

ANIMAL RESEARCH

Dog Dealers' Days May Be Numbered

Legislators want to shut down the pipeline of "random source" dogs and cats to laboratories, but some researchers worry about the impact on science

In the summer of 2005, a 1-year-old Labrador mix with brindle markings arrived on a truck at the University of Minnesota, Minneapolis. The dog, one of a handful of ostensibly unwanted canines rounded up by an animal dealer from local pounds, was to be implanted with an experimental heart device and eventually euthanized. But this dog was hardly unwanted. When research technicians passed a handheld scanner over his shoulder blades, they detected a microchip that they traced back to a man, three states away, desperately searching for his pet, Echo.

Cases like Echo's demonstrate what can happen when the so-called Class B dealer system breaks down. For more than 4 decades. individuals licensed by the U.S. Department of Agriculture (USDA) have collected dogs and cats from shelters, breeders, and other sources and sold them to research facilities. Proponents say these dealers provide genetically diverse breeds of various sizes and ages that can't be obtained from traditional laboratory animal suppliers and that are essential in some types of research. But detractors point to a history of misconduct, from stolen pets to animal cruelty, and have been trying for years to shut down the system. "By using these animals, we risk losing our credibility with the public," says Robert Whitney, who oversaw animal resources programs at the National Institutes of Health (NIH) for more than 20 years. "It's an Achilles' heel for research."

Last year, the National Academy of Sciences (NAS) released a report that backed up

what Whitney and fellow thinkers have been saying. "Class B dealers are not necessary for supplying dogs and cats for NIH-funded research," it said, and recommended ways to phase out the system. The report is also giving fuel to a congressional bill that would ban these dealers outright.

But many in the research community are fighting back, even those who don't use Class B dealers. "These actions are premature," says Alice Ra'anan, director of Government Relations and Science Policy at the American Physiological Society (APS), which represents more than 10,000 scientists, doctors, and veterinarians. Any such ban, she says, would delay important research projects and could shut down others entirely. "It would be enormously disruptive."

The rise of animal welfare

Ironically, it was a case much like Echo's that helped create the Class B dealer system. In 1965, a Dalmatian named Pepper was stolen from a farm in Pennsylvania and sold to a research hospital in New York, where she died in a cardiac pacemaker experiment before her owners could locate her. The following year, *Life* maga-

Lab cat. Random-source cats may harbor important diseases not found in purpose-bred animals.

Motley crew. Dogs gathered from a variety of sources await transport at a Class B dealer facility.

zine published "Concentration Camps for Dogs," a photo exposé of emaciated dogs, cats crammed into chicken crates, and other abuses at the property of a Maryland dealer who sold animals to research facilities.

The stories galvanized the public, and in 1966 President Lyndon Johnson signed the Laboratory Animal Welfare Act into law. The legislation mandated the humane treatment of dogs, cats, and other laboratory animals. It also created two types of licenses—Class A and Class B—for selling animals to research. Class A dealers could sell only animals that they had raised themselves, while Class B dealers could sell animals they had acquired from "random sources," such as pounds, breeders, and even other dealers. Class A facilities tended to be large corporate entities that bred animals on site, while Class B dealers often ran smaller, "mom-and-pop" operations.

By the 1970s, the Class B dealer system was thriving. NAS estimates that there were about 200 dealers supplying thousands of dogs and cats to U.S. laboratories.

These animals proved critical to advances in science and medicine. Largechested Dalmatians like Pepper helped doctors develop some of the first artificial-heart devices and lung-transplant procedures. And cats and dogs gathered from the general population harbored a variety of genetic diseases and infections that led to insights into everything from sleep apnea to AIDS.

Yet, despite USDA regulation, stolen and abused animals continued to show up at research institutions. So, in 1990, Congress toughened the Animal Welfare Act. Shelters now had to hold animals for 5 days before selling them to Class B dealers, and—as part of a new USDA "traceback" program the dealers had to provide extensive docu-



mentation about where they got their animals, often detailing multiple sources over several states. Some shelters began refusing to sell cats and dogs to Class B dealers entirely.

RICHARD B.

TOM): ANIMAL

The biggest blow to the Class B system came in 2003, when a member of a humane organization—Last Chance for Animals infiltrated the Arkansas facility of a Class B dealer named C. C.

26 FEBRUARY 2010 VOL 327 SCIENCE www.sciencemag.org Published by AAAS Baird and went public with accounts of sick, abused, and dying animals, many of which appeared to be former pets. The case became fodder for an HBO documentary and resulted in the largest investigation of animal abuse in U.S. history. USDA, blamed for not properly enforcing the Animal Welfare Act, intensified its traceback program and began unannounced quarterly inspections of Class B facilities.

