## **How Animal Use Smells**

Have you ever noticed your dog sniffing just about everything on your walk around the neighborhood? Smells are a very important part of the animal kingdom. While we use our sense of smell to check out what's on our plate for dinner or to find out if something is baking in the oven, animals use their sense of smell in a variety of different ways. Humans and animals depend on their olfactory system to help them pick up a scent and then process what it means. For some animals, smells are very important because they need them in order to communicate with others!

## **Communication With Smells**

Scents are one of the most common means of animal communication. Some animals use smells to mark their territories, discouraging others from getting close. For example, leaving urine or dung in certain areas is just one way of claiming space. When another animal gets close, they can smell and realize that this area is already taken. Some animals use smell to encourage others to come closer, especially a mate. Certain chemicals are secreted through the glands, urine or even, you guessed it, dung to let a male of the species know that a female is interested in him. In both cases, things called pheromones are hiding out in the scent. Pheromones are chemicals that get released into the air or deposited onto an object. You might think about them as little messengers that work to communicate something to other animals.

## **Using Smells for Protection**

Communication isn't the only way that animals use scents. Some use a smell as a way to protect themselves from other predators. For example, the skunk is probably the most famous animal that has a stinky scent. When a skunk gets scared, it releases that really bad smell for protection. Many times, a predator will leave the skunk alone because of the smell. Deer are another great example of an animal that uses the sense of smell for protection. As the wind blows, it carries the scents of other animals along with it. If a deer notices the smell of a predator in the air, it can run away.

## **Animals That Use Smells**

There are lots of different animals that depend on their sense of smell. You already know that dogs depend on their sniffers. But did you know that humans sometimes depend on a dog's nose, too? Places like the local police department or even the FBI count on a dog's nose to alert them to things like drugs or explosives. Rats can also be trained to use their amazing sense of smell to pick up on land mines! It might be hard to believe, but a bear actually has a better sense of smell than a dog or a rat. The part of a bear's brain that deals with smells is five times larger than that of a human! In addition to land animals, aquatic animals also depend on their sense of smell. The shark is pretty famous for its ability to sniff out blood in the water. This lets the shark know that there is something weak or injured nearby that might make a tasty lunch. But don't forget about insects. Ants take their sense of smell to a whole new level when compared with other insects. Using chemical communication, ants can tell which members of their group are major or minor workers. They even use their sense of smell to figure out which member of the group is the queen. Scientists believe that an ant's sense of smell may be one of the reasons that these insects can organize themselves so well.

Animals Learn to Fine-Tune Their Sniffs: A Research Study

- Nature Works: Chemical Communication
- Why Are Olfactory Systems of Different Animals So Similar? (PDF)
- Kissing Cousin or Close Kin? One Sniff is All Some Animals Need to Tell the Difference
- The Scent of Life: The Exquisite Complexity of the Sense of Smell in Animals and Humans
- Scientist Discover Some Mammals Can Smell Underwater
- Mammals Smelled Their Way to Bigger Brains
- Animals That Smell Bad on Purpose
- Mosquitos Use Smells to See Their Hosts
- Mice Can Smell Carbon Dioxide
- Lobster Sniffing: How Lobsters' Hairy Noses Capture Smells From the Sea
- Do Snakes Really Smell With Their Tongues?
- How a Dog Actually "Sees" the World Through Smell
- FBI: About Our Detecting Dogs
- Can Fish Smell?
- Study Shows Turkey Vulture is Double Blessed With Acute Vision and Sense of Smell
- A Bear's Sense of Smell
- Lemur Lovers Sync Their Scents
- Deer Deterrents: Scents

(Information copied from perfume.com/article-how-animals-use-smells)