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# WILDLIFE PROFESSIONAL



## FROM POACHING TO SMUGGLING

Tracking Crime in the Wild



**Fencing Out Grizzly Bears**

**Restoring Pine-Oak Woodlands**

**Jaguars' Uncertain Future**





# From Poaching to Smuggling

TRACKING CRIME IN THE WILD

By Julia John

▲ Cameras follow Maine Warden Jake Scott as he speaks to a trapper for an episode of the TV show "North Woods Law."

Credit: Animal Planet

Near the end of the 2013 deer season, the Maine Warden Service received a tip at a checkpoint. A poacher from the small town of Dixmont was boasting on Facebook about his recent exploits, a hunter told the wardens.

In the post, a ginger-bearded man wearing a camouflage baseball cap, a cigarette in his mouth, posed with the body of a buck. The leg of another deer appeared in the background. “I went on a killing spree lol,” a comment beside the photo read. The game wardens recognized the man as a repeat offender named Cody. They’d put him behind bars for poaching before.

When officers showed up at Cody’s house to question him, he and a friend offered contradicting stories before finally confessing to night hunting without tags from a vehicle. The wardens unearthed the poached animals’ carcasses on the property. “They’re gonna be in jail and paying a couple thousand dollars,” said Sgt. Chris Simmons. “I hope the word gets out we are going to do whatever we have to do to put an end to violations like this.”

This is just one scene from “North Woods Law,” a popular Animal Planet television series that followed the Maine Warden Service as it dealt with everything from a common loon (*Gavia immer*) trapped in a frozen lake to the remains of a starved Appalachian Trail hiker to criminals who threatened the state’s wildlife.

“Everybody watched it — hunters, fishermen, kids, parents,” said John MacDonald, the service’s public information officer and a former project manager for the show, which featured Maine’s wildlife law enforcement officers on over 75 episodes from 2012 to 2016 before shifting to New Hampshire. “The variety of our job and scope of our mission touched a lot of different lives.” Officers initially had reservations about broadcasting their inner workings, MacDonald said, but they ventured onscreen to build awareness and support for their work, and it paid off. “People are contacting us more than ever to help with what we do,” he said.

The show’s success highlights how much wildlife law enforcement has expanded over the past century. In 1903, Theodore Roosevelt hired the federal government’s first warden at its first national wildlife refuge on Pelican Island, Fla., to safeguard the refuge’s namesake bird against the fashionable feather trade. Today, the U.S. Fish and Wildlife Service’s National Wildlife Refuge System



Credit: Animal Planet

dispatches almost 300 federal wildlife officers to watch over 566 refuges spanning 850 million acres throughout the country. State agencies employ over 5,000 wardens. Other agencies, including the U.S. Forest Service, Bureau of Land Management and National Park Service, conduct their own wildlife law enforcement.

▲ In a scene from the TV show “North Woods Law,” Maine Warden Jeremy Judd works with a dog to search for a missing person.

But conservation officers struggle to keep up with the numerous wildlife criminals roaming the landscape, from hunters taking game without licenses to sophisticated smuggling networks linked to international markets.



Credit: U.S. Fish and Wildlife Service

◀ Paul Kroegel became the federal government’s first game warden when President Theodore Roosevelt hired him to protect great white pelicans (*Pelecanus onocrotalus*) on Florida’s Pelican Island.





Credit: U.S. Fish and Wildlife Service

### Crimes without witnesses

“In the U.S., there’s one game warden for every 10,000 people,” said Kristie Blevins, a criminal justice and criminology professor at Eastern Kentucky University and co-chair of a special session on poaching held at the 2018 North American Wildlife and Natural Resources Conference in Norfolk, Va. “Compare that to regular law enforcement — an officer for every 1,000. We don’t have enforcement capability. Wildlife crimes occur in places where people don’t witness them.”

Little research has been done on poaching detection rates, said Jonathan Gassett, southeastern field representative with the Wildlife Management Institute and co-chair of the same special session, but the wildlife offenses that come to light may be as little as

▲ A federal wildlife officer interacts with a visitor at the South Texas Refuge Complex.

### Wildlife Law Enforcement in Canada

Many Canadian wildlife species are also sought after by wildlife criminals. “We have species that are high value and attract crime that we have to protect for future generations,” said Sheldon Jordan, director general with Environment and Climate Change Canada’s Wildlife Enforcement Directorate. Its 80 officers and 15 intelligence specialists are spread among 20 offices charged with upholding federal regulations governing interprovincial and international wildlife trade, migratory birds, 144 protected areas and 560 imperiled species. “Wildlife crime is complex because you’re talking about nature, culture and economics,” Jordan said.

