

A dog nose best

SAM HAS the best nose. Goldie has the most drive. Scrappy is the keenest to please. Scrappy just wants to be loved.

Their temperaments may differ and so too their breeds, but when this canine trio are let loose in a building they have one thing on their minds – to sniff out rot, fresh dry rot. When they find it they bark, very loudly. They are adorable, decisive, quick and accurate.

The firm that owns and trains them, Hutton + Rostron Environmental Investigations, has a name for its new generation of four-legged, tail-wagging supersleuths: Rothounds.

Tim Hutton, the former Royal Army Veterinary Corps man who masterminded the idea at the Guildford-based firm, says: "If you have a building you think is free of dry rot it would take a couple of days for a surveyor to go through and check it. A dog could go through it in a couple of hours."

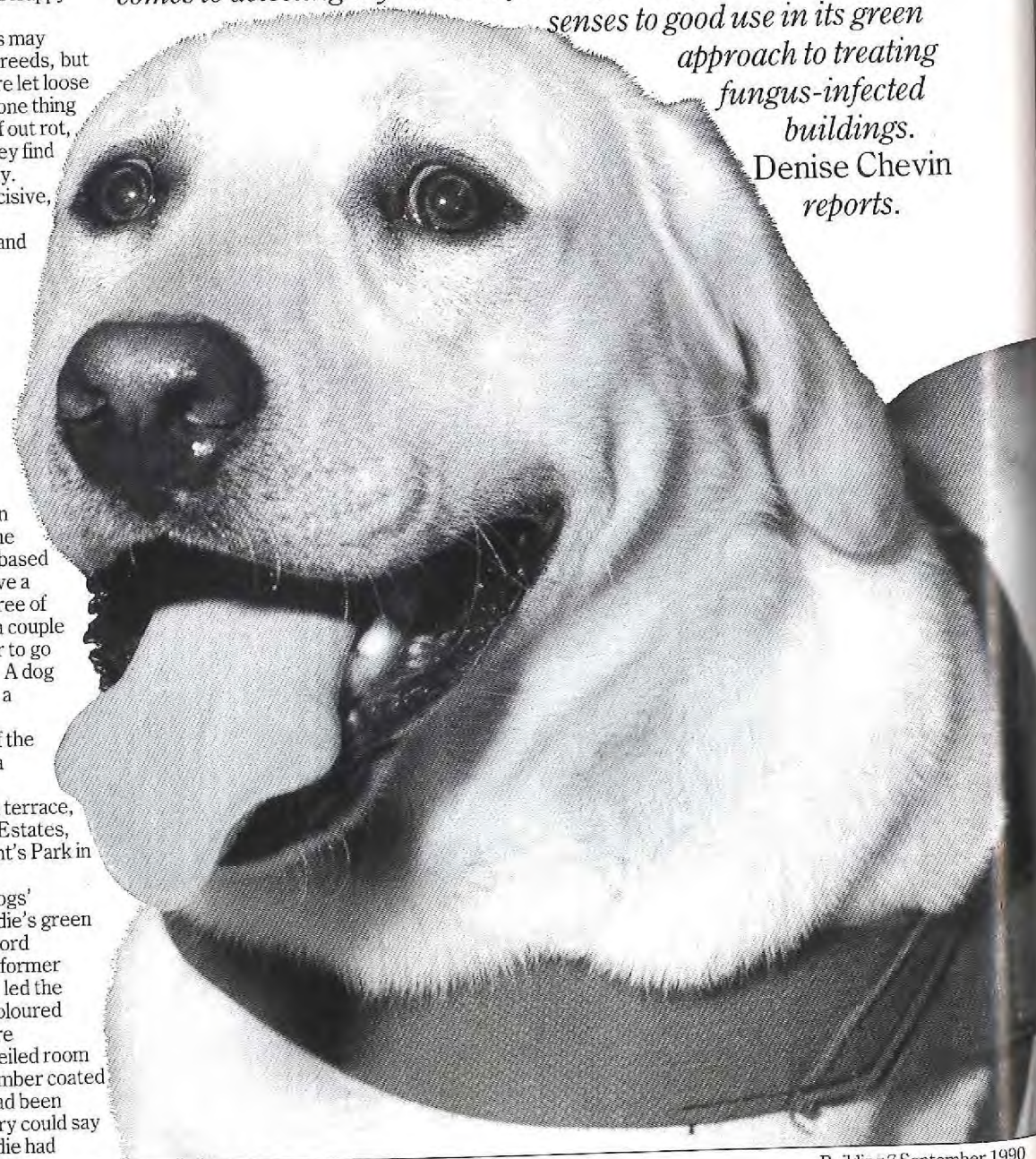
The expediency of the dogs was evident at a training session in a dilapidated Victorian terrace, belonging to Crown Estates, on the edge of Regent's Park in London.

