DEMIAN CHAPMAN stood at the front of a hotel meeting room, in the coastal Brazil city of Recife, and laid out the new challenge awaiting customs and border patrol agents around the world.

“It sounds,” he said, “very daunting.”

As of September, the agents must now monitor the trade in five shark species that have been granted historic new protections by CITES, the Convention on International Trade in Endangered Species of Wild Fauna and Flora. To do that, authorities must be able to pick out a scalloped hammerhead fin or a porbeagle fin from the small mountains of various fins that are unloaded off ships or prepared for flights.

And so, Chapman—an assistant professor at Stony Brook University’s School of Marine and Atmospheric Sciences—proceeded to give the roomful of environmental, enforcement and fisheries authorities hints on what to look for. The aptly named oceanic whitetip shark features a white marking on the rounded tops of his fins, like they’ve been dipped in paint. The hammerheads have very tall, skinny, light brown fins with a distinctive base. No CITES-protected species has black markings on its fins.

“To laypeople, you [think that] all fins look alike,” Chapman said, “but it turns out … they are actually quite different.”

In an effort to make the new protections all the more effective, Humane Society International has helped organize these workshops, traveling around the world to host or attend sessions in Brazil, Senegal, India, Egypt and the United Arab Emirates; another is scheduled for Colombia in November.
Tens of millions of sharks are killed annually to meet the demand for shark fin soup—an unsustainable rate that is driving some populations to near-extinction. Many are killed by the cruel practice of finning, in which fishermen cut the fins off live sharks, then dump the animal back into the water to die slowly.

But in March 2013, for the first time in the 40-year history of CITES, Appendix II protections were extended to five commercially traded species of sharks—porbeagles, oceanic whitetips and three species of hammerheads—along with both species of manta rays. That means the trade in these species should now be strictly monitored to prevent populations from becoming further endangered. In some areas, the trade was immediately banned until the populations recover.

Advocates hope the measure will prove more effective than the previous patchwork of regional and national bans that some fishermen could work around by just going to the next country.

“This is the first real tangible global protections that we’ve seen for sharks,” says Rebecca Regnery, HSI deputy director. “All the CITES parties, which is 180 countries in the world, should abide by this.”

Many fisheries authorities have never had to enforce a CITES listing, so the workshops also cover the CITES process itself—the permits, the applications—as well as how to track the fins and monitor living populations.

Regnery, for one, is optimistic. “In Senegal, one of the countries pointed out that at the CITES meeting last year, some of the CITES and fisheries authorities from the same countries wouldn’t even shake hands at the meeting. They wouldn’t even talk to each other.

“And now, to see them sitting together at the table and working together constructively, and figuring out how they can collaborate, is very meaningful. And I would imagine that this would extend to more issues than just sharks—now that they’re working together.”

**WAKE-UP CALL**

**TOLEDO WATER CRISIS HIGHLIGHTS NEED FOR FACTORY-FARM REGULATIONS // BY EMILY SMITH**

**THE NEWS ALERT WENT OUT IN THE MIDDLE OF THE NIGHT:** Don’t drink the tap water. Don’t give it to your dog; don’t brush your teeth with it; don’t take a shower in it. The water in Toledo, Ohio, was so contaminated in early August that even boiling couldn’t save it.

Fertilizer and manure runoff from factory farms had created a toxic algae bloom in Lake Erie that threatened wildlife and crippled the city’s water supply for nearly three days, sending hundreds of thousands scrambling for all the bottled water they could find.

“For me, it was an inconvenience,” says John Dinon, who bought 5-gallon buckets at the hardware store and drove to his sister’s house in Michigan to fill up. “For other people, it was a significant hardship.” As HSUS director of outreach and engagement in Ohio and a Toledo resident, Dinon is part of an HSUS-led coalition pushing for tighter restrictions on how large-scale animal operations dispose of waste. The state passed a law in June that regulated farmers’ use of chemical fertilizer, but it failed to include manure. Since the Toledo crisis, several amendments have been introduced to fix that, by limiting how manure is spread and stored.

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“It’s long past time to start regulating agribusiness runoff,” says Paul Shapiro, HSUS vice president of farm animal protection.

