

AWI Quarterly

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For subscription inquiries or other information, contact AWI at 900 Pennsylvania Ave., SE, Washington, DC 20003 Phone: (202) 337-2332 Facsimile: (202) 446-2131 Email: awi@awionline.org Website: awionline.org

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ABOUT THE COVER

A female white rhinoceros (*Ceratotherium simum*), with calf, grazes on the rich grasslands of South Africa's KwaZulu-Natal province. Perched between the calf's ears is an oxpecker, a bird that feeds off ticks and insects on the backs of rhinos and other large African mammals.

Despite her leanness, this mother rhino appears healthy and in possession of an impressive horn that helps her forage in thickets and defend herself and her offspring. Others of her kind are not so fortunate. Poachers target rhinos for their horns, which, despite being made of keratin—the same protein that forms hooves, hair and fingernails—is coveted for its alleged (but unsubstantiated) healing properties.

In the article on page 14, we discuss the heavy toll that the illegal (as well as legal) wildlife trade is taking on animals around the globe. We also examine what various nations, including the United States, are doing to address the crisis.

PHOTO BY RICHARD DU TOIT/MINDEN PICTURES

International Court of Justice Declares Japanese Antarctic Whaling Illegal

AFTER A FOUR-YEAR WAIT, the International Court of Justice (ICJ) issued its ruling on Australia's challenge to Japan's scientific whaling program in the Antarctic (known as JARPA II). The ruling, issued March 31 in The Hague, The Netherlands, by a vote of 12–4, concluded that JARPA II does not comply with Article VIII of the International Convention for the Regulation of Whaling (the article authorizing whaling for scientific research).

In reaching this conclusion, the ICJ was critical of JARPA II for its (1) openended time frame; (2) limited scientific output; and (3) failure to (a) consider non-lethal methods, (b) justify the large sample sizes, or (c) coordinate with other national and international research programs.

The ruling is a significant a victory for whales and vindicates those countries and groups, including AWI, who have cried foul over Japan's abuse of Article VIII—using it as a veil to cover its commercial whaling in the Antarctic. The ICJ decided that Japan "shall revoke any extant authorization, permit or license granted in relation to JARPA II, and refrain from granting any further permits in pursuance of that program."

An international moratorium on commercial whaling was implemented in 1986 and has saved hundreds of thousands of whales from slaughter—and likely prevented the extinction of some stocks. Unfortunately, Japan, Norway, and Iceland have elected to ignore this moratorium.

While Japan initially responded to the ruling by announcing that it will not participate in a 2014–2015 Antarctic whaling program, it has subsequently signaled its intent to revise the JARPA II program for a return to the Antarctic. Even if Japan's whalers do not return to the Southern Ocean, the nation continues to kill whales, including endangered Bryde's and sei whales, in the North Pacific. Meanwhile, Iceland and Norway slaughter whales for commercial purposes in the North Atlantic. We need to remain vigilant in our efforts to bring about a world that is commercial whaling-free.

ANIMAL WELFARE INSTITUTE QUARTERLY







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Above Left: A group of bottlenose dolphins frequent the Bocas del Toro Islands of Panama's Atlantic coast. Increasingly, they must dodge overly eager sightseers. (Comroques)

Top Right: A veterinary technologist who called attention to grave animal welfare issues involving mice at a Maine research laboratory was dismissed, and is pursuing a whistleblower lawsuit. (Steph Hillier)

Bottom Right: AWI is fighting a plan to cull thousands of deer on Long Island, NY. (Rich Schieren)



Virginia Says No Coyote/Fox Pens (Except for All the Ones Already Around)

VIRGINIA PASSED A LAW in April banning new coyote/fox penning operations in the state. The law makes it a Class 1 misdemeanor (punishable by up to one year in jail and a fine of up to \$2,500) for any person "to erect, maintain, or operate an enclosure for the purpose of pursuing, hunting, or killing or attempting to pursue, hunt, or kill any fox or coyote with a dog."

Unfortunately, before it passed, the bill (S.B. 42) was hobbled by amendments tacked on by Senate and House committees. As originally submitted, S.B. 42 would have outlawed coyote/fox penning altogether, and made it illegal to stage or participate in competitions wherein a fox or coyote is pursued by dogs within an enclosure. This blanket prohibition was altered to exempt the 36 existing penning operations, which will be allowed to continue in operation for another 40 *years*—until July 1, 2054. The Virginia Department of Game and Inland Fisheries also must adopt regulations that limit the number of foxes stocked annually across all permitted preserves in the state to 900. (No number is given for coyotes.)

In 2013, AWI, Project Coyote, and the Animal Legal Defense Fund released an investigative report of a penning facility in Indiana that details the savagery of these operations. The report can be downloaded for free from AWI's website at www.awionline.org/INpenning.

CITIZENS SPEAK UP FOR MUTE SWANS

In December 2013, the New York Department of Environmental Conservation (NYDEC) released a Draft Management Plan for Mute Swans that called for complete eradication of all 2,200 birds from the state of New York by 2025. Lethal control of the swans would be conducted by hunters, private property owners, USDA Wildlife Services, and several local agencies.

Particularly shocking is the plan's encouragement for members of the public to kill the birds or pluck them from the wild and keep them in captivity. The plan authorized



Mute swans wade in the shallow waters of Jamaica Bay, NY. A plan to eradicate this introduced species in New York raises serious animal welfare concerns.

property owners to use methods that arguably require some training and expertise, such as sterilization, shooting, and "capture and removal of swans to be euthanized or turned over to persons licensed to keep the birds in captivity." No specific guidelines were provided regarding how to properly capture these birds, what types of facilities would be appropriate for holding them in captivity, and if these facilities would be inspected.

AWI and many of its members spoke up, commenting that the plan was not only inhumane, but did not comply with state legal requirements. Specifically, the NYDEC has an obligation to comply with the State Environmental Quality Review Act (SEQR) for projects like this and must produce an environmental impact statement first in order to assess the significance of eradicating all mute swans in the state.

Fortunately, after receiving thousands of comments and various petitions in February of this year, the NYDEC decided to change course. The agency announced that it would revise the plan and consider non-lethal means for population management. Meanwhile, state legislators are also penning legislation or co-sponsoring existing bills to establish moratoriums on implementing the draft plan to lethally control and eradicate the swans. AWI will continue to monitor the issue and alert members during the next public comment period, which is expected in the spring of 2015.

CONDORS GETTING THE LEAD OUT?

Endangered California condors in Arizona and Utah are showing a substantial decrease in toxic blood-lead levelspossibly the result of a drop in lead-based ammunition by hunters. Biologists with The Peregrine Fund, which helped test the birds, indicate that 16 percent of birds trapped and tested after September 2013 revealed bloodlead levels indicating extreme exposure, compared with 42 percent of birds tested the season before. Further, the number of birds that required treatment with lead-reducing chelation therapy was down from 28 the prior year to 11. Eddie Feltes, field manager for The Peregrine Fund's condor project, pointed to hunters' increased use of non-lead ammunition and other lead-reduction efforts as potential reasons behind the lowered lead toxicity levels and fewer mortalities. Since 2002, California condors have been expanding their range. After they moved into southern Utah, the Utah Division of Wildlife Resources started conducting outreach and providing incentives to reduce lead exposure in that portion of the condors' range. 🏖

Wildlife Killing Contests Under Scrutiny in California

JUST DAYS before an annual killing contest in which some 40 coyotes were gunned down around the town of Adin, the California Fish and Game Commission voted unanimously to consider a statewide ban on wildlife killing contests. According to Project Coyote's executive director, Camilla Fox, who testified before the commission and who has partnered with AWI on this issue (see Spring 2013 AWI *Quarterly*), "Wildlife killing contests are conducted for profit, entertainment, prizes and, simply, for the 'fun' of killing. No evidence exists showing that such indiscriminate killing contests control problem animals or serve any beneficial management function." The February 5 vote by the Fish and Game Commissions means a formal rulemaking process will commence that could lead to a permanent statewide ban on the killing contests.



B ANDON KOCH

The federal government seeks to end endangered species protections for gray wolves. A scientific panel has indicated this proposal is founded on faulty science.

Science Says Stop: Fed Plan to Delist Wolves Panned by Expert Panel

AN INDEPENDENT scientific peer review panel has unanimously concluded that the US Fish and Wildlife Service (USFWS) did not use the best available science to support its proposal to remove Endangered Species Act protections for gray wolves across the contiguous United States (see Winter 2014 AWI Quarterly). The review was commissioned by USFWS and conducted by the National Center for Ecological Analysis and Synthesis (NCEAS) at the University of California, Santa Barbara.

The panel found that the delisting proposal gave undue weight to a single preliminary publication—one that was not, in fact, widely accepted by the scientific community. The panelists identified additional scientific research that should be considered before any decision is made to change the listing status of gray wolves. Steven Courtney, who chaired the NCEAS panel, called the results of the review "unequivocal."

