

Do gundogs have

GPS?

Ask any gundog enthusiast to name the dog's most remarkable capability and, if they've given the matter any serious thought, odds on they will talk about nose and scent. Dogs live in a world of smells we can barely comprehend. The scents they pick up – better thought of as richly textured chords than single notes – convey complex messages containing a wealth of information that the dog's brain has to decode.

That they do so, not only in the shooting field, but also in the detection of drugs, explosives, and in a host of other ways, is testament to a sense so significant that it bears on everything else they do.

It cannot, however, account for the ability of some dogs to return directly and precisely to the fall of a shot bird or thrown retrieve even when walked a considerable distance in a meandering fashion from that point.

Dogs do not, as it were, 'return to go' – at least not normally. So what determines their choice of a direct route as opposed to returning to near the point of origin and then taking a line from there? And would an adequate explanation of the one also be a satisfactory explanation of the other? I have a hunch that it may, but it can be no more than that.

The uncanny ability of gundogs to find game and dummies leaves **Graham Cox** wondering about photographic memories and a sixth sense.

Uncanny ability

That is because whenever a dog – or any other animal for that matter – does something remarkable, a number of senses are typically being used in concert and, more often than not, each will be significantly different from our equivalent. Here is John Halstead characterising the dog he handled to three successive IGL Retriever Championship wins beginning in 1985. That unique hat-trick underpins FTCh Breeze of Drakeshead's claim to be considered the best of the best and, as so often, an extreme in achievement casts light on more generally present qualities. Breeze was, in his view, "a brilliant marker, a most persistent

hunter, especially on a runner, and he had the most uncanny natural game finding that I have seen in any dog." It's that word 'uncanny' that lies at the heart of this issue.

Brilliant marking, that quality mentioned first by John Halstead, often takes our breath away because it is beyond what we consider possible. Dogs have a field of vision 60 to 70 degrees wider than humans, giving them a total field of about 240 degrees. Moreover, compared to us they can see well in low light conditions and their colour vision is notoriously different. They see blues and yellows well, but reds and greens appear the same to them, though they are much better than

"A dog's sense of smell cannot account for its ability to return directly and precisely to the fall of a shot bird or thrown retrieve."

us at discriminating between closely related shades of grey.

The eyes have it

What's for sure is that dogs are capable of prodigious feats of long-distance marking: feats beyond what we think they might be capable of. Bill Meldrum, former Sandringham headkeeper, recalls a retrieve by the late June Atkinson's golden dog FTCh Holway Corbiere. A woodcock rose in sugar beet, was hit but went at least 400 yards. Bill, who was judging, told June to send her dog and she – no slouch in the matter of sending, having judged the Retriever Championship a record nine times – said, "Surely not from here?". But he insisted, so she cast him and he went straight to the mark, picked, and returned to applause from everyone.

So, to dogs' scenting capabilities we must add vision, which can be exceptional. And there is a third sense that may have a key bearing on the phenomenon that I want to try to understand. I'm referring, of course, to their acute hearing. The same dog illustrates my point. This time it is the 1989 IGL Retriever Championship in Devon. The afternoon of the first day saw the trial hit some patches of real tiger country as it moved through mature woodland and, with game sparse, a duck was shot way back. ➤

FTCh Holway Corbiere could not conceivably have marked it, yet his retrieve was fast and sure on a bird he could only have 'marked' using his sense of hearing.

