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Report: Dogs are smarter than people think

Canine friends said to have basic math skills

August 1, 2002 Posted: 1:59 AM EDT (0559 GMT)



LONDON, England (Reuters) -- Dogs are probably much cleverer than most people think, according to a new study.

Scientists are convinced that dogs can count and researchers at the University of California, Davis, say they try to convey different messages through the pitch and pace of their barks.

In addition to exhibiting smart behavior, some scientists say dogs have 20-40 times more receptor cells in their nasal cavities than humans.

"Animal behaviorists used to think their bark was simply a way of getting attention. Now a new study suggests that individual dogs have specific barks with a range of meanings," New Scientist magazine said on Wednesday.

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Dogs usually use high-pitched single barks when they are separated from their owners and a lower, harsher superbark when strangers approach or the doorbell rings, according to Sophia Yin, an animal behaviorist at the university.

Playful woofs are high-pitched and unevenly spaced.

Dogs also know when they are being short-changed on treats because they have a basic mathematical ability which enables them to tell when one pile of objects is bigger than another.

"But to count, an animal has to recognize that each object in a set corresponds to a single number and that the last number in a sequence represents the total number of objects," New Scientist added.

QUICKVOTE

Do you think your dog's bark is

- Just a bark
- An attempt to talk
- I'm a cat person

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Tasty treats

Robert Young of Brazil's Pontifical Catholic University of Minas Gerais in Belo Horizonte, tested the theory on 11 mongrels using dog treats.

The canines were shown treats and then a screen was lowered and the goodies were left as they were or some were added or taken away.

If a treat was added or taken away the dogs looked at the treats much longer than they did when the goodies were not disturbed, presumably because they had done their sums and the numbers did not meet their expectations.

"Dogs are descended from wolves, which not only have a large neocortex -- the brain's center of reasoning -- but live in large social groups," the magazine said.

Young believes the mathematical ability could have been used to work out how many allies and enemies they had in a pack.

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