico, the United States, and China to review efforts to combat illegal take and trade.

Other critical issues discussed included the illegal trade in great apes and jaguars, the breeding of tigers in captivity for purported conservation purposes, the trade in elephant ivory and live elephants, the role of CITES in reducing the risk of zoonotic diseases linked to wildlife trade, and illegal trade in sharks and rays.

These and other matters will continue to be discussed intersessionally within various Standing Committee working groups and at the committee's 78th meeting in February 2025.



CHAEL



THE ENDANGERED SPECIES ACT:

Half a Century of Essential Protections

If igh in the clear blue skies over the Grand Canyon, California condors wheel slowly, searching for their next meal. In the shortgrass prairie of Wyoming, the dark eyes of black-footed ferrets peek out from the safety of old prairie dog burrows. Across the woods and marshes of eastern North Carolina, the howls of elusive red wolves declaring their territory pierce the evening air. In the cool, clear waters of Tennessee rivers, small fish called snail darters flit across gravel streambeds in pursuit of prey.

These species may have little in common, but they are bound by a common thread—each still exists because of the Endangered Species Act. December 2023 marks the 50th anniversary of the ESA, a law enacted to stem the ongoing tide of extinction resulting from "economic growth and development untempered by adequate concern and conservation." At the time, bipartisan support for the bill was overwhelming—unanimous passage in the Senate and 96 percent approval in the House of Representatives. President Nixon, who had called on Congress to increase endangered species protections, signed it into law on December 28, 1973. Five decades on, it has been credited with saving 99 percent of listed species from extinction and is hailed as the world's strongest conservation law, one that serves as a global model for the preservation of imperiled wildlife.

MAKING THE LIST

The ESA provides a framework to protect and recover species at risk of extinction, both domestically and abroad, by promoting the conservation of the ecosystems upon which those species depend. The law is implemented by the US Fish and Wildlife Service (USFWS) for terrestrial species and by the National Marine Fisheries Service (NMFS) for marine species. To qualify for ESA protections, a species must first be listed under the law as either "threatened" (likely to become endangered in the foreseeable future) or "endangered" (currently in danger of extinction). The agencies are required to complete a status review at least every five years for each listed species.

A listing evaluation may be initiated by a petition from an individual, organization, or state agency, or through the federal government's own candidate assessment programs. The ESA requires that listing decisions be based solely on the best scientific and commercial data available. By law, a species usually must be listed if it is deemed threatened or endangered due to any of the following five factors:

(1) destruction, modification, or curtailment of habitat or range; (2) overutilization for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms to protect









the species and its habitat; or (5) other natural or manmade factors affecting the species' continued existence.

The ESA currently protects approximately 1,700 domestic and 700 foreign species. Listed US species include the Florida manatee, rusty-patched bumble bee, northern long-eared bat, polar bear, and American crocodile. The list once included the bald eagle. Decades of dedicated effort, however, led to a spectacular recovery for our national symbol, which was delisted in 2007. Foreign species on the list include the scarlet macaw, cheetah, orangutan, pink fairy armadillo, African lion, Panamanian golden frog, and African and Asian elephants.

Unfortunately, hundreds of additional species await listing decisions, and the agencies (particularly the USFWS) have been slow to review candidate species due to chronic underfunding and limited personnel. Reviews take 12 years on average, a decade longer than mandated under the law.

Once a domestic species is listed, the agencies must designate and protect critical habitat, subject to certain exceptions.

Critical habitat consists of areas that contain the physical and biological features essential for the species' conservation, whether or not currently occupied by the species. Three years after the ESA was enacted, Congress expressly recognized that the "ultimate effectiveness of the Endangered Species Act will depend on the designation of critical habitat."

Upon listing of a domestic species, the USFWS or NMFS generally must also draft a recovery plan, which provides federal, state, and tribal agencies, as well as private individuals, with detailed conservation management actions, recovery criteria, and anticipated resource needs. Although the actions delineated in recovery plans are not mandatory, they are used to set management priorities.

PROHIBITING "TAKE"

One of the law's primary protective measures is a prohibition on the "take" of listed species. "Take" means to harass, harm (which includes significantly modifying or degrading habitat), pursue, hunt, shoot, wound, kill, trap, capture, or collect listed animals. The prohibition applies to both private and

government entities. Moreover, every federal agency has a duty to conserve imperiled species, which the ESA explicitly elevates over agencies' primary missions. In furtherance of this duty, no federal agency may authorize, fund, or carry out any action likely to threaten the existence of a listed species or harm its habitat. Potentially harmful agency actions cannot go forward absent consultation with the USFWS or NMFS to ensure that they will not jeopardize the species or cause the destruction or adverse modification of designated critical habitat.

The prohibition on take, however, is not absolute. The USFWS or NMFS can issue permits allowing "incidental take" (described as "unintentional, but not unexpected, taking") of a listed species during an otherwise lawful public or private action, such as building a residential development, drilling for oil and gas, or logging on public lands. In such instances, limited take may be authorized if mitigation measures are implemented.

AWI AND ENDANGERED SPECIES

AWI and our partner organizations have long been involved in efforts to protect listed species. In a settlement of a lawsuit brought by AWI and allies, the USFWS agreed this year to resume efforts to reestablish red wolves in the wild. (See page 10.) We work to save North Atlantic right whales from extinction due to entanglement in fishing gear and ship strikes. We are supporting innovative scientific research and community education efforts to save Hawaiian honeycreepers—songbirds that are quickly disappearing due to non-native, disease-carrying mosquitos, exacerbated by climate change. We also campaign to end trade in live African elephants for public display, and work to ban the import of sport-hunted trophies of ESA-listed species.

