Dr. Drury R. Reavill Dr. Robert E. Schmidt **Zoo/Exotic Pathology Service** 2825 KOVR Drive West Sacramento, CA 95605

Rehabber:	Lollar	Date:	September 11, 2007
Clinic:	Bat World Sanctuary 217 N. Oak Avenue Mineral Wells, TX 76067	Access: Species: Breed: Sex:	V073076-0 Mammal Free-Tail Bat Female
ISIS:	NA	Name: Age: Type:	- 3 Months Post mortem jar

CLINICAL INFORMATION

This is an orphaned pup raised on formula suspected of containing contaminants similar to those in the pet food recall. She had dehydration and metabolic bone disease with possible liver and renal breakdown. There are numerous bat pups across the country with a similar problem that are being raised on this formula.

MICROSCOPIC

Submitted is the entire bat preserved for examination.

Pancreas: No lesion recognized.

<u>Liver</u>: There is diffuse fine eosinophilic globular pigments that are identified within the cytoplasm of the hepatocytes.

<u>Esophagus</u>: examined is a section through the esophagus in which, within the lumen, there are aggregates of degenerate neutrophils with associated fibrin.

Urinary bladder: No lesion recognized.

Spleen: The spleen is congested. There are mild multifocal areas of neutrophilic infiltrates.

<u>Stomach</u>: Within the gastric section are large numbers of yeast. These are budding yeast that are proliferating along the mucosal surface.

<u>Intestines</u>: Examined are multiple sections of the intestines at various levels. There are multifocal areas of neutrophilic and small numbers of lymphoplasmacytic infiltrates in the lamina propria, primarily of the small intestinal sections.

Ovary: No lesion recognized.

Oviduct: No lesion recognized.

Mesenteric lymph node: No lesion recognized

CONTINUED

<u>Kidney</u>: Examined are sections through the kidneys including the cortex and medulla of the kidney. These renal sections are supporting variable amounts of interstitial fibrous connective tissue proliferation with associated dilated renal tubules and inflammation of lymphocytes, plasma cells, and an occasional neutrophil. There is crystalline material, which is light basophilic angular within some of these tubules. There is a deposition of a homogeneous amphophilic material that is thickening the basement membranes of some of the tubules.

<u>Lung</u>: There is multifocally in the lung infiltration of numerous neutrophils that are viable and degenerate. These are associated with fibrin and edema. There is some congestion and collapse also noted. Inflammatory exudates are noted within the lumen of many of the bronchioles and bronchi.

<u>Heart</u>: Examined is a section through the ventricle, atria, and great vessels of the heart. No lesion is recognized.

Thymus gland: No lesion recognized.

<u>Trachea</u>: Examined is a longitudinal section through the trachea. No lesion is recognized.

DIAGNOSIS

- 1) KIDNEY: MODERATE DIFFUSE SEVERE FIBROSING SUBACUTE INTERSTITIAL NEPHRITIS WITH TUBULAR DILATION, AMYLOID DEPOSITION, AND INTRALUMINAL CRYSTALS
- 2) LUNG: MULTIFOCAL TO COALESCING MODERATE ACUTE SUPPURATIVE BRONCHOPNEUMONIA
- 3) INTESTINE: MILD SUBACUTE ENTERITIS
- 4) SPLEEN: MILD MULTIFOCAL ACUTE SPLENITIS

<u>COMMENT</u>

The lesions in the renal sections can be supportive of the toxins that were identified in foodstuff used for pet food manufacturing. This animal appears to have a more chronic renal lesion suggesting a low level toxin.

There is also a severe suppurative pneumonia recognized. I suspect this is a bacterial pneumonia and may be secondary to the renal lesions, which most likely are representative of a failing kidney.

DRURY R. REAVILL, DVM ABVP, Certified in Avian Practice Diplomate, American College of Veterinary Pathologists

DRR:br*

Q1 KW urinary, inflammatory