AWI Quarterly

Summer 2011 Volume 60 Number 3

AWI Quarterly

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ABOUT THE COVER

Wolves and other predators may not find this Great Pyrenees pup too menacing at the moment, but once grown he may stand watch over cattle on Michigan's Upper Peninsula. A growing number of pasture-based farmers are turning to this centuries-old dog breed as a way to protect livestock without resorting to lethal predator control. On page 6, Dr. Tom Gehring of Central Michigan University talks about how his AWI-sponsored studies in the field with livestock protection dogs have made believers out of some Upper Peninsula farmers. In North Carolina, Dawn and Stephen Robertson use Great Pyrenees to watch over the sheep on their Animal Welfare Approved East Fork Farm (see page 8).

Photo by Dr. Tom Gehring

HUE AND CRY OVER THE NEW GUIDE IS AN OLD TUNE

The new, eighth edition of the National Academy of Sciences' *Guide for the Care and Use of Laboratory Animals* reflects much that has changed since publication of the last edition 15 years ago concerning notions of the proper housing, handling, and care of animals used in experiments. What has not changed, sadly, is the furor generated by an entrenched research industry resistant to and threatened by suggestions that there is any need or obligation to evolve.

To be sure, the *Guide* falls far short of what AWI would like to see. It still *encourages* rather than *mandates* improvements, and relies very heavily on performance-based standards rather than more precise engineering standards. Yet, as noted in the Fall 2010 *AWI Quarterly,* the eighth edition is vastly improved. It was written by a carefully selected committee of experts in laboratory animal medicine, science, and behavior, animal research, and laboratory animal regulation and oversight. Subsequently, it was rigorously reviewed by a knowledgeable and experienced external peer review committee.

Now that it is time for the National Institutes of Health (NIH) to adopt and implement the *Guide* for use by its grantee institutions, there are loud complaints that its "significant economic impacts warrant additional review and comment." This attempt to weaken the *Guide* and slow down the NIH's implementation of it is the same strategy the National Association for Biomedical Research (NABR) and its cohorts employed when the research community was asked to enhance animal welfare with the 1985 Improved Standards for Laboratory Animals (ISLA) amendments. In fact, NABR succeeded in severely weakening the ISLA regulations and delaying them for years. (One could argue that some are still not enforced.)

The new *Guide* will have a positive impact on both the animals and the science, and most researchers should be able to implement it without difficulty. If some institutions need a phase-in period for changes requiring capital investment, so be it—but only if these facilities are on a public list and the phase-in is documented to ensure timely compliance. The wait for a decision from NIH to adopt the eighth edition should not be a prelude to an even longer delay endured by animals used for research.

Illustration by Cameron Creinin

ANIMAL WELFARE INSTITUTE QUARTERLY

Summer 2011

VOLUME 60 NUMBER 3

Above Left: *Bowhead whales swim through a lead in the pack ice off the coast of Alaska (Vicki Beaver, NOAA/AFSC/NMML, Permit No: 14245).*

Top Right: *A clown treefrog clings to a leaf in Ecuador's incredibly biodiverse Yasuni National Park (Geoff Gallice).*

Bottom Right: *A flock of sheep find ample forage on North Carolina's East Fork Farm (Appalachian Sustainable Agriculture Project).*

GAO Study Wastes Time and Tax Dollars

AFTER ALMOST TWO YEARS and tens of thousands of taxpayer dollars, the Government Accountability Office (GAO) has released its report, *HORSE WELFARE: Action Needed to Address Unintended Consequences from Cessation of Domestic Slaughter* with two contradictory recommendations: restore horse slaughter or ban horse slaughter outright.

The GAO examined issues commonly associated with horses and horse slaughter (transport, abuse, neglect, overbreeding) since the suspension of slaughter in the U.S., rehashing most of the points raised by AWI over the years with no new significant revelations. The GAO did manage to criticize the USDA for its shoddy record-keeping, its failure to issue a final rule to ban double-deck trailers, and its continued authorization of shippers to haul horses despite past records of inhumane transport by those shippers.

There was one particularly significant omission from the GAO's review—the failure to consider the welfare of horses when slaughter existed in this country. This was a glaring oversight, particularly in light of the GAO's suggestion that perhaps horse slaughter within our borders should be resumed. As *Quarterly* readers well know, horse slaughter doesn't occur in a void, and the handling, hauling and slaughter of horses when it happened on U.S. soil was unquestionably brutal.

USDA/FOIA/Julie Caramante

An example of "regulated" horse slaughter: This USDA file photo shows an emaciated horse following delivery to the Belgian-owned BelTex slaughterhouse in Fort Worth, TX, which until 2007 slaughtered horses in the U.S.

FRISCO FARMERS' MARKET ENDS LIVE BIRD SALES

Live chickens and other birds have been sold at the Heart of the City Farmers' Market at the United Nations Plaza in San Francisco for the past two decades. The management of the market recently agreed to a new policy banning live bird sales, following years of investigation and protest by animal advocates. Sellers of live birds have received numerous citations from San Francisco Animal Care and Control, but cruelty prosecutions have not been possible due to an interpretation that the state's animal cruelty law exempts birds. Birds sold at markets suffer from lack of water, poor ventilation, overcrowding, and confinement to paper or plastic bags. The new policy will prevent the sale of more than 100,000 live animals in San Francisco each year. The Richmond Certified Farmers' Market is now the last known Bay Area market to allow the sale of live birds.

Steak with a Side of Superbugs

A RECENT STUDY published in the journal *Clinical Infectious Diseases* reported wide contamination of meat with strains of drug-resistant bacteria. Nearly half of all meat and poultry sampled for the study contained drug-resistant strains of *Staphylococcus aureus*, the bacteria that commonly causes staph infections. The samples of beef, chicken, pork and turkey from 80 brands came from 26 grocery stores in five U.S. cities. Of the bacteria contained in the meat samples, 52 percent were resistant to at least three classes of antibiotics, and DNA testing suggested that the animals from whom the meat was derived were the sources of contamination. Antibiotics are routinely given to promote growth and prevent disease in animals who are subjected to intensive confinement.

In related news, this past May consumer groups filed a federal lawsuit against the Food and Drug Administration for failing to withdraw approval of penicillin and tetracycline use in animal feed when animal health is not at risk.

PROTECTIONS FOR TIBETAN ANTELOPES

Four nature reserves, covering over 200,000 square miles in western China, have joined forces to protect endangered Tibetan antelopes through anti-poaching operations. The initiatives are expected to last three months and become an annual event. Joint patrols will monitor the vast and inhospitable area to deter poachers, who covet the animals' fine wool—known as "shahtoosh"—as material for shawls. A single shawl requires three to five antelope hides. These reserves first gained protection in the mid-1990s; anti-poaching efforts thus far have successfully intercepted 17,000 illicit antelope hides, apprehended almost 3,000 hunters, and confiscated more than 300 guns.

The new joint effort will bring increased protection to the estimated 120,000 antelopes believed to exist within the parks' boundaries—a doubling of numbers in the past two decades but nowhere near the estimated millions once believed to roam the region's high plateaus.

Animal Victims of Tsunami and Radiation Crisis

ON MARCH 11, an earthquake and subsequent tsunami destroyed entire communities on the coast of northeastern Japan, killing over 15,000 people. Close to 5,000 are still lost in the rubble or the sea. After the destruction triggered a radioactive leak at the Fukushima Daiichi nuclear power plant, Prime Minister Naoto Kan immediately declared a voluntary evacuation zone 20 kilometers in radius around the plant. An estimated 10,000 registered dogs and an unknown number of unregistered companion animals were reluctantly left by fleeing owners. Abandoned farm animals numbered well over half a million, with 630,000 chickens, 30,000 pigs, and 3,500 cattle. For the next several weeks, desperate farmers and pet owners braved the radiation threat, returning to feed and care for the animals they had left behind. On April 22 the Japanese government enacted a strict "do not enter" policy, prohibiting the 80,000 residents from re-entering the evacuation zone. In mid-May, when residents were finally granted temporary retrieval access, many pet owners and farmers returned to find their animals starved to death—and some cannibalized.

After months of pressure from Diet of Japan members and local government officials, as well as recommendations from animal advocacy groups in and outside of Japan (including AWI), the national government authorized euthanasia for the remaining debilitated livestock to prevent further suffering. With international assistance, passionate Diet members and animal advocates established Japan's first farm animal sanctuary on July 27. Though too late for the countless lives that were lost, this measure is a symbolic and significant step for the often forgotten animal victims of disasters, and a poignant reminder of the need for emergency relief planning for people and animals alike.

Rex Features via AP Images

Left behind: Dogs at a breeding facility in the evacuation zone. Unlike many animals left to suffer and starve in the zone, these dogs were rescued by the non-profit Animal Refuge Kansai (ARK).