We help to get at-risk species listed under the law as well. This year, in response to petitions from AWI and allies, NMFS proposed to list the Atlantic humpback dolphin as endangered and to ban import and export of threatened Banggai cardinalfish. (See page 16.) We successfully opposed a petition last year to remove ESA protections for southern sea otters. In 2018, a petition from AWI and allies resulted in an endangered listing for the Taiwanese white dolphin.

Internationally, we have long participated in meetings of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to prevent unchecked collection and global trade of vulnerable wildlife. In the United States, CITES is implemented through Section 8 of the ESA, which provides for CITES enforcement within this country. For some species, it is important to seek the increased protections afforded by an ESA listing in addition

to the international trade restrictions that accompany a listing on CITES Appendix I or II.

IMPORTANCE OF THE ESA

As we celebrate and honor the 50th anniversary of the ESA, it is important to recognize not only the progress we have achieved in protecting species under this landmark legislation, but also to soberly reflect on the toll humankind continues to take on the planet's biodiversity.

Each species plays a unique and essential role in its ecosystem—the extinction of any is an incalculable and irreplaceable loss. Through habitat destruction, overcollection, and other activities, however, humans are engineering a sudden mass extinction unlike anything in our own species' history. Many species have already been lost, with many more in imminent danger—1 million species globally are at risk of extinction in the next few decades, including 27 percent of the world's mammals, 41 percent of amphibians, 37 percent of sharks and rays, and 21 percent of reptiles.

Extinctions tear at the intricate, interwoven web that sustains life on this planet. Failing to stem the current tide of extinction would be catastrophic. In the text of the ESA, Congress declared that species "so depleted in numbers that they are in danger of or threatened with extinction" are "of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people." In an important decision issued five years after the ESA was enacted, the US Supreme Court held that Congress's intent was to "halt and reverse the trend toward species extinction, whatever the cost"—a stark recognition that the cost of not doing so would be vastly greater.

The ESA is more essential now than ever. Yet, notwithstanding the law's successes, its bipartisan beginnings, and surveys consistently indicating continued support for the law from more than four in five Americans, it has come under increasing political attack in recent years. On Capitol Hill, AWI and allies work to fend off attempts to weaken the ESA, even as we fight to secure sufficient funding to fully realize the law's protective potential. On this monumental anniversary, please join us in sending a message to your members of Congress in support of the ESA and imperiled species at awionline.org/ESA. We have an obligation to protect animals from extinction, for their own sake and for ours. The ESA provides the strongest tool we have to do so. &

Opposite page, clockwise: San Joaquin kit foxes (Banu), Florida manatees (Austin), black-footed ferret (Kerry Hargrove), and piping plover (Harry Collins)—species whose continued existence may depend on protections afforded them under the Endangered Species Act.



The global trade in ornamental fish is a multibillion-dollar business involving the annual global export of around 2 billion fish from 2,500 freshwater and marine species. Many are captured from the wild, often via inhumane or destructive fishing practices (which include dynamiting coral reefs to stun fish for collection). The long-term implications for many targeted species are unknown, but for the individual animals, the trade is deadly—an estimated 98 percent of wild-caught fish die within one year of capture.

The Banggai cardinalfish, a small and iridescent fish with striking spots and black stripes, native only to the Banggai archipelago in Indonesia, is one species whose continued existence in the wild is threatened by the relentless demands of the global ornamental fish trade. First described in 1933, the Banggai cardinalfish did not attract the serious attention of the aquarium trade until the mid-1990s. Since then, however, millions have been snatched out of their wild homes to fill private and public aquariums throughout the world. In the early 2000s, up to 1.4 million cardinalfish were being removed from the archipelago each year, contributing to an estimated 90 percent decline in species abundance and the eradication of some local populations. As the species is largely sedentary, it is unlikely that wild cardinalfish will ever naturally recolonize vacant habitats. To make matters worse, scientists have estimated that up to 80 percent of wild-caught cardinalfish die before they are even exported from Indonesia.

Banggai cardinalfish shelter from predators among the spines of sea urchins, the tentacles of anemones, and the branches of soft corals. Their plight, therefore, is exacerbated by overcollection of these species as well, and the further degradation of coral beds from ocean warming and poor land use practices releasing large amounts of sediments into coastal habitats.

Despite the National Marine Fisheries Service's 2016 listing of the species as threatened under the Endangered Species Act, the United States remains one of the largest markets for Banggai cardinalfish. In 2019, according to government data, over 177,000 cardinalfish were imported, with nearly 99 percent taken from the wild. When a species is listed as endangered under the ESA, there is an automatic prohibition on "take" (which includes collection). When NMFS lists a species as threatened, however, an additional step is required to ban take: publication by the agency of regulations known as a "4(d) rule."

In 2021, after NMFS failed to publish a 4(d) rule for Banggai cardinalfish, AWI, the Center for Biological Diversity, and Defenders of Wildlife petitioned the agency for a rule to ban the import, export, and US sale of the species. In August 2023, NMFS responded by proposing a 4(d) rule that would ban import and export of Banggai cardinalfish, but allow domestic sales of the fish to continue.

Banning import and export is a welcome first step toward stemming the demand for wild specimens of this species. Nevertheless, AWI and colleagues contend that NMFS should strengthen the proposed rule by also banning the sale of Banggai cardinalfish in this country. A domestic market leaves the door open for wild-caught fish to be smuggled into the country for sale. Shutting that door would help ensure the continued wild existence of this diminutive but spectacular fish. &

WHALING SEASON ENDS WITH A LITTLE LESS **BLOOD IN THE WATER**

The 2023 commercial whaling seasons ended with over 800 whales killed, yet fewer than anticipated. Norwegian whalers killed 507 minke whales, falling short of the 1,000 quota. In a shrinking Norwegian fleet, two large vessels have increasingly dominated the hunt. One, which mainly hunts for the Japanese market, was responsible for 220 whale deaths.