The intense regulation took its toll. Today, only 11 Class B dealers sell dogs and cats to research facilities (hundreds of others sell nonhuman primates, pigs, and other animals), and more than half of these are under intense USDA scrutiny. Together, they supply about 3000 dogs and cats—about 3% of the 90,000 or so used in U.S. research.

Yet critics have been unable to shut down the system entirely. In 1996, federal legislators first introduced the Pet Safety and Protection Act, which would have outlawed the sale of cats and dogs to researchers from Class B dealers. But APS and other research groups opposed it, and it has failed to pass every year it has been proposed. That may change with the release of last year's NAS report.

The leash tightens

ITY IMAGES

Щ

Š

STAN

CREDIT:

The report seems damning in its conclusions. Commissioned by Congress in response to Echo, C. C. Baird, and other incidents, it found that although Class B dog and cat dealers had provided a vital service to biomedicine, the system was now obsolete and even potentially damaging to research. "There is a minority of dealers that are totally legitimate and doing the job well," says Stephen Barthold, the chair of the report committee and director of the Center for Comparative Medicine at the University of California, Davis. "But others have sullied the reputation and are taking down the whole thing."

Class B dealers, the report found, were no longer providing the valued diversity they had in the past. Shut out of shelters and forced to rely on breeders and private owners, the dealers were selling researchers primarily young hounds and beagles—essentially the same type of dogs Class A dealers were providing. "We could not find any compelling evidence that these animals were unique," says Barthold.

The committee also concluded that, because of limited resources, USDA could not properly regulate the Class B system. "USDA is supposed to ensure compliance," says Barthold, "but they've done a bad job." And



that meant stolen and abused animals could still end up in U.S. research labs. "It's a very negative public stigma that, personally, I don't think NIH needs," Barthold says. USDA refutes those claims: "The record over the years shows that we've enforced the system very well," counters Robert Gibbens, who oversees USDA regulation of Class A and B dealers in the western United States.

The NAS committee recommended several ways to phase out the Class B dog and cat system. It suggested that researchers get their animals directly from pounds and shelters. It advised paying Class A dealers to provide older and more genetically diverse animals. And it proposed that universities or NIH set up consortia to share dogs and cats, as has been done for primates and rodents. "There are so many possible sources for these animals," says Cathy Liss, president of the Washington, D.C.-based Animal Welfare Institute (AWI), which has tried to find a middle ground between groups like APS and those who want to eliminate cat and dog research entirely. "It's about trying to ensure integrity in the supply."

But these ideas have not sat well with scientists who still rely on the Class B system. "All of the possibilities ... wouldn't work as far as I'm concerned," says a cardiovascular researcher who asked to remain anonymous so as not to draw attention to his university. For

NEWSFOCUS

more than 30 years, he has used large and old random-source dogs from Class B dealers to study cardiovascular diseases and develop medical devices. Class A dealers don't stock these dogs, he says, because it's more economical for them to sell puppies. Nor can he get them from shelters, because most no longer sell to researchers. And he says he doesn't understand why NIH or Class A dealers should breed extra dogs and cats for terminal research, when millions of shelter animals are euthanized every year.

"There may not be a lot of groups in America still using Class B dogs for research," he says, "but the numbers do not reflect the importance of the research being done."

End of the pipeline?

Still, the end seems near for Class B dog and cat dealers. Last fall, Representative Mike Doyle (D–PA) and Senator Daniel Akaka (D–HI) reintroduced identical versions of the Pet Safety and Protection Act (H.R. 3907 and S. 1834, respectively). With the National Academies' report, "we're in a better position to pass this bill than we've ever been,"

says Doyle. NIH's response to the report, which is expected this spring, could include halting future funding for research that uses Class B dogs and cats.

Even APS seems to acknowledge that the system is on its way out. The society has endorsed the NAS report, and Ra'anan says it wants to work with NIH to develop viable alternatives. She's arguing for a 5-year transition period, especially for labs that have ongoing projects with random-source animals. "This is not something that can be done overnight," she says, "but we need to get the ball rolling."

Some universities have already started. Duke, Yale, and MIT, for example, discourage their researchers from obtaining cats and dogs from Class B dealers. Says AWI's Liss: "Institutions need to step up to the plate."

At least one dealer says it is planning on shutting down on its own. "I don't see how the system can continue to survive like this," says Janice Hodgins, who has run a Class B facility in Howell, Michigan, with her husband since 1960. At one time, the operation housed more than 300 dogs and cats, used in everything from hip-replacement studies to mental health research. Today, they have just nine. "There's been a lot of things learned through randomsource animals," she says, "but I feel like we're on the losing end of this now."

-DAVID GRIMM