Humane Livestock Protection

Going to the Dogs to Keep the Wolves at Bay

BY THOMAS M. GEHRING PH.D.

Livestock producers throughout the world can be negatively impacted by stock losses due to predators and wildlife-transmitted diseases. In the western part of the Great Lakes Region of the United States, this conflict has increased as gray wolf populations have grown and white-tailed deer have become wild reservoirs for bovine tuberculosis.

From 2005 to 2008, my graduate students at Central Michigan University and I conducted field experiments on cattle farms in the Upper Peninsula (UP) of Michigan to determine the effectiveness of livestock protection dogs (LPDs) for excluding wolves, coyotes, deer, and medium-sized predators from livestock pastures. Our study was the first experimental trial of LPDs on working livestock farms to evaluate their effectiveness in excluding these animals. This type of comprehensive experiment had never been done anywhere in the world.

We integrated female-male pairs of Great Pyrenees pups on six cattle farms and monitored predator and deer use on these farms at the same time we monitored wildlife use on three control farms (no LPDs present). For the first two years of the study, we provided the LPDs and all food and care at no cost to the farmers. We used Great Pyrenees dogs since they are generally less aggressive towards humans compared to other LPD breeds. Great Pyrenees also tend to be more suitable for small and medium-sized farms because of the inherent trait of this breed not to roam far from the livestock they are protecting.

LPDs should be assimilated with the livestock they are to protect before they are 16 weeks old to ensure that a strong bond forms between the dog and livestock. This assimilation or imprinting period—along with monitoring

Rosemary Gehring

Photos by Dr. Tom Gehring

Top: Dr. Tom Gehring and his protégées. While some of the professor's students pursue Ph.D.s, these Great Pyrenees pups pursue "L.P.D.s" as they master the art of livestock protection.
Below: A watchful graduate.

Cattle on a farm in Michigan's Upper Peninsula rest easy as guard dogs stand sentinel. Livestock protection dogs give farmers peace of mind, too, providing an effective defense against livestock losses.

by the farmer to correct inappropriate behavior such as biting—leads to an effective LPD who is protective, attentive, and trustworthy. We integrated pups with calves when the pups were 7-8 weeks old—housing LPD pups in pens with two calves and maintaining an attached pen that the pups could move into to eat, drink and sleep while they were still young.

By May of 2006, the LPDs were active on the farms. From that time forward, wolf and coyote use of pastures declined until it reached zero the following year, where it remained through the end of the study. No livestock were killed by predators on LPD-protected farms, while some livestock were killed on other farms in the area which were not protected by LPDs. Deer use was lower on LPD-protected farms compared to control farms, as well.

Our study demonstrates that LPDs are an effective non-lethal management tool for deterring wolves, coyotes, and deer from livestock pastures on small- and medium-sized farms. As such, LPDs could serve as valuable, proactive management tools that livestock producers could implement on their farms to help reduce livestock losses from predators and wildlife diseases.

We also found that LPDs reduced pasture use by medium-sized predators, such as raccoons, opossums, and skunks. This latter finding might be important for grassland bird conservation, since these medium-sized predators are significant nest predators of birds. This result suggests that LPDs might thus serve as a more general conservation management tool.

Conversations with livestock producers in our study suggest that the LPDs became valuable partners and companions in their operations. Because LPDs monitored pastures continuously, the producers gained greater psychological peace of mind and lower stress, and indicated that they no longer worried as much about wolves eating their cattle because the LPDs were working for them.

An anecdote from our study illustrates this point: When we interviewed farmers for our project, one particular farmer agreed to accept LPDs from us. However, he was convinced that the experiment would be a complete failure. He told my graduate student that she would have the easiest thesis to write in all of history—one sentence of four words: "It did not work." One year into the study, this farmer started to change his mind about the effectiveness of the LPDs. He commented that maybe my student's thesis would need to be a little bit longer than one sentence. By the end of the study in 2008, this farmer believed that the LPDs were effective and he worried much less about wolves traveling around his farm. Recently, one of this farmer's LPDs, George, died of natural causes. This farmer is now actively looking for another LPD pup to integrate with his adult LPD on the farm. He is convinced that LPDs work and wants to continue using them, at his own expense. We are currently working with this farmer to help facilitate his acquisition of another LPD.

Interest in the use of LPDs is growing in the UP of Michigan, due in part to our study. Mostly, I believe the increase in popularity is due to the outstanding farmers, like the one I noted above, and knowledge of their experiences spread via word-of-mouth. Individual farmers who see these LPDs on someone's farm are curious and start asking questions. After 2008, I placed eight more LPD pups on farms in the UP because of growing interest. I currently receive numerous phone calls each month from farmers interested in obtaining LPDs on their farms.

No formal program exists to provide LPDs to farmers in Michigan. I believe such a program would garner wide support from local farmers and lead to extensive use of LPDs to aid conservation, protect livestock, and reduce conflicts between farmers, predators and deer.

This study was funded by AWI's Christine Stevens Wildlife Award, Central Michigan University, the USDA's National Wildlife Research Center and SARE program, CITGO Petroleum Inc., Defenders of Wildlife, and National Geographic's Conservation Trust.

Appalachia's East Fork Farm Seeks Higher Ground on Animal Welfare

East Fork Farm is nestled deep in the Blue Ridge Mountains of North Carolina, about 25 miles north of Asheville. As farm settings go, it doesn't get much more scenic. Giles Morris, a recent visitor to the farm and co-founder of the online journal, the *Tuckasegee Reader*, described it as "breathtaking"—a not unusual reaction. With natural springs and an equally fluid topography, East Fork's 40 acres present to the eye a pastoral postcard.

On the other hand, prospective farmers might find the dimensions and pronounced contours of the farm a handicap. The sometimes steeply rolling hills hemmed in by higher mountains—features which contribute so much to its tranquil beauty—might seem a difficult terrain within which to put down roots and tend animals. That, of course, depends on the farmer—and the animal. Pasture that might prove slightly vertiginous to, say, cattle can be an ideal place to tend sheep.

And that's what East Fork owners Dawn and Stephen Robertson do. Not only do the Robertsons raise sheep, they strive to do so in a manner befitting the bucolic setting—with a meticulous eye toward ensuring both land and animals (which include rabbits, chickens and trout as well as sheep) are well cared for. With respect to the land, the farm's stated mission includes "preserving and enhancing the ecological health of our farmland and water." With respect to the animals, East Fork's sheep operation is certified under AWI's Animal Welfare Approved (AWA) program—considered the most stringent set of farm animal welfare standards in the country.

In accordance with AWA standards, the Robertsons raise their crossbred Katahdin/Dorper flock entirely on pasture. East Fork sheep are medicated only when they are truly sick—which is not often—and no hormones are administered. Lambs are not weaned before their time and never in a manner likely to cause unnecessary stress.

Another distinction of East Fork and other AWA operations is that young lambs' tails are not "docked," or partially removed. Docking is an extremely common practice to combat flystrike—serving as a shortcut to the careful observation and care that might otherwise prevent such maladies. Docking is stressful and painful for the lambs and can cause physical and health problems, especially if the tail is cut too short. A 2008 report by the U.K.'s Farm Animal Welfare Council referred to tail docking as a painful mutilation that should be avoided whenever possible.

East Fork combines high-welfare husbandry with humane predator management, as well. Coyotes and other opportunists in the surrounding hills know to stay away, as East Fork sheep have muscular bodyguards. The flock is guarded by Great Pyrenees dogs—a breed long used by Basque shepherds in the Pyrenees Mountains. Keeping the dogs on hand allows the farm to avoid livestock losses and eschew lethal predator control. They are also good company.

Of the farm's Great Pyrenees, Stephen says, "We have had some that we rescued and some that we have trained ourselves." Integrating the dogs into the flock is a process—the dogs must develop a proprietary interest in their wards. "I learned early on that you don't just buy a dog and throw him in there and say, 'Good luck.' The bonding process between the dog and the lambs is very important." (For more on the use of Great Pyrenees dogs to protect livestock, see "Humane Livestock Protection: Going to the Dogs to Keep the Wolves at Bay" on page 6.)

The Robertsons settled on this spot 15 years ago. They were not new to the area, having lived previously in a small community on Asheville's south side. Stephen's family also had a farming background but, as he tells it, they "were primarily truck farmers, raising row crops and taking them to the farmers' market … loads of cantaloupes, tomatoes, cabbage—a completely different type of farming. But the experience was useful." Before establishing East Fork, Dawn and Stephen were actually "computer geeks" (Dawn's words) in the software business. But they longed for more space within which to raise a family, and a greater sense of self-sufficiency, so they went shopping for a farm. "It's something we really wanted to do," said Stephen. "I like physical labor, being outside, and working with my hands." He says they also enjoy the diversity that farming offers—there is no "typical" day.

