



This program argues that the human visual system is skillful at some things, but that we miss an amazing amount of what is going on right in front of our eyes. Whether spotting attractive people in a crowd, gauging depth and distance, or even predicting where things end up, the eyes are at their most perceptive. But clever experiments conducted at a nightclub by scientists from Sussex University illustrate that when a person's visual focus reaches its peak, other things within eyesight are missed. Discussion also focuses on the brain's processing of images, as well as the coordination of our sense of vision with our bodies. A BBCW Production.



1. Eyes and Vision

In a daring "dog fight" in the sky, zoologist Marven Nigel tests his vision during a high-speed pursuit. In the animal kingdom, vision skills vary among species. An eagle sees prey from four miles away.

2. People Watchers

All animals have eyes suited to their particular needs. What do humans need to see? Scientists study the minute movements of the human eye to determine what the human volunteers actually look at.

3. Eyeball Design

The retina contains a hundred million light receptors that allow humans to see. Sharp color vision comes from a small area that is a blind spot. The brain compensates for the blind spot as it interprets the raw images the eyes see.

4. "Seeing" the Future

Baseball hitters cannot see the pitched ball, but they anticipate where it will be when they swing. Their brains analyze the speed, angle, and spin of the ball within microseconds of it leaving the pitcher's hand.

5. Visual and Physical Coordination

Wearing glasses that turn the world upside down, zoologist Marven Nigel tests the brain's ability to interpret visual signals. The simplest tasks are nearly impossible for him, as his hand-eye coordination is similar to that of an infant.

6. Brain Power and Vision

Nearly one-third of the brain is involved with vision. When the brain is overloaded with emotion or thinking, visual processes can be impaired. An experiment demonstrates how the brain ignores irrelevant events.

7. Visual Overload

The human brain receives an almost unlimited supply of visual images, and it has to decide where to place its attention. Volunteers missed a very obvious event when their minds were focused on another element. Can we always trust our eyes?