

BEYOND BREED

New Research on the Visual Identification of Breeds
Calls into Question Breed-Discriminatory Legislation



By Ted Brewer Reprinted from Best Friends Magazine, March/April 2011

Something used to weigh on Dr. Victoria Voith's mind nearly every time she visited a shelter. She noticed a preponderance of dogs identified as German shepherds or as shepherd mixes. As someone with a great fondness for the breed and someone who once had a German shepherd, Voith was fairly certain that the shelters were, in many cases, misidentifying the dogs.

“There’s so much behavioral variability within each breed, even more between breed mixes, that we cannot reliably predict a dog’s behavior or his suitability for a particular adopter based on breed.”

Voith is a professor of veterinary medicine at Western University in Pomona, California, and a specialist in the animal/human relationship, so she became curious: Just how often do people visually misidentify the breeds of dogs? She decided to conduct a study that might give her an answer.

In 2008 she randomly chose 20 different dogs who had been adopted from 17 different shelters, rescue groups and other adoption agencies that had attempted to identify the dogs' breeds. All of the 20 dogs had been labeled as mixed breeds – either a mix of specific breeds (e.g., German shepherd and Labrador) or breed types (e.g., shepherd mix), or a combination of both (e.g., chow/terrier mix). Voith had the dogs' DNA analyzed to see how the agencies' breed identifications matched up to the genetic tests.

The DNA tests, which report breed compositions in percentages, revealed multiple breeds in all but one of the dogs, whose only DNA-identified breed was 12.5 percent Alaskan malamute. The highest percentage of one breed found in any of the dogs was 50 percent, and that too occurred in only one dog. Otherwise, predominant breeds represented only 25 percent or 12.5 percent of the dogs' genetic makeup. (The DNA reports are in units of 12.5 percent to represent the approximate percentage that each great-grandparent contributed to the individual dog's DNA.)

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• LEGISLATION

So, how did the adoption agencies' identifications match up with the DNA results? According to the DNA, the agencies correctly identified a specific breed in only 31 percent of the 20 dogs. Usually, the breeds correctly identified by the agencies represented only 25 percent or 12.5 percent of the dogs' makeup. "Even when there was an agreement between a specific adoption identification and DNA identification, the same dogs usually had additional breeds identified by DNA that were not suggested by the adoption agencies," Voith says.

Voith has expanded her breed identification research to include more than 900 trainers, veterinarians, kennel workers, animal control staff and other dog experts, all tasked with visually identifying a sample of mixed-breed dogs. Voith has compared their answers with the DNA of these dogs. Though she can't yet reveal what the results are, she does say, "My ongoing studies indicate there is often little correlation between how people visually identify dogs and DNA-reported results."

"So we have to go from identifying dogs by breed to identifying dogs as individuals."

"You can even have agreement among professionals on what they think this dog is, maybe as much as 70 percent of the people trying to identify the dog, and the DNA doesn't come out to match that," she says. "It's not that people in these professions aren't good at identifying purebred dogs; it's just that mixed-breed dogs do not always look like their parents."

Speaking or writing about her research, Voith often refers to the research that John Paul Scott and John L. Fuller conducted in the 1950s and 1960s on the

behavior and development of dogs, including the mixed-breed offspring of various purebred crosses.

Scott and Fuller photographed the offspring and many of the dogs looked nothing like their parents or grandparents. Some, in fact, looked more like other breeds. "It amazes me how dogs can look like a breed that doesn't appear in their immediate ancestry," Voith says.

"Voith suspects that as many as 75 percent of all mixed-breed dogs may be mislabeled."

Voith's research triggers a slew of questions, among them: If professionals can't even correctly identify breeds of dogs by sight, how can law enforcement in cities where certain breeds are banned? Given how hard it is to correctly identify breeds of dogs by sight, do breed-discriminatory policies make sense—in whatever arena they exist? By claiming their dogs are the offspring of certain breeds, with the characteristics commonly associated with those breeds, are adoption agencies inadvertently creating false expectations among adopters of how those dogs might behave?

And is it time, finally, to stop viewing dogs through the prism of their supposed breeds?

A CASE OF MISTAKEN IDENTITY

The propensity we have for wanting to know our dogs' breeds and talk about it is perhaps as natural to us as wanting to know our own ancestry and tell others about it. It's often a matter of pride that our dog has, say, Newfoundland in him, just as it's a matter of pride that our grandparents or great-grandparents emigrated from Italy, Russia, India or some other exotic location.

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But once person's pride can be another person's, or city's, bias, as we well know from places that have banned pit bull-type dogs.

Ledy VanKavage, senior legislative attorney for Best Friends, has taken note of Voith's breed identification research and cited it in support of an argument presented last year in an article for the American Bar Association's *The Public Lawyer*. VanKavage says that breed-discriminatory legislation is bad fiscal policy based largely on erroneous data that pegs pit bull terriers as the common culprit in dog bites. The data is gleaned largely from the media.

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“It's sort of like an urban legend or hoax promulgated by the media,” VanKavage says. “You can't just go by the headlines, because a lot of times they're wrong. A lot of times it's law enforcement who's giving the media incorrect information. They're wrongly identifying the breed, because they think that any short-haired muscular dog is a pit bull.”

Voith suspects that as many as 75 percent of all mixed-breed dogs may be mislabeled. “So the whole data base on which these [breed] restrictions exist is in question,” Voith says.

A number of cases in cities and counties with breed bans have underscored the fallibility of animal control when it comes to identifying pit bull terriers. Last year

in Toledo, Ohio, for instance, the Lucas County Dog Warden's Office seized from a Toledo man's house what animal control officials insisted were three pit bull terriers, two more than the city allows for one owner. Police also charged him with violating an ordinance that mandates pit bull owners to keep a muzzle and leash on their dogs when in public. The owner fought the charges in court, proving that the dogs were, in fact, cane corsos, not pit bulls. The judge ruled that the dogs be released. (The judge also struck down the provisions in the dog ordinance that limited the number of pit bulls an owner may have and mandated that pit bulls wear muzzles in public.)

Of course, even if the dogs had been pit bull terriers, that doesn't mean they were dangerous dogs simply by virtue of their breed. “Not all dogs of the same breed act the same,” Voith says. “Not even all dogs in the same litter of purebreds are identical. There's tremendous variation in the behavior and the morphology within a breed, even among litter mates.”

UNFAIR ASSUMPTIONS

Voith's research throws a monkey wrench into more than just breed-discriminatory legislation. It also challenges the feasibility and fairness of breed-discriminatory policy wherever it might be found, be it policy set by landlords, dog parks, dog rescues and shelters, even insurance companies. American Family Insurance, for instance, denies homeowner's insurance to people with pit-bull-terrier-type dogs.

It's conceivable then, given Voith's research, that a family may think they have adopted a pit bull terrier (because that's what they were told when the family adopted the dog) and come to find that their insurance company won't cover them anymore or that their landlord won't allow them to remain on his property