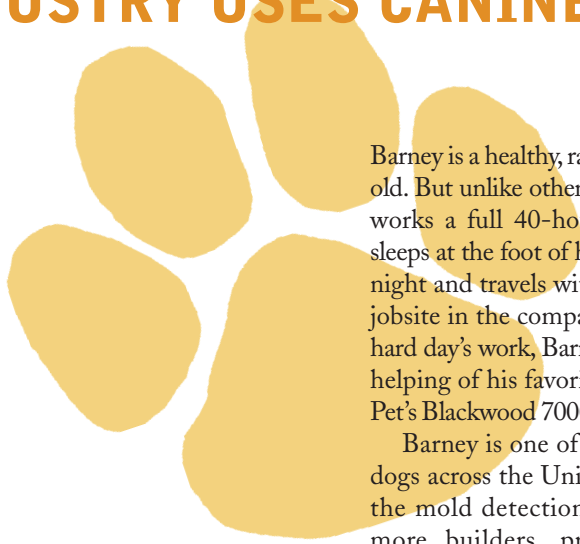


A BUILDER'S

Best

Friend

INDUSTRY USES CANINES TO TRACK TOXIC MOLD



Barney is a healthy, rambunctious two-year-old. But unlike other two-year olds, Barney works a full 40-hour week. Barney also sleeps at the foot of his employer's bed each night and travels with him from jobsite to jobsite in the company truck. And after a hard day's work, Barney receives a generous helping of his favorite meal—Generation Pet's Blackwood 7000, a premium dog food.

Barney is one of a growing number of dogs across the United States working in the mold detection industry. More and more builders, property owners and homeowners are turning to the power of the canine sense of smell to track down allergy-triggering toxic molds.

Thousands of different types of mold grow in the natural environment. Indoors, mold is most common in areas with high humidity levels, such as basements and showers. Many times, indoor mold can be the result of "water-intrusion events" or flooding. Construction defects, such as

poorly caulked windows, leaky pipes and improperly sealed appliances, also can provide enough moisture to foster the growth of mold.

That's where Barney comes in. David Marcelli, Barney's owner and handler, says 80 percent of the mold detection work that his Mold Trackers K-9 Team, Westminster, Md., performs involves residential projects in the final stages of construction.

"We go in and search out a building after the trades have finished, but before the walls and ceilings are sealed up," Marcelli says. Barney and Marcelli hunt for mold using a search pattern similar to that used by arson investigation dogs. The pair moves counterclockwise around the perimeter of the room, with Marcelli marking any area where Barney signals mold exists.

"When he alerts, I am confident there is mold there," Marcelli says. "Barney can pinpoint exactly where the mold is, to within an inch."



Bootz, a Lab-Great Dane mix, is hired to detect mold for homeowners in northeastern Pennsylvania.

d

BY PETER MASON

Marcelli, a former mold remediation contractor, says Barney's powerful nose has a distinct advantage over conventional mold detection methods, such as air sampling, surface swabs or visual inspection. Air sampling tells you whether you have mold, and eventually what kind, Marcelli says, but Barney can pinpoint the exact location. For builders, this can mean the difference between tearing out a small section of drywall or gutting an entire room.

THE NOSE KNOWS

Erick Lundgaard, CEO of Mold Sniffers in Las Vegas, was called in to inspect a building that had already been checked by industrial hygienists and declared "mold-free." However, building occupants were not convinced that the mold was gone. Lundgaard conducted a visual inspection and saw no sign of mold, but Trace, his spore-smelling canine co-worker, immediately gave a passive alert,

abruptly sitting and pointing his nose at the ceiling. When workers opened the ceiling to investigate, they found mold lining the interior of the top of the wall, 10 to 12 feet above the Jack Russell terrier's head.

"Trace can get to places faster than people, detect mold in places that people can't reach and pinpoint areas that may have been missed by other kinds of searches," Lundgaard says.

No doubt, dogs have an amazing sense of smell. For years, police have used dogs

to help detect illegal drugs and bombs. Fire marshals use dogs in arson investigations to sniff out minute traces of accelerants buried in tons of burned debris. In earthquakes and other natural disasters, rescuers use dogs to comb the wreckage for survivors. Researchers at Auburn University's Canine Detection Research Institute have documented cases of dogs accurately detecting specific compounds associated with explosives and narcotics at air concentrations below one part per billion.





DOG DAYS AT SCHOOL

Nobody knows this better than Bill Whitstine, a certified master trainer and owner of Mold Dog, a Florida-based business that trains, certifies and sells mold-detection dogs. Five years ago, Whitstine, a retired fire marshal, joined a team of mold experts, including veterinarians, industrial hygienists and leading researchers, to develop a program to train dogs to detect mold. After more than two years of study, the panel concluded that dogs could, in fact, be trained to sniff out specific microbial compounds associated with more than 18 species of the most common “toxic” molds.

According to Whitstine, more than 70 mold detection dogs currently work in the

Trace, a Jack Russell terrier mix, inspects a building in the Las Vegas region.

teach the pups how to accurately detect mold. To keep their skills sharp, the dogs are tested quarterly and must be recertified each year. Additionally, owners and handlers must complete 60 hours of training to learn how to lead the dog and interpret its signals.

sylvania Mold Dog, LLC, says she and Bootz, an active three-year-old, Labrador-Great Dane mix, primarily work with concerned homeowners in northeastern Pennsylvania, an area with wet, cold winters and humid summers. Gerhard estimates that Bootz’ nose helps residents reduce their mold detection bills by approximately one-third compared to conventional mold detection methods.

The work differs for Lundgaard and Trace in Las Vegas, where high humidity and excess moisture are rarely a concern. Lundgaard says many of the mold problems experienced in the city’s arid climate result from construction defects. Lundgaard and Trace are also called in to inspect many of the city’s “condo conversion” projects, where aging apartment buildings are gutted, remodeled and sold as condominiums. After the demolition phase, Lundgaard and Trace scour the building to ensure that it is mold-free and that no unseen remediation disasters are creeping in the walls, floors or ceilings.

Whitstine reports that builders are sometimes skeptical of the dogs at first, but “once we explain what these dogs can do, the builders love it. The way [traditional mold detection companies] check for mold, they can’t tell you where it is. I can tell you exactly where it is,” Whitstine says.

Although the concept of pairing dogs and construction is still new, industry professionals are beginning to take an interest in the trend.

For builders looking to limit their liability costs and stay on budget, a certified mold-detection dog truly may become a builder’s best friend.

“It’s more the attitude and intelligence of the dog that counts,” Whitstine says, noting that he has had success with such breeds as Labradors, border collies, Jack Russell terriers, Aussies and beagles.

United States. The majority of the dogs that Whitstine trains are rescued from local Humane Society shelters. Whitstine says hunting dogs are the best trackers, but any breed can be taught to detect mold.

“It’s more the attitude and intelligence of the dog that counts,” Whitstine says, noting that he has had success with such breeds as Labradors, border collies, Jack Russell terriers, Aussies and beagles. Only 1 in 10 dogs makes the cut to undergo the 600 to 800 hours of training it takes to

Whitstine estimates that an average mold remediation job costs \$60,000, a price he claims can be reduced significantly by using a mold detection dog. “Inspectors want to tear down half the room looking for mold,” he says. “Builders can’t have an open-ended checkbook like that. Our dogs can pinpoint the source of the mold.”

The type of detection work performed by these teams depends largely on the location, the owners report. Michelle Gerhard, owner of Penn-

Mason is editor of Associated Builders and Contractors’ online newsletter, *Newsline*.