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ABOUT THE COVER

Baby black rhinoceros, Maalim, is heading in for his evening bottle and then a good night's sleep at the David Sheldrick Wildlife Trust outside Nairobi. Apparently abandoned by his mother, days-old Maalim (named for the ranger who rescued him) was found in the Ngulia Rhino Sanctuary and taken to the Trust. Now at 20 months, he has grown quite a bit but is still just hip-high! Black rhinos, critically endangered with a total wild population believed to be around 4,200 animals, continue to be poached (along with white rhinos) for their horns. "Into Africa" on p. 14 chronicles the visit to the Trust and other Kenyan conservation program sites by AWI's Cathy Liss.

Photo by Cathy Liss

Brutal BLM Roundups

THE UNNECESSARY REMOVAL OF WILD HORSES has reached an alarming rate under the current administration. Thousands of horses have been and continue to be removed from their native range, and placed in short- and long-term holding

facilities in the Midwest. Taxpayers pay tens of millions of dollars a year to warehouse horses who should be roaming free on public lands.

Interior Secretary
Ken Salazar
announced a
plan supposedly
to improve BLM's
management while
saving tax dollars.
Unfortunately, it
involved spending





Honey Bandit is a young foal snared in a summer 2010 roundup near Twin Peaks, California. At two months of age, he was found in BLM custody near death—starving, severely dehydrated, separated from his mother, and covered with more than 90 bite wounds from other horses. Rescued by Palomino Armstrong, he is making a miraculous recovery.

more money (\$43 million in the first year alone) to buy land to warehouse more horses. AWI opposed this plan and, thankfully, Congress rejected it. (Congress also cut off another misguided "solution," telling BLM that it could not use any funds to euthanize healthy, adoptable horses.)

A bipartisan letter signed by 52 members of Congress sent to Secretary Salazar questioned the recent tragic deaths of several wild horses and focused on the dire need for an independent analysis of the wild horse and burro program by the National Academy of Sciences (NAS). AWI started the national call for an independent review of BLM's practices regarding wild horses, and in one bit of good news, BLM has finally assented. In late August, BLM formally asked NAS to make an independent technical review of the Wild Horse and Burro Program to ensure that the agency is using the best science available in managing wild horses and burros on Western public rangelands. The proposed study would tentatively begin in January and take two years to complete. BLM, reprehensibly, has indicated the roundups will continue while the study goes on.

ANIMAL WELFARE INSTITUTE QUARTERLY







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Above Left: Bald eagles in the nest. Every year, eagles and many other birds are poisoned and killed by lead introduced

are poisoned and killed by lead introduced into the environment by humans. (Photo by Mark Wilson); **Top Right:** This beagle at a New Jersey shelter is one of roughly 250 animals AWI helped rescue from an abusive lab in North Carolina. (Photo by Associated Humane Societies); **Bottom Right:** Cows roam the pasture on Will Witherspoon's AWA-certified Shire Gate

Witherspoon's AWA-certified Shire Gate Farm in Owensville, Missouri. (Photo by Amelia J. Moore).



AWI to the Rescue!

AWI Joins Forces with Shelters and Rescue Organizations to Save Hundreds of Animals from Lab Under Investigation for Abuse

Rescued beagles—who arrived earlier that morning—enjoy fresh air and sunshine in the company of staffers at Associated Humane Societies' Popcorn Park Refuge in Forked River, NJ. At Popcorn Park, they are walked and socialized every day.



A dramatic rescue occurred in september, when nearly 200 dogs and over 50 cats were saved from a North Carolina animal testing facility. The laboratory subsequently closed its doors after an undercover investigation documented abuse of the animals by workers at the facility. Quick work on the part of the Animal Welfare Institute, in partnership with the Humane Society of the U.S. and more than a dozen animal shelters and rescue groups, succeeded in placing all of the rescued animals, offering hope that they will find loving homes and solace after their ordeal.

People for the Ethical Treatment of Animals (PETA) conducted the initial investigation¹ that exposed the apparent cruelty at Professional Laboratory and Research Services (PLRS), a rural lab located in Corapeake, North



Dawn Cruz said,
"We are so happy
that Abby [adopted
from Associated
Humane Societies]
came into our
lives and that we
are able to give
her a safe home,
a soft bed, lots of
attention, and a
family that adores
her." Pictured: Abby
with Dawn's sons,
Jonah (left) and

Carolina. PLRS was funded by large pharmaceutical companies to test insecticides and other chemicals used in companion animal products. For nine months, a PETA investigator worked undercover at the facility, and shot video showing animals in excruciating pain from procedures, as well as employees kicking, throwing, and dragging petrified dogs, violently slamming cats into cages, and screaming obscenities at the animals for showing fear and being uncooperative. Workers even failed to move the animals when they pressure sprayed the cage areas, soaking them and splashing caustic chemicals on already painful open sores.

"The exposure of this gratuitous cruelty underscores the need for stricter enforcement to protect animals in research facilities," says AWI President, Cathy Liss. AWI has long worked to promote better care and handling of animals used in research, and foster efforts to provide them with the opportunity to engage in natural, species-typical behaviors, while sparing them unnecessary pain, fear and distress.

Following its investigation, PETA filed formal complaints with local, state and federal authorities, including the U.S. Department of Agriculture (USDA), and submitted evidence to the local prosecutor's office. Soon thereafter, the USDA inspected the facility and instigated a formal investigation—as did the local district attorney's office. In the meantime, the lab agreed to surrender voluntarily its dogs and cats, and to cease research at the facility.

The ordeal for the animals was not over, however.

Alerted to the situation on a Tuesday, AWI was told the deadline for placing the released animals was Friday—a

scant three days to find shelter or have the animals face possible euthanization. (All rabbits who were test subjects at the facility were, in fact, euthanized.) From Tuesday to Friday, AWI staff members frantically



North Star, one of six cats taken in by Associated Humane Societies, left her cage behind for the "Kitty City" freeroaming area of the Societies' Tinton Fall, NJ shelter.

worked the phones, calling on AWI's vast network and succeeding in getting all the dogs and cats placed. Over a dozen shelters and rescue groups from New Jersey to Florida were enlisted to take in the animals.

While lamenting the situation that gave rise to the rescue, Liss noted that in the present case, swift action saved lives: "This event serves as dramatic testament to what can happen when the humane community comes together to expose and oppose cruelty. AWI is extremely grateful to PETA for its investigation, to enforcement personnel at the USDA for its prompt action once the situation was revealed, and to the all the animal advocates who worked overtime to get these animals placed in shelters. Through the actions of many, hundreds of dogs and cats were rescued and given the chance to receive the care and compassion all animals deserve." As we go to press, three quarters of the rescued annuals have been adopted to "forever homes."

'More information on PETA's investigation of the lab is available online at: www.peta.org/features/professional-laboratory-and-research-services.aspx.

Animal shelters and/or rescues that have taken in dogs and cats from the NC lab

Florida

In Dog We Trust

New Jersey Associated Humane

Societies

North Carolina Carteret County Humane Society

Society
Guilford County Animal
Shelter
SAFE Haven for Cats
SPCA of Northeastern North

Triangle Beagle Rescue of NC Wake County Animal Center Wake County SPCA

Virginia

Beagles to the Rescue Elizabeth City SPCA Norfolk SPCA Virginia Beach SPCA

Washington, DC Washington Animal Rescue League

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ROADKILL RESEARCH: Making Highways Less Hazardous

UC Davis researcher Fraser Shilling and colleagues created a website for Californians to report on roadkill. The goal is to collect data that could help transportation planners and conservation managers design more wildlife-friendly roads. "Thousands of animals are killed on California's roads every day, including endangered species. This is a threat to the state's natural legacy and, for some species, their very existence," said Shilling, a research associate

and co-director of the UC Davis Road Ecology Center. The Center aims to improve transportation systems by studying the impacts of roads on natural ecosystems and human communities. The first year of the study collected 6,700 roadkill observations by 300 people, involving 205 animal species from acorn woodpeckers



Getting to the other side of the road can be a perilous journey for animals. Fraser Shilling of UC Davis is examining roadkill to better understand danger zones and possible solutions.

to zebratail lizards. The most common victims were raccoons. Shilling hopes to expand the project to include focused studies on particular types of roads, roadkill website development in other states, and analyses of the causes of wildlife-vehicle collisions. Shilling has already launched a similar effort for Maine in partnership with Maine Audubon.