Despite serious financial challenges, Japan's factory ship operation killed its full quota of 187 Bryde's whales and 25 sei whales, but the country's coastal whalers took only 82 of a possible 136 minke whales.

In Iceland, a shortened season resulted in 24 fin whales being killed compared to 148 last year. Responding to serious welfare abuses documented in last year's hunt, Iceland's fisheries minister suspended the start of the season for more than two months. It eventually opened with new regulations in place, but welfare violations continued,

prompting the Food and Veterinary Authority to temporarily suspend the permit of one of the two whaling vessels.

DEATH PRECLUDES DELIVERANCE FOR ORCA TOKITAE

For 53 years, the captive orca Tokitae (a.k.a. Toki, Lolita, and Sk'aliCh'elhtenaut) lived in a tiny tank at Miami Seaguarium. She was a Southern Resident orca, a Pacific Northwest population listed as endangered in 2005. (In 2015, that listing was amended to remove the exclusion of captive whales such as Toki.) After the park was sold to The Dolphin Company in March 2022, hope arose that she might finally be moved to a healthier environment—perhaps ultimately to a sea pen in her native waters in the Pacific. Unfortunately, such hope came too late for this redoubtable lady. On August 18, Toki died.

While a summary of the necropsy results has been released, we await the details. This summary outlines

a number of chronic conditions Toki suffered; she simply spent too long in that terrible tank. This makes the pain of losing her, after she hung on for so long and just when her future looked brighter, all the more overwhelming.

Fare thee well, Tokitae—may you have fair winds and following seas.

NMFS NIXES QUICK STEPS TO PROTECT **RICE'S WHALES**

The Rice's whale was initially listed as endangered under the Endangered Species Act in 2019 as a subspecies the Gulf of Mexico Bryde's whale—but was reclassified as a unique species in 2021. Its primary threats include pollution, oil and gas exploration and extraction, ocean noise, entanglement in fishing gear, and vessel strikes. Though fewer than 100 remain, the National Marine Fisheries Service denied a petition in October to establish a mandatory 10-knot speed limit and other vessel-related mitigation measures to protect Rice's whales. NMFS concluded that it first needed time to finalize the critical habitat designation, species recovery plan, and quantitative vessel risk assessment.

Unfortunately, when it comes to saving these whales, time is not a luxury we can afford. On November 15, AWI cosponsored the opening of the Smithsonian Institute's exhibition on the Rice's whale, which features the skeleton of a whale that stranded in Tampa in 2019. That same week, AWI staff attended the Marine Mammal Commission's annual meeting, along with a full-day symposium aimed at raising awareness of America's endangered whales—particularly Rice's whales, North Atlantic right whales, and North Pacific right whales—on the 50th anniversary of the ESA.



Dr. Michael Tillman

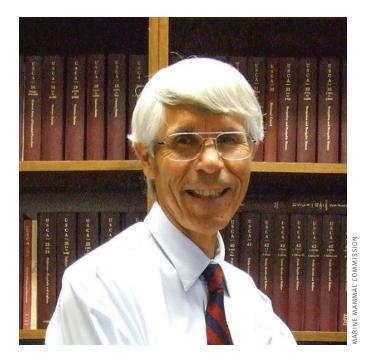
r. Michael Tillman, a long-time advocate for whales and conservation, died in July at the age of 80.

Dr. Tillman was born in Seattle, but his roots extended northward: Through his maternal family, he was a member of the Tlingit Tribe of Southeast Alaska. In 1972, he obtained a PhD from the University of Washington in fisheries science with a focus on marine mammal biology. He took a job with the National Marine Fisheries Service and, in 1974, began representing the US government at the International Whaling Commission, serving as deputy US commissioner (including stints as acting US commissioner) from 1994 until his retirement from NMFS in 2004. He remained active within the IWC and continued to advise the US delegation after his retirement.

Dr. Tillman chaired the IWC's Scientific Committee from 1983 to 1985—a period during which he also served as the first professional director of the International Union for Conservation of Nature's Conservation Monitoring Center. From 2011 through his last IWC meeting in 2018, he chaired the IWC's Aboriginal Subsistence Whaling Working Group and worked with Native Alaskans and other subsistence whalers to provide for their subsistence needs while conserving whale populations.

In 2010, President Obama appointed Dr. Tillman to serve as one of three commissioners of the Marine Mammal Commission, an independent government agency providing oversight of marine mammal conservation policies and programs conducted by federal agencies. He served on this commission until 2022. Throughout his long and storied career, Dr. Tillman promoted opportunities for greater participation of women and minorities in field research and as government representatives at international meetings on global environmental issues.

In 1951, with permission from Dr. Albert Schweitzer, AWI created the Schweitzer Medal to honor outstanding



achievement in the advancement of animal welfare. In 1994, the Schweitzer Medal went to Dr. Tillman in celebration of his whale protection work at the IWC—in particular, his pivotal role at the 1993 IWC meeting in Kyoto, Japan, in defeating a concerted effort by pro-whaling nations to end the moratorium on commercial whaling, in effect for only seven years at that time. The moratorium remains in place today, thanks in no small part to Dr. Tillman's early defense.

At the ceremony, the medal was presented by acclaimed actor Jason Robards (a staunch supporter of environmental causes), who praised Dr. Tillman's leadership, scientific acumen, and "very firm grasp of the vagaries of the IWC and its Scientific Committee."

