# Poop-sniffing dogs work for wildlife researchers

'Too crazy' for pets, these dogs track scat all over the world

> By RICH LANDERS The Spokesman Review

SPOKANE, Wash. — Shelter dogs too intense or feisty to be adopted are helping wildlife scientists by doing what comes naturally — running through the woods and sniffing for the poop of other animals.

But they don't get to roll in it," said Jennifer Hartman of Conservation Canines. "We've heard those jokes."

The noses of the canine misfits are being put to use in Pend Oreille County in a pilot project seeking more information about the interrelationships of wolves and other carnivores as well as with their prey.

The dogs are tools for studying endangered species and other wildlife that doesn't require trapping or tranquilizing the animal.

"These dogs have been contracted to work all over the world," said Julianne Ubigau, a high school science teacher and eight-year veteran with the program based in the University of Washington's Department of Biology.

For example, Chester, a golden retriever mix, returned recently from a job of sniffing out bear scat in the French Pyr-

Scooby, a black Lab mix, has been to Cambodia, Mozambique, the Alberta oil sands, Montana and most recently Mexico for mane wolf research.

The highest profile Conservation Canines project in the Northwest involves dogs trained to put their nose to the wind in a boat and lead researchers to collect the floating poop of endangered killer whales.

The new project in northeastern Washington seeks to learn how the revival of wolves in the region influences the diets of other carnivores and their prey.

### 'Too crazy'

The right dogs can be trained within a couple of weeks to lead handlers to scat from specific animals so samples can be collected and sent to labs for analysis that can unlock secrets about wildlife



Rich Landers/The Spokesman-Review via AP

Justin Broderick and Jennifer Hartman play with Chester, from left, Scooby and Max along the Pend Oreille River near Usk, Wash., June 29 The shelter dogs are trained to sniff out the scat of wolves, cougars and bears.

"We take the dogs that can't find a home because they are too crazy to be chosen for pets," Ubigau said. "We don't want dogs interested in poop. We want dogs that are obsessed with playing ball. These are the easiest dogs to reward and train to do the job."

One of the selection tests involves walking through a dog shelter holding a tennis ball.

"We look for the dogs that see the ball and quiver," Hartman said. "Their eyes are focused on the ball. Everything about them indicates they want to play with that ball."

"Then we take them outside and hide the ball," Ubigau said. "We watch how long the dog will focus on looking for the ball. We pick a dog that has an insatiable desire to play; it would hunt for the ball to exhaustion. That's the dog for us.

"We need dogs with a strong drive to hunt but not a strong drive for prey. Our dogs can't be interested in chasing wildlife. Our goal is to be as noninvasive as possible."

#### Less biased

Scat detection dogs are able to locate samples from multiple species simultaneously across large, remote areas repeatedly

Ubigau says sampling with detection dogs tends to be less biased than traditional wildlife detection methods such as remote cameras, radio-collaring, hair snags and trapping.

more reliable information in a shorter a time.

The five dogs being used in Pend Oreille County from a base near Cusick have been trained to sniff out the feces of any carnivore.

We can change that with a dog by the way we offer the reward, which is to play with the ball," Ubigau said.

In a project that focused on fishers, the handlers started by introducing the dogs to previously collected fisher scat.

"The dogs caught on fast," she said. "Before long, we noticed the dogs were often walking on logs because they quickly learned on their own that's where they had a higher probability of finding fisher poop."

This spring, as Ubigau, Hartman and Jason Broderick began the pilot project, they trained the dogs to find scat from coyotes, wolves, bears, bobcats, lynx and cougars as well as deer, elk and moose.

"We want data on predators and prey," Ubigau said.

In their first 30-day session this spring, the three handlers and their dogs collected 3,000 scat samples.

"There's a lot of poop out there," she said, pointing to a freezer full of it.

Now in the second of four month-long sessions, they don't collect every pile of deer and moose droppings the dogs detect or they'd be competing with the coal trains for hopper cars to haul their load.

we collect or we'd go broke (on the lab costs)," Hartman said. "We key the dogs more to finding fresh stuff, since the lab can get more data from poop that isn't totally dried out."

