

Veterinary Issues

Speakers

Dr. John Scheels, DDS, Dental Consultant, Wauwatosa, WI

Chris Waldron, Assistant Curator of Carnivores, The Philadelphia Zoo, Philadelphia, PA

Case study. Waldron presented the logistics involved in doing an umbilical hernia operation on one of the Zoo

The umbilical hernia began as a small lump on the bear's underside that, over time, became extremely noticeable—even to the casual observer. Waldron described the anesthesia, transport, physical exam, surgical, and educational procedures involved in this case. The surgery was successful and the bear recovered completely.

This operation became an entire Zoo effort, involving the curator, keepers, veterinary staff, facilities, and education.

John Scheels, D.D.S.

Dental Consultant, Wauwatosa, WI

Scheels offers his services to zoos and receives approximately 20 significant cases per year. He also trains other dentists and veterinarians in providing dental care to captive animals, and trains keepers on symptoms to look for that may indicate early dental problems.

Many of the cases on which Scheels consults are life threatening, because polar bears and other animals will hide discomfort. Because animals do not tend to show pain until the situation is critical, it's important to look for early symptoms. Symptoms of dental problems can include loss of weight, drooling, slight behavior change, and body language (in the case of chronic pain). Open-mouth training is very valuable, and enables keepers to check for soft-tissue problems or discoloration.

Dental problems common in polar bears include:

- Trauma (tooth fracture, fractured mandible)
- Periodontal disease (most-common reason polar bears lose teeth)
- Soft-tissue lesions or growths
- Caries (decay)—typically from too much sugar in the diet

Diet is the best way to prevent many of these problems. Scheels also stressed the importance of having no chains or metal bars in enclosures—bears often chew on them and cause dental trauma.

The polar bear's mandibular canine is the primary tooth to save. Scheels would not consider doing a root canal for a minor tooth. He might consider doing a crown on a young bear to prevent a tooth from splitting. Pathology, diagnosis, and treatment are the same for all mammalian teeth. A dentist can prepare for animal work by studying skulls.