About 16,000 polar bears (*Ursus maritimus*) — over three-fifths of the global population — are found in Canada, the sole nation that permits their harvest and trade. Only the Inuit can legally take polar

bears, a species Canada considers of special concern and the International Union for the Conservation of Nature classifies as vulnerable. The bears are a critical subsistence source for Inuits. But, between 2009 and 2013, the global market price for the animals shot up fivefold, Jordan said, precipitating a rise in polar bear trafficking the government investigated from 2012 to 2015 in Project Aurora.



Credit: Environment and Climate Change Canada

▲ Authorities at Winnipeg International Airport intercept an undeclared polar bear hide that they say lacked a legitimate export permit.

“Although the price of polar bear furs at auction went up, there was no increase in harvesting rates, so we

were faced with a trafficking — not poaching — problem,” he said. “There were more people trying to smuggle [the skins] out of the country because they were worth a lot of money. We got convictions of exporters selling, transporting illegally or trying to smuggle out polar bear skins from Canada.”

This intensification of unlawful trading activity threatened the Baffin Bay polar bear population, which was already highly stressed and banned for export, Jordan said. From 2013 to 2015, Canada penalized six smugglers who attempted to sneak pelts beyond the border.

“We put full-out enforcement around polar bears, so it was zero tolerance for illegal trade,” Jordan said. “We have almost no noncompliance today.”

In recent years, illicit domestic and East Asian markets in traditional medicine have fueled a booming demand for black bear paws and gallbladders. Although hunting black bears is lawful throughout the provinces, possessing bear gallbladders is prohibited to prevent overharvest and wastage. Once a gallbladder enters Asia— where it’s powdered and added to teas and other concoctions — it can sell for \$2,000, Jordan said. One investigation of a gallbladder smuggling ring in Quebec and Ontario yielded 80 arrests.

Other instances of wildlife crime are more local. Since last year, Jordan’s team has been investigating a Newfoundland waterfowl poaching and trafficking operation. Offenders annually shot hundreds of overwintering murrets (*Uria aalge*) and eiders (*Somateria spp.*) out of season and sold them in secret networks for up to \$20 based on their weight.

“In wildlife enforcement, it’s not like drugs where you’re always going to have a supply and market,” Jordan said. “This is a zero-sum game. It’s called extinction.”

5 percent of all the offenses. The public's concerns often jump to armed gangs killing African elephants for ivory or Southeast Asian merchants selling caged forest birds in outdoor markets, but poaching is rampant in North America, he said. In some cases, it's simply people trying to feed their families. In others, it's poachers snatching green tree frogs (*Hyla cinerea*) from Louisiana ponds for the pet trade or killing American black bears (*Ursus americanus*) to extract gallbladders for markets in Asia where some believe the organ has health benefits.

"Most people don't have any idea that wildlife crime is a multibillion-dollar-a-year industry in our country," Gassett said, and each occurrence deals a blow to the core of the North American Model of Wildlife Conservation — that the government holds wildlife in trust for the people.

"We protect this incredible wealth the public has," said Richard Johnston, chief of Refuge Law Enforcement with the National Wildlife Refuge System. "I am frustrated when people see poaching as a victimless crime. When wildlife is killed or stolen, you are taking away the opportunity for somebody else to enjoy that wildlife. There are victims to wildlife crime."

Last year, the division handled 53,000 crimes, from drunken driving to human trafficking, but about a quarter of them were wildlife crimes, he said, from hunters overharvesting elk (*Cervus canadensis*) in Montana to thieves making off with Kemp's ridley sea turtle (*Lepidochelys kempii*) eggs in Texas. Wildlife products can fetch huge sums "that rank up there with drug trafficking" on the international black market, Johnston said.

Fighting the illegal wildlife trade is particularly challenging in the United States, where there's high demand for trophies and esoteric pets captured from the wild and plentiful species to feed an international black market, said Meredith Gore, a professor with Michigan State University's Department of Fisheries and Wildlife.

"If people are able to smuggle wildlife," Gore said, "are they smuggling drugs, guns, humans or zoonotic diseases these animals could be carrying? It's a frightening situation, the downward spiral of loss to ecosystems and human society from wildlife trafficking. I can't think of any broad-scale problem that touches so many different sectors of society."

Even common species can be lucrative contraband. To keep up with the domestic and global demand for pet

turtles, Gore said, poachers collect enormous numbers of turtles in the wild. In 2014, news outlets reported that Canadian Border Services at the Windsor-Detroit Tunnel intercepted a Canadian who had taped 41 turtles to his legs and nestled 10 more in his groin—including eastern box turtles (*Terrapene carolina carolina*), red-eared sliders (*Trachemys scripta*



Credit: Canada Border Services Agency



Credit: Environment and Climate Change Canada/Canada Border Services Agency

*elegans*) and diamondback terrapins (*Malaclemys terrapin*)— to send them to China, where a single specimen can be worth as much as \$800. The violator got five years in federal prison for trying to smuggle thousands of the endemic turtles out of the country.