USDA Fines Vanderbilt for Animal Deaths in Lab

VANDERBILT UNIVERSITY HAS BEEN FINED over \$8,000 by the U.S. Department of Agriculture for violations of the Animal Welfare Act in connection with three incidents of animal deaths at a university research facility. In April 2008, a galago (bush baby) was found dead in a washing machine after someone from the lab "failed to ensure that all animals were removed from fabric nesting boxes prior to them being washed." The galago was a newborn unnoticed by the worker, who removed the mother and put the cloth nesting basket in a load of laundry. In September and October of 2008, two separate incidents in which hamsters were administered improperly mixed experimental compounds resulted in the death of one hamster and required the euthanization of four others. In addition to the fines, Vanderbilt also agreed to review its laboratory procedures.

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Maui Regulates Pet Trade in Fish

ON AUGUST 24, the Maui County Council voted unanimously in favor of a law curbing reckless reef fish extraction for the aquarium trade, representing the first such regulation in Hawaii. The law establishes strict standards and a permit system, and holds aquarium trade collectors accountable for fish mortality and humane treatment. Fees and fines are imposed to offset the expense of tracking reef extraction and its effect on reef health. The high demand for exotic aquarium species and the lack of oversight at the state level have facilitated excessive extractions from Hawaiian reefs, leaving many reefs barren that once housed rare endemic wildlife. Yellow tangs, eels, and hermit crabs are some of the vital marine life that has been stripped from the reefs for the aquarium trade, suffering high mortality rates in the process. Maui County's landmark legislation hopefully will spur other counties and the state government to take similar action to protect Hawaii's reefs. 🏖

Golf Course to Pay Owner for Killing Dog in Trap

THE CONIBEAR BODY GRIPPING TRAP is designed to instantly kill by breaking the neck or back of an animal. It often doesn't, and victims suffer greatly before they die. It is also not selective—birds, endangered species, and even companion animals have been caught and killed. The use of these traps was dealt a legal blow when the Circuit Court for the 19th Judicial Circuit in Lake County, Illinois ruled in favor of Rich Poska and family in a lawsuit regarding the tragic incidental trapping and killing of their companion dog, Rupert. As reported in the Winter 2009 AWI Quarterly, Rupert was brutally killed in a Conibear trap set for muskrats near the White Deer Golf Course in Vernon Hills, Illinois. Represented by attorney Tracy McGonigle, a member and former chair of the Chicago Bar Association's Animal Law Committee, the Poskas subsequently sued

both the golf course and the trapper whom the golf course engaged to trap and kill muskrats in and around the course. Ultimately, the trapper defaulted by failing to appear in court and was found liable on all counts and ordered to pay a judgement to the Poskas. Pursuant to the Humane Care for Animals Act, punitive damages were imposed. After the court denied the golf course's motion to dismiss the "negligence," "negligent infliction of emotional distress," and "strict liability" claims brought against it, the course agreed to settle out of court with the Poskas. By allowing the negligent infliction of emotional distress claim to survive, the court recognized, at least at a preliminary pleading stage, a new cause of action arising from the loss of a pet. The Poskas have also vowed to do what they can to get these traps banned.

PALAU AND HONDURAS CALL FOR MORE SHARK SANCTUARIES

During a special September meeting on biodiversity convened by the United Nations General Assembly in New York, the presidents of Palau and Honduras called on other nations to join them in saving the world's shark populations by establishing shark sanctuaries in their waters. President Toribiong of Palau established the world's first shark sanctuary in September 2009, banning all commercial shark fishing in Palau's waters.



Seventy-three million sharks are killed each year for their fins.

President Lobo of Honduras followed suit in February, declaring that nation's waters a shark sanctuary, as well. The two



Cruel cuisine: a bowl of shark fin soup

presidents also called for a global ban on shark finning at the meeting. An impassioned President Toribiong stated that, "The need to protect sharks outweighs the need to enjoy a bowl of soup. These creatures are being slaughtered and are at the brink of extinction unless we take positive action to protect them."

A push to ban shark fishing is also underway in The Bahamas, following an article in a Bahaman newspaper exposing plans by Sunco Wholesale Seafood to start fishing for sharks and exporting their fins to Hong Kong. To sign the petition and request that the Bahamian government protect its sharks, visit: www.thepetitionsite.com/takeaction/549/487/335.



WHEN MASSACHUSETTS CITIZENS voted overwhelmingly in 1996 to outlaw steel jaw leghold traps, other bodygripping traps, and snares for capturing fur-bearing animals, critics of the law loudly proclaimed that disaster was imminent. Many claimed that the trapping restrictions would cause the state to be awash in beavers and flood waters because they mistakenly felt that trapping was the only effective beaver management tool.

Human/beaver conflicts occur across North America. To understand why, it is important to have an historical perspective. The North American beaver, Castor canadensis, has existed for millennia. Native Americans referred to beavers as "Little People" because beavers are second only to humans in their ability to modify their environment to suit their own needs. Beavers were revered by Native Americans who understood that beaver dams and the ponds they created support a vast array of wildlife.

Modern biologists understand their value, too. They now classify the beaver as a "keystone" species—one whose presence within an ecosystem supports a host of other species and is critical for maintaining biodiversity. Beaver damming activity also has many other important environmental benefits, including improving water quality and controlling floods. As European settlements spread from coast to coast, trappers typically blazed the trail—leading explorations in search of the extremely valuable beaver pelts. While early settlers may have understood the value of pelts, they failed to understand the value of beaver-created wetlands. As a result, wetlands were drained and unregulated beaver trapping nearly led to the extinction of the North American beaver.

As our country grew, extensive human development occurred in the absence of beavers. Beaver wetlands, once drained, became farmland; houses, roads, railroads, and other development were often built in or near the low-lying areas that beavers once inhabited.

The 20th century brought increased awareness of the value of beavers and wetlands, as well as land use changes as some farms reverted to forested areas. Beavers were reintroduced into many states, including Massachusetts,

and spread to areas where beavers had not been seen for hundreds of years. With improved regulations and management, and because the commercial value of their pelts had dropped, they thrived. Occasionally however, conflicts would arise as beavers built dams and flooded developed areas.



The flooding in the back yard of this house, built on a flood plain, was caused by a new beaver dam. The water dissipated after installation of a flow device.

Typically, when dam building by beavers created flooding issues for humans, the beavers were trapped and killed and the dams destroyed. In fact, for many decades beaver trapping and dam breaching were the



Michael's nephew, Devin Egan, with a Flexible Pond Leveler pipe

only management methods used to handle beaver-related flooding issues.

In the 1990s, successful alternatives to destroying beavers and their dams were developed. These innovative technologies, called flow devices, created the opportunity for humans and beavers to peacefully coexist. Flow devices (also called water control devices, Beaver Deceivers™, beaver bafflers, etc.) are typically either specially designed pipes installed through beaver dams to control pond levels, or specially designed fencing to prevent beavers from damming road culverts. Flow device pioneers included Michel LeClair in Ottawa and Skip Lisle in Maine, as well as scientists at South Carolina's Clemson University.

In Massachusetts, after voters restricted trapping in 1996, there was a critical need for alternatives. Only a handful of effective flow devices existed in the state. Meanwhile, local newspapers reported on the issue in a way that frequently fanned the flames of animosity toward beavers. Problems were dramatized, while solutions rarely received the same attention.

Fortunately, the flow device pioneers freely shared their knowledge and experience. Thanks to them, my wife and I were able to start a volunteer group called the Pioneer Valley Wetland Volunteers (PVWV) and, in 1998, we began installing flow devices at beaver conflict sites. Despite no formal training or experience, our volunteer efforts were largely successful and demand for our group's services grew. By the end of 1999, our flow devices had resolved 70 different beaver problems in Massachusetts—without harming the beavers.

To date, Beaver Solutions™, a company I started in 2000 after PVWV disbanded, has resolved over 800 beaver conflicts with flow devices. While new problems still occur, beaver conflicts are now rarely headline news in Massachusetts. Over time, it has been shown that flow devices are usually the most cost effective, long-term, humane, and environmentally friendly tool to resolve human/beaver conflicts. In fact, in my experience, flow

devices are the best management tool for approximately three out of every four human/beaver conflicts.