Previously, in defending the delisting proposal, Secretary of the Interior Sally Jewel disavowed any discretion in the matter, stating that "It's about science and you do what the science says." Now that science is clamoring to be heard, we hope that's true. USFWS Director Dan Ashe issued a statement on February 7 indicating that in light of the report, the agency planned to reopen the public comment period until March 27. **2**

AWI FINDS USDA TO BE UNRELIABLE ARBITER OF ANIMAL PRODUCT LABEL CLAIMS

The use of animal welfare and sustainability claims has increased dramatically over the past decade, as consumers have become more aware of and concerned about the well-being of animals raised for food and about the negative impacts of animal agriculture on the environment. But despite their interest, consumers are confused about the meaning of animal welfare and sustainability claims on labels, the accuracy of which they are typically unable to verify for themselves. The public's interest in these claims makes them ripe for exploitation by companies attempting to lure the growing number of consumers who seek an alternative to products from factory-farming production systems.

THOSE WHO SHOP FOR MEAT and poultry products often see such claims as "humanely raised" or "sustainably farmed" on packaging labels. They naturally assume (as the company behind the label wants them to assume) that these assertions indicate some extra effort was made on behalf of the animals and/or the environment. In the vast majority of cases, however, the shopper has no knowledge of what, if any, action the producer has taken to justify the claim-and no practical access to such information. All too often, there is a wide gap between what consumers believe they are purchasing and the reality. The US Department of Agriculture (USDA) has the authority to deny the use of labels when they are believed to be false or misleading. But USDA does not go onto farms to evaluate animal raising or environmental practices. Rather, the department relies on information supplied by producers to determine whether claims related to humane animal treatment and sustainable agricultural practices are accurate and appropriate for use on a label.

While USDA regularly approves claims related to animal welfare, no legal definitions exist for the terms "animal welfare," "humane," or "animal care." Moreover, USDA has never officially acknowledged any particular set of animal standards as representing acceptable supporting evidence for the use of welfare-related claims. The same is true for environmental claims—no official definition exists for "sustainable," and no acceptable standards have been identified. So how does USDA make its decisions? Although USDA has no definitions for animal welfare and sustainability claims, it has developed labeling guidance to assist in the approval of these claims. The guidance requires that producers submit supporting documentation, which can include affidavits and testimonials, operational protocols, feed formulas, and certificates.

AWI set about to evaluate USDA's process for approving label claims related to animal welfare and environmental stewardship—submitting more than a dozen Freedom of Information Act requests covering a total of 25 claims



USDA approved this humane label without any supporting evidence, and the producer refuses to provide its animal care standards to the public.



appearing on the labels of 19 meat and poultry products. The review revealed that the government is regularly approving the use of animal welfare and environmental claims on labels, with little or no evidence documenting the accuracy of such claims. We also found that the current label approval process: 1) is inconsistent and lacks transparency, 2) does not meet consumer expectations, 3) leads to misleading and deceptive labeling, and 4) harms farmers who make accurate claims on their product labels.

In response to AWI's requests, USDA stated that it was unable to locate *any* documents for 20 of the 25 claims. This suggests USDA did not require producers to submit a single piece of supporting evidence prior to it issuing an approval for use of these claims.

USDA provided very limited documentation for the other five claims. For the claim "humanely raised on sustainable family farms," approved for use on one turkey producer's products, supporting documentation consisted of an affidavit containing only two sentences pertaining to the claim, with one of the sentences merely repeating the claim. A mere two sentences—at least one of which provided no additional information—were sufficient for USDA to determine that this producer deserved to use a high-value claim related to both animal welfare and environmental stewardship.

Another of the five claims was approved based on an overview of the animal care protocol of just one of the company's many suppliers. In another case, the claim "raised on family farms using sustainable agricultural practices" was approved on the basis that "many" (but apparently not all) of the company's suppliers engage in a few practices related to environmental stewardship.

AWI challenged use of one "humanely raised" claim before the National Advertising Division (NAD) of the Better Business Bureau, arguing that use of the claim by a particular producer was misleading and deceptive. AWI's complaint was based on the fact that the producer raises animals under conventional industry standards, and most consumers expect products with such a claim to have come from animals raised to a higher standard. While NAD agreed that removal of the claim "was necessary and appropriate," USDA continues to allow the claim.

As in the above case, USDA routinely approves the use of high-value claims, such as "humanely raised," on products from animals raised under conventional industry standards. For example, USDA regularly approves use of the claim by poultry producers that operate under the woefully inadequate standards of the National Chicken Council and the National Turkey Federation. Yet, a 2013 public opinion survey commissioned by AWI found that 88 percent of frequent meat and poultry shoppers believed that producers should not be allowed to use the claim "humanely raised" unless they actually exceed minimum industry animal care standards.

Consumers disagree with other aspects of USDA's label approval process for animal welfare and environmental



This label was approved without the producer having to explain what "sustainably farmed" means or how the company meets the definition.

> claims as well. A large majority of consumers who frequently purchase meat or poultry products say the government should require producers to prove any claims such as "humanely raised" or "sustainably farmed" that they want to put on their product labels. And consumers expect more than a brief affidavit or testimonial to be offered as proof.

> It's not surprising that a majority of consumers who frequently purchase meat or poultry don't feel confident that USDA verifies label claims, and a large majority would like to see claims such as "humanely raised" and "sustainably farmed" verified by an independent third party.

> Most producers don't make their standards available to the public, and many even refuse to provide them upon request. This means the veracity of label claims is known only to the producers themselves, who have a financial interest in promoting their products in the most marketable manner possible.

Lack of on-site verification (by USDA or others) of label claims is a particular problem for holistic claims like those related to animal welfare and environmental sustainability, because these claims address multiple aspects of production. Some producers seek to assure consumers that their products are properly labeled and meet a certain standard by participating in a third-party certification program. Producers who seek third-party certification typically incur a variety of fees associated with the certification. These producers also incur higher costs associated with maintaining systems that go beyond conventional production standards in terms of animal welfare and environmental stewardship.

USDA is currently allowing producers to make claims to consumers that represent the equivalent message of

an independent third-party certification. Producers that make animal welfare and/or environmental claims, but do not adhere to higher standards and are not independently certified, are able to avoid both the cost of certification and better production, while still reaping the benefits in market value. Allowing the use of these claims without proper verification promotes unfair marketing practices and disadvantages farmers who provide verification of the claims made on their products. In an October 2013 survey conducted by Harris Interactive on behalf of AWI, nearly 90 percent of respondents supported a requirement that animal welfare and environmental stewardship label claims be backed by third-party certification.

Third-party certifiers provide meaningful, verifiable standards. They confirm compliance with the standards first on the farm and, if appropriate, during transport and/ or at slaughter. Third-party program standards are typically available online for all interested parties to review, thus providing transparency. The programs are independent of the companies they are certifying, and they regularly review and revise their standards.

USDA must change its current label approval process to prevent misleading and deceptive labeling and promote a fair market for farmers who go the extra mile. This can be accomplished by USDA approving label claims only after certification has been obtained from an independent third party that audits on-site practices pertaining to the claim and has standards that exceed conventional industry standards in a meaningful way. USDA must stop facilitating false advertising and instead use its authority to ensure that consumers who wish to support better practices may do so in confidence.



AWI challenged use of the claim "humanely raised on family farms," because the company's animal care standards are significantly below those of independent animal welfare certification programs.



Pigs in industrial facilities aren't afforded the opportunity to forage in the open. Some recent changes in industry standards signal small changes to improve welfare, though.

INDUSTRY TAKES TENTATIVE STEPS TO IMPROVE PIG WELFARE

Tyson and Smithfield announced changes to their respective animal care programs for pigs and the operations they are raised within. Both companies are asking/ instructing producers to improve their production practices by implementing basic animal welfare requirements and recommendations.

Tyson distributed a letter to its hog suppliers explaining how they need to change production practices in order to be in compliance with Tyson standards. The letter stated that all contract producers who manage Tyson-owned sows must terminate the use of manual blunt force as a form of euthanasia for sick and injured pigs. The letter also asked contract farmers to install video monitoring systems into facilities by the end of 2014, and improve gestation sow housing by implementing "quality and quantity of space" changes. While these are welcome steps forward, contract growers only account for approximately 5 percent of Tyson's supply chain. Tyson is also requesting that all of its producers use anesthetics when tail-docking or castrating piglets as they fund research on practical pain mitigation.

Smithfield, the world's largest hog producer, is recommending that its contract producers phase out the use of gestation crates by 2022. Smithfield committed to phasing out gestation crates in its company-owned facilities originally in 2007. Now, Smithfield is asking all of its contract producers to join them in converting to group housing systems. While the contract producers are not required to convert sow housing, the company claims that contract extensions will be less likely in the event that the producers do not change.

Canada also to Ease Plight of Pigs on Factory Farms

THE CANADIAN NATIONAL FARM ANIMAL CARE COUNCIL (NFACC), a collaboration between the agriculture industry, animal welfare groups, government, and other interested parties, recently released its *Code of Practice for the Care and Handling of Pigs*. According to the NFACC, in creating the code it took into account the best science available compiled through an independent peer-reviewed process, with input from stakeholders. The new code, like the Tyson and Smithfield announcements, falls far short of the high-welfare standards of AWI's Animal Welfare Approved program. However, it shows that Canada is working toward improving how pigs are treated throughout the country.