In his acceptance remarks, Dr. Tillman referenced a familiar saying—where there's a will, there's a way—but expressed his preference for an older, more resonate version: If the will is strong enough, the means will present itself. He noted that those who passed the whaling moratorium had the clarity and the will to pursue this daunting goal for more than a decade. He stated that his own will to pursue a particular course of action emerged from "a strategic sense of the kind of world I'd like to live in, and the one I'd like to leave behind."

AWI and his legion of friends and colleagues at the IWC and beyond are grateful for Dr. Tillman's indomitable will, and the five decades he spent leading the way to greater protections for whales and other marine mammals. &

Cynthia E. Wilson

I ongtime AWI board member Cynthia Wilson died in August at the age of 83. Cynthia served on AWI's board for over 50 years, chairing the board for the final 20 of those years following the passing of AWI's founder, Christine Stevens. in 2002.

Cynthia was born in Syracuse, New York, and grew up with a menagerie of animals—the beginning of a lifelong interest in them. (As an adult, her menagerie consisted entirely of cats she had rescued.) She initially stayed in upstate New York to attend St. Lawrence University, where she graduated magna cum laude with a bachelor's degree in English, before heading to the University of Texas for a master's in journalism. She had hoped to be a travel writer for *Time* magazine. At the time, however, the magazine required women to pass a typing test—which Cynthia kept failing.

In the mid-1960s, Cynthia was working at Columbia Records when she received a fortuitous phone call from the White House. Lady Bird Johnson was looking for someone skilled at writing letters. Cynthia was hired and joined Lady Bird's personal staff, where she had a broad range of responsibilities, including work on the First Lady's national beautification program.

At the end of the Johnson administration, Cynthia joined the National Audubon Society staff as their first Washington representative. During eight years with Audubon, she wrote and presented testimony, lobbied congressional and agency staff, and worked with the organization's regional offices and local chapters to develop and implement strategy focusing on wildlife, public lands, and pesticide issues. In Washington, Cynthia befriended Christine after they both testified at a number of congressional hearings on wildlife. In 1971, Christine invited Cynthia to join AWI's board; a few years later, she was appointed vice president.

At the beginning of the Carter administration, Cynthia was asked to serve as an assistant to Interior Secretary Cecil D. Andrus. She worked on environmental and wildlife issues, including the Alaska National Interest Lands Conservation Act and other legislation that resulted in the creation of 103 million acres of parks and refuges in Alaska. In addition, she served as the secretary's liaison with Congress, other federal and state agencies, White House staff, Native

American tribes, environmental and animal welfare organizations, and the press.

Following her time in the Carter administration, Cynthia held a number of positions in the private sector, including principal resource person for a law firm representing an environmental coalition seeking to block registration of Compound 1080 (a brutal poison used to kill coyotes and other native predators), executive director of Friends of the Earth, and development officer of American Farmland Trust, an organization that seeks to protect the nation's farmland from development.

We are indebted to Cynthia for her long-standing commitment to animals. The board and the organization benefited greatly from her vast and varied experience highlighted above, and we are grateful for her selfless support of AWI. Cynthia was bright, determined, and articulate—a strategic thinker and planner who was extremely knowledgeable about policy and political process. This dear friend and pillar of the organization will be sorely missed.



Cynthia Wilson with Interior Secretary Cecil D. Andrus, who paid tribute to her enormous contributions to conservation by dubbing her "our Lady of the Redwoods."



ggs are a staple of the Western diet. In the United States, 94 percent of Americans report consuming them, and annual egg consumption averages around 280 per person. In 2022, around 109.5 billion eggs were produced in the United States.

With animal products, mass production typically comes with a massive price—not to the consumer, but to the animals involved. Animals are packed into quarters so tight they can scarcely move, let alone express the natural behaviors that might alleviate the stress of their confinement. In this respect, the egg industry has traditionally been no different keeping hens in "battery cages" so small and crowded that the hens cannot even spread their wings. There is a growing public concern, however, over the welfare of animals raised for food—with calls for reform and, in some states, laws to mandate such reforms. In recent years, the welfare of egg-laying hens has drawn particular scrutiny, leading to a significant increase in the proportion of hens being housed outside battery cages. According to the US Department of Agriculture, as of September 2023, approximately 32 percent of US laying hens were housed in cage-free systems.

Public interest in this issue has also led producers to attach a variety of claims to egg carton labels, seeking to convince consumers that the hens pressed into service are experiencing a happy life—free from cages and free to roam.

The average shopper, however, is unlikely to know the particulars of these animal-raising claims—how they differ from one another and how they actually impact animal welfare. Consumers who understand the terminology and trustworthiness of the claims, of course, can make more informed choices.

To help engage and educate consumers, AWI partnered with The Garden Creative, a production company, to develop a three-minute animated Choose Better Eggs video depicting how hens are raised under the four main hen housing systems: caged, cage-free, free-range, and pasture-raised. Shortened versions of the video are running on various social media platforms. This four-month campaign is aimed at shoppers in five US metropolitan areas: Austin, Boston, Chicago, Denver, and Seattle.

Our targeted audience groups are bakers, vegetarians, and those with an identified interest in organic and sustainable living. The video has already garnered attention and admiration from a key preliminary audience: communication and marketing professionals. In November, Choose Better Eggs received a Gold Award at the 2023 MUSE Creative Awards, which recognize "excellence and innovation in the realms of creative design, advertising, and digital media."

To accompany our social media campaign, AWI has created a Choose Better Eggs website that answers common questions about hen housing and egg labels, such as:

How much space do cage-free, free-range, and pasture-raised hens receive?

The amount of space given to hens raised under different housing systems is determined by the individual egg company or egg certification program. There are no federal laws addressing minimum space allowances for hens; however, several states have set legal standards. The amount of space provided to hens varies greatly, but in general, cage-free hens have slightly more space than caged hens, while free-range hens have more space than cage-free hens, and pasture-raised hens have the most.