Installing flow devices is extremely gratifying work. We are able to solve very real problems for people, while at the same time allowing beavers to remain on the landscape. Finding this middle ground of coexistence has immense benefits for humans, beavers, a myriad of other species, and the health of our planet.

To facilitate the spread of this technology in other parts of this country, we recently completed an instructional video that teaches people how to build and install successful flow devices. This groundbreaking DVD would not have been possible without a very generous grant from the Animal Welfare Institute, as well as the assistance and cooperation of many people and organizations—in particular, Rikk Desgres of Pinehurst Studios, Heidi Perryman of Worth A Dam, Laura Simon of HSUS, and my wife, Ruth Callahan.

The return of beavers across North America is cause for great celebration. While the ponds that beavers create can sometimes cause problems for humans, nonlethal solutions are readily available. Sharing the landscape with beavers benefits us all.

Michael Callahan is President of Beaver Solutions, a company that specializes in humanely resolving human/beaver conflicts.



In gratitude for the significant financial assistance that AWI provided for this project, Beaver Solutions is offering the flow device installation instructional DVD (regularly priced at \$24.95) to AWI members for \$14.95. To order, contact Michael Callahan through the Beaver Solutions website (www.beaversolutions. com) and identify yourself as an AWI member.

Lead Poisoning: The Lessons of the Birds of Esperance

By Jennifer Modrall and Mark Pokras, D.Y.M. Tufts Cummings School of Veterinary Medicine

AT FIRST, it was just an unnatural morning quiet that residents noticed. Then birds were found dead by the hundreds. Some people said they saw them dropping from the sky. Locals reported that, "virtually the entire local song bird populations died out in only a few weeks." This was not a scene from a new horror movie about a mysterious plague. The birds died from lead poisoning.

This wasn't decades ago or in a third world country with no environmental regulation. It was in Esperance, Australia starting at the end of 2006. Lead carbonate (cerrusite ore) from a local mine had been transported through the town for shipment. No one realized that lead dust was escaping at the port until the birds started dying. In the end, officials estimated that more than 9,000 birds died. The dying birds were the sentinel event that forced agencies to investigate, like the proverbial canary in the mine. Once officials investigated, they found an environmental and wildlife catastrophe and narrowly averted a human public health disaster—thanks to the claxon early warning of the birds' deaths.

Australian officials discovered that lead dust from the ore had contaminated drinking water, soil, harbor sediments, shellfish, and house dust, and found elevated blood lead levels in people, including young children. The birds apparently got the lead poisoning from eating nectar and foods contaminated with lead dust, and from preening the dust off their feathers. Due to their small sizes, sensitivity to toxins, eating habits, and high visibility, birds are all too often environmental sentinels.

Lead poisoning is not a new problem. We've known of the dangers of lead for thousands of years.

Although human blood lead levels in the U.S. and other developed countries have consistently decreased since regulations removed lead from many gasolines and paints in the 1970s, blood lead levels are still orders of magnitude above "natural" (i.e.: before humans started mining, smelting and using lead).

Acute lead poisoning of humans is still a large problem in many parts of the world, as recent episodes in Nigeria and China have highlighted. In the U.S., it is estimated that 25-30 percent of children in New Orleans are still poisoned by hazardous levels of lead, mainly from old paints and soils contaminated from years of deposition from leaded gasoline and industrial pollution. Also, dangerously high blood lead levels are still common among certain occupations. Beyond the obviously risky occupations of mining and smelting, other at-risk workers include: painters, carpenters, car mechanics, plumbers, ceramic glazers, and people working in facilities that produce certain electronics and batteries. Workers can inadvertently bring lead dust home, and unwittingly expose their families, especially vulnerable children. Pets often share children's risks. All these activities, which present lead poisoning hazards for humans, pose similar or greater risks for animals by contaminating their living environment. Simply living around human habitation and activities increases the risk of lead poisoning for animals. Wild animals who live around human habitations or industrial activity can have elevated (sometimes toxic) lead levels. Examples include: Nepalese monkeys living around temples in Kathmandu, Pacific island albatross chicks living near buildings, and urban (versus rural) dogs in India.

In the Esperance lead disaster, thousands of birds died of acute lead poisoning. But, if thousands of birds died, how many other animals suffered from sub-lethal lead poisoning? And, what are the consequences to wildlife of sub-lethal lead exposure? There is a growing body of research indicating that exposure to lower levels of lead once considered "safe," especially chronic exposure, has serious adverse health effects. Once in the body, lead affects virtually every physiological system-cardiovascular, renal, reproductive, and especially the



Loons often get lead poisoning from ingesting abraded fishing weights or lead shot, which resemble the small stones they normally consume to help grind their food.

central nervous system. In fact, many sub-lethal negative effects have been found in both humans and animals.

These include increased aggressive behavior in humans, cats, and other species; hypertension in people and dogs; learning and behavioral deficits in humans and gulls; and hearing loss in humans and monkeys. Other sub-lethal effects of lead exposure that have been found in people and other species include: decreased reproductive success, decreased IQ

ability to reproductive reproductive survive, and ultir stable population would be particul marginalized or easily or populations all other pressures.

The effects of due to lead poise should not be distanced in the California is arguably deatly deatly deatly deatly deatly deatly and ultir stable population would be particul marginalized or easily or populations all other pressures.

biochemical processes.

As in humans, some of the most dramatic effects of lead poisoning in animals are found in the young, such as: impaired development of the brain, anemia, decreased growth rates, and increased mortality in hatchling birds. The cognitive and behavioral effects of lead seen in humans can similarly alter wild animals' physiology and behaviors, potentially in ways that negatively impact their

in children, cognitive impairment

psychiatric disorders, and altered

immunological, physiological and

in the elderly, behavioral and

ability to reproduce, migrate, feed, survive, and ultimately maintain stable populations. Such effects would be particularly deleterious for marginalized or endangered species or populations already "stressed" from other pressures

The effects of acute mortality due to lead poisoning of wildlife should not be dismissed either. The largest impediment to the recovery of the California condor in the wild is arguably death by lead poisoning. Condors and other scavengers eat the discarded carcass waste from animals hunted with lead ammunition. and this source of lead is regularly implicated in elevated blood lead levels or deaths due to lead poisoning. And bald eagles, while no longer a federally endangered species, are reported poisoned and dying by ingested lead ammunition in increasing numbers. What would be the consequences of an Esperance type disaster for an endangered population such as the California condor? Notably, lead ingestion and poisoning have been documented in



X-ray of a common loon who ingested a large lead fishing weight

at least 63 avian species, including 10 globally threatened or near threatened species.

There is also a humane aspect to the issue of lead poisoning in wildlife. Using humans as a "reverse" animal model, we know that lead poisoning, even sub-lethal, is painful, causing colic, nausea, constipation or diarrhea, gastrointestinal pain, joint pain, persistent headaches, and seizures. Sub-lethal levels of lead have been documented in many animals. Is it a big leap to assume they suffer?

Spent lead ammunition also presents problems for other birds, which inadvertently consume lead shot or bullet fragments that have settled in soils and water sediments. Some birds consume soil while foraging, others deliberately eat small stones to aid with the grinding of food within their gizzards. Both groups may concurrently consume lead. It can take as little as one ingested lead shotgun pellet to poison and kill a bird. Wildlife cannot shop for lead-free food or know whether they drink lead-free water.

Humans have amassed vast knowledge about lead's toxic effects, pervasive environmental contamination, presence in both humans and wildlife, and increasing evidence of adverse health effects at lower exposure levels. However, lead is regulated differently than most other environmental and physiological poisons. (The reasons behind this discrepancy are beyond the scope of this article and perhaps best left to sociologists, economists and historians.) In the case of other environmental threats, such as PCBs and DDT, the necessary proof for

humans and wildlife, and it does cause serious, often irreversible harmful effects.