The code requires all new buildings used after July 1, 2014, to house sows in groups. It states that "through science and innovation, the Canadian pig industry is committed to full adoption of group housing designs/ systems that offer more freedom of movement for sows." However, the code allows for other forms of housing, as well. By July 1, 2024, sows must be kept in either group housing, individual pens that allow them the freedom to turn around, or stalls—so long as the stalls provide the opportunity to turn around or exercise periodically, or provide "greater freedom of movement" (which will be defined by July 1, 2019).

Other requirements for advancing pig welfare are found throughout the code. For instance, pigs must be given enrichments that enhance their physical and social environments. Behavioral problems such as tail-biting and aggression must be investigated to identify the possible environment, feed, management, or health factors causing the problem. Beginning July 1, 2016, castration and taildocking cannot be performed without analgesics. Producers must implement standard operating procedures that detail protocols for the identification, care and humane treatment of sick or injured pigs. Pigs unfit for travel must not be loaded onto trucks, and the code provides guidance on when a pig should be considered unfit for travel. The code also recommends that producers, when breeding pigs, genetically select for traits that have positive effects on animal welfare and health. 🏖

FIRED WHISTLEBLOWER FIGHTS ON FOR ANIMALS IN RESEARCH

In November 2012, the industry journal *Lab Animal* published an extraordinary profile of licensed veterinary technologist Santina Caruso, entitled "Working with animals is 'in her blood.'" Why was this feature extraordinary? Because she had filed a whistleblower retaliation lawsuit—usually the kiss of death in animal research—in 2010 against The Jackson Laboratory, one of the world's top suppliers of mice for research and the recipient of tens of millions of research dollars annually from the National Institutes of Health (NIH).

The lawsuit, which went to trial last year and is currently on appeal, gives a rare glimpse into the monumental challenges faced by animal care personnel who report animal welfare concerns to prevent needless suffering and ensure compliance with animal welfare laws. These are the workers most likely to see suffering and noncompliance—and to fear illegal retaliation for reporting.

Ms. Caruso says she supports providing humane care while working to reach scientific goals; this and her incontrovertible skills resulted in Jackson's hiring her in 2008 to help improve mouse care. They needed her because in 2003, due to Jackson's veterinary care shortcomings, the Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) placed the institution on "deferred accreditation," meaning it retained its accreditation but was charged with fixing the issues. (Under oath, Jackson's attending veterinarian—who was also an AAALAC trustee—explained that accreditation would be revoked only if a lab gave AAALAC "the finger"; otherwise, AAALAC will work with them for "years.")



A mouse's foot, showing a toe that has been "clipped"—a callous and outdated method of identification. Toe clippings were performed without anesthesia at Jackson Laboratory, according to Ms. Caruso. In her 3.5 months at Jackson, Ms. Caruso repeatedly raised animal welfare concerns about two NIH-funded projects. She reported that adult mice were having their toes cut off, without anesthesia. Toe amputation is primarily done to identify mice and collect genetic material. Jackson's Institutional Animal Care and Use Committee (IACUC) never approved this painful, archaic procedure.

Most importantly, she reported that instead of being humanely euthanized in a timely manner, quadriplegic mice were dying of starvation and dehydration because they couldn't reach food and water. Even Jackson's veterinarians and human resources director felt that it was reasonable to report these problems, and that Ms. Caruso had done so in good faith. Yet, at trial, the veterinarian in charge of clinical research care stated that Ms. Caruso's reports of animal welfare concerns contributed to her termination.

This veterinarian also stated that the IACUC could not modify anything, including euthanasia criteria, once it had approved the protocol. Jackson's attorney repeated this blatant misstatement of the law multiple times. Actually, IACUCs are federally mandated to perform ongoing reviews of approved protocols, and are authorized by the Public Health Service Policy on Humane Care and Use of Laboratory Animals (which also mandates minimizing pain and distress, and applies to all NIH-funded research) to modify an already-approved protocol. Indeed, the Jackson IACUC, based on Ms. Caruso's reports, *did* modify the endpoint criteria for euthanasia.

But the jury repeatedly heard Jackson misrepresent the law and facts. Despite Jackson's attending veterinarian praising her "concern for the welfare" of the mice and "willingness to go the extra mile to improve their situation," the lab's attorney accused her of "very cruel[ly]" making these very mice suffer for "days" to manufacture evidence. AWI strongly believes that Ms. Caruso did not receive a fair trial—one of the many reasons we are supporting her appeal.

After Jackson fired her, she filed a whistleblower complaint with NIH's Office of Laboratory Animal Welfare (OLAW), which requested that Jackson's IACUC investigate. That investigation not only vindicated her—Jackson admitted that its endpoint euthanasia criteria were unclear and ill-defined, and were consequently modified—but also found systemic issues. The IACUC took the grave step of suspending one of the NIH-funded research projects she had reported. OLAW concluded that her complaint was merited and contributed positively to animal welfare. (Meanwhile, the researcher, who has since moved to another institution, continues to receive NIH funding—over \$1.5 million in grants since 2008.) Unconscionably, the Animal Welfare Act—the primary federal law regulating the treatment of animals in research—does not cover mice or rats, though they are far and away the animals most commonly subject to experimentation. Therefore, it is all the more vital that individuals within research facilities safeguard these animals—and that IACUCs fulfill their responsibility to minimize animal suffering. Compliance and proper animal care depend upon what NIH calls "enforced selfregulation"—through IACUCs.

AWI commends Ms. Caruso for her dedication to each individual mouse, even when it meant the loss of her job, and for her determination to prove that she acted in good faith to prevent senseless suffering. As she wrote to OLAW six months after her termination: "I have zero regrets. I know I did the absolute correct thing."



A quadriplegic mouse enduring a slow, painful death at Jackson Laboratories. Ms. Caruso found that hundreds of mice were allowed to die in this manner rather than be euthanized humanely.

Chimpanzees in Research Get Shortchanged on Space

ON APRIL 4, 2014, in a Notice of Agency Decision, NIH announced its new requirement regarding the minimum floor space required for each of the remaining chimpanzees in NIH-supported research (see Summer 2013 AWI *Quarterly*). NIH's Council of Councils Working Group on the Use of Chimpanzees in NIH-Supported Research (Working Group) had originally recommended 1,000 ft² per chimpanzee. This recommendation, however, was rejected.

In the Notice, NIH justified its rejection by citing concerns about the expected costs of implementation, as well as about the scientific basis of the recommendation. The agency elected to embark on a further assessment, which included consulting with experts and commissioning



Chimpanzees, like this resident of the Chimp Haven sanctuary in Louisiana, thrive in ample open spaces. NIH shunned the advice of its own working group in allowing chimps in research to remain in close quarters.

a review of available literature about space requirements. The consulted individuals all were research scientists and veterinarians associated with large primate research facilities—facilities that might be expected to oppose any space-expansion requirements for the chimpanzees.

The NIH assessment did not find published data to support the original 1000 ft² per chimpanzee recommendation and noted an urgent need for further research to quantify the space needs of chimpanzees. NIH apparently chose to ignore what the Working Group gleaned from its visits to chimpanzee sanctuaries that provide larger living space, including what it learned about their "considerable success" in forming large, stable social groups of more than 25 individuals. This hands-on, reallife evidence appears to have played a significant role in the Working Group's recommendation. Of particular note, the Working Group stated that cost was not sufficient justification for keeping chimpanzees in ethologically inappropriate environments.

Based upon its interpretation of the literature review and additional input, NIH decided that the primary living space of the chimpanzees should be "at least 250 ft² per chimpanzee," one-quarter of the Working Group's recommended minimum. AWI does not agree with this finding and urges NIH to reconsider its decision. It would appear that the 250 ft² requirement is arbitrary, particularly in light of the acknowledgement of an urgent need for further research to quantify space requirements.

Dr. Kenneth Litwak Joins AWI as Laboratory Animal Advisor



Dr. Kenneth Litwak recently joined AWI as our laboratory animal advisor, after nearly 20 years conducting and overseeing animal research. We sat down with Kenneth to talk about his thoughts on animal welfare and the long road that led him to AWI.

AWI: Tell us about your education and work experience.

Kenneth: I got my bachelor's degree at California Polytechnic State University, then my veterinary degree at Kansas State University. Following a brief stint as a companion animal veterinarian, I went back to school to obtain a doctorate, at Wake Forest University. After receiving my doctorate, I joined the faculty at the University of Pittsburgh and then the University of Louisville. At both institutions, I ran laboratories, dedicated to developing and testing artificial organs.

Were you using animals while testing these organs?