Who inspects egg farms to check whether label claims on egg cartons are accurate?

The USDA conducts annual on-farm inspections to verify claims made by producers participating in its egg-grading program, which covers about 55 percent of the eggs sold in the United States. However, the USDA's low standards for determining compliance do not adequately address animal welfare. Fortunately, many egg producers participate in third-party certification programs that specifically address animal welfare.

Is it important for eggs to be labeled "hormone free"? What about "antibiotic free"?

"No hormones" claims on eggs are a meaningless marketing ploy, since the USDA prohibits the use of hormones in the production of eggs. Claims related to antibiotic use do have some relevance to animal welfare. However, research suggests that, when living in conventional factory farms, animals not administered antibiotics for any purpose may be more likely to experience disease conditions that cause pain and suffering. "No antibiotic" claims are only recommended when the label also contains a higher-welfare claim, such as "pasture-raised."

What does it mean if an egg carton doesn't say "cage-free," "free-range," or "pasture-raised"?

If an egg carton label doesn't include any of these claims, then it is very likely the hens were housed in small cages.

How can I tell if a carton of eggs is certified for animal welfare?

Cartons of certified eggs typically contain the word "certified" and/or a certification logo or seal.

Are "USDA Organic Certified" eggs cage-free, free-range, or pasture-raised?

Caged housing is prohibited under the USDA Certified Organic program, but genuine outdoor access is currently not required (and under the recently published updates to organic regulations, won't be required for all USDA Certified Organic producers until 2029). Consequently, eggs labeled as "organic" may come from hens raised cage-free, free-range, or on pasture. When buying organic eggs, it is necessary to look for these additional claims to determine how the hens were housed.

Which egg brands are certified pasture-raised?

At least four third-party programs currently certify pastureraised eggs: American Humane Certified, Certified Animal Welfare Approved, Certified Humane, and Regenerative Organic Certified. All these programs list participating producers on their website.

Where can I find certified pasture-raised eggs?

Certified pasture-raised eggs are now available in most major chain grocery stores and online. To locate these products, see the "Finding Certified Pasture-Raised Eggs and Plant-Based Egg Alternatives" section of AWI's *Choose Better Eggs* website.

What if I don't want to purchase or consume any eggs produced by animals?

Plant-based alternatives (including egg replacers, egg scrambles, and hard-boiled eggs) are now available in some stores and online. To locate these products, visit AWI's *Choose Better Eggs* website. In addition, recipes can be found on the internet that guide consumers in preparing their own lowcost, plant-based egg substitutes.

Watch the *Choose Better Eggs* animated video, learn more, and locate better choices near you at *ChooseBetterEggs.com*.



USDA ESTABLISHES ANIMAL WELFARE STANDARDS FOR ORGANIC PROGRAM

In November, the US Department of Agriculture published a final rule establishing animal welfare standards for the millions of animals raised on organic farms. The Organic Livestock and Poultry Standards (OLPS) rule is the result of decades of advocacy in which AWI worked to better align the "USDA Organic" label with consumer expectations for how organically raised animals are treated.

Under the new rule, all animals will be guaranteed true access to the outdoors—closing a loophole that has for years allowed mega-egg operations to count barren, screened-in concrete porches as outdoor access for the hens. Additionally, the rule mandates environmental enrichment and bars many painful physical mutilations and the extreme confinement of gestation and farrowing crates.

The USDA made several improvements to the final OLPS version that conformed to changes proposed by

AWI during the public comment period. Specifically, the soil requirement for outdoor areas increased from 50 percent coverage to 75 percent coverage, the amount of time newborn calves could be housed individually was shortened from six months to the time it takes to complete weaning, and transport standards were altered to require plans for care if transport exceeds eight hours.

Organic farms have until January 2, 2025, to comply, with the exception of certain poultry operations, which will have an additional four years to comply with outdoor access requirements for egg-laying hens and outdoor and indoor space requirements for meat chickens.

STUDY HIGHLIGHTS **LACK OF PROTECTIONS** FOR FARMED FISH

A recent study published in Cambridge University's Animal Welfare journal (Mood et al., 2023) estimates the number of farmed fishes slaughtered for food in global aquaculture from 1990 to 2019. The study authors first

noted that, unlike other forms of animal agriculture, aquaculture production is typically reported as "biomass" rather than number of individual animals. The authors sought to highlight the individual toll, given the welfare issues associated with aquaculture and the growing body of evidence that fish are sentient beings capable of feeling pain—not merely brainless, undifferentiated biomass.

The study estimated that 124 billion farmed fish were slaughtered for food in 2019, a nine-fold increase since 1990. Despite the fact that the World Organisation for Animal Health first established welfare codes for farmed fish in 1995, the authors found that at least 70 percent of farmed fish have no protection under countries' animal welfare laws, and less than 1 percent have fish-specific legal protection at slaughter.

SUPREME COURT **DECLINES TO REVIEW NORTH CAROLINA AG-GAG LAW**

In October, the US Supreme Court denied a petition to review the Fourth Circuit ruling that struck down portions of the Property Protection Act—North Carolina's latest ag-gag law—on the grounds that recording audio or video in nonpublic farm areas is a protected newsgathering activity under the First Amendment. The law ostensibly applied only to "double agent" employees—those who enter nonpublic areas of a business "for a reason other than a bona fide intent of seeking or holding employment or doing business with the employer." It allowed businesses to collect damages from employees who "harm" their employers by exposing recordings or photographs taken secretly. The law was widely criticized for not allowing adequate protection for whistleblowers exposing illegal activity.