The Maumee River watershed, among the largest watersheds that feed Lake Erie, is lined with hog houses, chicken houses and dairy farms. When farmers properly spread manure across local farmland, it restores nutrients to the soil. But many large-scale operations use the practice as a cheap, easy way to unload massive quantities of waste.

Toledo spent about $4 million last year stripping the runoff from its water—with the August bloom, this year’s bill is expected to be even higher. Taxpayers shouldn’t have to pick up the tab, says Joe Maxwell, a farmer in Missouri and HSUS vice president of outreach and engagement. “Manure management is the most critical point that allows [factory farms] to claim a cheap meat policy. We can no longer afford a cheap meat policy in this country.”

Instead of taking poisoned water and making it drinkable, Dinon says, we need to stop poisoning the water in the first place. Or, as Shapiro puts it: “It’s like putting a trampoline at the bottom of a building where all these people fall off rather than a railing on the roof.”
NOT LONG AGO, humans believed we were the only creatures who used tools. Today there are hundreds of examples of animals using and in some cases manufacturing tools as well. Tool use also shows up in some unexpected places, including among reptiles and fishes.

During a six-year global odyssey studying the behavior of all 28 species of crocodilians, Russian-American biologist and author Vladimir Dinets witnessed both American alligators and Indian mugger crocodiles using sticks to lure herons, who build their nests with the twigs. The crocs transport the raw materials on their noses, floating them beneath the rookeries and waiting in ambush just below for an unsuspecting bird. The scaly hunters do this only during the birds' nesting season, making it both location- and timing-specific—a quite sophisticated form of tool use.

At a holding facility in France, captive cod could feed themselves by tugging a looped string with their mouths, which triggered the release of a food pellet. The fish wore plastic identification tags on their backs. Before long, several cod had adopted an innovative method of activating the food dispenser by hooking the loop over their tags. It isn’t known why these individuals preferred the new method. It may have allowed them to move more quickly to the food dispenser, or perhaps it helped relieve the boredom of confinement.

Jonathan Balcombe is director of animal sentience for the Humane Society Institute for Science and Policy.
LAST DECEMBER, HSUS state director Kim Alboum and photographer Shannon Johnstone hit the road during a rare southern snowstorm to visit eight rural shelters throughout North Carolina. Their intention: to highlight often-forgotten shelters through Johnstone’s compelling photos.

These little shelters have worked to accomplish big things, like getting rid of gas chambers and combatting terrible animal cruelty. And even the small details the pair saw along the way told a larger story: spotless enclosures, hairbrushes zip-tied to the sides of cat enclosures for rubbing pleasure and kitty condos made from cardboard boxes.

“There are so many amazing people in these little rural shelters with virtually no resources,” says Alboum. “And nobody was telling their story.”

The road trip was part of the North Carolina Shelter Project—a collaborative effort among advocacy groups, including The HSUS, to increase support and visitations for rural shelters in the state. In February, Johnstone’s photos were exhibited in Raleigh to a turnout of 200 people. Shelters received $500 from proceeds and donations such as food, toys and cleaning supplies. A second exhibit was scheduled for October.

Johnstone tried to capture the shelters’ spirit by focusing on the natural light and interactions between staff and animals. (View more photos at supportncshelters.org.) “I wanted to see where people walk into the shelter,” she says, “where the dogs live and where they leave.”

It worked. Shelters and participating organizations posted the photos on social media sites, boosting adoption interest. Rescue groups took in dogs, cats and even a potbellied pig after attending the event.

There was Jax, a little brown dog adopted from the Stokes County Animal Shelter by a friend of Johnstone’s in Arizona after she posted his photo on Facebook. And Tank, a wounded stray cat adopted the day after Chatham County Animal Shelter shared his photo.

And then there was Bill, a lovable American bulldog-boxer mix with a basketball-sized head and tank-like body who had been at the Chatham shelter for four months. He, too, was adopted the day after shelter director Leigh Anne Garrard posted his photos in late February.

“We had 27 animals adopted directly from the shelter during that event [and] 18 animals … pulled by rescue groups,” says Garrard. “This event was a lifesaving benefit to us.”