



# Blunt trauma involving the “Stink-sac” (post-anal sac) in a beach cast Gray whale (*E. Robustus*), Alaska

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The post-anal sac is a unique anatomical structure specific to grey whales. It is located mid ventral between the blubber and tailstock muscles within a distance of 56-120 cm posterior to the anus. We report on the gross and histopathological findings of blunt force trauma of the tailstock involving the “stink sac” in an adult female beach cast grey whale (2018 GW 0914 FD Tag 193; TBL 11.70 m; Carcass condition IV; COD killer whale predation), Alaska. Poor carcass condition and lack of noticeable swelling are probably contributing factors why the post anal sac is rarely being examined in beach cast gray whales. Contribution of trauma to cause of death is speculative. However, given the importance of the tailstock for propulsion and predator deterrence, blunt force trauma to the region even in the absence of vertebral fractures is likely to have functional consequences.



Fig.1a 30 x 30 cm Swelling on Tail stock

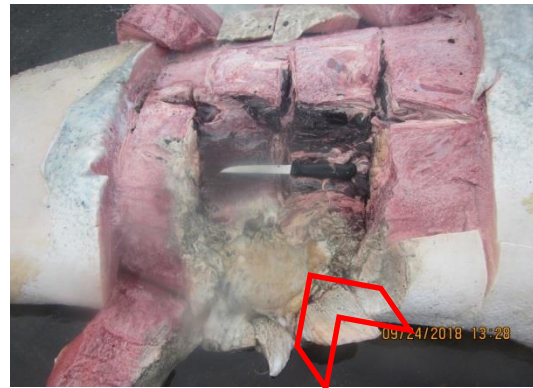


Fig.1c In situ Stink-sac capsule



Fig. 1b Cyst fluid



Fig. 2a. Lining of Capsule

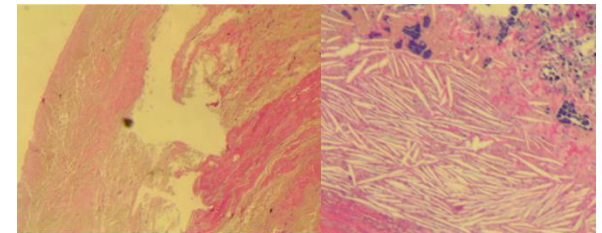


Fig.2c,d Fibrous capsule formation with intra-capsular cholesterol clefts, basophilic mineral, and osteoid (osseous metaplasia).

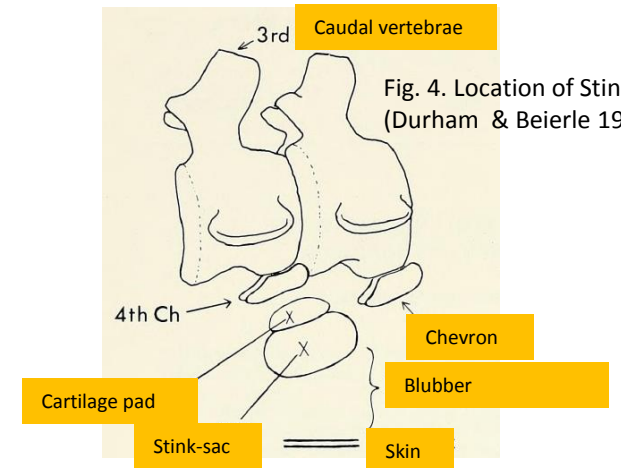


Fig. 4. Location of Stink-sac (Durham & Beierle 1976)

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