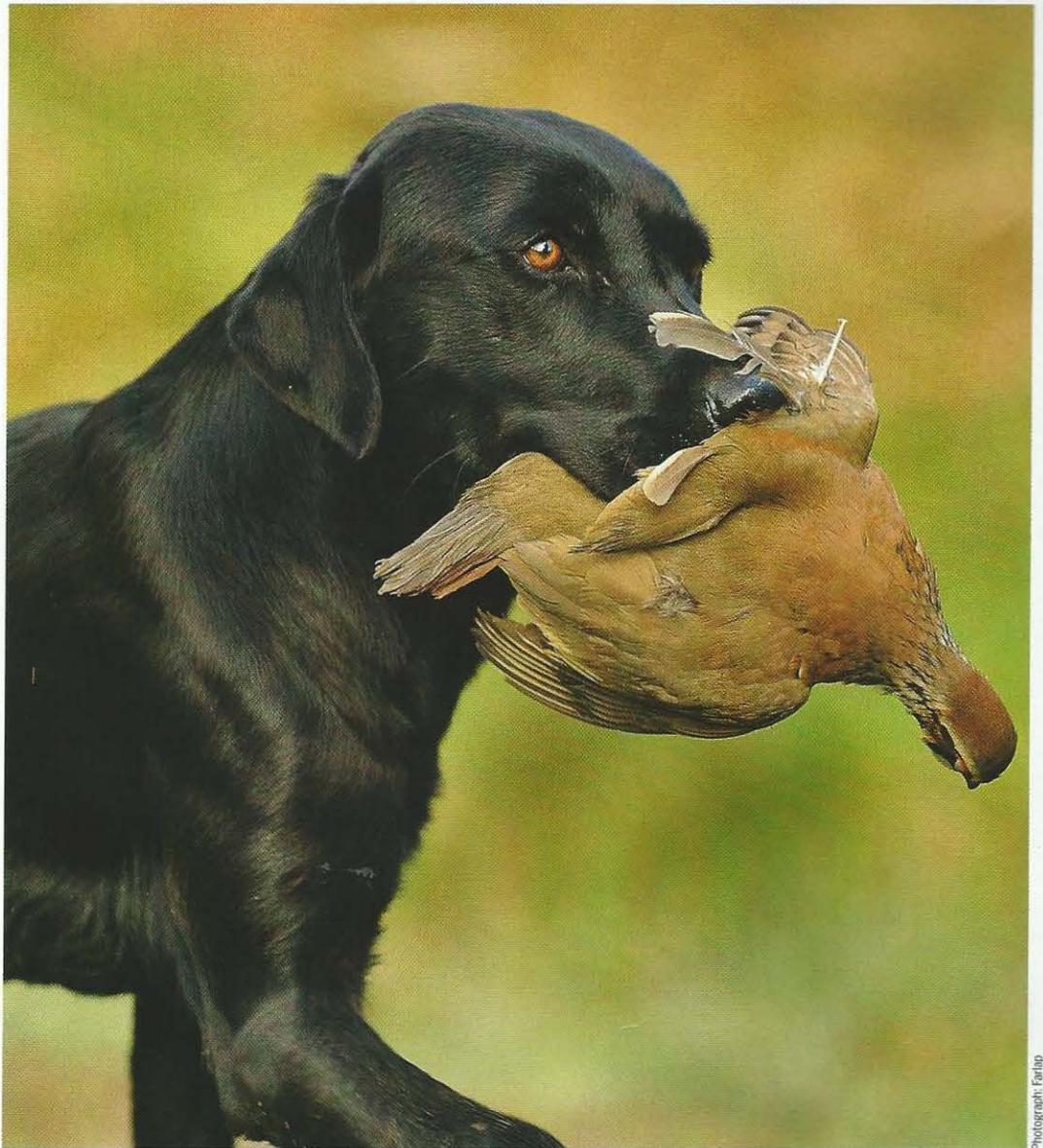
All this means that if you have a dog – and this is irrespective of how much you do or do not train it – you should prepare to be amazed again, and again and again. I'm not talking of giving forewarning of earthquakes or epileptic seizures, or identifying cancers, though dogs can do all of these things, but mundane day-to-day tasks: all of which can generally be accounted for in terms of the exceptional competences I have already outlined.

A kind of magic

But that ability seemingly to 'calculate' the precise location of shot game or a thrown retrieve remains something of a mystery. It is utterly implausible that it could be nose related: at least until the last moments of the retrieve. Similarly, because of the time delay, it is hard to believe it is a result of acute hearing. It is as if some internal GPS was forever plotting what a beeline back to the retrieve would be.

That analogy may offer a clue. Certainly it points to the possibility that it is some variant of the sighting capabilities of the dog that might explain the extraordinary feat in question. Let's take it as read that all the dog's senses are in play at all times. The question is whether something different and special is in play? I think so.

Many animals use a method called dead reckoning as they move about: keeping track of each independent movement and adding these up to derive their net change in position. Impressive, but clearly not what I am talking about. Experimental biologists, meanwhile, have considered whether animals can be said to have cognitive maps. The jury is out but, in any case, neither of the two main definitions in the literature illuminates our case.



Photograph: Farlap

Do dogs have something we might describe as a sixth sense when it comes to finding game?

Do dogs have a photographic memory?

Finally, there is triangulation. First used in the early 16th century for attempts at map-making, its modern systematic use stems from the work of the Dutch mathematician Willebrord Snell in 1615. This is all very well: not least because it clearly works. But triangulation's relevance to our question may be no more than tangential.

A clue to what may be a better answer is provided by those

occasions when the dog goes back in the first instance close to where the shot was taken or the retrieve thrown before going directly to the fall. Some sort of sight memory seems to be in play.

Dogs, if you like, live in a world of smells but also operate with a picture theory of meaning about the configuration of that world. I think they have something akin to what, if a human demonstrated it, we would call a 'photographic memory'. They clearly have scent memories too, as

well as the ability to fairly accurately estimate the distance of a retrieve from its trajectory in the air when they have no chance whatever to mark the fall.

What's for sure is we should be immensely grateful that our dogs have these competences, however mysterious they may be. After all, the animal world is full of well-attested capabilities that keep us guessing. Think of homing pigeons. There's no end of speculation. But, at the end of the day, that's what it is: and perhaps that's the way it should be. After all, mystery and magic are easy bedfellows and don't we want some of that in our lives? ■

"It is as if some sort of internal global positioning system was forever plotting what a beeline back to the retrieve would be."