

**Sf -13 Individual Animal Report Excerpted from:
2005 Ketten, D. R., Beaked Whale Necropsy Findings for Strandings in the
Bahamas, Puerto Rico, and Madeira, 1999-2002. WHOI
Technical Report WHOI-2005-09. pp. 1-38 at**

<http://www.whoi.edu/csi/images/WHOI-2005-09.pdf>

Specimen ID/sex: 13-Sf female 5 feet total length

Species: *Stenella frontalis*

Date of stranding: reported 15/03/00

Location: Powell Cay, Abaco/(26.54N/77.29W)

Preliminary condition: Code 1-2/Live-Died under observation

Analyses to date: CT scans

Tissue Dispositions:

Whole body/frozen - Ketten

Serum, hemolyzed blood/frozen - Balcomb

Observations/other observers:

March 15, 2000, a five foot Atlantic spotted dolphin (*Stenella frontalis*) was reported stranded alive at Powell Cay (26 54N 77 29W) at 0700 local time. Tourists kept the dolphin moistened until Dr. Bater from Freeport, Grand Bahama and Diane Claridge arrived around 1700. The entire post-mortem specimen was placed in a freezer at Sandy Point, Abaco at 2000. Ken Balcomb and Diane Claridge transported the intact frozen specimen to Boston for scanning by Dr. Ketten on 30 March, 2000.

Observations/Ketten/Cranial/Temporal regions:

The frozen intact animal was transported in an insulated box by charter and commercial airlines from Abaco to Boston on 30 March 2000 with a total transit time of 9 hours. It was transferred from the airport to MEEI for scanning immediately upon arrival. Scanning of all three specimens in the shipment took place over an 8 hour period between 19:30, 30 March 2000 to 0300 31 March 2000. The animal was removed from the primary carton but left inside sealed plastic bags during scanning. There was no evidence of thawing of any but the most superficial layers during the scan and transport times. Following scanning, the head was returned to the van, driven later that morning to WHOI, where it was placed in a -20 degree C freezer. It is currently secured in a locked body bag within the freezer.

The specimen was scanned in the transaxial plane using an ultra high resolution spiral CT protocol with 0 degree gantry tilt. Three and 1 mm acquisitions were obtained; submillimeter images of the inner ear were reformatted from the spiral data. Both conventional clinical soft-tissue and bone kernels images sets reviewed were used for the brain and auditory system assessments.

The head region is well-preserved with little evidence of freezer artifact. The body cavity was not imaged at this time. The brain is well defined and normally configured. The sulci, ventricles, and subarachnoid regions are well defined and normal.

There is no evidence of any fracture in the scans and no indication of gross hemorrhagic areas. The nasal passages are clear and well aerated as are the major sinuses and oral cavity. In contrast to the previous structures, the peribullar and middle ear spaces are occluded with mid to low density, mixed tissues. Because of the volume of tissue, the substructure is difficult to differentiate in the scans. The attenuation values of the occlusive tissues are consistent with mixed fats and mucosa, suggesting parasitic nematodes in part or peribullar and corpus cavernosum distention of unknown origin. The attenuations are not consistent with simple hemorrhage. The inner ear is normal and patent.

Findings:

Based upon scan images, the animal is in an excellent state of preservation. There is no evidence of blast or overt correlates with the previous specimens. The apparently distended tissues resemble those seen in ears of animals with otitis media and/or a moderate parasite burden but this must be considered speculation until a full necropsy and ear dissection are completed. The gross condition of the tympano-periotic complex is consistent with a healthy adult inner ear but hearing may have been compromised by middle ear infection or immobilization of the ossicular chain if there is substantial distention in the middle ear tissues.

Summary: (See also laboratory dissection notes)

Good preservation/Inflammatory changes sphenethmoid sinus/Retro-peri-bullar necrosis bilateral/