All aspects of lead production, use, and disposal produce pollution and health risks. The entire life cycle of lead—from mining and smelting, to production of goods, to recycling and disposal—all contribute to lead getting into air, water, and living organisms. Yet, lead is inadequately regulated. Regulations are piecemeal and do not address the breadth of the problem. There are some limits on lead exposure: it is banned in some products (e.g., most gasoline and food

contamination from mining and smelting, manufacturing, and disposal easily cross international borders. In the U.S., lead is still allowed in some paints (such as for bridges and other industrial uses), lead ammunition and sinkers continue to be used in hunting, fishing, and shooting sports, and occupationally allowable lead levels are still above those recommended by some health experts. Currently, there are only a few uses of lead for which alternatives do not exist, such as certain batteries and electronic components. But where there are viable alternatives to lead use, we should ask ourselves and our policymakers, "Why not switch to less toxic alternatives?"

How do we solve this problem? Regulations help, careful recycling helps, but perhaps the best answer is to stop using lead. There are nontoxic alternatives for almost every use of lead. Some are a bit more expensive than lead, but with a little determination and innovation, we can undoubtedly substantially reduce our lead use and pollution. The lessons of the birds of Esperance are, at a minimum, that lead "escapes," and that the health and environmental consequences of lead are far ranging, difficult to remediate and may be irreversible. Will these lessons be learned, or will, the birds of Esperance be forgotten, and will we allow the problem of lead to persist for millennia more?



Eagles often get lead poisoning from scavenging carcasses or discarded gut piles containing lead bullet fragments, or from fish containing lead fishing gear.

banning their use in the U.S. was that the substance was present and persistent in the environment or animals, and that it caused harm to animals or humans. Anthropogenic lead is also known to be present and persistent in the environment,

cans), its maximum content is limited in others (e.g., children's toys and drinking water), and it is restricted for certain uses (e.g., hunting waterfowl). Additionally, industrial and health regulations vary greatly between countries, even though air and water

Mark Pokras, D.V.M. is an Associate Professor and Wildlife Veterinarian at Tufts Cummings School of Veterinary Medicine's Wildlife Clinic. Jennifer Modrall is a Project/Research Assistant at Tufts Cummings School of Veterinary Medicine.



Marge Gibson of the Raptor Education Group rubs a swan's abdomen to facilitate digestion, which stalls with lead poisoning. The swan died the next day, as did his longtime mate a few days later.

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What you can do

Although the problem of lead is vast, there are actions individuals can take. Educating yourself is key to protecting your family, animals and yourself. Lead enters our lives via many insidious routes, and is present in seemingly innocuous items. Lead paint in older houses and during remodels still presents hazards for many families and animals. What is less well known is that many brass fixtures contain lead that can leach into water, and brass fixtures are often present in homes and water fountains in schools. Lead can be found in many items you might not suspect, such as: bird cages, ceramic glazes on pet bowls, herbal remedies, child and pet toys, and cosmetics, which are not required to list many ingredients, including lead. Seemingly

innocent hobbies, such as stained glass, jewelry making, and fishing with lead sinkers, present exposure hazards to the hobbyist, and/or their families and wild animals. Lead fishing tackle and hunting ammunition present serious problems for wildlife and are arguably some of the easiest lead contamination sources to reduce. We

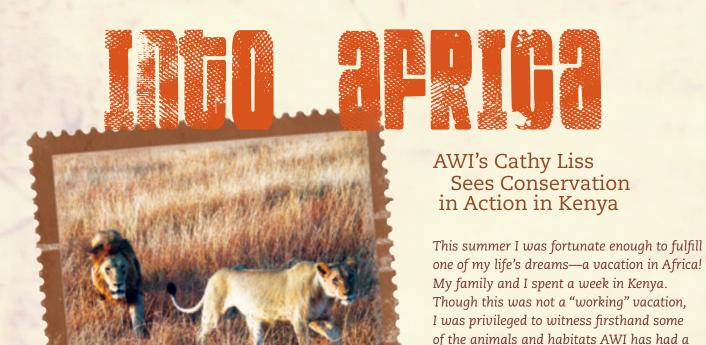
must remember that
anglers and hunters
cannot fix the problem by
themselves; they need the
assistance of industry and
coordinated government
agencies. Beyond
avoiding lead, the next
necessary action is getting
lead out of our lives and
products, and this will

require local, national and international changes in policy and regulations. We can educate ourselves and do our best to avoid lead. Remember, however, that merely making choices to avoid lead does not solve the problems. Wild animals, meanwhile, do not have the luxury of choice.

Web Resources

The web can provide you with both educational information and links to lead-related policy issues and actions. Below is a list of some useful websites, and all U.S. State public health websites have sections on lead poisoning and prevention, and sometimes local lead related issues.

www.epa.gov/lead www.cdc.gov/lead www.hud.gov/offices/lead/healthyhomes/lead.cfm www.tufts.edu/vet/lead



Wildlife in Kenya

We selected Kenya as our destination because the nation has been a leading proponent of strong enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to regulate wildlife trade. Kenya strives to protect its wildlife, and recognizes and values its live animals (rather than the financial value of dead animals and their parts and products) and the ecosystems in which they live. In particular, Kenya has long recognized the dire threats posed by agreements, no matter how narrowly crafted, to allow any trade in elephant ivory.



Earlier this year, in response to Tanzania's interest in selling off its ivory stockpile, Kenyan Prime Minister Odinga stated, "I don't want to dictate

to Tanzania to burn its ivory stockpiles, but Kenya did so, na huo ni mfano mzuri wa kuigwa," (with the last part of his remarks being Kiswahili for "and that's a good thing which should be emulated"). Indeed, in a landmark event in 1989 Kenya burned the tusks from more than 1,200 elephants killed by poachers (with an estimated value of \$3 million), declaring its support for an end to the market for ivory. The financial incentive is still strong for poachers and dealers (fueled by the ivory sales approved by CITES in 1997 and 2007); 20 rhinos and 232 elephants were poached in Kenya this past year. For decades AWI has worked with and applauded Kenya's efforts. I was happy, therefore, to lend support via my tourist dollars.

hand in protecting.



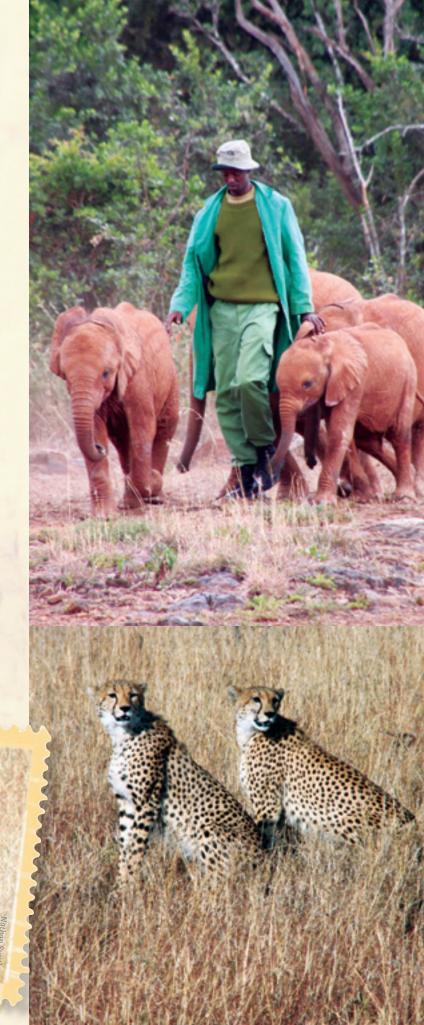
David Sheldrick Wildlife Trust

What a delight it was to visit the incredible staff and beautiful baby elephants and rhinoceroses at the David Sheldrick Wildlife Trust just outside of Nairobi! We've worked with Dame Daphne Sheldrick for years on threats facing Africa's wildlife from bushmeat to the ivory trade, so I had been particularly looking forward to this visit. The trust has played a key role in Kenya's conservation effort as it seeks to protect imperiled wildlife, runs anti-snaring units, supports anti-poaching patrols and rescues, and rehabilitates and releases orphaned elephants and rhinos. Watching the elephants at their mid-day mud bath and observing all of the orphans later in the day when they were brought in from the bush for their evening bottle before bed was heartwarming—and the keepers did a fabulous job of educating everyone about basic animal behavior and the perils the animals face.