For a while after the Robertsons moved to the property, Dawn tended registered Katahdin sheep while Stephen worked outside the farm. But when it came time to choose full-on family farming, sticking with sheep was not a given. In fact, Stephen was once sold on another animal well-adapted to uneven terrain: "I had done a lot of research into goats," he said. "I had planned out how many I was going to run, and was going to go with a Boer/Spanish-type goat." But that's when fate and a prime opportunity intervened. "I found a lady who was selling her whole flock of sheep, and we just decided to go buy them and start that way. Usually when you buy sheep you get what people don't want, but she was selling the whole flock, and was selling for a very good price. So, there you have it—no goats."

The setting may be ideal and the chosen animal in sync with the landscape, but the work is far from easy. "Sheep are difficult animals to raise," says Stephen. You've really got to look at them a lot." Sheep are prone to parasites—particularly the barber pole worms prevalent in that area. "We run our sheep through the handling facility once a week now, to assess health and address any parasite challenges. We have just made it a regular thing, to really stay on top of lambs. Every Monday, it takes us seven and a half hours." They are also continually moving

Appalachian Sustainable Agriculture Project

Appalachian Sustainable Agriculture Project

East Fork sheep browse along a winter meadow. Like all Animal Welfare Approved farmers, the Robertsons raise their animals on open pasture.

the sheep to greener pastures. "We do a lot of rotational grazing to avoid parasite buildup, since the larvae will die without a host. We still do have challenges, but we've found that if you're proactive about it instead of reactive, you can save a lot of lambs."

Despite the need for constant vigilance, Stephen is proud to be counted a sheep farmer: "I like sheep people because they are really in touch with their animals. They spend so much time with them; they know them." Good thing, because the Robertsons have been able to enhance their business by working with an association of sustainable sheep farmers from the region, all of whom follow the same strict grazing techniques and healthy practices as East Fork, and all of whose farms bear the Animal Welfare Approved seal. East Fork now supplies local area restaurants and retailers with AWA pastured lamb from a number of family farms in North Carolina and nearby Virginia and Tennessee—and is looking for new farms to join the group. This arrangement provides marketing opportunities for local farms unable or unsuited to market directly.

"The other farmers in the group raise their animals the same way I do. It seems to work out pretty well. It's a good alternative to bringing sheep to auction; [The farmers I work with] are sensitive to how the animals are handled and slaughtered and prefer this route to the stockyard."

Photos by Appalachian Sustainable Agriculture Project

A sheep nibbles near Autumn Robertson's foot as she stands with sister, Madison, and parents, Dawn and Stephen. ***Far right:*** *An old grain barn against a misty mountain backdrop.*

The Robertsons actually found out about AWA through Chris Wilson, a farmer in the East Fork Farm group. "I was starting to work with a retailer and she suggested AWA as a way to differentiate us in the market." says Stephen.

The Robertsons are also taking full advantage of their extraordinary vistas by venturing into agritourism. A few years ago, they built a cedar shake cottage on the property with a commanding view of the valley to serve as a rental cabin. It was almost fully occupied last year. Guests aren't expected to lend a hand with chores, however. "They mainly come and relax," says Stephen. A second, larger cabin is nearing completion, and the Robertsons envision it "as a place families and groups can come and use as a base for rafting, hiking, etc."

Best of all, since settling in, the Robertsons have been blessed with two new farmhands. Their first daughter, Autumn, was born 12 years ago, followed by Madison a year later. The whole family is now very much involved in the operation. Dawn and Stephen want their children to appreciate where food comes from, and the work that goes into producing it. Stephen says the girls are quick studies so far: "They are learning to not just go through the motions, but to look at situations critically and foresee potential problems. They are starting to look beyond just what they are told to do and see the whole picture."

For the Robertsons of Animal Welfare Approved East Fork Farm, the "whole picture" in this picturesque setting is not just about earning a living. Rather, it encompasses a strong sustainability ethic, a desire to live closer to the land, and an abiding attention to the well-being of the animals.

USFWS

The powdery white visage of this little brown bat roosting in Vermont's Greeley Mine indicates infection by the fungus associated with white-nose syndrome.

WHITE-NOSE SYNDROME

As white-nose syndrome (WNS) was confirmed in yet another state—Maine—some Members of Congress were coming to the bats' rescue. Rep. Peter Welch (D-VT) and Sens. Frank Lautenberg (D-NJ) and Patrick Leahy (D-VT) asked their colleagues to join them in letters to the chairmen and ranking members of their respective Interior appropriations subcommittees requesting sufficient funding for the many agencies involved in addressing WNS. The letters underscore the tremendous environmental and economic consequences associated with the death of so many bats: A recent scientific study estimated that the loss of bats as insect predators may cost agriculture between $3.7 billion and $53 billion a year. More than a million bats have already died from the disease—bats who would have consumed between 660 and 1,320 tons of insects each year. Those agricultural industry losses are in addition to the downstream environmental effects of increased pesticide use, negative economic implications when bats can no longer fulfill their role in maintaining the health of forest ecosystems, and serious public health implications of an increase in disease-carrying pests.

Senators Seek Horse Slaughter Ban

SENS. MARY LANDRIEU (D-LA) AND LINDSEY GRAHAM (R-SC) have reintroduced a bill to ban horse slaughter. The "American Horse Slaughter Prevention Act of 2011" (S. 1176) would end the slaughter of American horses here and, more urgently, stop the export of these horses for slaughter abroad. The bill has 23 cosponsors to date.

Horse slaughter currently does not occur on U.S. soil; the last plants closed in 2007 under state laws. But without a federal ban, there is nothing to stop plants from opening elsewhere, and efforts to reestablish horse slaughter in the U.S. continue to surface. Moreover, each year approximately 100,000 American horses are hauled to Canada, Mexico, and beyond, traveling hundreds or even thousands of miles to slaughterhouses on double-deck cattle trucks without food, water, or rest. A federal law is needed to put an end to this abuse as well.

Tax Dollars for Slaughter Nixed Again

AS AN ADDITIONAL BACKSTOP against resumption of horse slaughter in the U.S., the House has passed an FY 2012 appropriations bill that includes an amendment offered by Rep. Jim Moran (D-VA) prohibiting the USDA from spending tax dollars to inspect horse slaughter facilities. While not a substitute for a permanent ban, this defund language—first adopted in 2005—has prevented horse slaughter plants in the U.S. from operating, and any new facilities from opening. Rep. Moran and Rep. Rosa DeLauro (D-CT) spoke strongly in favor of the amendment, noting that now is not the time to start spending tax dollars to prop up an industry owned and propelled by foreign interests, and one that is responsible for the suffering of American horses. The amendment became necessary after the language was omitted from the appropriations bill originally approved by the House Agriculture Appropriations Subcommittee. As in prior years, AWI will work to ensure that this provision is protected as the bill moves through Congress.

Throwing the Book at Animal Abusers: More States Crack Down on Cruelty

WHILE IT HAS BEEN NECESSARY to fend off numerous attacks on animal welfare in state legislatures this year (See Spring 2011 *AWI Quarterly*), there have also been positive developments benefitting animals.

At the top of the list: NEVADA has substantially strengthened its animal cruelty laws. Where once even egregious acts did not rise to a felony until a third offense within seven years, now persons who "torture or unjustifiably maim, mutilate or kill" a dog, cat, or other animal "kept for companionship or pleasure" will be guilty of a category D felony on the first offense. In another bold move, the law makes it an (even more serious) category C felony to commit such acts "in order to threaten, intimidate or terrorize another person… ." This clearly acknowledges the relationship between animal abuse and other crimes, especially domestic violence, and provides prosecutors with a powerful tool for both punishing crimes against animal victims and preventing crimes against human victims.

The legislation was enacted in response to the brutal torture and death of Cooney—a dog adopted from a shelter—at the hands of an owner who could only be charged with a misdemeanor under the old law. Cooney was not the only victim of this individual, who had a history of violence towards both animals and people. In a letter to the Assembly committee, his former wife told how he had tortured the family hamster "as an example of what he would do to [her] if she left him."

SPCA of Northern Nevada

The savage killing of Cooney, shown here, sparked outrage and led to tougher animal cruelty laws in Nevada.

MISSISSIPPI became the 47th state to enact a felony animal cruelty law, albeit one that is not altogether satisfactory. Even the sponsor of the bill, Sen. Bob Dearing (D-Natchez) acknowledges that what finally passed could be improved, explaining that, "The bill signed into law, SB 2821, did not include 'kill' as a provision for aggravated cruelty; it also states that multiple abuse of cats or dogs is treated as a single offense, and, finally, aggravated cruelty is not a felony until the second offense." In the next session of the legislature, Sen. Dearing plans to introduce a new bill to address these problems. Several other important changes were made to Mississippi law as it addresses animal cruelty: Courts may order psychological counseling for abusers and ban them from working with animals. Shelters that care for animals involved in abuse cases will be able to receive reimbursement for their expenses from the offender. Misdemeanor penalties are established for abuse and neglect of all animals, and for the first time, confining dogs outside without adequate shelter is prohibited.

