PATHOLOGY OF CHRONIC LARGE WHALE ENTANGLEMENT MORTALITIES

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NECROPSY EXAMINATION

1. Report of a dead whale – towed in if at sea. if practical
2. Arrangements made for beach necropsy and disposal
3. Lesions examined, documented, dissected and sampled for histopathology
4. Gross report prepared
5. Histopathology samples examined and reported
6. Case report assembled and finalized and submitted to NOAA
Eg #3107
Yearling
First sighted entangled
July 6 2002
Chronic Peduncle
Eg #3107
Gear Removed
Bay of Fundy
Sept 1 2001
Dorsal peduncle
Eg #3107 Nantucket, Mass. Oct 12 2002
Ventral peduncle. Photo: Peter Brown NMMST
Eg #3107
Looking cranially
Photo: WHOI

Dorsal

Ventral

Intervert.
Disc

Eg #3107
Looking cranially
Photo: WHOI

Dorsal

Ventral

Intervert.
Disc
Eg #2301 SEPTEMBER 6th 2004 Photos: NEAq
Eg#1102 - Chronic – rostrum but lethal

Drawing: Scott Landry
Chronic Rostrum
Eg #1102
2001
Loss of condition

Photos: PCCS
3911 – EgNEFL1103
First sighted entangled 12/25/10
20% thinner than a ‘normal’ right whale

Gear removed 12/30/10
More gear removed after sedation 01/15/2011

Satellite tag quit 01/21/2011

Found dead 02/01/2011

Sketches by Scott Landry
Full extent of mouth involvement not apparent until lower jaws and tongue removed
EgNEFL1103
Line embedded in right lip

Photos _ K Jackson FWC
Test rig for line impact modelling
Right Whale Calf Flipper
11.3-kg Load
7.6-cm draw 2.5-cm draw

Humpback Whale Fluke
31.8-kg Load
7.6-cm draw 2.5-cm draw
Conclusions

• Entanglements involve head, flippers, body and tail
• Line can incise down to bone if mobile over flesh
• Bone can grow around line
• Bone and soft tissue attempt to wall off the line
• Bone development impacts
• Mean duration if lethal ~ 5.5 months