### A range of motives

Money isn't the only motivation. Sometimes, wildlife offenders find the cost of hunting licenses out of reach. Sometimes, they're merely unfamiliar with hunting regulations. But for many poachers, the motives are less straightforward.

▼ Officials at the Canadian border have apprehended multiple suspects trying to traffic thousands of native turtles out of the U.S. for the pet trade.

▲ Smugglers sometimes tape plastic bags of turtles to their legs to try to evade authorities along the U.S.-Canada border.





Credit: Washington Department of Fish and Wildlife

▲ An investigator in the Washington poaching case holds bones believed to be from an animal taken illegally.

▼ Washington game wardens say a poacher illegally hunted this American black bear using dogs and then took a photo of it with his cellphone.

In Washington, Department of Fish and Wildlife officers last year busted what they say is a massive poaching ring — The Kill 'Em All Boys — responsible for unlawfully taking more than 100 mule deer (*Odocoileus hemionus*), elk, cougars (*Puma concolor*), American black bears and bobcats (*Lynx rufus*) in 2015 and 2016. Its members often brought animals down with dogs and left their bodies to rot. Of 13 suspected poachers charged so far — several with over 100 charges, including charges under a state spree killings act that makes killing multiple animals a felony — four have pleaded guilty to charges. Four others are considering plea deals that include jail time and fines and require them to cooperate with investigators. Five are still awaiting trial.

“They know how to operate outside the law and felt entitled to do what they wanted,” said Jeff

Wickersham, a captain with the department. Search warrants revealed an assortment of dead wildlife, text messages and visual evidence on the criminals’ cellphones that detail their efforts to elude officers. A text from one of the men warned others, “Don’t shoot warden headed that way.” Dozens of incriminating pictures and videos the violators took show the hounds chomping on bears with gaping wounds and drawn-out entrails. Other images capture the poachers posing with a dead bobcat, a rifle and their dogs.

Since several of the men had been charged and convicted of similar violations previously, Wickersham said, “They learned how fish and wildlife officers work. They knew we would not go behind locked gates because the likelihood of finding somebody there was very low. They knew salmon season was occurring this time of year and we would probably be there. They would go off into a different part of the forest to stay away from us. They knew how to get around being caught by us.”

Poaching of this extent amounted to wildlife trafficking in other cases in the state, in which criminals targeted parts of bear, elk and other valuable species. The perpetrators were exposed through undercover purchases, he said.

“It’s very hard to affect lawful consequences on those individuals,” Wickersham said, “when because you catch them once, they become smarter and continue doing what they were doing.”

### Stiffer penalties

In California’s largest raptor poaching case, wildlife authorities investigating a man shooting hawks on his land early this year say they turned up more than 120 decaying migratory raptors around his 80-acre ranch adjacent to northeastern California’s Honey Lake Wildlife Area. Most were red-tailed hawks (*Buteo jamaicensis*), but officials also found a ferruginous hawk (*Buteo regalis*) — a state species of special concern — and an owl. Their inquiry discovered other nongame birds, two bobcats and a mountain lion the man had poached.

Every poaching offense could result in punishments of six months’ imprisonment and \$5,000 in fines per raptor. Taking the mountain lion could bring a \$10,000 penalty. The alleged crimes could also include federal charges under the Migratory Birds Treaty Act.



Credit: Washington Department of Fish and Wildlife

Many jurisdictions are hoping tougher sentences will reduce poaching. “From a criminal justice perspective, if I know there’s a good chance I’m going to get caught and, within three months, be paying a hefty fine or going to jail, I’m much less likely to commit that crime,” Gassett said.

In New Mexico, where conservation officers uncover 100 headless big game carcasses each year — mostly trophy elk, pronghorn (*Antilocapra americana*) and Barbary sheep (*Ammotragus lervia*) — the state legislature last year declared poaching a felony.

“We’re hoping it’ll serve as a significant deterrent,” said Robert Griego, colonel of field operations with



◀ Officers discovered more than 140 carcasses of raptors, other nongame birds and wildlife on the property of an accused California poacher in early 2018.