In HAWAII, a new law makes it a felony to attend or wager on a dogfight or to possess a device intended to train a dog for fighting; previously, only those who staged dogfights, trained or owned dogs for dogfighting, or allowed their property to be used for dogfights could be charged with a felony. Unfortunately, cockfighting remains a misdemeanor.

Until recently, NEW YORK was one of only five U.S. states with no laws to regulate trade in bear parts. As poaching of American bears for traditional Asian medicines rises, traders target these lax states to hunt bears and sell their parts. A single gallbladder might fetch thousands of dollars on the domestic black market.

Fortunately, a bill just passed the New York State Legislature that would ban the "possession, sale, barter, offer, purchase, transportation, delivery, or receipt of bear gallbladder, bile, or any product, item, or substance containing, or labeled or advertised as containing, bear gallbladders or bile." Once the bill becomes law (as is expected after this issue goes to press), New York will join 34 other states that prohibit trade in bear gallbladders and bile. (Eleven other states regulate trade in bear parts in some manner short of an absolute prohibition.)

Indiana DNR Gets Cagey on Coyote and Fox Penning

IN INDIANA, ONE MUST HAVE A PERMIT to possess wildlife outside of hunting season. Apparently, though, "possess" is a very flexible word. According to the Indiana Department of Natural Resources (DNR), plucking wild animals out of their homes in the wild and transporting them to a fenced enclosure doesn't count as possession, so long as there are accidental holes in the fence.

This past May, AWI, Project Coyote, and the Animal Legal Defense Fund filed suit against the DNR and its director Robert Carter, after the department waived state permit requirements for a coyote and fox penning facility near the town of Linton, in southwestern Indiana. As noted in the Spring 2010 *AWI Quarterly,* "penning" involves setting packs of dogs loose to chase wild coyotes and foxes within enclosed areas. Supporters of the practice claim they are just training their dogs; they don't *intend* to kill the coyotes and foxes. Yet eyewitness accounts and undercover investigations by government officials indicate that often the dogs are not called off once they corner the wild canids, but rather tear into them and maul them to death.

When animal welfare advocates pointed out that the Linton facility lacked the mandatory permit to possess wildlife, the DNR made the rather dubious assertion that coyotes and foxes trapped in the facility's enclosures are not technically "possessed" because there are small, unintentional perforations in the poorly-maintained wire fences. The lawsuit alleges that the DNR's interpretation of the law would allow anyone in the state to skirt the wildlife possession permit requirement simply by failing to keep up with repairs.

The DNR's eagerness to bend rules to accommodate penning is strongly at odds with the wishes of the Indiana citizenry, it would seem. A recent Mason-Dixon poll found that Indiana voters favor a bill prohibiting penning by a margin of 85 to 9 percent. It also runs counter to the DNR's previous stance on the issue. Last year the department actually recommended a prohibition on coyote and fox penning to the Indiana Natural Resources Commission (NRC)—the 12-member board that addresses issues pertaining to the DNR. According to the minutes of a 2007 NRC meeting, DNR director Carter reported on a multistate investigation regarding illegal fox and coyote trade associated with penning. "Most of the time (the coyote) is killed," he said.

Eastern Coyote Institute

Penning proponents claim that physical contact between domestic dogs and coyotes in field trials seldom happens. Undercover investigations (and photographic evidence) say otherwise.

At a November 2010 NRC meeting, the board preliminarily voted to approve rules that would authorize the continued operation of existing pens and allow new pens to be established until a proposed January 1, 2012 moratorium. Late pressure from the National Rifle Association (even as some hunters spoke out against penning) is believed to be behind this acquiescence to a practice most Hoosiers find repugnant. As of this printing, the NRC has yet to approve final rules, and the lawsuit is still pending.

WXIN-TV FOX59/April 21, 2011

Photos by http://tesboard68150.yuku.com

Florida outlawed coyote and fox penning last year after tremendous public outcry. Despite similar opposition in Indiana, behind-the-scenes pressure has the state's Natural Resources Commission contemplating whether to give the barbaric practice its blessing.

On Top of the World

by D.J. Schubert

IT TOOK THREE TRIES FOR THE PILOT TO LAND in Barrow, Alaska in the heavy fog. To the native Iñupiat, Barrow is known as *Ukpeaġvik* (or *Utqiaġvik*), which means "place to hunt snowy owls." I came to the top of the world to learn about Iñupiat culture, bowhead whales, and to strengthen the bridge between the Animal Welfare Institute and native Alaskan whalers. AWI has long opposed commercial whaling, but its stance on aboriginal subsistence whaling is more nuanced, and takes into account aboriginal uses and needs, science, and cruelty concerns (see sidebar on page 17).

Nearly 4,700 people call Barrow and neighboring Browerville home. In addition to the native Iñupiats, there is a diversity of ethnicities including Asian-, Mexican- and African-Americans, and a contingent of Hawaiians. The city contains an eclectic mix of houses (many painted in bright colors), two schools, several restaurants, a college, a police station, office buildings, a cultural center, three hotels, four taxi companies, convenience stores, a modern grocery/department store, and—surprisingly—a tanning salon.

The subsistence lifestyle of many of the residents, however, is obvious: The skeletons of whaling boats, caribou hides and skulls, and even baleen from past whale kills decorate many yards. With the odd assortment of snowmobiles, all-terrain vehicles, automobiles, and other odds and ends, the aesthetic—perhaps surprising to the average suburbanite—reflects a culture of survival in a climate and landscape foreign to most.

Shortly after my arrival, I headed to the Naval Arctic Research Laboratory (NARL) with Dr. Robert Suydam, a cetacean scientist with the North Slope Borough Department of Wildlife Management (NSB-DWM). NARL—which reportedly was used to spy on Russia during the cold war era—has been converted into Ilisaġvik College and offices for the NSB-DWM. Our destination was the Arctic Research Facility (ARF). Historically, the ARF was used to conduct physiological studies on various Arctic wildlife species. Now, the ARF was bustling with activity as the home away from home for more than a dozen young people who had come to Barrow to participate in the bowhead whale count that occurs approximately every 10 years.

D.J. Schubert

Dr. Craig George of the North Slope Borough Department of Wildlife Management negotiates a jumbled path over the frozen sea after a visit to a whale counting perch.

Martha Holmes/npl/Minden Pictures

A bowhead whale glides under a surface of ice and water in the Arctic Ocean. Iñupiats hunt these whales in support of a subsistence culture. This aboriginal subsistence whaling is being used as leverage by other nations to justify attempts to open up whaling elsewhere.

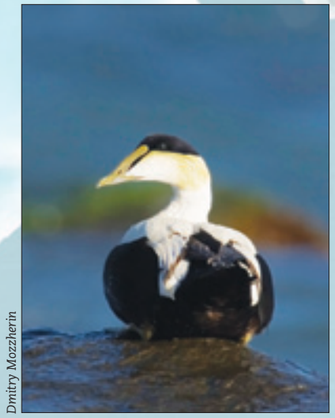
After donning insulated coveralls, "bunny" boots, and a heavy jacket, Dr. Suydam and I ventured by snowmobile from the ARF across the shore-fast and pack ice to the whale counting perches near the ice edge and the open water of the Arctic Ocean. The Arctic landscape was stunning in its stark beauty. Throughout the winter and early spring, storms force the massive sheets of pack ice to collide with the shore-fast ice, creating a haphazard assortment of giant slabs—most larger than an automobile—strewn across the ice, with many slabs painted in dazzling shades of blue.

The whale counting perches were constructed atop the slabs of ice, providing a perfect vantage point to observe migrating bowheads traversing the open water. From April through May, the whale counters would spend at least 10 hours at the perches each day, with two 4-hour shifts counting whales separated by a 2-hour break. Unless the weather was not conducive to observing whales, this was a 24-hour-a-day operation, facilitated by the midnight sun.

D.J. Schubert

A whale counting perch sits atop slabs of ice. The perches are used to observe and collect data on the whale migrations.

The perches were surrounded on three sides by large white tarps to cut exposure to Arctic winds. They were furnished with animal skins to provide insulation from the ice, and the standard tools for counting whales—i.e., binoculars, a theodolite (used to estimate horizontal and vertical distance) and data sheets. Counters would scan the water looking for the black backs of bowhead whales. Once spotted, various measurements and



Dmitry Mozzherin

A male common eider in breeding plumage. Common eiders come to the region around Barrow, AK, each summer to breed.

