

Choosing Sides

Are animals “right-handed” or “left-handed”?

By Sue Heavenrich

I USE MY RIGHT PAW

Which hand do you use to write your name or draw a picture? Which foot do you use to kick a ball? Whether it's the right or left, you probably use the same hand or foot to do other things that require accurate, well-controlled movements.

That's called your dominant side.

About 90 percent of humans are right-handed. Scientists want to know

if other animals also have dominant hands or feet—or paws, flippers, or claws. To find out, they watch animals in the wild and give simple challenges to zoo animals and pets. So far, they have discovered that the answer is not a simple yes or no.

At first, chimpanzees appeared to be left-handed. Dr. William Hopkins at Georgia State University and his research partners watched chimpanzees as they went “termite fishing,” using twigs and leaves to pull termites out of the insects' nests. Most of the chimps did the job with their left hand.

But other experiments made

scientists wonder if chimps are really right-handed. When chimpanzees ate peanut butter from a narrow tube, they tended to use the left hand to do the easy part (hold the tube) and a finger on the right hand to do the hard part (reach in for the treat).

Scientists wanted to find out.

Does that mean chimpanzees are left-handed for some tasks and right-handed for others? That's not likely. Dr. Hopkins says the chimps may have used the weaker hand to pull out the termites and the dominant hand to swipe off the insects and put them in their mouths. In that case, all studies so far would indicate that chimpanzees are right-handed.

Chimps share something in common with us: we all

have hands—or feet—that we use to grasp objects. But what about other animals? Do they have dominant sides?

Scientists Dr. Deborah Wells and Dr. Sarah Millsopp wondered whether cats are right- or left-pawed. So they set up a study in their lab at Queen's University Belfast in Northern Ireland. Initially, they gave the cats the simple task of reaching for objects hanging overhead or moving across the floor. The cats showed no preference; they used either paw.

Dr. Wells and Dr. Millsopp also included a test that made the cats perform smaller, more-controlled movements. The researchers dropped a piece of tuna into a container and wrote down which paw each cat used to

fish out the treat. Now the cats showed a preference. All of the female cats except one used the right paw to get the tuna. For males, it was the opposite: 19 out of 21 used the left paw. The researchers tested each cat many times to make sure it really preferred to use one paw instead of the other.

They also tested kittens as they grew to the age of one year. At first, the kittens used both paws. Then the scientists noticed a change. “We discovered that as they grew older, the cats showed a stronger paw preference,” said Dr. Wells. She said this fits with what scientists observe in children. By the time kids are four or five years old, they show hand dominance.

No one knows why so many animals seem to have a dominant side. But whether an animal has paws, hooves, or fins, choosing a side seems to come in, well . . . handy. 🐾



See for Yourself

Like a scientist, you can learn a lot by watching the things animals do naturally. When a cat plays with toys and reaches for objects, notice which paw it uses. If someone trains a dog to “shake hands,” watch to see if the dog offers one paw more often than the other. The more difficult the task is, the more likely the animal will use its preferred side.

I USE MY LEFT PAW