Sweetwaters Chimpanzee Sanctuary

Two hundred lush acres in the Ol Pejeta Conservancy serve as a refuge for abused and orphaned chimpanzees. Though not native to Kenya, 42 chimpanzees currently reside at the Sweetwaters Chimpanzee Sanctuary, living in two separate groups on either side of the Ewaso Nyiro River. Many of the individuals have tragic histories, and one of the first chimps to greet us was a male who had been held captive in a cage that was so small he had no choice but to stand bi-pedal rather than quadra-pedal. Though he now has a vast, serene range to roam, he has trouble getting around as he is uncomfortable







Educational Centers

Our first stop at the Morani Information Centre in the Ol Pejeta Conservancy was the live exhibit: Baraka (whose name means "blessings" in Kiswahili), a black rhino who has gone blind and could no longer survive in the wild, is now cared for in an enclosure beside the main building. There were many visitors, mostly children, who appreciated the unique opportunity to be in such close proximity to a rhino as he was munching on his lunch. Then we went indoors to the educational and highly interactive exhibit rooms, with displays on the fauna and flora and the importance of protecting them.

Equally impressive was the Giraffe Centre near Nairobi, with its own live exhibit: endangered Rothschild giraffes who roam the extensive grounds and are part of the breeding program responsible for helping to raise the population in Kenya to about 300. This subspecies of giraffe is one of three found in Kenya—the other two being the reticulated and the Masai. Educational materials on giraffes and other wildlife are readily available at the Centre, whose walls are decorated with colorful works of art by Kenyan children. Sales of the art help provide disadvantaged children the opportunity to visit the Centre and other places where they can learn to treasure their nation's wildlife heritage.

Threats to wildlife continue to mount, including plans by Tanzania to build a 260-mile road bisecting the northern Serengeti, potentially jeopardizing the 2 million wildebeests and zebra who migrate from the Serengeti into Kenya's Masai Mara reserve in search of water.



Kenya's Future

It was heartening to see the clear value Kenya places not only on the education of tourists, but also on the education of its own people. From an early age many Kenyans have opportunities to learn the wonder of nature—and the dangers that threaten it (i.e., the ivory trade, bushmeat trade, human/wildlife conflicts, loss of range). Clearly, much energy is being invested in the future, with the hope that Kenya's varied and breathtakingly beautiful wildlife will survive to the benefit of generations to come.

All photos by Cathy Liss unless otherwise noted



AWI CONTINUES to work with members of Congress to pass legislation to strengthen protection for animals. Some of our key areas of focus as the 111th Congress draws to a close are described below.

CRUSH VIDEOS

Some good news: The Senate unanimously passed legislation, introduced by Senators Jon Kyl (R-AZ), Jeff Merkley (D-OR), and Richard Burr (R-NC), to restore the ban on crush videos (see Summer 2010 AWI Quarterly, p. 5). Some bad news: the Senate version differs from the bill the House passed in July, so now the House must vote again. That chamber did not take up the new bill before recessing for the election, but there is a good chance that they will get to it when they reconvene next month.

SHARK FINNING

Despite overwhelming support in the U.S. Senate for a bill to close loopholes in a law banning the finning of sharks, Senator Tom Coburn (R-OK) took it upon himself to block this and several other responsible animal protection bills at the last minute in an effort to make a point about government spending. The House already approved this measure, so AWI will continue pressing the Senate to act on this bipartisan bill in November.



Unless Congress acts, the production of crush videos will claim more innocent animal lives.

ACTION NEEDED

These bills need your support! Visit www. awionline.org/takeaction or call AWI at (202) 337-2332 for information on how you can help by contacting your members of Congress.

B Dealers and NIH

HOUSE AND SENATE APPROPRIATIONS subcommittees have again expressed disappointment with the pace of efforts by the National Institutes of Health (NIH) to end the purchase of dogs and cats from random source Class B dealers by its external grant recipients. The full Senate appropriations committee stated that the three- to four-year time frame NIH has set for this phase out was "longer than the committee would have preferred, especially considering that the NIH largely ignored this issue for years." NIH has been asked to update Congress on its progress in meeting this goal.

Horse Transportation

IN JULY, the House Committee on Transportation and Infrastructure unanimously approved the Horse Transportation Safety Act (H.R. 305). This bill would make it illegal to haul horses in trailers with two levels, one stacked on top of the other. The bill, sponsored by Representatives

Mark Kirk (R-IL) and Steve Cohen (D-TN), was introduced in response to several horrific accidents resulting in the deaths of dozens of horses who had been crammed into unstable trailers.

Horse Slaughter

THE ISSUE OF ENDING HORSE SLAUGHTER continues to resonate with Congress. Just before the House left for election season, over 80 legislators from both parties signed a letter circulated by Representatives Jim Moran (D-VA) and Elton Gallegly (R-CA), co-chairs of the House Animal Protection Caucus, to Speaker Nancy Pelosi asking her to bring H.R. 503—the Prevention of Equine Cruelty Act sponsored by Chairman John Conyers (D-MI) and Representative Dan Burton (R-IN)—up for a vote as soon as possible. Unfortunately, a vote was not held before the House recessed.

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Page 18, Left to Right: A squirrel monkey engages in natural behavior by working to obtain food from a complex feeder. A paper hut and nesting materials provide enrichment for a nude mouse.

· Method of euthanasia or disposition of animal, including planning for care of long-lived species following study completion.

The Guide goes on to state:

While the responsibility for scientific merit review normally lies outside the IACUC, the IACUC should evaluate scientific elements of the protocol as they relate to the welfare and use of the animals.

When considering certain animal use protocols with the potential for unrelieved pain and distress, the 2010 Guide further delineates:

...the IACUC is obliged to weigh the objectives of the study against potential animal welfare concerns. By considering opportunities for refinement, the use of appropriate nonanimal alternatives and the use of fewer animals, both the institution and the Principal Investigator can begin to address their mutual obligations for humane animal care and use.

¹The Institutional Animal Care and Use Committee (IACUC) is a selfregulating entity that, according to U.S. federal law, must be established by institutions that use animals for research or instructional purposes, to oversee and evaluate all aspects of the institution's animal care and use program. For more information, see www.iacuc.org.





New and Improved Guide for the Care and Use of Laboratory Animals

A REVISED VERSION OF The National Research Council's Guide for the Care and Use of Laboratory Animals (the Guide) has been released as a pre-publication draft, the first revision of the Guide since 1996. The final publication date is December of this year. If only minor changes and typographical corrections are incorporated in the final edition, the 2010 version of the Guide is a step in the right direction by placing more emphasis on the quality of life for animals used in research.

Why is this document important? The Guide is the reference manual animal research programs are supposed to adhere to if they receive National Institutes of Health (NIH) money or Small Business Administration (SBA) loans, are accredited by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC), or are located in Cambridge, Massachusetts where a laboratory animal ordinance requires adherence to the Guide. In short, this document extends to most of the animals used in research in the United States; therefore, the changes should impact millions of animals.

Under the Guide, it is typically the responsibility of each institution to police itself, with limited direct oversight. Accountability varies, depending on the jurisdiction: NIH's Office of Laboratory Animal Welfare (OLAW) administers the program for those research projects supported by taxpayer dollars; OLAW requires an annual report and does not perform a site visit, except in some cases where there is direct evidence of noncompliance. AAALAC requires an annual report and conducts a scheduled site visit once every three years. The City of Cambridge carries out annual inspections.

The 2010 Guide appears to embody a philosophical shift from the perspective that enrichment, group housing, and social contact are "variables" that must be controlled, to an understanding that these elements can reduce stress (itself a variable) and lead to more reproducible results (better science) while improving animal welfare. Previously, the standard called for animals to be singlehoused and their cages unenriched, unless you could demonstrate that group housing and enrichment would not negatively impact scientific results. The standard set in the updated Guide is that animals should be socially housed and their cages enriched. This change in emphasis should empower each institution's Institutional Animal Care and Use Committee (IACUC)¹ and animal care staff to provide enrichment and social housing as standard housing conditions. Although the 2010 Guide states that facilities "should" rather than "must" use enrichment and social housing, it is unquestionably stronger in this regard than the 1996 edition. The following is a quote from the new Guide regarding the primary enclosure:

All animals should be housed under conditions that provide sufficient space as well as supplementary structures and resources required to meet physical, physiologic, and behavioral needs. Environments that fail to meet the animals' needs may result in abnormal brain development, physiologic dysfunction and behavioral disorders (Garner 2005; van Praag et al. 2000; Würbel 2001) that potentially compromise both animal well-being and scientific validity. The primary enclosure or space may need to be enriched to prevent such effects and improve animal well-being....