Yes. We used calves. Their hearts are about the same size as a human heart and calves have been the animal model that had been in use since the earliest days of artificial heart testing. Yet no one had really spent a lot of time thinking about how different they were from the very sick people. I realized that and started asking questions, like: "How does a healthy, growing calf differ from the sick person?" or "What can we learn from an animal model that looked the same, but was anatomically and physiologically different?" Once I started asking those questions, it became increasingly difficult to justify our use of the calf to test the artificial hearts. Especially at the University of Louisville, I found very creative people using mechanical and computer models of the heart and circulation to test these devices, allowing us to answer virtually all of our questions without having to do animal testing.

I remember giving a talk, at a meeting about artificial heart development, about the need to rethink our use of the animals, because the results we were getting were wrong (including results from studies I had published). I had multiple well-known cardiovascular surgeons tell me that I didn't know what I was talking about. It was a bit chaotic and disturbing. I realized just how protective people were of their published results. It was a form of heresy. That is when I decided to stop doing my own research and instead promote better care of the research animals, using my training as a laboratory animal veterinarian.

It must have been a big change to go from running a single laboratory to overseeing the health and welfare of all the animals in an institution.

It was a tremendous change. After being singularly focused on science, I had to switch gears and increasingly focus on issues of animal welfare. Yet, those same scientific principles that caused me to rethink the use of animals for artificial organ development, also led me to look at laboratory animals in a very different way.

For example, in most facilities mice are transported from a housing room to a procedure room. That can involve a cage being hand-carried or put on a cart. It seems innocuous, but when you look at this single circumstance, you see how much it can affect the animal. When a person walks, they tend to swing side-toside (think about it when you walk down the hallway next). Imagine what happens to the 20-gram mouse in the cage. Now, imagine what happens to that mouse if you drop something and reach down to pick it up, while holding that cage. They get tossed all around the cage, which is extremely stressful. Or, think about the cart rattling down the hallway. I did a study, which got published, with this sort of transportation and found that cart transportation could expose the mice to nearly 2 g's worth of acceleration. That's enough to lift them off the ground. We found that simply putting a towel under the cage was enough to remove most of the vibration. That's just one example of how I tried to use the scientific process to improve animal welfare.

But you eventually left animal research, altogether. Why?

Over many years, I became less and less enamored of how animal research was being done. While people may disagree about the need for animal research, there should be no disagreement with the desire to improve the quality of life for the research animals. I found that there was real resistance to making simple changes to benefit the animals. The scientists were afraid that these simple changes would somehow affect their research outcomes, even if I could produce data to suggest there would be no effect.

Similarly, as we seek ways to improve the lives of research animals, we need to examine all aspects of their lives, including the rigidly controlled conditions they live in. For instance, how does keeping five mice in a 75 in² clear plastic box, with air constantly blowing through it, relate to a person, who is interacting with many different environments, every day? Taken further, how does a genetically manipulated mouse, who eats the same diet every day, and has been exposed to virtually no diseases, relate to a person, who eats a varied diet and is constantly exposed to various diseases? We have made animal research into a

factory production and have lost our perspective about how the animal relates to the human. The diseases researched in animals look like those in people, only until we look more closely. Then we find that our pink lawn flamingo only shares a similar color to the real bird.

What will you be doing at AWI?

There's so much to do. I think the biggest focus will be on making data available. There are dozens of articles describing ways to improve research animal welfare, but unless you know how to get them or how to interpret them, they're effectively useless. I believe that AWI can provide a real leadership role in making the data more accessible. I'm really looking forward to working with scientists to find ways to apply the principles of the 3 R's (refining, reducing, and replacing) in a manner that will improve animal welfare, while ensuring solid scientific outcomes. 🏖

Cutting Down Transport Trauma for Animals in Research

MOVING ANIMALS IN RESEARCH around within an institution is a very common practice. Animals are moved from their housing rooms to laboratories or other locations, such as imaging or surgical facilities. Transportation is inherently stressful to these animals and can expose the public to allergens and diseases. Minimizing the stress of transportation and potential for unexpected exposure to allergens or diseases should always be done by the animal care staff and overseen by the Institutional Animal Care and Use Committee.

The Ohio State University recently took a partial step in this direction. It banned all personal vehicle transportation of animals classified as Animal Biosafety Level 2 (ABSL-2) or higher. Animals classified as ABSL-2 have been infected with agents associated with human disease and pose moderate hazards to personnel and the environment. This is a reasonable step, but does not address the animal and public welfare issues associated with transporting an animal in a personal vehicle. Once an animal is put into a personal vehicle, the institution has virtually no ability to oversee the safety and care of the animal. Other Big Ten universities have varying restrictions on personal vehicle transportation; some not allowing any personal vehicle transportation (Indiana University and University of Iowa) and some requiring a careful description of the transportation (University of Michigan, University of Wisconsin, University of Illinois, and University of Minnesota). AWI encourages Ohio State and all research facilities to consider the welfare of the animals and public and ensure their policies for transportation of animals in research do not allow use of personal vehicles.

GLOBAL EFFORTS TO STOP THE ILLICIT WILDLIFE TRADE: ARE THEY ENGLIGH?

THE FILM "NOAH" IS A HOLLYWOOD EPIC that recounts the biblical story of Noah's struggle to save his family and a menagerie of animals from a flood that threatens to wipe out all other life on the planet. Beyond the bounds of sacred text and cinematic story-telling, there's a modernday flood occurring—one that is also devastating wildlife species, irreparably altering ecosystems, and stealing from future generations. The global trade in wildlife and wildlife products has escalated to alarming levels, fueled by increasing demand, burgeoning economies, and a phalanx of wildlife criminals, including organized criminal syndicates.

The substantial increase in the illicit wildlife trade is due in large part to the recent involvement of these criminal syndicates, which also traffic in narcotics, arms, and humans, and rely on corruption, force, and sophisticated trade networks to facilitate their illegal operations. They have vast arsenals of weapons and other equipment, including helicopters and night-vision goggles, ensuring that they can outgun and outrun most law enforcement agents as they expeditiously exploit wildlife. They have also murdered over 1,000 wildlife law enforcement officers over the past decade.

Terrorist organizations, including Joseph Kony's Lord's Resistance Army, the Janjaweed, and Al Shabaab implicated in the September 2013 shopping mall attack in Kenya—are also reportedly involved in the illicit wildlife trade to sustain their operations or curry favor with corrupt officials. Their role in the trade has been described as a "grave menace" to national and regional security in central Africa by United Nations Secretary General Ban Ki-moon.

The role of criminal syndicates and terrorists in the illegal wildlife trade has not gone unnoticed. Indeed, it has

triggered increased national and international interest in this global scourge and a renewed commitment among many governments, including the United States, to tackle this problem.

In November 2012, Secretary of State Hilary Clinton addressed the illicit wildlife trade in a speech at a State Department event dedicated to the trade and its links to domestic and international security. Secretary Clinton laid out a four-part strategy to counter the increasing threat of wildlife crime that involved enhancing diplomatic outreach to foreign governments, initiating targeted campaigns to reduce demand for wildlife products, continuing to expand US-international capacity-building efforts, and developing new partnerships to combat wildlife crime.

Seven months later in Tanzania—one of the world's most biodiverse countries and a hotspot for wildlife crime—President Obama signed an executive order combating wildlife trafficking. The order noted that "poaching of protected species and the illegal trade in wildlife and their derivative parts and products ... represent an international crisis that continues to escalate" and that small scale, opportunistic poaching has expanded to include "coordinated slaughter commissioned by armed and organized criminal syndicates." To address this crisis, the order established a presidential task force on wildlife trafficking and a complimentary citizen's advisory council, and allocated \$10 million for anti-poaching campaigns and technical assistance in Sub-Saharan Africa.

Actions to protect wildlife have also been initiated by NGOs and private individuals: The Clinton Global Initiative has joined with several international organizations to thwart elephant poaching and the illegal ivory trade. Billionaires Warren Buffet and Paul Allen are funding wildlife protection projects in Africa. Google and other companies are donating funds or expertise to develop new technologies to fight wildlife crime. A number of urgent meetings between governments, scientists, and various stakeholders have taken place throughout the world to develop new strategies to slow or stop the illicit wildlife trade.

Not to be outdone, a number of other governments allocated additional funding to combat wildlife crime. Kenya has strengthened its wildlife protection laws, increasing the penalties for wildlife crime, and other countries are considering similar legislation. Judges in some countries, recognizing the severity of the illicit wildlife trade, have sentenced convicted wildlife criminals to pay substantial fines or spend years in jail to deter others from committing such crimes. Even China, a key country driving much of the illicit wildlife trade, is making some efforts to clamp down on illegal trading. These are signs of hope—though only time will tell if these efforts will be sustained or are merely temporary measures to give the perception of action.

At the multinational level, the United Nations Commission on Crime Prevention and Criminal Justice has declared illicit wildlife trading a "serious crime," providing expanded opportunities for legal assistance, asset seizure and forfeitures, and extraditions in response to wildlife crimes. INTERPOL, other law enforcement agencies, and governments are conducting global operations to combat wildlife crime and destroy criminal syndicates. Though other examples of such actions exist, these are merely baby steps in the massive strides required to identify wildlife criminals, dismantle criminal syndicates, and eliminate demand for illicit wildlife products.