NOAA

Polar bears, like the Iñupiats, find subsistence on the sea ice. Like their human counterparts, they face an uncertain future. A changing climate is making the ice less reliable and the hunting of seals—the bears' primary prey—more difficult.

observations were noted on the data sheets as the animals traversed the open water. In between shifts, many of the counters stayed in a nearby warming tent. The tent, surrounded by an electric fence to ward off curious polar bears, was equipped with a stove, coffee, tea, blankets and snacks.

The fog prevented us from seeing whales that day, but there were several flocks of common eiders, a few spectacled eiders, and some glaucous-winged gulls observed traversing the open lead. The lack of whales was somewhat expected, as most of the juveniles and adults had already passed, though the last peak of the migrants—including mothers with calves—was expected soon. Only days earlier, the whale counters were busy tracking a near record number of migrating whales, along with the occasional polar bear transiting the pack ice.

Though the serenity of being on the pack ice was enticing, I headed back to Barrow in hopes of meeting with representatives of the Alaska Eskimo Whaling Commission (AEWC) which, in collaboration with the U.S. government, oversees and manages the bowhead whale hunt.

Many AEWC officials were at their whaling camps or had gone inland to hunt geese, but I was able to meet Arnold Brower, a past chairman of the AEWC, in his office at the Ukpeaġvik Iñupiat Corporation. He was initially hesitant to see me; however once I made clear my interest in working with the Iñupiat community to identify issues of mutual concern and areas where AWI and others could join forces with the AEWC to seek change, he welcomed me into his office for a wide-ranging discussion about bowhead whales, threats to the species and their habitat, and the International Whaling Commission (IWC).

We shared a common concern about the Alaskan's bowhead hunt being a political pawn in the battle over commercial whaling (see sidebar at right). We discussed the expansion of oil and gas development activities in the Arctic, an issue of considerable concern to the AEWC due to the potential for a massive oil spill in the midst of an ice field—which would be impossible to clean up. The anticipated increase in ship traffic and ocean noise inherent to the industry is already negatively affecting bowhead whales, and will only worsen over time. Similarly, the effects of climate change remain a persistent and urgent concern to the AEWC and Arctic residents due to the drastic impacts on their lifestyles, culture, and the wildlife they rely on for survival.

The next day, I awoke at 1:00 a.m. to a bright sunlit sky, providing hope that today I would see a bowhead whale. I returned to the ARF and eventually to the perches where ice conditions were changing rapidly as the sun hastened the spring melt.

Yet, despite blue skies and calm seas, the whales continued to elude me. Based on radio transmissions overheard at the ARF, however, the whales did not elude three whaling crews. While I felt sadness for the whales—for the whaling crews, their families, and the native residents of Barrow this was tradition, a part of their subsistence culture.

Though I wasn't eager to observe the flensing process, I had hoped to get to the ice edge to observe and document the community camaraderie that is integral to Iñupiat tradition. It is an Iñupiat custom when a whale is struck for the villagers to head to the ice edge to help hoist the multi-ton animal onto land and assist with flensing the carcass. In exchange, they are given blubber and meat for their personal use while the whaling captain and crew members retain the rest. Within days of the hunt, by custom, the whaling captain will open his home for all to enjoy a meal of muktuk (blubber), whale meat, and bread. The remaining meat and blubber may be smoked, dried, salted, or stored in underground ice freezers for future use though, by law, the meat and blubber cannot be sold. (Only native handicrafts made from the whale's baleen or other parts can be sold.)

Unfortunately, given the deteriorating ice conditions, transport problems, and time constraints, the difficulty in getting me to the ice edge could not be overcome. As I departed Barrow, I imagined how the stark, ice-covered landscape would change in the next few weeks as the ice melted. How has climate change already altered the Arctic ecosystem? How will it continue to affect the region, its wildlife, the people and their culture? Would the bowhead whales survive? Will the Iñupiat way of life persist or will the environmental change force them to adapt? And, despite the cultural divide, can the commonalities we share be used to compel change to protect the Arctic environment for whales and humans alike? Only time will tell.

D.J. Schubert

Whaling boats parked on the ice near Barrow, AK.

ASW: POLITICAL PAWN IN THE PACK ICE

ABORIGINAL SUBSISTENCE WHALING (ASW) countries that are members of the IWC include the U.S., Russia, St. Vincent and the Grenadines, and Denmark (representing Greenland). The Alaskan Iñupiat bowhead hunt, involving eleven villages, is the best-managed ASW hunt, yet it also has been used by other countries engaged in political shenanigans.

The controversy is linked to Japan's efforts to use the bowhead quota (approved by the IWC and shared by the native whalers of the U.S. and Russia) as leverage to force the U.S. to support Japan's desire to engage in coastal, commercial whaling. In 2002, this scheme succeeded in forcing the U.S. to adopt a whale conservation strategy based largely on protecting the bowhead quota. Though once a reliable voice for whale protection, the influence of the U.S. within the IWC has been weakened by its overarching concern for the bowhead quota. Its actions within the IWC are often subject to an assessment of how its decisions will affect the bowhead quota, which comes up for renewal every five years (including next year).

As a result, at recent IWC meetings the U.S. supported Greenland's controversial ASW whaling program and its expansion to include humpback whales. This was done (despite full knowledge of deficiencies in Greenland's ASW operation) to curry favor with Japan, Denmark, and their allies and secure a future bowhead quota.

AWI continues to questions the number of whales the Iñupiat require to meet their subsistence, nutritional and cultural needs, and strongly encourages efforts to reduce the cruelty inherent to the hunt. Nevertheless, using the bowhead quota for political purposes must end.

D.J. Schubert is a wildlife biologist with AWI. He regularly represents AWI internationally at meetings pertaining to wildlife conservation, such as conferences of the parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and annual meetings of the IWC.

Live Sharks Prove Lucrative as More Countries Move to Protect Them

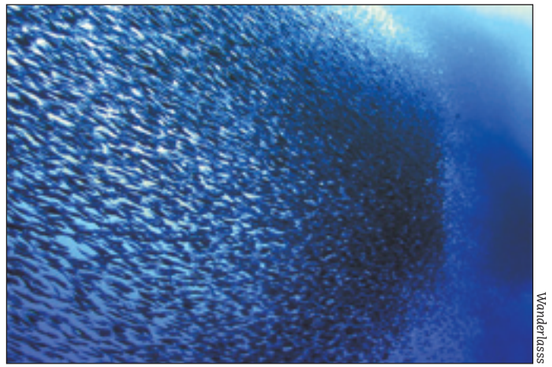
MEXICO AND THE BAHAMAS joined the list of countries this summer that have banned shark fishing within their territorial waters. Meanwhile, Chile outlawed shark finning at sea within its waters. Such moves may turn a profit: A study by the Australian Institute of Marine Science assessed the value of shark watching as a tourist industry for the Pacific island nation of Palau, which declared its waters a shark sanctuary in 2009. The study found that money made from divers who specifically come to see sharks constitutes over 8 percent of Palau's $218 million GDP. With 100 or so sharks in the prime dive sites, each contributes roughly $179,000 annually to Palau's tourism industry—a whopping $1.9 million over a shark's lifetime. A dead shark's value is a few hundred dollars at most. Highlighting economic incentives for countries to develop shark watching tourism could be a powerful tool in the fight to save these animals.

DANUBE RIVER STURGEON GRANTED SAFE PASSAGE

Danube sturgeons—whose roe is prized as a source of caviar—have become so critically endangered that caviar exports from natural fish populations (as opposed to farmed fish) from all Lower Danube countries have been banned by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Bulgaria, however, has granted the fish a temporary reprieve by enacting a one-year ban on sturgeon fishing along its section of the Danube—complementing a 10-year ban imposed five years ago by Romania on the opposite bank. These countries share almost a third of the Danube's length, giving the sturgeon a vast area in which to swim free from human grasp. Meanwhile, Azerbaijan, Turkmenistan, Kazakhstan, Iran and Russia have also imposed a 5-10 year ban on sturgeon fishing in the nearby Caspian Sea.

Big Consequences of Small Fish Collapses

WHILE POPULATIONS of top marine predator fish like tuna, billfish and sharks plummet, Stanford University researchers have found that anchovies, sardines, and other small fish are at an equal or greater risk of suffering a collapse. Analyzing over 200 scientific assessments of fisheries around the globe, the Stanford team found that populations of small fish were at least as likely as large ones to have collapsed at some point in the last 50 years. A major cause of population crashes in all fisheries is overfishing. Over 25 percent of the world's fisheries consist of small fish, primarily for use in animal feed, fertilizer and nutritional supplements. Small fish compose a vital link in the oceanic food chain, and a plunge in population could precipitate declines in the mammals, birds and other fish who depend on those species for food. Though small fish may have short reproductive cycles and, as a consequence, recover quickly, the species dependent upon them may take much longer—profoundly disrupting ecosystems.