DNA analysis enables researchers to track individual animals and make population estimates. But much more can be determined from scat, including diseases, hormone levels that would indicate pregnant females and diet.

'The further you analyze, the more money it costs," Hartman said. "We have to stay in our budget."

#### On the ball

The handlers are systematically working the dogs in a 3,100-square-mile study area broken down into 66 cells, each of which measures 4.8 square miles.

The dog and the handler wear GPS units that log their

Working with Ranger, the youngest and newest dog on the team, Ubigau drove to the edge of a new cell on Monday, fitted the dog with a reflective vest and guard that protects his chest from punctures when going over logs.

She wore a backpack with plenty of water, specimen bags, bear spray and, of course, the all-important ball.

Within 10 minutes of hiking into the forest, Ranger made his first find and sat to be noticed, his eyes locked on Ubigau until



Rich Landers/The Spokesman-Review via Al Julianne Ubigau, of Conservation Canines, works with Ranger, front, and Max, back, near Usk, Wash. The shelter dogs are trained to sniff out the scat of wolves, cougars



of Conservation Canines, near Usk, Wash. The shelter dogs are trained to sniff out the scat of wolves, cougars and bears.

Ranger works with

Julianne Ubigau,

Rich Landers The Spokesman-Review

Hartman had told the story about Scooby, on an assignment in Africa, finding a scat as a group of impalas spooked around the dog.

"They were running and jumping behind Scooby, but he just sat focused on the handler as if to say, 'Come on; I found your poop, now let's play ball. I don't care about these other goofy animals." was similarly Ranger

focused until Ubigau approached, asked him to back up, which he did, and tossed him the ball for several enthusiastic catches.

"This is what it's all about for Ranger," she said.

The dog lay on his belly and continued to give full attention to Ubigau as she collected what she determined to be a bobcat scat and recorded the coordinates on the GPS. Then they moved on.

"It's a lot of stomping through the woods," she said.

"I've had people come out with me and say this is the best job in the world, following a dog through the forest. But after awhile, they change much brush we crawl through, the bugs and weather, and then at the end of a session, when you're the most tired, the dog will go uphill, always uphill, and find another poop."

#### Own style

Every dog has its own style. Lab mixes tend to range a little farther ahead than cattle dog mixes, but they all get the job done.

The dogs, rescued from uncertain futures at the shelters, have found a piece of heaven with Conservation Canines.

Chester, for example, is getting gray in the muzzle but still looking toward a good life in retirement.

"This will be his last season," Ubigau said as she let him out of his cage to exercise near the Pend Oreille River. He immediately came to a visitor, sat on his foot and leaned against his leg looking for a

"He'll be one of our ambassador dogs when we meet the public and go to science classes at schools. He's as good at making friends as he is at find-

## Washington state vet sees chance for worse bird flu season next winter

WSDA preps for second season with virus deadly to poultry

> By DON JENKINS Capital Press

OLYMPIA, Wash. — Bird flu could return next winter with new strains that are more prevalent in wild birds and more deadly for chickens, Washington State Veterinarian Joe Baker said Monday.

"We have to be ready for the worsening scenario," he said.

The Washington State Department of Agriculture has been reviewing last year's outbreak and planning to prevent and respond to a reoccurrence.

One lesson from last year: It could have been worse.

The virus in Washington was limited to a small percentage of wild ducks and raptors, four mixed-bird backyard flocks and a game bird farm of mostly pheasants. The outbreaks were spaced apart geographically and chronologically, keeping WSDA and the U.S. Department of Agriculture from being overwhelmed as they quarantined infected premises.

"Frankly, compared to what happened in the Mississippi Flyway, we got off pretty easy,' Baker said. "We can't necessarily count on that good fortune the next time it hits.'

The first U.S. detection of highly pathogenic bird flu was in mid-December at a lake in northwest Washington. The disease appeared over the next two months throughout the West, including at two commercial poultry farms in California.