To stem the slaughter of African elephants, several governments, including the United States, Belgium, Gabon, France, the Philippines, and China have recently destroyed all or portions of their confiscated ivory stockpiles. Hong Kong has also committed to destroying its massive ivory



Pangolins are relentlessly hunted and traded illegally for their scales, skins and meat. At top, law enforcement officials in Cambodia relocate a rescued pangolin. Bottom: A ground pangolin at Madikwe Game Reserve in South Africa.

THE LONDON CONFERENCE ON THE ILLEGAL WILDLIFE TRADE

On February 13, 2014, UK Foreign Secretary William Hague and members of the royal family welcomed heads of state, ministers, other dignitaries, and celebrities to Lancaster House for the London Conference on the Illegal Wildlife Trade—a meeting that brought high-level representatives from 46 countries and 11 international organizations together to address wildlife crime.

In welcoming the guests, Secretary Hague opined that the meeting would be a turning point in the fight against the illegal wildlife trade and declared that such trading is "a global criminal industry, ranked alongside drugs, arms and people trafficking. It drives corruption and insecurity, and undermines efforts to cut poverty and promote sustainable development, particularly in African countries." Prince Charles thanked the participants for their commitment to urgently act to stop the illegal wildlife trade, which he stated "has become a grave threat not only to the wildlife and the people who protect them, but also to the security of so many nations." Prince William remarked that everyone must use their "collective influence to put a stop to the illegal killing and trafficking of some our world's most iconic and endangered species."

The conference resulted in the London Declaration on the Illegal Wildlife Trade which, like the United States' National Strategy for Combating Wildlife Trafficking, identified several key categories of actions. These include eradicating the market for illegal wildlife products, ensuring effective legal frameworks and deterrents, strengthening law enforcement, and achieving sustainable livelihoods and economic development to combat the illegal wildlife trade. Forty-six countries, including the United States, endorsed the declaration—another step in the right direction but one that must be followed by a long-term commitment of governments and stakeholders to remedy this serious threat to wildlife.



include ingredients from tigers and other protected animals, were seized by US law enforcement officials. Attendees at the London Conference hope to ratchet up international efforts to stem the flow of such goods.

These traditional

medicines, which

stockpile, and others will likely follow suit. These ivory "crush" events send a clear message to wildlife criminals that the trade in blood ivory is unacceptable and must end. Far more is required to end this trade, including the closure of domestic ivory markets in China and the United States, and campaigns to convince ivory buyers, particularly China's burgeoning middle class, that owning ivory is not a symbol of wealth or importance but a token of cruelty and death.

Even the British royal family has joined the global fight against the illegal wildlife trade, with HRH The Prince of Wales (Prince Charles); HRH The Duke of Cambridge (Prince William); and HRH Prince Henry of Wales (Prince Harry) attending a high-level ministerial meeting in February 2014 in London (see box at left). Prince William has expressed a long-term commitment to the effort to end the illegal trade in wildlife. He has participated in the creation of anti-wildlife trafficking public service announcements and even asked that the royal family's collection of ivory be destroyed.

Only days before the UK meeting, in the United States, the President's Task Force on Wildlife Trafficking released a "National Strategy for Combating Wildlife Trafficking." While not particularly detailed and lacking many outside-the-box ideas, the strategy identified three priorities: strengthening law enforcement, reducing demand for illegally traded wildlife, and expanding international cooperation and commitment.

The strategy lists a number of focal points in pursuit of these three goals: strengthening and improving enforcement of domestic, foreign and international wildlife laws; using administrative tools to quickly respond to the immediate poaching crises; seizing the assets of domestic and international criminals; improving the capacity to intercept illegal animals and items at ports both at home and abroad; developing new tools and technologies to combat wildlife crime; engaging in multinational enforcement efforts; attacking corruption that undermines wildlife law enforcement; supporting and partnering with governments and other stakeholders to reduce demand for wildlife products; and strengthening existing international wildlife trade agreements.

Though incomplete and lacking detail, the national strategy provides the United States an opportunity to be a global leader in the fight against wildlife crime. To demonstrate such leadership, the country must strengthen its own laws and abilities to crack down on such criminal activities. For instance, with only about 220 special agents



and less than 140 port inspectors, the United States does not presently have the capacity to effectively stop federal wildlife crimes within its own borders. This must be corrected.

Globally, increasing the capacity of foreign governments to intercept illegal wildlife shipments and to investigate and successfully prosecute wildlife criminals are key tools in the war against the illicit wildlife trade. At present, too many of those arrested for wildlife crimes never pay for their crimes due to shoddy investigations and prosecutions. Furthermore, curtailing corruption that has become pervasive within governments is essential. Often, wildlife criminals and syndicate bosses use bribes or kickbacks to avoid capture, or they have "friends" in high ranking positions who facilitate their illegal activities. If such corruption cannot be stifled, effort and funds committed to combat wildlife crime will be wasted.

Similarly, without demand-reduction campaigns, efforts to shut down the illegal wildlife trade in source countries may be for naught. Such campaigns, though often expensive and time-consuming, can be successful, as demonstrated by the success in helping turn people against the shark fin trade in Asia. Similar campaigns have been initiated to reduce demand for elephant ivory and rhino horn.

The plight of rhinos, elephants and tigers, and the links between the illegal wildlife trade, criminal syndicates, and terrorism, triggered the development of the US national strategy. However, the illegal trade, which may be worth as much as \$19 billion annually, adversely affects a proverbial ark full of species, from insects to the great whales and everything in between.

It is unclear if the enormous profits that drive the illegal trade can be overcome through global action. Sadly, though the world's governments have an immense capacity to deliberate, negotiate, and produce endless documents, reports, and studies, their ability to act with the required urgency is often hindered by a lack of political will, corruption, enforcement deficiencies, and inadequate resources. The US national strategy is a product of hours of meetings and deliberations, with the words on its pages representing a start toward achieving a greater goal. But, without far more effort, it won't save a single animal.

It is too early to tell if these new initiatives will succeed in significantly reducing the illicit trade in wildlife. Can the global community prevail against a cadre of wildlife criminals seeking quick profits and unconcerned about the damage being done to species, habitats, or people? Or will massive profit margins, a plethora of poachers, minimum legal penalties, rampant governmental corruption,

Left to right, at top: Confiscated ivory items at the National Wildlife Property Repository in Denver, CO. A Bengal tiger in Ranthambore National Park, India. US and Tanzanian presidents and first ladies greet well-wishers during a state visit to discuss wildlife trafficking. A blue-and-yellow macaw, among the millions of wild birds traded illegally each year. Ivory (Kathryn Dailey), Tiger (Allan Hopkins), Obama (FWS), Parrot (Steve Wilson) and intense demand conspire to make these efforts only temporarily plug holes in a dike holding back a flood of extinctions?

As one of the world's largest importers and exporters of wildlife products, the United States has an obligation to step up and fight against the illegal wildlife trade regardless of the costs and without political interference. Laws must be strengthened and the judiciary educated about the scourge of wildlife crime, since most penalties imposed against convicted wildlife criminals are too lenient and provide no deterrent effect. While its proposals to restrict domestic ivory trade and clamp down on ivory imports is an adequate first step (see box at right), the domestic ivory market in the United States must be closed, and similar rules must be established to end the domestic trade in other imperiled species.

The United States must also substantially strengthen its laws related to international trading of wildlife. Current laws that largely reflect international standards imposed by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are inadequate. Indeed, though the National Strategy for Combating Wildlife Trafficking focuses on the illicit trade, the "legal" trade has increased exponentially without sufficient regulation to ensure that such trade is "sustainable" (or even legal). There are numerous examples of purportedly legal exports of CITES-listed wildlife or wildlife products to the United States for which the scientific evidence indicates that the exports are actually illegal. This "legal" trade to feed American demand for exotic pets, exotic leather products, and other wildlife commodities is contributing to the precipitous decline of species.

Ultimately, gaining control of the wildlife trade—legal and illegal—will take political will, creativity, and money to stop those who are robbing us and future generations of our wildlife. With the accelerating rate of species extinctions often linked to anthropogenic impacts—if more species go extinct as a result of our greed, vanity, ignorance, and appetites, it will be a shameful legacy to pass on to our children.

Hollywood has Noah to save animals from extinction; we don't. For today's wildlife, the only hope is a global collaboration of governments, organizations, and citizens to fight back against those who won't—and don't—hesitate to destroy our natural world.



A young elephant lies dead, one of 22 massacred in Garamba National Park, Democratic Republic of the Congo, in March 2012. The poachers used high-powered rifles fired from a helicopter, and carried away more than \$1 million worth of ivory.

US EFFORTS TO CLAMP DOWN ON IVORY TRADE

The United States has promised to undertake efforts to stop the slaughter of African elephants by closing some of the gaping loopholes that have contributed to this country being the second largest market for ivory products.

