



## **Teacher's Guide**

### **Instinct & Learning in Animal Newborn Care**

**NATURE Science Education Series**

**Grade Levels:**

7-12

**Subject Areas:**

Life Sciences

Biology

**Synopsis:**

This episode captures a variety of parenting styles in the animal kingdom, attesting to the role of ancestral memory in the interactions of adults and their offspring. Examples range from the dedicated care of emperor penguins to that of extended families like those of the musk ox, guanaco, elephant, and most primates. Live-action film footage of the interactions of mothers, fathers, and their babies raises questions about emotional attachments such as bonding and imprinting, and learned behaviors versus instinctual behaviors.

**Learning Objectives:** Students will:

- Compare and contrast styles of parenting in the animal kingdom.
- Consider the possibility that ancestral memory provides the instinct to survive.
- Provide evidence that primates learn from their parents.
- Cite several examples that suggest there are emotional bonds between animal babies and their parents.

**Vocabulary:**

imprinting, suckling, bonding, paternal, guanaco, sibling rivalry, matriarch, ancestral memory

**Pre-Viewing Discussion:**

Do you think that most animals are born with an instinct to survive? What makes you think so? Can you provide examples to support your opinion?

Do animals learn from their parents or is everything they do governed by instinct? What makes you think so? Can you provide examples to support your opinion?

Do animals have emotions? What makes you think so? Can you provide examples to support your opinion?

What are some examples of extended families in the animal kingdom? How would being part of an animal society be beneficial to an animal baby?

**Post-Viewing Discussion:**

How do the parenting styles of ostriches and emperor penguins differ? How are they typical of the parenting styles in other animal populations?

What did the wildlife photographer capture in the live-action shots of a chimpanzee mother and her baby?

Why do most people believe that elephants have emotions? What examples in this program provided other evidence of emotions in animals?

Which sequence in this program gave you the greatest insight into parenting styles in the animal kingdom?

**Further Activities:**

Further investigate behavioral patterns typical of primate societies. Choose one example for a class presentation that compares the social interactions of a primate family with those of a human family.

Provide a convincing example of how global warming is changing animal survival patterns that are ages old.

Find other examples of sibling rivalry in animal populations. Consider the possibility that sibling rivalry enhances the instinct to survive.

Watch animated motion pictures that feature the lives of emperor penguins. Compare the animated versions with the facts about emperor penguins and their fight for survival.

**Related New Dimension Media Titles:**

Biological Classification in the Animal Kingdom  
The Great Whales