Credit: California Department of Fish and Wildlife

## Traffickers Target Hummingbirds for Love

At the U.S. Fish and Wildlife Service Forensics Laboratory in Ashland, Ore., biologists have been obsessing over a peculiar kind of love charm for more than a decade. They’re probing into the mysteries of the unlawful *chuparosa* trade, in which hummingbirds — sometimes called *chuparosas* in Spanish — are killed, sealed in a paper tube, wrapped in thread, placed in a bag with a prayer card and sold to the lovelorn.

“You’re supposed to get your hummingbird, pray to it and light a pure wax candle, and you can have any woman you want,” said Ariel Gaffney, one of the lab’s forensic ornithologists. “I would have never thought hummingbirds a target for wildlife crime.”

She assists her colleague Pepper Trail in examining the birds as they come in from special agents who’ve confiscated them or purchased them from shops in Texas and elsewhere where they’re peddled after being packaged in Mexico. The lab has received 300 *chuparosas* since 1998 — when the agency first apprehended a violator carrying an assortment of the hummingbird love charms. Over one-third of them have been seized in the last two years, suggesting a robust, ongoing trade.

Gaffney uses a scalpel to delicately remove each encased animal for identification, which can be difficult because of plucked

feathers and severe desiccation. The ornithologists have recognized multiple species that breed in North America and winter in Mexico, including the rufous hummingbird (*Selasphorus rufus*), Allen’s hummingbird (*S. sasin*), black-chinned hummingbird (*Archilochus alexandri*) and ruby-throated hummingbird (*A. colubris*).

“These birds are facing habitat loss at their breeding and wintering grounds,” Gaffney said, largely due to urban expansion and the conversion of forests to coffee plantations in Central America. “This additional pressure of local trapping in Mexico could be one more pressure to these birds. [The people who kill them] don’t have any regard for the fact that females and juveniles are responsible for keeping population numbers going.”

X-rays showed small pellets lodged in the hummingbirds’ bodies, Gaffney said, which suggested they had been shot. Unwrapping the birds usually revealed slit chests where their hearts had been scooped out to be sold as a tea ingredient consumed for heart health, she said.

Gaffney fears a growth in the trade. It needs to be evaluated, she says, to see how much impact it’s having on hummingbird populations. “This increase in *chuparosas* at the lab could be a byproduct of law enforcement being previously unaware of the trade,” she said.

Her lab plans to continue inspecting the *chuparosas* to help piece together the illegal market and stop its sellers.



Credit: U.S. Fish and Wildlife Service

▲ A bag holds a variety of confiscated *chuparosa* love charms in cellophane packets.



► A search warrant of a house in New Mexico turns up dozens of trophy heads from animals thought to have been poached out of season.



Credit: New Mexico Department of Fish and Game

the New Mexico Department of Game and Fish. “Before, you were looking at a misdemeanor. Fines were low and almost never would we get jail time. With it being a fourth-degree felony, we’re looking at a potential \$5,000 fine and up to 18 months in prison, not to mention the loss of the ability to possess a firearm.”

Previously, New Mexico tried raising civil penalties to up to \$10,000, depending on the animal’s horn size. But convicted poachers would flee the state or pay the fine in tiny increments that didn’t amount to an effective sentence long-term, Griego said. In 2014, the state also enacted a law stating the agency could revoke a violator’s hunting privileges for as long as deemed warranted by the severity of the crime — even for a lifetime.

“Harvest objectives are meaningless if you don’t enforce the rules,” Griego said.

### A new approach

Meanwhile, the emerging interdisciplinary field of conservation criminology is shedding fresh light on wildlife crime.

“Crime prevention, deterrence and compliance are things criminologists have studied forever. It’s neat for conservation and wildlife management to think about parallels,” said Gore, whose book *Conservation Criminology* published last year, is the first textbook on the subject.

The U.S. Strategy to Combat Wildlife Trafficking put forward by former President Barack Obama

underscores stronger demand reduction and international collaboration, not just tighter enforcement, Gore said. “Wildlife trafficking is considered a non-U.S. problem, but it does touch the U.S. It’s not easy to change human behavior. We can incentivize behavior change, but there’s no silver bullet.”

In 2017, she said, the Trump administration issued an executive order identifying wildlife crime as an important transnational organized crime, alongside guns, drugs and human trafficking.

Because wildlife crime is enormous and everchanging, it can be hard for different organizations to work together to tackle it, she said, but they’re starting to realize cooperation will be key for combating poaching and trafficking from both the supply side and the demand side.

“We need to get criminologists, conservationists, people that study supply chain, private industry and artificial intelligence all in the room together,” she said. “This is not just a wildlife issue. The problems caused by wildlife poaching and trafficking pose risks to humans and wildlife, and the solutions are for humans and wildlife.” ■



Julia John is a science writer for The Wildlife Society.