Specifically, the federal government has proposed to (1) prohibit commercial import of all African elephant ivory; (2) prohibit commercial export of elephant ivory with the exception of bona fide antiques; (3) significantly restrict domestic resale of elephant ivory; (4) clarify the definition of "antique" ivory; (5) restore full Endangered Species Act protections for the African elephant; and (6) limit the import of sport-hunted elephant trophies to two per hunter per year. Many of these proposed changes will be subject to public comment before they are finalized.

The National Rifle Association, antique ivory dealers, and some musicians have expressed opposition to these proposed restrictions, claiming that they hinder sales or international transport of antique ivory products or custom guns, fine furniture, or musical instruments containing ivory. Ultimately, the need to protect elephants must trump these concerns. And in truth, while these proposals may help to curb US ivory trade, a complete ban would be the most effective means to truly prevent US demand from continuing to fuel the slaughter of African elephants.

In a related effort, legislation is pending in Hawaii and New York to restrict ivory possession, imports, exports, and sales. New York City is considered a key hub for the sale of ivory products both from illegal and legal sources—though much of what is passed off as legal is not. In addition, in April 2014, the federal government prohibited the import of elephant trophies from Tanzania and Zimbabwe due to those countries' questionable management strategies and lack of effective law enforcement.

AWI CURTAILS LONG ISLAND DEER CULL

It may be hard for modern suburbanites to believe, but deer became so scarce in the early 1900s due to intense hunting that the species would have been considered endangered. That, of course, is no longer true. A mix of hunting restrictions, predator eradication, and suburbanization creating deer-friendly open spaces—has produced a dramatic comeback. The white-tailed deer is now the most widely-distributed large mammal in North America. What has been a boon for deer populations, however, has proven sometimes to be a bane to human settlements and, in some cases, to the environment. In fact, deer are considered a bigger threat to the health of eastern US forests than climate change because of the impacts of their feeding habits on forest regeneration and, consequently, other species—particularly songbirds.

While many therefore vilify deer, which the legendary naturalist John Muir called "invincibly graceful" and the US Forest Service describes as a "magnificent animal" of "immeasurable" importance, it is important to remember that humans have largely engineered this problem. The towns and villages of eastern Long Island, New York, are no exception, where a mix of development and open space has fueled deer population growth by providing ample food and refuge. As usual, when deer and humans come into conflict, the deer come out on the losing end. In response to a growing number of deer, the Long Island Farm Bureau and the US Department of Agriculture's Wildlife Services program proposed a project last summer to use federal sharpshooters to kill 2,000 to 3,000 deer this winter throughout the five eastern towns on Long Island.

AWI sent a letter in January to USDA officials, asserting that Wildlife Services was in violation of the National

Environmental Policy Act by proposing to cull thousands more deer than contemplated by existing environmental planning documents, and by failing to update these documents to include consideration of over a decade of research on successful, non-lethal management methods. USDA responded by agreeing to reduce the scope of the project to no more than 1,000 deer, and to update its environmental planning documents, but refused to halt the killing this winter.

AWI then worked with local deer advocates to convince the towns not to support the Farm Bureau/Wildlife Services project, with all but the town of Southold deciding not to contribute funds to the project. In an attempt to stop any killing of deer this winter, AWI joined a lawsuit alleging that Southold had hastily approved its financial support for the project without adequately complying with state environmental law; unfortunately, the judge in the case denied our request for a temporary injunction. AWI brought a second lawsuit, filed against the New York State Department of Environmental Conservation, alleging that the department was issuing permits for the cull in an arbitrary and unscientific manner. This time, the deer won a reprieve when the judge issued a temporary injunction in early March that halted the issuance of any new permits for the cull. AWI is awaiting a decision on its request for a preliminary injunction.

AWI continues to work to halt any cull this year and advocate for greater transparency and consideration of non-lethal management methods, given that the Long Island Farm Bureau and Wildlife Services apparently still seek to cull as many as 9,000 deer on eastern Long Island over the next few years.



Jaguars Get Habitat Designation but Remain in Danger

A FULL 17 YEARS after being listed as endangered across its entire range, critical habitat was finally designated for the jaguar (*Panthera onca*) this spring. A total of 764,207 acres in the three southernmost counties in Arizona (Pima, Santa Cruz, and Cochise) and neighboring Hidalgo County in New Mexico fall within the boundaries of the final designation that was released by the US Fish and Wildlife Service (USFWS) last month.

Critical habitat designation for purposes of the Endangered Species Act (ESA) means that such areas are recognized to contain physical or biological features that are essential to the conservation of the species and therefore may require special management considerations or protection. Critical habitat designation is particularly vital for jaguars, given that there have been no documented females or breeding pairs in the United States for over 50 years.

During the 19th and early 20th centuries, these big cats were extirpated from California and Texas, and nearly eradicated from Arizona and New Mexico, in large part due to lethal control to protect livestock. To this day, hounds, neck snares, foot snares, and steel-jaw leghold traps for mountain lion control continue to be used in jaguar habitat. In 2009, during an illegal capture operation, the Arizona Game and Fish Department injured and euthanized a jaguar known as "Macho B" who had lived in the area for at least 16 years. AWI submitted comments on the habitat proposal in August 2013, supporting the designation but pointing out that both the Jaguar Recovery Outline and the habitat proposal ignored significant portions of the jaguar's historic range that are essential to the species' recovery. Historically, jaguars were found in California, Arizona, New Mexico, Texas, and possibly as far east as Louisiana.

Connecting large areas is key to conserving the long-term viability of large carnivore populations. AWI specifically recommended that USFWS designate additional protected habitat for jaguars farther north, so as to include all locations where their presence has been documented since the animal's ESA listing in 1997, including the Chiricahua and Animas Mountains in Arizona and stretches of the Mongollon Rim in New Mexico's Gila National Forest. These additional areas are part of a richly biodiverse region of southeastern Arizona, southwestern New Mexico and northwestern Mexico known as Sky Island. Critical habitat recognition over a wider portion of this region would allow for the movement of individuals into adjoining territories and help populations exchange genetic material.

If jaguars are to be truly afforded the chance to thrive as a species, they must be provided space and the opportunity to disperse, while being protected from trapping and exposure to other lethal activities within the critical habitat area. AWI seeks to ensure that these majestic carnivores reclaim their rightful place in this country's wilderness.





ERRAN BAYLOR

Ava Kotler, Kirra Kotler, and Lizzie Gordon on the north steps of the State Capitol in Sacramento. They delivered 1.2 million signatures supporting the effort to end orca captivity for entertainment in California.

AWI Sponsors Groundbreaking Legislation in California to Protect Orcas

CALIFORNIA STANDS poised to be the first state to end captivity of orcas for entertainment purposes. In early March, AWI's Dr. Naomi Rose joined Assemblymember Richard Bloom (D-Santa Monica), Blackfish director Gabriella Cowperthwaite, and two former SeaWorld trainers at a press conference on Santa Monica pier to announce the introduction of SB 2140 by Assemblymember Bloom.

The Orca Welfare and Safety Act, as the bill is called, would prohibit the public display of orcas (or killer whales) in the state and retire those currently in captivity in California to less stressful lives in sea pens. Dr. Rose stated at the event: "My experience studying orcas in the wild has led me to conclude that the welfare of these intelligent, wide-ranging, socially complex animals cannot be adequately protected when confined for a lifetime in small, shallow tanks."

Public awareness concerning the problems associated with orca captivity has blossomed since the airing of Blackfish (reviewed in the Summer 2013 AWI Quarterly) and publication of the book Death at SeaWorld, by David Kirby (reviewed in the Fall 2012 AWI Quarterly). Both chronicle the story of Tilikum, a captive orca who in 2010 killed his long-time trainer, Dawn Brancheau, after killing two other people in separate earlier instances. Captured off the east coast of Iceland and ripped from his family when he was around two years old, Tilikum has spent more than three decades in captivity.

AWI also sponsored a screening of Blackfish at the Crest Theater in Sacramento, followed by a panel discussion with Dr. Rose, actor and bill spokesperson Eric Balfour, and former SeaWorld trainer John Hargrove. The event, held on April 7, coincided with the first hearing of the bill on April 8 by the California Assembly's Committee on Water, Parks and Wildlife. The hearing attracted wide attention from media and the public, with people spilling out into the corridor. After hearing testimony from both sides, including Dr. Rose, the committee agreed to a suggestion by the chairman, Anthony Rendon (who had already stated his ethical opposition to keeping large mammals in captivity) to send the bill to "interim study"-a process to allow committee members time to obtain more information on the science associated with orcas and captivity. While we are disappointed that the bill won't be passed in 2014, we look forward to being part of the interim study process, which we believe will provide further evidence of the need for this bill to become law. 🏖



After meeting with California legislators, AWI's Dr. Naomi Rose speaks with a television reporter about the Orca Welfare and Safety Act.

PAROLE POSSIBLE FOR OLDEST CAPTIVE ORCA

Lolita, now almost 50 years old, was a member of the Southern Resident distinct population segment (SR DPS) of orcas when she was captured in 1970 off Whidbey Island, Washington. She has been held and displayed at the Miami Seaquarium ever since, in an enclosure long believed by AWI and others to be non-compliant with Animal Welfare Act (AWA) space standards. Despite complaints to USDA's Animal and Plant Health Inspection Service—the agency responsible for enforcing the AWA—no actions have been taken to force the facility to increase the size of her enclosure. Now there may be hope.