PUBLIC SUPPORTS EGG-CHECK TECH TO PREVENT CHICK CULLING

A recent, first-of-its-kind survey of more than 1,000 US egg consumers showed a high level of interest in a new technology called "in-ovo sexing" that can determine the sex of chicken embryos before they have hatched. Of survey respondents, 47 percent were "extremely" or "very" interested in eggs produced using in-ovo sexing, and 71 percent were willing to pay a premium for such eggs.

These results are highly encouraging, because in-ovo sexing could save hundreds of millions of chicks each year from an inhumane death. In the United States, around 300 million day-old male chicks are culled annually because they are useless to the egg industry: They cannot lay eggs, and they do not grow fast enough to be economically raised for meat. As a result, they are killed shortly after hatching, typically by maceration (dropped into a high-speed grinder and shredded alive) or suffocation (dumped into large plastic bags).

Spurred by chick-culling bans in places such as Germany and France, in-ovo sexing technology is now being used in several European countries. While it is not yet commercially available in the United States, major industry stakeholders such as United Egg Producers and Vital Farms have expressed interest in its use. In addition, the Foundation for Food and Agriculture Research and Open Philanthropy are jointly offering a \$6 million "Egg-Tech Prize" to the first applicant who can develop in-ovo sexing for commercial

> Male chicks have no commercial value to the egg industry and are callously dispatched right after birth. Technology is emerging to spare hundreds of thousands of chicks from this fate every year.

use in the United States that meets certain criteria, including capacity to detect sex by the eighth day of incubation (to avoid causing pain) with 98 percent accuracy, and ability to process at least 15,000 eggs per hour.

USDA LAUNCHES ANTIBIOTIC SAMPLING PROGRAM

The USDA's Food Safety and Inspection Service announced in September that it had launched a new exploratory sampling program to assess the accuracy of "no antibiotic" marketing claims for beef products. The common practice of administering antibiotics to intensively confined farmed animals to promote growth and ward off (rather than treat) illness in crowded, stressful environs is a major concern because it promotes resistance to antibiotic drugs—including those critical for treating serious human diseases—and kills gut bacteria that are beneficial to animal health.

To implement the program, FSIS inspectors will collect liver and

kidney samples from cattle carcasses in slaughter plants whose products bear claims such as "raised without antibiotics." "no antibiotics ever." and "no antibiotics added." The samples will be analyzed for the presence of more than 180 different antibiotics. If drug residues are detected, the FSIS will issue a letter to the slaughter plant, instructing it to take corrective measures. Depending on the results of the sampling program, the FSIS may start requiring slaughter establishments to submit lab test results to substantiate such claims. or it may implement a longer-term verification program.

The announcement follows on the heels of a new report by the World Organisation for Animal Health indicating that global use of antimicrobial drugs declined by 13 percent over the three-year period from 2017 to 2019 (the latest data analyzed). While this is a positive trend, one of the report's authors warned that more work remains to be done: In 2019 alone, more than 4 million human deaths were attributable to antimicrobial resistance.





Dr. Randour's Legacy:

Securing the Data to Bring Animal Cruelty into Sharper Focus

> Dr_{ullet} Mary Lou Randour, who served as senior policy advisor for AWI's Animals and Interpersonal Violence program until her recent retirement, rarely shies away from a challenge—even if it involves convincing an institution as formidable as the FBI that one of their venerable systems could use an adjustment. In 2014, Mary Lou and Nancy Blaney, AWI's director of government affairs, persuaded the Federal Bureau of Investigation to add animal cruelty as a separate category in the National Incident-Based Reporting System (NIBRS), the agency's national crime-reporting database.

> If the implications of this victory aren't immediately apparent, consider this: Previously, animal cruelty incidents—to the extent they were reported at all by state and local law enforcement officials—were tossed into the "miscellaneous crimes" category in NIBRS, where "petty" offenses such as truancy, spitting, and ticket-scalping reside.

Dr. Mary Lou Randour at the Association of Prosecuting Attorneys' 2022 Animal Cruelty Prosecution Training Conference in Nashville.

Mary Lou, however, recognized the need to establish animal cruelty as a distinct category in the system. Doing so would highlight and collate the data in a way that would allow researchers, policymakers, and others to delve deeper into the how, why, when, and where of animal cruelty crimes.

BECOMING AN ANIMAL ADVOCATE

Growing up in metropolitan Washington, DC, Mary Lou rarely held back her opinions. By the time she was 4 years old, her parents were already joking about buying her a soapbox. She showed an early activist bent—joining the 1963 March on Washington and later protests for women's and LGBTQ+ rights.

Meanwhile, she pursued a PhD in human development and a career in clinical psychology. Mary Lou had been in practice around 15 years when, in 1992, she read Peter Singer's "transformative" book, Animal Liberation. "I could picture the suffering, and it was so overwhelming and undeserved," she recalls. She began working with the Doris Day Foundation, first as a volunteer and later as a full-time employee. She sought to focus her training and skills as a psychologist on the link between animal cruelty and other crimes, but encountered only anecdotal data. Thus, in 2002, the NIBRS campaign was launched.

Initial attempts to schedule a meeting with FBI officials, however, proved fruitless. "As with any institution, the FBI resists change, especially if it's promoted by people from the outside," Mary Lou explains. Undeterred, Mary Lou and Nancy (then with the Doris Day Animal League) adopted a more grassroots approach, creating a groundswell of support from local lawmakers and law enforcement personnel, state directors responsible for uniform crime reporting, the National Sheriffs' Association, the Association of Prosecuting Attorneys, and advocates for children and domestic violence survivors. They also joined the staff at AWI (Nancy in 2008, Mary Lou in 2011). After 12 years of campaigning and cajoling, the FBI agreed in 2014 to establish animal cruelty as a distinct NIBRS category.