An appropriate housing space or enclosure should also account for the animals' social needs. Social animals should be housed in stable pairs or groups of compatible individuals unless they must be housed alone for experimental reasons or because of social incompatibility.... Structural adjustments are frequently required for social housing (e.g., perches, visual barriers, refuges), and important resources (e.g., food, water, and shelter) should be provided in such a way that they cannot be monopolized by dominant animals....

The section on IACUC review of protocols is another area where the 2010 Guide emphasizes animal well-being. Previous editions of the Guide focused on IACUC review of what the project will do and what outcomes are expected. This edition has stated that the following additional items should be considered in the protocol review:

- · Impact of the procedures performed on the animals'
- · Description and rationale for anticipated or selected
- · Criteria and process for timely intervention, removal of animals from a study, or euthanasia if painful or stressful outcomes are anticipated; and

Creature comforts for these cats include group housing and carpeted perches.

Taken together, these additions obligate the researchers to provide more detail about their projects. In some cases this will require pilot studies to obtain data they were previously not required to collect about effects on the animals. Many IACUCs, with strong institutional support, have requested and reviewed this type of information for years. However, IACUCs that were unable to get these details in the past can now ask for them irrespective of institutional support.

Many other areas of the 2010 Guide have been expanded to provide more direction to the researchers, IACUCs, and animal care staff regarding endpoints,



Group housing for these chickens is enriched with hay bales and travel crates for perches and hiding.

authority to euthanize, use of Class A dealers, and the inclusion of aquatic and terrestrial animals in the discussion of housing and care.

In many research protocols, the endpoints have been ill-defined both by the regulations and by the researchers themselves. This Guide provides both a definition and a requirement for reliability:

The experimental endpoint of a study occurs when the scientific aims and objectives have been reached. The

humane endpoint is the point at which pain or distress is prevented, terminated or relieved in an experimental animal. The use of humane endpoints contributes to refinement by providing an alternative to experimental endpoints that result in more severe animal pain and distress, including death. The humane endpoint should be relevant and reliable.

Prior to this edition of the Guide, it was not clear that the veterinarian was the ultimate authority in the evaluation of an ill animal. Now, there is no ambiguity:

In the case of a pressing health problem, if the responsible person (e.g., investigator) is not available or if consensus between the investigator and veterinary staff cannot be reached concerning treatment, the veterinarian must have the authority, delegated by senior administration (see Chapter 2, Institutional Official and Attending Veterinarian) and the IACUC, to treat, remove from the experiment, institute appropriate measures to relieve severe pain or distress or euthanize the animal if necessary.

While still not condemning Class B dealers, a new section titled "Animal Procurement" suggests the IACUC must approve the source and number of animals, and there is now a clear preference for Class A dealers:

...vendors of purpose-bred animals (e.g., USDA Class A dealers) regularly provide information that describes the genetic and pathogen status of their colonies or individual animals and relevant clinical history, for example, vaccination status and anthelmintic administration. Because of this, the use of purpose-bred and pre-conditioned animals is preferable when consistent with the research, teaching and testing objectives.

Zebrafish, African clawed frogs, and other nontraditional animals used in research, not considered in previous editions, are now included; definitions for care and housing of these species, as well as suggestions for design of facilities and enrichment of these species is delineated. While still general, the information starts to put these species into the professional care and use standards expected for the animals more traditionally used in research.

Overall, the 2010 Guide reflects a substantial shift towards recognizing the importance of the animal as an animal, not just another test tube in research.

By Michele Cunneen Laboratory Animal Consultant Will Genetically Engineered Salmon Sink or Swim? IN A CHILLY HOTEL BALLROOM IN THE WASHINGTON, D.C.

suburbs this September, the Food and Drug Administration (FDA) heard from the public on the question of whether a farm-raised Atlantic salmon named "AquaAdvantage" should be approved as the first genetically engineered (GE) food animal. AquaAdvantage salmon contain a growth hormone gene from Chinook salmon that allows them to grow faster and reach market sooner than conventionally farmed Atlantic salmon.

The FDA is considering four main questions for AquaAdvantage salmon approval: salmon health, food safety, environmental impact, and the product claims of increased growth. What FDA is not considering in its decision leaves some doubt as to the rigor and scope of the GE animal approval process. The FDA is not assessing the food safety of the whole fish by conducting feeding studies, but merely assessing the component parts of the fish without looking at cumulative risks. The FDA is not considering ethical arguments against genetic modification, or the broader social context of GE. Ecological problems caused by GE salmon escaping and interbreeding, or competing with wild salmon are of concern as well, and require more study. Animal welfare will not be considered during the AquaAdvantage approval process, either, as admitted by one FDA staff member at the hearing.

At the same series of public hearings, FDA also discussed labeling of food animal products. Patty Lovera of Food and Water Watch argued in the public hearing that, if approved, GE salmon should be the first food required to carry a GE label. Gregory Jaffe from the Center for Science in the Public Interest cited that 70 percent of American consumers want GE food to be labeled. There are 62 genetically modified crop varieties in the U.S. food supply, as reported in 2002 by the U.S. Department of Agriculture (USDA), and none are currently required to be labeled as such. The U.S. position on GE labeling runs counter to that of many other countries—since the late 1990s and early 2000s, labeling of GE foods has been required in the European Union, Australia, Japan and South Korea. Despite

the precedent set by other countries and U.S. consumers' preference for labeling, the FDA has indicated that labeling will be based on a narrow view of material differences in GE salmon compared to non-GE salmon.

Industry groups and consultants,

consumer interest in how food is raised.

including Richard Carnevale of Animal Health Institute, were quick to repeat the platitude that there were no material reasons GE salmon should be labeled. Richard Clothier, chairman of the AquaBounty Technologies company that developed the AquaAdvantage salmon, rejected mandatory labeling as a "slippery slope" leading to labeling of all GE foods. Alison Van Eenennaam, of the University of California Cooperative Extension at UC Davis, proposed yet another line of arguments that genetic engineering is a production method, and production methods are too difficult to spell out on a label. This last statement seems to be at odds with both USDA organic labeling, which is a production method, and the rising

Observers speculate that AquaAdvantage salmon may eventually be approved and reach the market, though it is unclear whether it will be labeled as genetically engineered. The popularity of salmon in the U.S. and the trend of increasing farmed salmon production globally means that consumers, and not regulators, will make the final decision on GE salmon—that is, if they know what they are buying. It remains to be seen if the FDA is limber enough to modernize its GE animal labeling and approval processes to keep pace with consumer awareness of GE issues and the coming migration of animals from the lab to the farm.

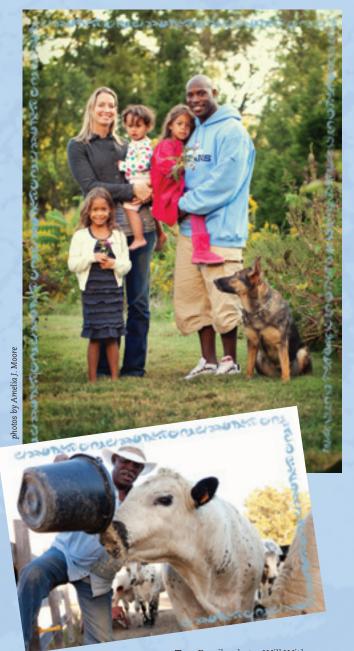
By David Love, Ph.D., Aquaculture Project Director Johns Hopkins Center for a Livable Future

[portions of this piece were reproduced from posts on the LivableFutureblog.com]

ENGINEERED

FEROCIOUS ON THE FIELD, Compassionate on the Pasture

NFL FOOTBALL STAR WILL WITHERSPOON'S BIGGEST WIN IS THE AWA SEAL



Top: Family photo: Will Witherspoon, his wife Rebecca, daughters Layne, Maya and Shaye, and one of the Witherspoon dogs. Bottom: Will's father, Cordell "Pops" Witherspoon, tends to the animals. A former military officer, Cordell now lives on the farm.