Earlier this year, in response to a petition filed by the Foundation to Support Animal Protection, the National Marine Fisheries Service issued a proposed rule to remove an exclusion for captive members of the SR DPS. This is significant because the SR DPS is protected under the Endangered Species Act (ESA). Including Lolita as part of this population segment would mean she would be covered automatically by the same protections, including those governing "take" of endangered and threatened species. AWI believes that captivity is a "take" as defined by the ESA, because it disrupts one or more behavioral patterns that are essential to an animal's life history and its contribution to the population. Lolita's enclosure is not AWA-complaint and she is not with other orcas—a "harm" according to the Fisheries Service's interpretation of the ESA.

AWI has submitted comments to the Fisheries Service supporting the proposed rule-making and urging that once Lolita is covered by the ESA, steps be taken to address the "take" that she is suffering in captivity in a non-compliant



Lolita in her tank at the Miama Seaquarium. Forty-four years ago, she was wrenched from her family in Puget Sound, WA, and brought here to perform.

enclosure. Options for Lolita include increasing the size of her enclosure to make it AWA-compliant, moving her to a sea pen in her native waters, or rehabilitating and releasing her to the wild. Given her young age at capture and more than 40 years in captivity, AWI favors the second option—retirement to a sea pen in her native waters. A proposal put forward by the Orca Network seeks to do just that. In such a pen she would once again feel the ocean currents; be well cared for in an area that far exceeds AWA requirements in every way; not be made to perform or exposed to loud, artificial music and noise; and be allowed to finally find peace.

More Whales Strand After Noisy Naval Exercise

SADLY, there has been another mass stranding of Cuvier's beaked whales (*Ziphius cavirostris*) that coincides with naval activities involving sonar blasts. This one occurred over several days in early April in waters south of Crete in the Mediterranean Sea. From first reports, the incident appears to have involved at least five single stranding events and seven animals. A trilateral military exercise named Noble Dina 2014, involving the United States, Israel and Greece, preceded the strandings. The exercises included antisubmarine warfare, usually involving the use of active sonar, which has been irrefutably correlated with strandings of beaked whales and other cetaceans at many locations across the globe. This part of the Mediterranean Sea is well known habitat for beaked whales, which are particularly susceptible to anthropogenic or human-generated noise. It is believed that because they are deep-diving animals—just recently a whale was recorded to dive to almost 10,000 feet, while another stayed down for 138 minutes—their flight response to noise results in them rising too quickly and suffering from a debilitating condition similar to "the bends" in human divers. Necropsies of affected individuals will continue, as will the question of why naval exercises were taking place in known beaked whale habitat.

Bottlenose Dolphins in Panama Getting Bottled Up by Tour Boats

BOCAS DEL TORO is a cluster of small islands on the Atlantic side of Panama, with a rich and diverse marine ecosystem. Until recently, the human presence in Bocas del Toro consisted of indigenous communities and a few banana plantations. People traveled by small handmade canoes, and lived in one-room wooden stilt houses.

A rapid tourism boom has changed that. Europeans and North Americans have established tourism businesses in Bocas del Toro—not always carefully. Within the last 20 years many of Bocas del Toro's mangroves have been ripped out and a bustling tourist town has developed, with roads, tourist facilities, and shops.

One of Bocas del Toro's most popular tourist activities is dolphinwatching. Every day, small speedboats with disproportionately large and noisy engines take tourists out to Dolphin Bay—where bottlenose dolphins come together to socialize and possibly teach their young how to forage. During the slow season, from 3 to 15 boats might approach a group of dolphins at one time. But during high season, locals have reported more than 100 dolphin-watching boats crowding around a single group of dolphins in the bay. In order to create ideal dolphin picture opportunities for the tourists, boats circle, drive through or over dolphin groups, and chase mothers and calves. Tourists even leap out of the moving dolphin-watching boats to swim after the dolphins.

Ashley Sitar, a Ph.D. student in the Department of Environmental Science and Policy at George Mason University, on hand to conduct research in the area in the summer of 2013, asked locals and boat operators about the dolphins and tourism. She found that dolphinwatching boat operators in Bocas del Toro were unaware that Panama even had a dolphin-watching code of conduct, and knew little about proper watercraft operating procedures to avoid injuries to dolphins.

During July, August and September, Ashley observed the local dolphins without dolphin-watching boats present, and how they reacted when boats were around. She found that when dolphin-watching boats were present, the dolphins showed behaviors indicative of stress—such as slapping their tails on the surface of the water. She also observed evidence of physical run-ins with boats—sliced fins and gashes along their flanks from boat propellers. From 2012 to 2013, nine dolphins (out of a total population of 100–150) were killed in boat collisions.

Tellingly, the stress behaviors were only observed when dolphin-watching boats failed to follow the Panamanian dolphin-watching code of conduct. Her study showed that when boats kept the right distance and behaved in a manner described and advocated by this voluntary code of conduct, dolphin behaviors were similar to those when boats were not present—that is to say, normal and unstressed.

The indigenous people have become financially dependent on dolphin tourism. But they also, in interviews with Ashley, expressed a strong connection with the dolphins and alarm over the current situation. Improved dolphin tourism—including training and education in proper boat etiquette around the dolphins—will help the community of Bocas del Toro benefit from the influx of tourists without harming the dolphins.

A bottlenose dolphin in Bocas del Toro, Panama, attempts to navigate between tour boats. The sudden influx of fans is causing stress to the resident dolphins.

ZZING

DOES YOUR SEAFOOD COME WITH A SIDE OF WHALE?

Americans consume more than 5 billion pounds of seafood each year, 85 percent of which is imported. Although, historically, little information has been provided about the origin of this fish, American consumers are beginning to ask questions about the sustainability of the catch and demand that animal welfare issues be taken into account.

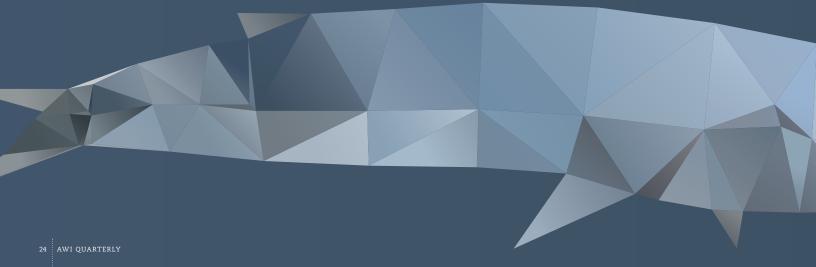
Public opinion polls commissioned by numerous animal protection groups show that consumers want to be sure, in particular, that they are not supporting whaling when they buy seafood. Two-thirds of respondents in both the United States and United Kingdom indicated that they are prepared to stop purchasing Icelandic seafood products based on their opposition to Icelandic whaling.

AWI is educating both the public and buyers within the seafood industry concerning the ties between the whaling and fishing industries. Our primary focus has been to expose the links between Iceland's whaling industry and HB Grandi, Iceland's leading seafood company. The company's chairman, Kristján Loftsson, is the managing director of, and a key shareholder in, the Hvalur hf whaling company. In addition, HB Grandi's fish processing facilities are used to cut and pack whale meat. Since resuming commercial whaling in 2006, Hvalur has killed more than 400 endangered fin whales and exported nearly 5,000 metric tons of whale products, mostly to Japan, in defiance of international law.

Our initial outreach to major US seafood buyers (see the Spring 2012 AWI Quarterly) induced Whole Foods Market (WFM) to commit to a whaling-free purchasing policy, and to require that, henceforth, all WFM Icelandic seafood vendors provide a written affidavit stating that they or their company are not involved in whaling. Although that and other retailer commitments were positive steps, HB Grandi sought out other customers, and continues to export fish to the United States.

AWI has recently joined forces with more than a dozen animal protection and environmental organizations—all members of the Whales Need US coalition of US groups opposed to commercial whaling—to call on leading seafood retailers and wholesalers to publicly oppose Iceland's whaling industry. To that end, we have written to dozens of US retail and food service companies, asking them to conduct full audits of their seafood sources and commit to a whaling-free seafood supply chain.

In mid-March, AWI and its partners launched an advertising campaign in Boston aimed at thousands of North American Seafood Expo attendees, which include key seafood suppliers and buyers from the food industry. Large ads ran on buses and subway trains that took people between the expo site and Boston's Logan International Airport. The ads featured an artistic rendition of a whale with the question "Do you know who caught your seafood?" and a website address: *DontBuyFromIcelandicWhalers.com*. The website explains which whaling-linked Icelandic companies sell to US buyers, and invites people to call on President Obama to take decisive action against Iceland's whalers by blocking imports of fish from Icelandic companies tied to whaling (which, unfortunately, he failed to do—see box opposite page).