"I was jubilant when they included this," Mary Lou recalls. "Then you have to get it working." In the years since, the task has shifted to enhancing the reporting of animal cruelty crimes by state and local officials.

ADDRESSING THE LINK: ANIMAL CRUELTY AND INTERPERSONAL VIOLENCE

Mary Lou and Nancy have hosted workshops for teachers, police, sheriffs, prosecutors, social workers, humane agents, and veterinarians—not only to promote reporting of animal cruelty incidents to NIBRS, but also to encourage "cross-reporting" among the various sectors to foster more effective and timely interventions. During a presentation to the California Teachers Association a few years back, Mary Lou remembers, a teacher recounted that one of her students had written in a class journal that his older sister had beaten the family dog to death with a baseball bat. The teacher was confused about whether and to whom she should report the incident.

Animal cruelty, in fact, is strongly linked to interpersonal violence—the presence of one is a red flag for the other. This link can also be a barrier: Up to 48 percent of domestic violence survivors delay leaving a dangerous situation out of concern for their pet's safety if left behind. Shortly after joining AWI, Mary Lou helped establish AWI's Safe Havens for Pets initiative, featuring a directory of sheltering services for pets of domestic violence survivors. Today, it is the largest directory of such services nationwide—listed on the National Domestic Violence Hotline's website and connecting survivors to more than 1,000 sheltering services across the country.

Mary Lou has also authored handbooks and professional journal articles on the psychology of animal abusers, treatment approaches for abused children, and more. Her most recent study, coauthored with Dr. Lynn Addington, a criminology professor at American University, and published in *Criminal Justice Policy Review*, used newly collected NIBRS data to highlight fundamental differences between intentional animal abuse and neglect and to address the implications for intervention strategies.

Along the way, in her "spare" time, Mary Lou led a successful seven-year effort to establish a division of human/animal studies in the American Psychological Association and helped

launch a spay-neuter campaign in the Dominican Republic, where she rescued her mixed-breed dog, Sabrina, a vivacious (and vocal) fixture at AWI headquarters.

PASSING THE BATON

In November, Mary Lou "retired" as an AWI staff member. Retirement, however, is a relative term, as she will continue to serve as a consultant on her latest project, AWI's Center for the Study of Animal Cruelty Data. The newly launched center will provide readily accessible, updated animal cruelty data through a condensed version of the NIBRS database—a potential goldmine for anyone initiating research on animal cruelty crimes.

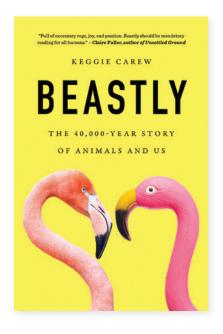
To ensure a seamless transition at AWI, Mary Lou handpicked her successor, Claire Coughlin, who shares her datadriven mindset, creative approach to problem solving, and commitment to practical and field-based support for human services, law enforcement, and animal welfare professionals. With an extensive background in strategic outreach, community-based support services for at-risk children and their families, and animal advocacy in her home state of Missouri, Claire will manage the new center and seek to expand the safe havens network.

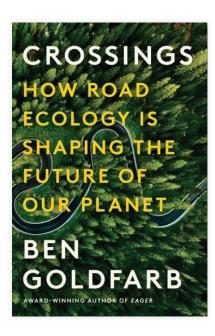
For Mary Lou, stepping back personally does not mean sacrificing momentum. "My mother was always a very practical woman and I am, too, in a way," she says. "I am 83, and I built certain things that I want to continue. I want to make sure they are in a place that's secure and that the people after me will carry them forward." &

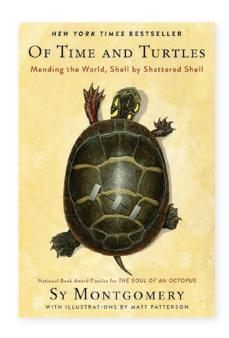
Left: Mary Lou interacting with the patients at a spay/neuter event she helped organize in the Dominican Republic. Right: Mary Lou and Nancy Blaney in front of AWI headquarters in Washington, DC.











BEASTLY

Keggie Carew / Abrams Press / 384 pages

Keggie Carew's background is not in science (her career started in contemporary art), and it shows. Her book, Beastly: The 40,000-Year Story of Animals and Us, is not the first book to consider the combined history of humans and nonhuman animals, but it takes a unique approach to the tale.

Carew, who established the Underhill Wood Nature Reserve with her husband, Thomas, uses an artful prose one doesn't often see in popular science books. At the same time, her wry and sometimes self-effacing humor (introduced in the very first sentence: "This damn book.") also shines throughout. Her account of our history with animals, "a gargantuan" one, ventures far and wide, from cave paintings to domestication, our relationship with "pests," and our study of animals in and out of the lab, including Henry Harlow's chilling social isolation experiments involving

infant monkeys and Robert Paine's revolutionary study "hurling" starfish out to sea (through which he introduced the concept of "keystone" species).

Carew captures the beautiful and the horrifying, the sad and the enlightening of our relationship with animals. Her occasional melancholy passages beautifully capture just what we stand to lose as species and ecosystems disappear. The sheer variety of species she weaves into her prose is impressive, and she peppers her story with interesting human characters as well. (The story of Simona Kossak, Lech Wilczek, Korasek the raven, and Zabka the boar is alone worth the price of admission.) She leaves the reader a bit sad at the state of nature today, but also with an enduring wonder for what nature is capable of. You may have read other books about humanity's relationship with the natural world, but you probably haven't read anything quite like Carew's Beastly.