A goose flaps its wings last winter in the Coweeman River

virus may have adapted and be-

come more lethal to chickens,

west last spring, the virus

struck only turkey farms, about

20. The virus finally infected a

chicken farm in Wisconsin. Af-

ter that, the disease broke out in

chicken farms in several states.

the virus spread among flocks

with a variety of birds. In Ben-

ton County, backyard chickens

remained healthy though sep-

arated by only a mesh fence

In Washington last winter,

For five weeks in the Mid-

in southwest Washington. Migratory birds brought bird flu to Washington in mid-December 2014. State Veterinarian Joe Baker says officials need to be prepared for another outbreak this coming winter.

he said.

The Western outbreaks stopped in mid-February, but the virus resurfaced in early March in the Midwest, with much more disastrous consequences. More than 48 million birds in 15 states have been culled, according to the USDA. The last case was confirmed June 17 in Iowa.

The USDA investigated outbreaks at more than 80 commercial farms and concluded that while migratory birds introduced the virus, biosecurity lapses spread it. Equipment and humans traveled between infected barns in the country's largest poultry producing states, the USDA reported.

Also, strong and sustained winds may have spread virus particles between barns, according to the agency.

Baker said he doesn't see airborne spread as a threat in Washington because the state doesn't have clusters of commercial poultry farms.

More concerning is that the

ens, turkeys and ducks. A virus lethal to chickens

may be spreading among waterfowl that spend the summer in Alaska and Canada and migrate to Washington for the winter, Baker said."It could cause us more problems because there could be more spread (of the virus) neighbor to neighbor," he said.

It's unclear how common bird flu is among wild birds, which are not sickened by the virus. The USDA didn't confirm a case of the virus in a wild bird outside the West until early March. Since then, cases in several states have been confirmed. In May, a dozen Canada geese tested positive in Michigan.

Baker said it's possible the disease is spreading more widely now among migratory birds.

He said WSDA will try to impress upon farmworkers and backyard poultry enthusiasts the importance of preventive measures.

"Biosecurity is really something you have to live everyday. You can't just talk about it. You can't just draft plans," Baker

WSDA has posted information about protecting flocks from bird flu at agr.wa.gov/ FoodAnimal/AvianHealth/

## Oregon adds sesquicentennial, century farms and ranches

By ERIC MORTENSON Capital Press

Eleven farms and ranches that have been in continuous operation by the same family for 100 years have been added to the state's list of Century Farms, the Oregon Farm Bureau announced.

Five more farms reached the 150-year mark and will be honored as Sesquicentennial Farms during the Oregon State Fair in

With the additions, Oregon now has 1,175 Century Farms and Ranches and 33 Sesquicentennial Farms and Ranches.

The Century Farms added this year are: Cheyne Farm, Klamath County; the Louis & Anna Falk Farm and Charles Ludwig Falk Farm, both in Linn County; Hynes Farm, Marion County; Taghon Farm, Washington County; Fisher Patterson Farm, Marion County; Christensen Farm, Linn County; McCready Ranch, Klamath County; Padget Ranches, Sherman County; Gentleacres, Polk County; and Bingaman Enterprises, Union County.

Sesquicentennial added this year are: Mid Valley Farm, Washington County; George W. Smith Ranch, Coos County; James Monroe Hemphill Farm, Umatilla



Courtesy of Oregon Farm Bureau The George W. Smith Ranch of Coos County is among Oregon's Sesquicentennial Farms and Ranches, places that have been in continuous family operation for 150 years.

County; Lieuallen Century Ranches, Umatilla County; and John F. Adams Farming Enterprise, Umatilla County.

To be eligible, the farm or ranch has to have remained in continuous family operation and attain a gross income from farm use of at least \$1,000 per year in at least three out of five years prior to application. Family members must live on or actively manage the farm or ranch.

Documentation can include photos, original deeds, personal stories or other historic records.

The program is supported by a partnership that includes the Oregon Farm Bureau the State Historic Preservation Office and Oregon State University Archives.