John Berry, the dogs' trainer, took off Goldie's green jacket bearing the word Rothound. Berry, a former police dog chandler, led the boisterous honey-coloured labrador into the bare oak-panelled high-ceiled room where samples of timber coated with fresh dry rot had been hidden. Before Berry could say "dog biscuits", Goldie had

A trained wet, black nose is faster than a moisture meter when it comes to detecting dry rot. One firm is putting enhanced canine

senses to good use in its green approach to treating fungus-infected buildings.

Denise Chevin reports.



unearthed the sample stashed underneath an open section of floor boards.

A few reverberating woofs and well-done pats later, the labrador had tracked down the second sample, tucked behind a cast iron radiator.

After nosing around the rest of the room in a less than logical fashion, Goldie gave the all-clear signal by remaining silent. The dog was justly rewarded with his red rubber ball.

"If you want to keep them happy you have to make a tremendous fuss of them," says Berry. He explains that the dogs are young – around two years or under. "You can't teach an old dog new tricks," he quips.

Tim Hutton got the idea to train dogs to sniff out dry rot while studying at Cambridge University 10 years ago. If the noses of dogs could be harnessed to detect drugs and explosives, why not the characteristic mushroom odour of fresh dry rot?

Although dry rot spreads quickly in damp timbers and masonry, it is difficult to cultivate in laboratory conditions, explains Hutton, who joined the family firm two years ago. Without samples of the fungus the firm had no tools with which to train the dogs.

The firm finally managed to grow the fungus and the dog sniffing plan was put into action in December. Scrappy, a dotty black and white Border collie, was first; then Sam, a shy, chocolate brown springer spaniel crossed with labrador; and finally Goldie. All were rescued from the RSPCA and, according to Berry, were selected "for their personality and their willingness to please".

Geoffrey Hutton, an architect and founder of the company, says the idea of using the dogs was to complement the expertise of its scientifically-trained staff.

The firm specialises in diagnosing biologically-related problems in buildings. It avoids spraying large areas of an infected building with pesticides to kill off the likes of dry and wet rot and death watch beetle.

Instead it eliminates the source of the moisture creating the



No nook or cranny is neglected when Scrappy is let loose on the trail of dry rot.

The alternative approach to treating dry rot

HUTTON + Rostron Environmental Investigations is to the treatment of rot-riddled buildings what naturopathy is to medicine: it attempts to tackle the cause rather than the symptoms.

"We're not in favour of using chemicals. They are a health hazard to buildings and they are not needed to cure outbreaks of dry rot," says Huw Lloyd, the firm's timber technologist. "Dry rot can only live in timber with a moisture content of more than 20%. Similarly wet rot needs moisture levels of 50-60%. Once you dry out the timbers, it can't survive."

The five-person firm is composed of an unusual combination of experts: a mycologist, entomologist, timber technologist, medical scientist and architect. It can also call on its sister firm which specialises in data processing.

This breadth of knowledge allows the team to identify the fungus in the building which, according to mycologist Dr Jagit Singh, is a vital step. "Not all fungus in a building is

destructive. Many builders do not make the distinction – when they spot fungus they just go berserk with pesticides." Using fibre optic devices in conjunction with the dogs, the scientists locate any problem fungus in the building and track down the cause of the high moisture content. They then draw up an action plan for the drying out and repair. Chemicals are not used even as a holding measure while the wall dries out.

The company also installs sensors to continually monitor the moisture content of the walls and timbers. It adopted this approach in its work on the restoration of Brighton Pavilion, Hampton Court and Mansion House in London. The technology is to be stepped up a notch at York Crown Court where moisture readings will be fed down a modem to the Guildford office.

Though Hutton + Rostron's green approach to combatting rot, now in its 15th year, has won it the seal of approval from the London Hazards Centre,

the British Wood Preserving Association remains sceptical.

The BWPA's David Scobie says: "Removing the source of the moisture is the first thing that a remedial firm using chemical treatments would do. But Mrs Smith in Acacia Avenue does not want to wait months for her bare wall to dry out. This sort of approach is taking the green thing to totally ridiculous levels."

Lloyd argues that it is up to the individual to weigh up the time factor against the use of chemicals. But the BWPA maintains that even the Building Research Establishment says that an infected area should be coated with chemicals while the timber is drying out.

Scobie explains that only chemicals on the Health and Safety Executive's approved list can be used in remedial treatment. The HSE's recent banning of the biocide tributyltin oxide (TBTO) would not cause too many problems, he says. "There's still a lot of strings to our bow."

He says they are currently "building up confidence in the dogs". When one has sniffed out a building the others are used to confirm the first one's finding.

Tim says that training the dogs has not been easy. "The smell of dry rot changes throughout its life span. The dogs didn't know what to do when they were faced

with a room riddled with it. "Sam almost gave us a nervous breakdown. He would not go back and confirm his findings – he thought it was too obvious. And Scrappy chewed up someone's skirting board."

"We've had periods of severe doubt. But by the time we got to dog three we'd got it cracked."