FOOTBALL IS AMERICA'S TOUGHEST major professional sport. Its players are renowned for their size, strength, agility and laser-like focus—as well as their ability to give and receive bruising, bone-wrenching, gut-busting hits and tackles. A professional football game is an hour-long (by the time clock) display of strategy, finesse, and aggressive brute strength. Conversely, no one would characterize farming as a show of aggressive brute strength and fierce competition. The two worlds—the controlled violence of football and the patient caretaking of farming—seem light years apart.

That's the point, says Will Witherspoon, a linebacker for the Tennessee Titans and owner of Shire Gate Farm in Owensville, Missouri. Witherspoon relishes the lush green peace of Shire Gate and the respite it provides to him, his wife Rebecca, and daughters Layne, Maya and Shaye, in the off-season. "Shire Gate is a total escape for us," Witherspoon says. "It's a place where my daughters and I can work with the animals and the land. I use the companionship of the animals and the beauty of the land to refocus myself after the demands of playing football. Shire Gate is our retreat from the world."

Witherspoon purchased Shire Gate Farm in 2007 as a home for his Shire horses, Rocky and Simon. As the farm expanded to include more horses, Witherspoon decided to turn Shire Gate into a working farm and added cows and (more recently) pigs. His research led him to AWI's Animal Welfare Approved (AWA) program and pasture-based farming. The AWA program—at no cost to the farmers audits and certifies family farms that prioritize the wellbeing of the animals. "I wanted Shire Gate Farm to be true to nature and true to the way things should be done," Witherspoon says. "That means putting the welfare and care of the animals first."

As a professional athlete in a highly physical and competitive sport, Witherspoon is especially aware of the health benefits of grassfed, high-welfare farming. "I want



Shire Gate livestock grazing on pasture, enjoying both the open space and the company of each other.

to animal welfare on his farm. "The great thing about the program is that it offers a wealth of information and provides access to people who can help me raise my herd and build my farm. There's no way I can go wrong. I know that AWA and AGA [American Grassfed Association] will work alongside me as Shire Gate grows."

Witherspoon also owns two dog daycare centers, another opportunity to provide humane care of animals. "I bought a farm for my horses and daycares for my dogs," he jokes. "So raising my cattle on pasture is a given." On a more serious note, Witherspoon has seen the benefits of pasture-based farming for his livestock. "I've only had one calf that has really been sick; otherwise my herd is very healthy. No hoof issues, no pink eye—you can't argue with success like that."

AWA Program Director Andrew Gunther praises Witherspoon's dedication to raising his animals with high-welfare standards. "When I visited Shire Gate with American Grassfed Association President Dr. Patricia Whisnant, it was clear he brings to his farm the same intense attention to detail and preparation he brings to the football field." In addition to his wife and daughters, Witherspoon's father, a former military officer, also resides with him at Shire Gate Farm. According to Gunther, "It was clear this is not just an infatuation for Will, but a real working family farm that will grow and prosper."

Fierce on the field, Witherspoon is equally fierce about the welfare of his animals. "When I decided to bring cattle and other animals on the farm, I jumped in quite readily and I decided if I'm going to do it, I'm going to do it right. AWI is helping me achieve that goal."

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HUMANE SLAUGHTER LAWS: ENFORCEMENT UP, BUT STILL INSUFFICIENT

A NEW REPORT, Humane Slaughter Update: Comparing State and Federal Enforcement of Humane Slaughter Laws, has just been published by the Animal Welfare Institute. According to the report, nearly three years after the shocking exposé of inhumane practices at a California packing plant, enforcement of humane slaughter laws has increased at both the state and federal levels, but remains low and inconsistent. Furthermore, the mild nature of the penalties (plant closures amounting to a few days or less) are insufficient to deter repeat violators from continuing to commit inhumane acts.

In late 2007, an undercover animal welfare advocate captured on video multiple incidents of egregious cruelty to cattle at the Westland-Hallmark Meat Packing plant in Chino, California. The video showed workers kicking, shocking and abusing animals too sick or injured to walk into the slaughterhouse, even shoving them with forklifts. Brought to the attention of enforcement officials and the public in early 2008, the incident sparked widespread public outrage, caused criminal charges to be filed against two of the employees, and led to the largest beef recall in U.S. history. Sadly, these incidents occurred despite the continual on-site presence of U.S. Department of Agriculture (USDA) inspection personnel and the performance of periodic third-party humane slaughter audits at the plant.

The Humane Methods of Slaughter Act requires that meat animals, excluding birds and rabbits (as well as animals slaughtered in accordance with religious law), be made insensible to pain by a single blow, gunshot, or electrical or chemical means before being shackled, hoisted or cut. The law also provides for the humane handling of animals on the premises of a slaughterhouse. The law applies at slaughter establishments inspected by the USDA, or in some cases by state departments of agriculture—which have the authority to take action (including the issuance of noncompliance records, suspensions, and withdrawal of inspection) for violations of the federal humane slaughter law.

Congress held multiple oversight hearings in the wake of the Westland-Hallmark incident, and the USDA took

several actions to step up its enforcement of the Humane Methods of Slaughter Act, including conducting an audit of slaughter plants at high risk for humane violations, temporarily increasing the time spent verifying humane handling and slaughter requirements, and issuing various humane slaughter notices and training modules for inplant inspection personnel.

To judge the effectiveness of these measures and to update a comprehensive, ten-year review of humane slaughter enforcement published by AWI in May 2008,¹ AWI conducted a survey and analysis of state and federal humane slaughter enforcement since Westland-Hallmark, using data obtained through state public records, federal Freedom of Information Act (FOIA) requests, and information posted on the USDA website. Among AWI's findings:

Repeat state and federal violators present a major enforcement problem. Numerous examples of repeat violators were found, including a Wisconsin state plant that was cited for humane violations 34 times in 20 months, and a North Carolina federal plant that was closed down eight times in 30 months for incidents of inhumane slaughter. The percentage of state plants with multiple violations from 2007 to 2009 was up over the previously studied period of 2002 to 2004. At the federal level, the length of time that slaughter plants were shut down for humane violations varied by plant size, with very small plants being closed for the longest periods of time and large plants being closed for the shortest time.

State and federal inspection personnel have inadequate training in humane enforcement and inadequate access to humane slaughter expertise. Enforcement documents reveal that inspectors react differently when faced with similar humane handling violations. Federal inspectors have limited access to humane slaughter experts, while states known to employ

¹D Jones, *Crimes without Consequences: The Enforcement of Humane Slaughter Laws in the United States*, Animal Welfare Institute, May 2008. www.awionline.org/cwc.

veterinary humane slaughter specialists generally have higher enforcement rates. Federal inspectors are about four times more likely than state inspectors to suspend a slaughter plant for a humane handling violation (like taking multiple attempts to stun an animal, cutting a still-conscious animal, or dragging a non-ambulatory animal).

State and federal humane slaughter enforcement was up at both state and federal levels but varied widely among individual states and among individual federal districts. Enforcement was up in terms of the issuance of noncompliance records and suspensions at state inspected plants and suspensions at federal plants. The number of federal slaughterhouse suspensions for humane violations increased seven-fold from 2006-2007 to 2008-2009 (as depicted in the chart below). State suspensions were up sharply as well. However, some states offered no evidence of any enforcement whatsoever, and humane activities differed dramatically among the 15 federal food safety enforcement districts.

Humane enforcement remained low in comparison with other aspects of food safety enforcement. While allocation of resources to humane slaughter activities appears to have increased for state plants, the amount of time spent at federal plants on humane activities appears to be unchanged. Overall, resources devoted to humane handling at the federal level continues to be less than 2 percent of total funding for food safety inspection.

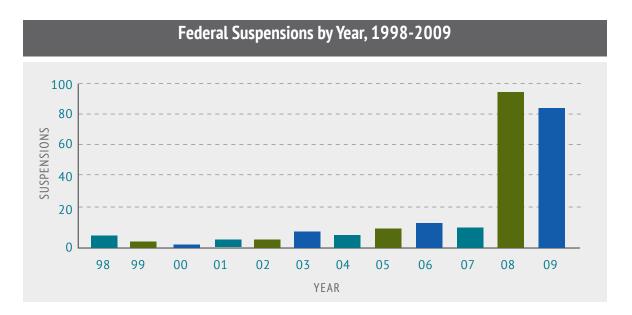
Based on our analysis, AWI has offered the USDA several recommendations for improving the enforcement

of humane slaughter laws. Most importantly, AWI is requesting longer suspensions and more frequent withdrawal of inspection (plant closure) for repeat violators. AWI is recommending that, upon a second incident of inhumane handling, a plant be closed for a minimum of 30 days, and that inspection services be withdrawn for a period of at least three years after a third incident of animal abuse.