Wanderlass

A school of sardines roil the waters off the Philippine coast. Researchers at Stanford found that small fish suffer population collapses just as big fish do. Collapses in prey species can reverberate up the food chain.

The Virtue of Virtual: Schools Switch to Digital Dissection

SO FAR, NINE SCHOOLS IN CALIFORNIA AND MAINE have agreed to end animal dissections in response to a challenge issued by AWI, Save the Frogs! and Digital Frog International. In exchange for their signed agreement to stop all animal dissections for a five-year period, the schools receive a free license for the Digital Frog 2.5 virtual dissection software (valued at $884) manufactured by Digital Frog International.

Each year, over 12 million frogs, cats, fetal pigs, rats, dogs, pigeons, turtles and other animals are used in school dissection projects. The procurement process is often extremely brutal, with callous treatment during the capture, transport, warehousing and killing, including death by immersion in preservative for many frogs.

Animal dissections desensitize students to animal cruelty and the unnecessary taking of animal lives. Virtual dissection is not only more compassionate, it is less expensive than procuring live and dead animals to dissect. It is also more effective: According to TeachKind, a web resource for humane education materials, "In nearly every comparative study ever published, students using non-animal methods such as interactive computer simulations tested as well as or better than their peers who were taught using animals for dissection and other animal-based exercises."

Bruno P

Frogs belong in the wild, not on the dissecting table. Virtual dissection programs do a superior job of teaching students basic anatomy, while promoting a healthy respect for animal life.

To make the pledge to end dissections in your school, visit *www.awionline.org/stopdissections*.

NO CLASS: Teacher Reassigned After Ridiculing Student's Anti-Dissection Stance

A Florida middle school teacher has been disciplined after taunting a 13-year-old student for choosing not to dissect a frog during science class. According to the student, the teacher snuck up behind her, shoved a bag of dead frogs in her face, dropped the bag on her binder, and then laughed at her in front of her classmates when she began to cry. The teacher also told students in other classes that they would be sent to the principal's office if they tried to opt out of dissection. The teacher's actions were not only insensitive and inappropriate, but also violated the student's legal right under the state's choice-in-dissection law to opt out of dissection. Ten states, including Florida, currently have laws allowing students to object to dissection and use alternatives instead. Florida's law allows middle and high school students to refuse to participate in classroom exercises that harm animals upon written consent from a parent or guardian, without being penalized for doing so.

Responding to media attention surrounding the incident, the school district conducted an investigation, which resulted in the board issuing the teacher a disciplinary warning letter and ordering her to undergo sensitivity training. Additionally, the Florida State Board of Education reassigned her to another school, required her to be retrained, and placed a disciplinary letter in her district and state files. The teacher will not be permitted to have her own class for the 2012 school year and will instead shadow a teacher in a different school. Meanwhile, the district is considering whether to replace animal dissections with humane alternatives.

Out on a Limb: Demand for Legs Driving Frogs to Extinction

IN THIS COUNTRY, a plate of frog legs (or "frogs' legs" as the dish is commonly called outside the U.S.) usually brings to mind France or the French-influenced regions of the American South. Frog legs, however, are especially popular in Cantonese cuisine, as well, and are consumed in homes, restaurants and bars throughout the world. According to a study published in the journal *Conservation Biology*, from 200 million to over 1 billion wild and farmed frogs are killed every year to meet the international demand for their legs.

Because frogs are exported most often as skinned body parts, it is extremely difficult to track which species are being traded. Consequently, it is difficult to measure the precise impacts of the frog leg trade on wild frog populations. Morphological similarities among commercially harvested frog species suggest that many species may be regularly harvested but misidentified and mislabeled. What is known is that the species most commonly involved in the trade are large-bodied frogs—namely the American bullfrog (*Rana catesbeiana*), crab-eating frog (*Fejervarya cancrivora*), and Javan giant frog (*Limnonectes macrodon*). In various countries, many other species are exploited as well for domestic consumption.

Animal Welfare and Ecological Issues

Cruelty is a common theme running through the varied methods used to kill frogs. They are often skinned, and have their snouts and rear legs cut off with scissors or a blade while still alive. Their torsos are then tossed aside in a pile of other bleeding frogs and they endure a slow, agonizing death. Inhumane methods employing nets, hooks and spears are also used to capture frogs from the wild. Frogs captured for live trade may be stuffed into bags or kept in unsanitary and overcrowded conditions until purchased for consumption.

The removal of frogs from the wild can devastate frog populations and their ecosystems. Scientists have stressed, however, that the risk of disease associated with the amphibian trade might pose an even greater risk. The escape of non-native frogs from frog farms or open-air markets, or the intentional/accidental release of such frogs into the wild is contributing to the spread of disease among wild populations.

One particular disease taking a heavy toll on amphibian populations throughout the world is caused by *Batrachochytrium dendrobatidis (Bd),* or amphibian chytrid fungus. It is one of the main reasons why more than one-third of the nearly 6,000 known amphibian species are threatened with extinction. Chytrid does not affect all amphibians equally, and some species can harbor the fungus without showing symptoms. Nonetheless, in infected populations, mortality rates of up to 90 percent have been observed, and researchers are desperately scrambling to control the fast-spreading disease.

There are practically no regulations in place to ensure that diseased amphibians are not traded. The American bullfrog is the most commonly farmed frog species worldwide and is highly adaptable to different conditions. Consequently, it has become an invasive species in many countries, competing with and eating native wildlife. Despite its origins here, commercially traded American bullfrogs and legs often enter the U.S. from overseas. A 2009 study by Schloegel *et al.* found that 62 percent of live American bullfrog specimens imported into the U.S. were *Bd* carriers.

Major Importers and Exporters

India was the primary exporter of wild-caught frogs until 1987, when it banned the trade due to overexploitation, ecosystem impacts, and animal welfare concerns. Once frog populations became heavily depleted in India, large quantities of environmentally harmful pesticides were used to control agricultural pests and mosquitoes—a service that had been provided naturally by frogs. Today, Indonesia is the leading exporter of wild-caught frogs and scientists fear that the country—which already spends millions on pesticides to control agricultural pests—is following the same path as India.

The U.S., France and Belgium are responsible for 75 percent of global frog leg consumption. Markets in both the U.S. and France were initially supplied by native frogs—until overexploitation of domestic species led to an increase in imports of (purportedly) farmed frogs. Nowadays, the U.S. imports live frogs and frozen frog legs from China, Mexico, Taiwan, Ecuador, the Dominican Republic, Brazil and Vietnam.

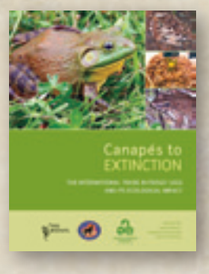
Throughout the U.S. frog legs can be found at grocery stores and restaurants, and live frogs and other amphibians can be purchased for human consumption at Asian markets. Last year, after a 15-year campaign by animal welfare groups, the California Fish and Game Commission banned the import of non-native frogs and turtles for food. Unfortunately, in February of this year, the ban was lifted because of pressure from the Asian-American community.

Frog legs are particularly popular in the Southern U.S. The Fellsmere Frog Leg Festival in Florida—now in its 20th year—is the largest such event in the world, annually drawing about 80,000 people. Fellsmere, in fact, was featured in the Guinness Book of World Records for "the most frog legs consumed at a festival," after 6,000 pounds of legs were sold and eaten during the 2001 event.

Some responsible chefs and businesses, however, have decided not to sell frog legs. Last year, Mid-Atlantic supermarket chain Wegmans discontinued frog legs from all of its 76 locations in the Eastern United States. And in 2010, Restaurant Gary Danko in San Francisco became the first restaurant in the world known to have stopped selling frog legs out of concern for the ecological impacts.

Need for Action

The current international trade in frogs and frog legs is unsustainable and is exacerbating the already dire situation for many wild populations. As a leading importer of frog legs, the U.S. has a responsibility to ensure that its trade is not spreading the deadly amphibian chytrid fungus among wild frog populations by introducing invasive frog species, or facilitating cruelty in the methods used to harvest and kill frogs. The U.S. should also introduce and support proposals to list heavily traded species under the Appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in order to regulate and monitor international trade in these species.