A MISSED OPPORTUNITY TO HELP END ICELANDIC WHALING

President Obama announced on March 31 that the United States will not impose targeted trade sanctions to address Iceland's commercial whaling. Instead, he revised and repackaged a series of diplomatic measures from two years ago that US officials will be obligated to implement.

Under a potentially powerful US law known as the Pelly Amendment, President Obama could have imposed targeted economic sanctions against lceland's whaling company, Hvalur, in an effort to halt its whaling. The president's announcement followed a February 2014 certification issued by US Interior Secretary Sally Jewell, declaring that Iceland's trade in whale products undermines the effectiveness of an international trade treaty—the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)—given that treaty's prohibition on international commercial trade in whale products.

In his message to Congress, the president acknowledged that Iceland's actions jeopardize the survival of the endangered fin whale—the second largest animal on earth—and undermine multilateral efforts to ensure greater worldwide protection for whales. Yet he chose to call for diplomatic measures against Iceland, measures that have been tried before without success.

The president first ordered diplomatic measures in 2011 against lceland for commercial whaling in violation of the international commercial whaling ban. Despite those measures, lceland continued to kill whales—35 minke and 134 fin whales in 2013 alone—as well as export whale meat and blubber. A massive shipment of 2,000 tons of whale products left lceland just days before the president's announcement, en route to Japan.

As the seafood expo opened, High Liner Foods, a leading North American seafood company, announced its own commitment not to purchase products sourced from Icelandic companies linked to whaling. The High Liner statement said the company is not supportive of any commercial whaling or trade in whale products, and that it was committing not to enter into any new contracts with HB Grandi until that company fully divests itself of any involvement and interest in whaling. Later, Trader Joe's responded in similar fashion, stating that the company opposes commercial whaling and will conduct an audit of its suppliers to confirm there are no links to any whaling.

Given the disappointing decision by President Obama not to impose targeted trade sanctions on Icelandic companies with ties to whaling, we believe it is now up to US commercial interests and consumers, with our assistance, to use their collective and significant economic clout to end Icelandic whaling.

To highlight the Icelandic seafood industry's ties to whaling, an AWI-designed ad on the side of a Boston bus asks "Do you know who caught your seafood?"



War of the Whales

Joshua Horwitz Simon & Schuster ISBN-13: 978-1451645019 448 pages, \$28.00

In 1994, when I was working at The Humane Society of the United States, I was contacted by Joel Reynolds of the Natural Resources Defense Council. He wanted to know if I would like to participate in a legal action against the US Navy in California, which was proceeding with "shipshock" trials (combat-condition testing of new ship hull

designs, using live ordinance) without adequate environmental assessment. I agreed, and thus began a long and fruitful collaboration with Joel that led to a number of victories on mitigating human-caused marine noise, particularly the use of military sonar, and a few defeats as well.

This story and others related to the impacts of military sonar on marine mammals are recounted in engaging detail by Joshua Horwitz in his upcoming book, *War of the Whales*, to be published by Simon and Schuster in July 2014. Josh focuses on two "characters" in the book: Ken Balcomb, a killer whale biologist in Washington state, and Joel. Ken has also studied beaked whales in the Bahamas and,

through an astonishing set of coincidences, ended up embroiled in the struggle to protect whales from the growing cacophony of sonar, pile driving, shipping, and seismic exploration for oil and gas that is cluttering up their acoustic space below the waves. Unlike people, who rely primarily on vision, whales are acoustic creatures, able to navigate the black ocean depths using their echolocation with a precision that military sonar can only dream of. Thus, they are particularly susceptible to the noise pollution assaulting their habitat.

AWI has also worked on the marine noise issue for many years; Ben White, a tireless activist who worked for AWI for several years before losing a battle with an

> aggressive cancer in 2005, is also featured in the narrative. Josh spent years researching this book—talking to dozens of people involved in the issue, including many representing the Navy. This gives the book a much-needed balance and tells the story fairly. Josh goes all the way back to the 1960s to put the present-day situation in context.

War of the Whales reads like a novel, but the story it tells is true. Josh took the time necessary to get the technical details right, but also to get to know the people involved, so the story isn't just a dry non-fiction account of an environmental issue, but a fascinating personal tale. It is available for pre-order online and,

if you've ever read a media article on a whale stranding caused by military sonar and wanted to know more, you're going to want to read this book. To read an excerpt from the book, see WaroftheWhales.com.

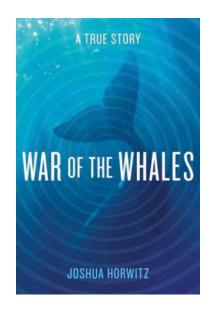
Written by Naomi Rose, Ph.D.

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.



THE BEAVERS OF POPPLE'S POND

Patti Smith Green Writers Press ISBN-13: 978-0989310444 284 pages, \$15.95

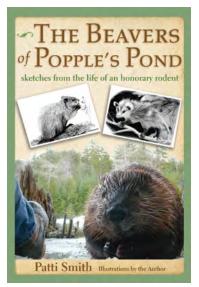
Life seems to fly past, ever more fastpaced and electronic-obsessed, with parents and their kids increasingly sitting indoors communicating via electronic tools. We all but ignore the natural world that is just outside our doors. In The Beavers of Popple's Pond: Sketches from the Life of an Honorary

Rodent, author, naturalist, artist, and wildlife rehabilitator Patti Smith shows us what we are missing. She takes us with her out into the beautiful Vermont countryside and describes, in loving detail, time spent observing, interacting with, taking notes about, and drawing the wildlife in the unspoiled valley. It is an inviting and enchanting place, and I thoroughly enjoyed the read. Increasingly, I also found myself inspired to look out in my own backyard to watch the wildlife there.

Smith's initial focus is on the beavers, having been motivated by the book *Beaversprite*, Dorothy Richards' moving account of the close relationship she developed with beavers with whom she shared a home. Smith had beavers living nearby, so she resolved to get to know them, too. She decided on two key techniques to employ with the beavers, as well as with many of the other

wild residents: she talks to them gently, and though watching them, seeks to give the appearance that she is busy doing other things. Her method worked, and she succeeded in developing relaxed relationships with many animals over the course of the book.





The first beaver acquaintances are named Willow and Popple (poplars are a favorite beaver food); they are quick to learn that Smith is not only nonthreatening, but that she comes bearing snacks (maple branches, apple slices, and nuggets specially made for injured or orphaned beavers). Popple and particularly Willow will visit Smith and eat in her company, but also go about doing the things beavers do such as working on their dams, preparing food caches, and raising young. There are so many other residents both large

and small we learn about too, including moose, bears, hares, salamanders, otters, geese, bats, wrens, thrushes, warblers, owls, newts, voles, mice, shrews, and frogs.

Smith appears to have endless enthusiasm for all the creatures she encounters, except for the mosquitoes. In one comical account, Smith chronicles her efforts to stay out and observe nature when the weather turns warm, but is desperate to protect herself from the mosquitoes that will feast on any exposed flesh. Ultimately she fashions a netted canopy to keep the mosquitoes at bay. Her mistake was in letting Willow join her inside, for when it was time to go, Willow abruptly left right through the netting, dragging the whole enclosure with her down to the pond.



PATTI SMITH

Smith taught me that red-backed voles sing, shrews use echo-locating clicks to navigate, a chipmunk can hold 70 seeds in her mouth, and porcupines peel apples before eating them. Which leads me to the book's ending: an intriguing description of Smith's interaction with a porcupine, but you'll have to read the book if you want to know how that tale ends.

Written by Cathy Liss



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Pair of States Step Up Protection for Companion Animals

"IF AT FIRST YOU DON'T SUCCEED, TRY, TRY AGAIN" must have been the mantra for legislators in two states that recently made gains for animal and human victims of abuse. South Dakota finally shed its identity as the only state without felony cruelty provisions when Governor Dennis Daugaard signed SB 46. The new law makes it a felony "to intentionally, willfully, and maliciously inflict gross physical abuse on an animal that causes prolonged pain, that causes serious physical injury, or that results in the death of the animal." With this new law, South Dakota also becomes the 41st state to make cockfighting a felony. The fact that all sectors in South Dakota, including opponents of past bills, were able to come together around SB 46 reflects the growing consensus that egregious acts of animal cruelty must be treated as the serious crimes that they are, and that the perpetrators of such crimes must be punished accordingly. There is more work to be done in this area, however, since some abusers still get off with mere slaps on the wrist.

In another positive move, Virginia becomes the 24th state, in addition to Washington, DC, and Puerto Rico, with a law allowing judges to include companion animals in protection orders for victims of domestic violence. These laws address a major obstacle to individuals leaving abusive situations: fear over what may happen to their companion animals. Abusers often harm, kill, or threaten to harm/kill a beloved pet as a way to intimidate and control their victims. In one survey, over 70 percent of battered women reported that their pets had been threatened, hurt, or killed by their partners. In some jurisdictions, judges have been reluctant to include companion animals without specific authority. Under the new Virginia law, the person for whom the order is issued must meet the definition of "owner" already in the law. Visit awionline.org/safetyplanning for advice on safety planning for pets. 🙅