CROSSINGS

Ben Goldfarb / W. W. Norton & Company / 384 pages

"To us, roads signify connection and escape; to other life-forms, they spell death and division." Ben Goldfarb's Crossings: How Road Ecology Is Shaping the Future of Our Planet is an engaging study of "road ecology," or how the invention of cars—and the paved roads that followed—have impacted life on Earth, including that of humans.

Goldfarb, who holds a Masters of Environmental Management from Yale and is an award-winning author and environmental journalist, explains that, for many species, cars have rendered evolution maladaptive: tried and true fight, flight, or freeze responses can prove deadly in encounters with fast-moving cars. This book is an engaging account of the unique challenges faced by different species that must navigate around this "moving fence." Some avoid roads altogether—thwarting migrations and potentially trapping them in unnaturally small territories with no mates. Others attempt to cross roads and highways, often with disastrous consequences for themselves (more than a million wild vertebrates are killed on US roads every day; for some endangered species, roadkill is the leading cause of death) and for drivers (wildlife vehicle collisions lead to approximately 200 human deaths and 26,000 injuries in the United States each year). Other species are attracted to the road—to bask on the asphalt (snakes), scavenge roadkill (eagles), or feed on roadside plants, sometimes to be swept up in wind vortices created by passing trucks (butterflies).

While Crossings is an eye-opening account of the wideranging consequences of something that is "so ubiquitous [it's] practically invisible to us," it also investigates the myriad mitigation efforts. Here we follow Goldfarb as he meets various characters—scientists, rehabbers, engineers, city officials—seeking ways to protect wildlife from the collisions, noise, and pollution created by cars on roads.

Goldfarb, who also authored the award-winning book Eager: The Surprising, Secret Life of Beavers and Why They Matter, is a gifted writer with a knack for explaining complex issues in a satisfying mix of prose and science.

OF TIME AND TURTLES

Sy Montgomery (author), Matt Patterson (illustrator) / Mariner Books / 304 pages

Sy Montgomery brings her passion for animals and talent for storytelling to focus on turtles in her 34th book, Of Time and Turtles: Mending the World, Shell by Shattered Shell.

Turtles, she points out, are not only culturally popular—from the tortoise besting the hare in an ancient fable, to Teenage Mutant Ninjas, to Nemo's sea turtle pal Crush—they have also been around since the time of dinosaurs and are an important component of many ecosystems, with more than 350 species on six continents. To dive into their world, Montgomery, along with illustrator Matt Patterson, interned for a year at the Turtle Rescue League (TRL) in Massachusetts.

At TRL, we meet a host of delightful characters—human and turtle—both of whom Montgomery describes in captivating detail. TRL painstakingly works in its corner of the world to save the numerous turtles displaced by development, abandoned as pets, or most often, injured during attempts to cross highways. (For more on that topic, see the prior review.) Montgomery captures the passion and the science behind turtle rehab. Turtles, it turns out, have an amazingly well-developed selfhealing process—withdrawing into their shell to protect against predators, they can practically shut themselves down to give their bodies the necessary time and energy to heal.

The idea of turtle time is woven throughout the book as Montgomery challenges us to see the world from the perspective of a creature who not only moves slowly but can live for hundreds of years. (So what's the rush?) In many ways, the book itself is written in this unhurried style, as Montgomery meanders through observations about a worker's tattoo, Einstein's theory of time, and other tangential diversions—which are all part of the book's charm.

A rich tapestry of stories that will make you smile, cry, and cheer, Of Time and Turtles is a well-researched adventure story that encourages us to see life through the eyes of a turtle, take the time to take in all that's around us, and let our lives be changed in unexpected ways.

BEQUESTS

If you would like to help assure AWI's future through a provision in your will, this general form of bequest is suggested: I give, devise and bequeath to the Animal Welfare Institute, located in Washington, DC, the sum of \$ _____ and/or (specifically described property).

Donations to AWI, a not-for-profit corporation exempt under Internal Revenue Code Section 501(c)(3), are tax-deductible. We welcome any inquiries you may have. In cases in which you have specific wishes about the disposition of your bequest, we suggest you discuss such provisions with your attorney.

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ORCAS RAMMING RUDDERS: IT MAY JUST BE PLAY

A critically endangered population of orcas, numbering only 40 individuals, inhabits the outer coastal waters of the Iberian Peninsula. Since spring 2020, these whales have been dramatically interacting with boats—mostly sailing yachts. These interactions started with a small number of juveniles and some minor damage to the vessels, but over time have expanded within the population and increased in intensity. No mariners have been injured, but at least 15 identified orcas are now involved and almost 500 interactions have left several vessels unable to navigate due to rudder damage. At least five have sunk.

These interactions have made international news. The predominant media narrative is that the orcas are attacking these boats in response to some initial incident—such as a vessel collision—that injured an orca, who then recruited podmates to retaliate.

After several seasons of monitoring the situation, scientists have concluded that, in fact, this behavior has more in

common with play, where the orcas are focused on rudders as intriguing objects in their environment. Despite the distressing (and expensive) outcome for mariners and boat owners, the interactions do not seem aggressive. AWI's Dr. Naomi Rose led an open letter from almost 80 cetacean experts, including several orca biologists focused on this population, stressing this conclusion and urging the public as well as mariners and authorities who must manage this situation—to avoid attributing human motivations to the animals. Such narratives may lead mariners to fear orcas, even when they do nothing. Fear can lead to dangerous and harmful attempts to deter cetaceans when they approach vessels, even outside the Iberian region.

Orcas are known for developing novel behaviors with no obvious function. These behaviors are considered cultural fads appearing and disappearing in populations without explanation. AWI is working with regional experts and authorities to counter disinformation and ensure these orcas are not punished for simply doing what they do naturally in their own home. &