

ANIMAL LIFE

13 x 26 min. HD

SUPER SENSES



YOU WON'T BELIEVE WHAT'S POSSIBLE ...



A TV
DOCUMENTARY
SERIES

The superior senses of animals reveal the secrets of animal perception. All animals have their own ways of sensing, many very different to our own. Sharper sight, keener smell, super-sensitive touch or even senses that are completely beyond our experience.

Have you ever wondered why some animals have such crazy looking sense organs? Why do snakes have a split tongue? Why do elephants have such huge ears? Why do some bats have different looking ears and noses? Why do moths have antennae that look like feathers? Every feature has a special purpose that has evolved to ensure the survival of the animal. Just like us, animals rely on their senses to communicate with each other, to find their way around, to find food and to stay safe.



EP 1 WE DISCOVER THE ANIMAL SENSES

There are animals with incredible abilities that are beyond any of our human senses. Some species have developed unbelievable senses in order to adapt to their environment. Let's discover some of the most amazing of these animal senses.



EP 2 SUPER POWERED SENSES – YOU WON'T BELIEVE IT'S POSSIBLE!!

The superior senses of animals reveal the secrets of animal perception. Animals use senses of which humans are unaware. Sensitivity to the earth's electromagnetic fields, or to variations in weather pressure, can be used to aid navigation, even to predict earthquakes. Predators put these senses to lethal use: a shark homes in on the body electricity of its prey, vampire bats detect the infra-red radiation of blood, and a rattlesnake sees a heat picture of its victim. Smell is invaluable in hunting, protecting a species, mating . . . and navigation.



EP 3 SIGHT

Many animals see the world completely differently to us, perceiving colours and images that we can only guess at. Being able to see helps animals locate food, move around, find mates and avoid predators, whether they live at the bottom of the ocean or soar high in the sky. Eyesight is important for most animals, and 95% of all species have eyes.



EP 4 HEARING

Only two animal groups have evolved the ability to hear – vertebrates like mammals, birds and reptiles, and arthropods, such as insects, spiders and crabs. No other animals can hear.

Some animals have a remarkable sense of hearing, finely tuned to where and how they live. Many animals hear sounds that are pitched too high for us to hear, others too low. It is hard to imagine what this noisier world sounds like.



EP 5 SMELL AND TASTE

Our senses of smell and taste are feeble compared to those of many animals. A keen sense of smell allows animals to find food and mates, as well as to stay out of danger. It can stop an animal wandering into a rival's territory or help it find its way.



EP 6 COMMUNICATION

When animals communicate, they are usually passing on important information. Communication is vital for finding mates, warning off rivals and predators, finding food and maintaining social groups. Animals communicate using visual signals, sounds, touch, smells and taste. Vision, touch and taste work well over short distances, but sounds travel much further and scent marks can last long after the animal has moved on.



EP 7 THE ELECTROMAGNETIC SENSES

Electric fields are used in numerous ways by animals. Electric eels and some rays have modified muscle cells that produce an electric charge strong enough to shock and sometimes kill their prey. Other fish use weaker electric fields to navigate murky waters or to monitor their surroundings. Bony fish and some frogs have a lateral line, a row of sensory pores in the skin, that enables them to detect electrical current in water.

Together, the flow of molten material in the earth's core and the flow of ions in the atmosphere generate a magnetic field that surrounds the earth. Amazingly, a number of animals are able to sense this magnetic field and just as a compass helps us navigate by detecting magnetic north, they are able to identify direction and navigate long distances. Behavioral studies have revealed that many animals including honey bees, sharks, sea turtles, rays, homing pigeons, migratory birds, tuna, and salmon are all sensitive to the earth's magnetic field.

ENVIRONMENT

Animals have developed amazing adaptations to their environments. Many different forms of energy & sensory perception exist in the environment, some of which we humans cannot detect. Here we explore some examples of how some animals sense the outside world.



EP 8 EARTH



EP 9 WATER



EP 10 SKY



EP 11 DAY



EP 12 NIGHT



EP 13 THE MOST AMAZING