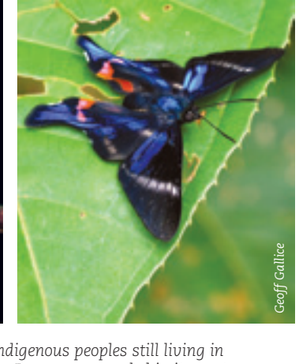
AWI, Defenders of Wildlife, and Pro Wildlife (of Germany) have released a new report, Canapés to Extinction: The International Trade in Frogs' Legs and Its Ecological Impact, *with recommendations concerning what governments should do to protect frog populations and prevent further ecological harm. Individuals can take action, too. If you find frog legs at a grocery store or restaurant, please write a letter to the management explaining the issue and encouraging the company to discontinue such sales. A pdf of the report is available at:* www.awionline.org/froglegs.


Geoff Gallice


Courtesy of the Yasuni-ITT Initiative


John Norton


Geoff Gallice


Geoff Gallice


Geoff Gallice

Yasuni National Park—home to some of the last indigenous peoples still living in isolation in the Amazon—is also a World Biosphere Reserve unequaled in its vast array of plant and animal groups. Some of the many species that contribute to Yasuni's stunning biodiversity include the (top left to top right) blue-crowned manakin, kapok tree, golden-mantled tamarin, waxy monkey leaf frog, periander metalmark butterfly, Tschudi's false coral snake, and (lower right) hoatzin. Both people and animals are threatened by potential oil extraction within the park.

The Yasuni-ITT Initiative

By Dr. Ivonne Baki, Plenipotentiary Representative Of Ecuador

Yasuni National Park, part of the Ecuadorian Amazon jungle, is probably the most biodiverse place on the planet. Home to many unique and endemic species, the national park, almost 1 million hectares in size,[1] was declared by UNESCO a "World Biosphere Reserve" in 1989. This biodiversity hotspot has been reported to contain 593 species of birds, 2,274 species of trees, 80 species of bats, 150 species of amphibians, 121 species of reptiles, and 4,000 species of vascular plants. There are also more than 100,000 species of insects per hectare. Far from the interference and destruction of civilization, it is a living laboratory where life flourishes in a complex equilibrium with nature, a magical place where new species have evolved and are still evolving.

Yasuni National Park is also home to Waorani and Kichwa communities, as well as the Taromenane and Tagaeri, two other indigenous groups in voluntary isolation, looking to preserve their ancient cultures and traditions.

In 1972, Ecuador became an oil exporter, and since then, this resource has been the main source of income of the national economy. Recently, large deposits of heavy crude oil have been identified in the ITT (Ishpingo-Tambococha-Tiputini) fields, located in Yasuni National Park. These reserves represent around 846 million barrels of heavy crude oil. Not surprisingly, the petroleum industry's eyes are focused on that fragile piece of land, in the hope to start extracting what represents as much as 20 percent of the national oil reserves.

Most experts and scientists agree that if Ecuador decides to extract the oil from Yasuni National Park, the opening of roads, deforestation, and contamination associated with oil exploitation will lead to the extinction of many of its unique species.

During the United Nations General Assembly in September 2007, President Rafael Correa announced that Ecuador had decided to forego the exploitation of oil in the Yasuni-ITT area, a substantial sacrifice for a small developing country whose economy still depends on petroleum, choosing to put social and environmental values first, while exploring other ways to benefit the country economically.

The Yasuni-ITT Initiative was born from this proposal. It aims at preserving Yasuni National Park's biodiversity by foregoing the exploitation of petroleum in the most pristine part of the Ecuadorian Amazon jungle, known as the lungs of the planet. By leaving this petroleum underground, the government of Ecuador is contributing to combating global warming by avoiding the emission of approximately 407 million tons of carbon dioxide.

In exchange, the Ecuadorian government seeks the financial contribution of the international community as a gesture of co-responsibility in the fight against climate change. It is estimated that the exploitation of petroleum would generate USD 7.25 billion[2] over the next 12 years, the time it would take for the reserve to be completely exploited. The Ecuadorian government is seeking half of that amount in order to preserve this delicate part of the Ecuadorian Amazon jungle, with the perspective of shifting from an "extractivist" economy to an economy based on the development of renewable energies.

The contributions coming from governments, private sector, and civil society to support the Yasuni-ITT Initiative are deposited in a trust fund administered by the United Nations Development Programme (UNDP). A significant portion of the fund will be invested in renewable energy projects, and the interest produced by the fund will be allocated to reforestation and conservation projects, social development projects in the area covered by the Yasuni-ITT Initiative, and projects aimed at avoiding deforestation and promoting energy efficiency and research and development.

By contributing to the fund, you are not only helping fight climate change, you are helping fund the preservation of thousands of endemic species living in a fragile environment threatened to disappear if it is at all altered.

It's up to all of us to protect Yasuni National Park. We now have a chance to be remembered as a generation who left a legacy: allowing our children and our children's children to continue living in a wonderfully biodiverse planet.

How can you support the Yasuni-ITT Initiative and help preserve one of the world's last rainforests?

Contributions from governments, intergovernmental entities, non-governmental organizations, the private sector and individuals can be made to the Yasuni-ITT Trust Fund: *mdtf.undp.org/yasuni*.

[1] Editor's note: Yasuni's nearly 1 million hectares equals 2.4 million acres (one hectare = 2.47 acres). By comparison, Yellowstone National Park in the U.S. is 2.2 million acres; the areas of U.S. states Delaware and Rhode Island combined would be 2.6 million acres.

[2] The revenues that the Ecuadorian state would receive if the oil were to be extracted would have a present value of USD 7.25 billion, (based on the benchmark price of USD 76.38 per barrel of WTI crude, as of September 14, 2010). The 407 million tons of CO_2 that would be generated by burning the ITT oil are valued at USD 8.07 billion (according to the current prices in the European ETS market of USD 19.81 per ton of CO_2-eq EUA, as of September 14, 2010).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RELIEVING PAIN FOR RODENTS IN RESEARCH

by Michele Cunneen, AWI Laboratory Animal Consultant

THERE IS AN INCREASING TENDENCY in animal research to ask the question, "Why not?" For a long time whenever this question was asked in the context of improving animal welfare, the response from the scientist was, "It will interfere with the model and confound the results." However, if the purpose of the research on animals is to cure or treat human disease, and a human with such a disease would take some form of pain relief in addition to whatever treatment is contemplated in the research, then isn't the animal used in research entitled to this same relief?

Admittedly, there are early stage processes where provision of pain relief might affect the results. However once you move to a screen of a specific disease, this excuse for withholding pain relief is no longer legitimate.

Jean-Etienne Minh-Duy Poirrier

The data suggest that stress and pain can have just as much if not more adverse effects on the models as steps taken to relieve the stress or pain. This has led to a growing movement to require analgesics in cancer and arthritis studies involving rodents.

In this context, analgesic drugs must have effective pain relieving qualities without impacting the cellular processes of the model, in particular inflammation. Two drugs—buprenorphine and metamizole (dipyrone)—satisfy these criteria, with demonstrated efficacy in relieving rodent pain without anti-inflammatory effects that could confound results. As such, they have been used in an increasing number of animal facilities as standards of care in cancer and arthritis models.

Another factor affecting animal stress levels is the method by which the analgesic is administered. With regard to the above-mentioned analgesics, the most common routes for buprenorphine are oral and subcutaneous; for metamizole, they are oral and intravenous. In long term studies oral administration of the compounds is both a time saver and less stressful to the animals.

If administered orally, stress may be further reduced by use of a non-gavage method, such as adding the drug to the animals' food. This method requires preparation and attention to the nature of the food paired with the drug, however. In order to be successful at oral soft food dosing, animals must be pre-study acclimated. The animals must know and like the untreated food. The delivery food must be soft, moist and highly preferred. Plain chow that has been wetted will not work. Commercial entities such as Bioserv, Lab Diet and Clear H_2O have soft diets available, or they can be homemade using flavored gelatin with chow. Regardless of the chosen route, lab personnel concerned with animal welfare should take note that best practices are moving towards the standard use of analgesics.

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Forgotten Monkeys Die at Primate Research Facility

THREE RHESUS MACAQUES DIED gruesome deaths in late May, at the AAALAC-accredited New Iberia Research Center (NIRC) in Louisiana. The facility admitted the monkeys were left in a chute connecting housing enclosures and—despite a requirement under the Animal Welfare Act (AWA) that all animals be observed daily—no one noticed the animals' absence for days and perhaps weeks while they slowly died of dehydration and starvation. By the time the 1- and 2-year-old animals were found, their bodies had begun to decompose.

This isn't the first run-in with the law for this research institution, which maintains more than 6,000 primates on its premises—of whom approximately 1,800 are actively used in research each year. In fact, less than two years ago, the facility was cited for multiple violations of the AWA. The USDA veterinary inspector's observations included African green monkeys with tails that had been amputated as a result of trauma (including frostbite) and macaques on active study who were uniformly denied social housing, with no justification provided for doing so. In this earlier instance, the research facility waived its right to a hearing and paid an $18,000 fine to the USDA—but neither admitted nor denied the charges.