In addition, AWI has recommended that the USDA develop procedures for referring instances of animal cruelty during slaughter to state or local law enforcement officials for prosecution under anti-cruelty statutes, and that the USDA work to achieve greater consistency in humane slaughter enforcement among state-level meat inspection programs.

Finally, AWI has asked that the USDA make slaughterhouse enforcement records available to the public via posting on the agency's website. Posting information regarding slaughter plant compliance with humane slaughter laws and regulations would assist the public in making informed decisions about the foods they purchase and consume, and would pressure individual slaughter plants to abide by the humane slaughter law.

Until the USDA makes these records readily available to the public, a list of slaughter plants that have been suspended for humane violations (including, in some cases, actual enforcement documents) is available on the AWI website at www.awionline.org/humaneslaughterviolations. Also available on the site is the full report: *Humane Slaughter Update*.



reviews awi publicatons





Two Books Examine Our Relationship with Wolves

New Era for Wolves and People: Wolf Recovery, Human Attitudes and Policy (2009) ISBN: 978-1-55238-270-7 282 pages; \$29.95

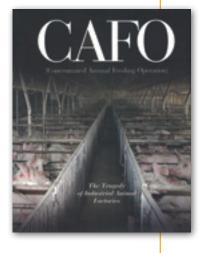
The World of Wolves: New Perspectives on Ecology, Behaviour and Management (2010) ISBN: 978-1-55238-269-1 352 pages; \$34.95

THESE TWO GROUNDBREAKING BOOKS—both edited by Marco Musiana, Luigi Boitani, and Paul Paquet, and published by the University of Calgary Press offer perspectives on how humans can better coexist with wolves. The first, New Era for Wolves and People, analyzes the crucial relationship between human ethics, attitudes and policy, and the management of wolf populations in North America and Europe. The various authors assert that these human dimensions affect wolf survival just as much, if not more, than the physical environment. AWI wildlife consultant Camilla Fox co-authored a chapter with internationally recognized animal behavior expert Dr. Marc Bekoff, titled "Ethical Reflections on Wolf Recovery and Conservation: A Practical Approach for Making Room for Wolves." The second book, The World of Wolves, looks at current trends in wolf and wildlife management. Representative case studies from geographically and culturally diverse areas of the world highlight the existing interconnections between wolves, their prey, habitat, and people, and the role of science in policy formation and wolf management.

CAFO: The Tragedy of Industrial Animal Factories

Daniel Imhoff (Editor)
Earth Aware Editions (2010)
ISBN: 978-1601090584
Hardcover 400 pages; \$50.00

A 2010 SURVEY funded by the beef industry found that 64 percent of American consumers are familiar with the term "factory farming." The Foundation for Deep Ecology and Watershed Media are seeking to increase that number through publication of CAFO: The Tragedy of Industrial Animal Factories, a



large-format book packed with 30 essays from leading experts on the negative impacts of factory farming, and accompanied by a collection of 450 photos (including a few from AWI) depicting the disgusting realities of industrial production of animals for food. Among the essays are contributions from Michael Pollan, Robert F. Kennedy Jr., Eric Schlosser, and Anna Lappe. Unlike other publications that have focused chiefly on the considerable environmental damage done by factory farming, CAFO also gives animal welfare its due, unflinchingly referring to industrial farms as "concentration camps" and "prisons" and portraying in words and pictures the mass suffering inflicted on farm animals today at typical U.S. factory farms, as well as during transportation and at slaughter. A more compact paperback edition, minus the photos, is also available. **2**

Kamie Cat's Terrible Night

Written and illustrated by Sheila Hamanaka Animal Welfare Institute (2010) ISBN: 978-0-938414-87-2

A NIGHT OUT ON THE TOWN COULD BE FUN... unless you are a cat lost and alone in the city. *Kamie Cat's Terrible Night* is the latest collaboration between AWI and award-winning author and illustrator, Sheila Hamanaka. This colorful children's book, featuring a multicultural cast of characters, chronicles the (mis)adventures of a cat named Kamie, after music from a party and the smell of fried fish wafting on the night air lure her out of an open window and the cozy home she shares with kind Mr. Wong.

Beneath "a sliver of a moon, no wider than a cat's whisker," Kamie learns that the city can be full of scary surprises. Kamie runs afoul of a big dog, a speeding car... even a human who pampers her own cat but doesn't think much of "scruffy" little Kamie staring longingly in her window. Following Kamie through back alleys, city streets, a shelter, and finally back home, young readers (ages 8 and under) can learn about compassion and proper care of our feline friends.

AWI and Hamanaka previously teamed up to publish Pablo Puppy's Search for the Perfect Person, and The Boy Who Loved All Living Things: The Imaginary Childhood Journal of Albert Schweitzer. As with the two previous books, one complimentary copy of Kamie Cat is available to all libraries, pre-K through third grade teachers, humane educators, and active AWI members. For others, or for additional copies, the book can be purchased at cost for \$4, which includes shipping and handling. Also available for free on AWI's website (www. awionline.org/educationalmaterials) are Kamie Cat- and Pablo Puppy-themed educational activities for children, with downloadable coloring pages, a board game, and more.

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, D.C., 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.



ANIMAL WELFARE PUBLICATIONS BOOKLET

The Animal Welfare Institute has updated its Animal Welfare Publications booklet which lists free or cost-priced books, reports and brochures. Materials are listed categorically by issue with detailed descriptions along with photographs of various publications. Each listing indicates whether the material is available for download. All resources are published by AWI unless otherwise stated in the description. Items may be ordered online at: www.awionline.org. Upon request, single copies of many publications are available at no cost to teachers, humane societies, libraries, and individuals at research facilities.



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Escaped Snakes Lead to Jail for Notorious Wildlife Trafficker

ANSON WONG, one of the world's most infamous traders in illegal wildlife, has been jailed for attempting to smuggle a cache of snakes and a turtle into Indonesia from Malaysia. Wong was caught red-handed at Kuala Lumpur International Airport in late August with 95 boa constrictors, two rhinoceros vipers, and a matamata turtle after his bag containing the reptiles split open while he was in transit to Jakarta.

Nicknamed the Lizard King, Wong ran his trafficking operation out of Penang, Malaysia, with customers all over the world. He typically used middle-men as couriers rather than risk his own capture. Wong has, however, been jailed for smuggling before. In 2001, he was captured and convicted in the United States under the Lacy Act for trafficking in illegal wildlife, after an elaborate five-year sting operation conducted by the U.S. Fish and Wildlife Service. He received a sentence of 71 months in federal prison, a \$60,000 fine, and was prohibited from selling animals to anyone in the U.S. for three years after his release. Jail did not significantly impact his operations. Shortly after his arrest, Wong's wife and business partner established a new company, CBS Wildlife, which exported wildlife to the U.S. while his main company, Sungai Rusa Wildlife, continued to ship animals despite the ban.

This time, his sentence was less severe. After pleading guilty under Malaysia's International Trade in Endangered Species Act 2008 for exporting the reptiles without a permit, Wong received a mere six months in prison and a \$61,600 fine.



Anson Wong exits the court in Sepang, Malaysia after sentencing.

The local attorney general's office has filed an appeal against the leniency of the sentence. Meanwhile, Malaysia's Wildlife and National Parks Department, which has responsibility for enforcing the wildlife trade laws, has vowed to clean up its ranks after allegations of corruption and complicity with Wong's business.

Malaysia is seen by many as a hub for the illicit wildlife trade with its rich biodiversity, lax law enforcement, and proximity to the major markets of the Far East. Wong's light punishment is unlikely to send a signal to other would-be traffickers that wildlife crime doesn't pay. For those who don't mind a short stint in jail, it clearly does pay, with such smuggling worth an estimated \$10-20 billion annually.