Brad Kemp/DAILY ADVERTISER

A pair of rhesus macaques at the New Iberia Research Center. The facility's commitment to humane care is in serious doubt after recent deaths and evidence of neglect.

The NIRC receives several million dollars in federal funds each year from the National Institutes of Health (NIH). The NIH, apparently, needs to reassess how it spends our tax dollars. The NIRC is in need of significant changes in its practices and personnel—changes which should have happened in 2009 and are clearly overdue. The USDA should hold the facility accountable by filing charges against it for its appalling lack of oversight of animals who are completely reliant upon the staff to provide for their basic care and welfare.

LABORATORY STAFF CHARGED WITH FELONY ANIMAL CRUELTY

Video images taken by an undercover investigator with People for the Ethical Treatment of Animals (PETA) at the Professional Laboratory and Research Services (PLRS) facility in North Carolina documented laboratory workers throwing, hitting, kicking and otherwise abusing the animals. In two highly disturbing instances, workers withheld pain relief to a dog having his teeth pulled, and attempted to rip off a cat's claws by repeatedly and violently yanking the animal from a chain fence to which the cat clung in fear.

Following PETA's exposé, the USDA cited the facility for multiple violations of the Animal Welfare Act, and it was closed down. All of the rabbits were euthanized and AWI led a successful adoption effort of the hundreds of dogs and cats at the lab (see Fall 2010 *AWI Quarterly*).

And now the final chapter is playing out: On July 5, a grand jury indicted four former PLRS employees for felony animal cruelty—the first such indictment of laboratory staff in U.S. history.

AWI Aims and Programs

AN INTRODUCTION TO AWI. This 12-page booklet, updated for our 60th anniversary, provides an overview of the programs and activities undertaken to further our mission to alleviate the suffering inflicted on animals by people. Learn how AWI works to improve the welfare of animals in the laboratory, on the farm, and in the wild.

Sharks at Risk

SHARKS HAVE OCCUPIED THE OCEANS for more than 400 million years. Today, fully one-third of the world's pelagic sharks face extinction—in large part driven by the demand for fins to make shark fin soup. This updated brochure (now available in both English and Chinese, with a pull-out card to deliver to restaurants) discusses the critical role sharks play in ocean ecosystems, the cruelty of shark finning, what conservation measures exist, and what you can do to help.

Basic Guidelines for Operating an Equine Rescue or Retirement Facility

Animal Welfare Institute (2011)
24 pages; $1

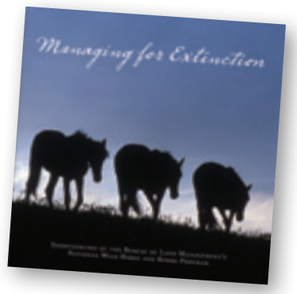
CARING FOR EQUINES is a significant, time consuming, and long-term commitment not to be entered into lightly. This updated booklet is designed especially for use by non-profit equine rescue and retirement facilities, and provides basic standards of care for operating a high-welfare facility. Topics include conducting health assessments, maintaining proper enclosures and shelter, processing new arrivals, handling adoptions, diet, dental care, and more.

International Trade in Wildlife

INTERNATIONAL TRADE IN WILDLIFE generates billions of dollars annually and is a continuing threat to the survival of countless animal and plant species. Illicit trade in wild animals and their parts is the third most lucrative illegal commerce, behind drugs and arms trafficking. This brochure examines the lofty goals—and, in practice, dismal shortcomings—of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the international treaty designed to protect endangered and threatened species. Tips on what consumers can do to avoid products made from endangered species are also included.

Managing for Extinction

Animal Welfare Institute (2011)
30 pages; $2



THE BUREAU OF LAND MANAGEMENT (BLM) is charged with protecting wild horses and burros on the range, as mandated by the Wild Free-Roaming Horses and Burros Act of 1971 (WFHBA). Tragically, the BLM has fallen far short of its mandate under this law. As a result, the long-term survival of these animals in the wild is in serious jeopardy. This update to one of our most popular publications provides damning evidence showing that BLM policy focuses almost exclusively on accommodating livestock grazing and other commercial uses, directly at the expense of wild equines. Strong recommendations are put forth on how the U.S. government can rectify this situation and provide the protections promised wild horses and burros in the WFHBA.

Journal of Animal Ethics

Spring 2011, Volume 1, Number 1
Andrew Linzey, University of Oxford; Priscilla N. Cohen, Pennsylvania State University, eds.
University of Illinois Press

WHILE WE HUMANS ON THE WHOLE have yet to acknowledge our moral obligation to other species and to behave accordingly, there is some evidence that the *idea* of such a moral obligation is gaining a foothold in our collective conscience. With that comes the need for a forum in which to define and discuss animal ethics. The new *Journal of Animal Ethics (JAE)* bills itself as the "first named journal of animal ethics in the world. It is devoted to the exploration of progressive thought about animals." (That progressive thought extends even to the more "impartial" language it encourages its authors to use, in order to help "create a nomenclature… that does justice to animals.") While there are a number of writings on animal ethics posted online, *JAE* distinguishes itself in its application of the theoretical to real-world scenarios. The inaugural issue addresses, among other topics, Canada's commercial seal hunt, the use of animals in embryonic stem-cell research, and the dissonance in our thinking about and treatment of "pet" versus "meat" animals. On the downside, most (though not all) of the articles have a tendency to lapse into insider jargon that makes them less accessible to the nonprofessional reader—perhaps the more important potential audience.

Born to Be Wild

THE INSPIRING, SELFLESS WORK of Dr. Biruté Galdikas of Orangutan Foundation International and Dame Daphne Sheldrick of The David Sheldrick Wildlife Trust is showcased in the Warner Bros. Pictures/IMAX film *Born To Be Wild*. Though well acquainted with these women and their tenacious efforts, I spent forty minutes captivated by the rescued orphans—each animal intriguing in his or her own way. IMAX 3D puts you in the midst of the infant orangutan and baby elephant antics via images so lifelike some viewers raised a hand to shoo away the occasional on-screen fly. The documentary, which takes you to the vast range in Kenya and the verdant rainforests of Borneo, is movingly narrated by Academy Award-winning actor, Morgan Freeman.

With footage that is touching, but not depressing, viewers follow Dr. Galdikas and Dame Sheldrick as they nurture their orphan charges, helping them heal. As the youngsters grow, the women and their devoted staffs ensure that the orphans learn life skills, because the ultimate goal is to return them to their homes in the wild.

A nearly too-subtle message is the threat looming over both the elephants and the orangutans. If human behavior is not changed—and protection efforts are not increased—this labor of love to rescue the young victims will be in vain. Please take the opportunity to see the movie if you can, and visit the websites of these two stalwart supporters of endangered species for more information on what you can do to support their work.

—Cathy Liss
President, Animal Welfare Institute

The David Sheldrick Wildlife Trust: *www.sheldrickwildlifetrust.org*
Orangutan Foundation International: *www.orangutan.org*

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 Institute
P.O. Box 3650, Washington, DC 20027

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Serengeti Highway Halted… for Now

FOR THE TIME BEING, big trucks will not barrel through Serengeti National Park, a World Heritage Site and location of one of the world's most important animal migration routes. At the end of June, the Tanzanian government announced it would suspend plans to construct a paved, commercial highway through the northern section of the Serengeti. The government will, however, go forward with a gravel road through the park, but claims the road will be managed by the Tanzania National Parks authority and used only for tourism and administrative purposes.

Gill Penney

Spotted hyenas cubs lounge on the Serengeti plains. Hyenas depend on wildebeests and other ungulates that traverse Serengeti National Park in search of grass. A proposed road through the park threatens both predators and prey.

Every year, up to 1.5 million wildebeest and half a million zebra, antelope, gazelle and other mammals move across the park and the adjoining Maasai Mara National Reserve in Kenya to chase the rain and the greening of the grass that follows in its wake. Scientists (as well as a leaked environmental impact study commissioned by the government) say a paved commercial roadway would sever the migration route and devastate populations of grazing animals, in turn severely impacting the lions, cheetahs, hyenas, crocodiles and other predators dependent upon them. Opponents of the highway say it would also damage the country's important tourism industry. An estimated 150,000-200,000 people visit the park annually to photograph big cats and other denizens of the savannah.

Potential impacts of the gravel road remain a big question—and many fear it will only serve as the first step toward eventual pavement. Tanzania's president, Jakaya Kikwete, has defended the highway project as a way to connect isolated communities in the area. Many activists and observers, however, view it as part of a larger scheme by the government to establish an industrial corridor to move raw materials quickly and cheaply from the interior to the coast for export. For now, the Tanzanian government says it will consider an alternative southern route that bypasses the park.