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INTERNATIONAL
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Robert L. Brownell, Jr.¹, Sarah D. Mallette² and Ricardo Rebolledo³

¹NOAA Fisheries, Southwest Fisheries Science Center, Monterey, California 93940 USA

²Department of Environmental Science and Policy, George Mason University, Fairfax, Virginia 22030 USA; Terwilliger Consulting Inc. Locustville, Virginia 23404 USA

³National Marine Mammal Foundation, San Diego, California 92106 USA

Stranding Circumstances:

On 18 January 2018 a dead common dolphin (*Delphinus delphis*) was found stranded in San Felipe, Baja California, Mexico. The dolphin was located approximately 6 km south of downtown San Felipe, just south of Sandollar Condotel along the high tide line

The carcass was examined to determine species and sex, estimate total length and document evidence of fisheries interaction. Images from external examination were collected.

Information about the stranding was relayed to Rebolledo and Lorenzo Rojas-Bracho. Rebolledo notified PROFEPA about the carcasses, then Rebolledo examined the specimen before PROFEPA disposed of the remains. Near this site Rebolledo also found the remains of two additional dolphins and a turtle. These carcasses were also reported to PROFEPA. However, based on the decomposition state, these additional specimens were from the 2017 fishing season, thus not presented here.

Summary of findings:



Figure 2. Common dolphin found on 18 January 2018 along a southern beach in San Felipe, Baja California Norte, Mexico. Image of right body shows late moderate decomposition, obvious evidence of entanglement in large mesh gill net [note circumferential ligature wound around head, missing epidermis in pattern inconsistent with normal decomposition (i.e. some skin missing likely due to interaction with net)].

This female common dolphin was found stranded dead (estimated GPS coordinates: 30.978689N; -114.811044E) along Playa San Felipe, south of downtown San Felipe. The total length of the dolphin was estimated to be 170-180 cm and the body condition appeared normal (i.e. not emaciated). The carcass was on its left lateral side and in a state of moderate decomposition (SI decomposition code 3). Approximately 25% of the epidermis was missing,

and the right dorso-lateral body, dorsal fin, caudal peduncle and flukes, head around site of entanglement, the trailing edge of right pectoral flipper, leading edge of left pectoral flipper, rostrum, and at the point of insertion of the right pectoral flipper exhibited missing skin. Much of the missing epidermis was distributed in a pattern inconsistent with normal decomposition (see Figure 2).

Fisheries interaction was obvious based on large diameter, circumferential ligature wounds penetrating into the blubber (see Figure 2 above and Figure 4-7 below). The vasculature was notably pronounced along the peduncle and fluke blades (Figure 3). Additionally, missing epidermis along the appendages and head likely resulted from interaction with the fishing gear.



Figure 3. Pronounced vasculature along ventral flukes and lateral peduncle.

On the right side of the head, a linear ligature wound, caudal to the eye, continued dorso-ventrally to the caudal margin of the blowhole (see Figure 4).



Figure 4. Obvious ligature wounds from large mesh gill net on right head of specimen.

The ligature wound continues to wrap dorsally along the head across the caudal margin of the blowhole (see figure 5). Underlying blubber was exposed along the length of the wrap mark and a patch (non-uniform margins) of epidermis was missing on the right dorso-lateral aspect of the head, adjacent to the circumferential wound (see Figure 5).



Figure 5. Dorsal head of specimen showing wrap extending from left and right side of head and exposed underlying blubber.

Along the ventral head, the ligature wound extended from the aspect of the lateral head and wrapped ventrally around the gular region (see Figure 5). Lateral of the ventral midline (right

side) a ligature wound was observed at a 90 degree angle and extended cranial/caudal (see Figure 6).



Figure 6. Ventral head and gular region with a linear ligature wound penetrates into the blubber (large red oval). The smaller circle at the bottom of the picture highlights an angled impression corresponding to gill net mesh.

The circumferential ligature wound (single, linear impression) continued along the left side of the head, between the eye and gape, and was oriented dorso-ventrally (see Figure 7).



Figure 7. Ligature wound on left side of head between gape and eye.

Discussion

The *Delphinus* examined on 18 January was the first documented cetacean taken in an illegal totoaba gillnet in 2018. The first dead vaquita of 2018 was documented on 28 March with cause of death attributed to fisheries bycatch (see details on the IUCN CSG website, March 2018). Sea Shepherd vessels in cooperation with the Mexican Navy have been removing active fishing gear, especially totoaba gillnets since 2015. These operations started again in January 2018 and a number of totoaba gillnets have been recovered (see details on the IUCN CSG website, March 2018).

While dealing with the plight of the vaquita in recent years, researchers and managers have not been paying attention to the bycatch of other small cetaceans, especially *Tursiops*. During the recent IWC Workshop of *Tursiops* Taxonomy, the participants noted that “There is significant genetic differentiation between the Gulf of California and California coastal populations (of the same magnitude as between coastal and offshore populations), but a comprehensive morphological analysis comparing the two has not yet been performed. In the Gulf of California, there was significant differentiation between offshore populations in the central and southern regions, and a coastal form restricted in range to the upper portion of the Gulf is of conservation concern assuming most of the dead *Tursiops* in the upper Gulf are the result of bycatch in fishing gear (Natoli and Rosel 2018). This problem needs to be evaluated in the near future to better understand the conservation status of these dolphins as there is special concern due to the continued illegal fishing with large mesh totoaba nets.

Summary

CIRVA (Comité Internacional para la Recuperación de la Vaquita) held its 10th meeting in mid-December 2017 in La Jolla, California and recommended, that the Government of Mexico establish an enhanced enforcement program during the totoaba season (December 2017 through May 2018), within the upper western region of the Gulf of California, hereafter called the “exclusion zone”. This “exclusion zone” is the area with the highest documented co-occurrence of vaquitas and illegal totoaba nets. In addition, CIRVA recommended that all Mexican enforcement agencies increase their enforcement efforts on land and in water immediately and continue the enhanced enforcement program for the duration of the period of illegal totoaba fishing (at least until June 2018). The objective must remain to eliminate all setting of gillnets throughout the range of the vaquita. Therefore, the discovery of a stranded dead common dolphin on 18 January 2018 near San Felipe confirms that illegal fishing with totoaba gillnets in the upper Gulf of California is continuing and this is cause for alarm. The discovery of this dead dolphin re-emphasizes the need to rapidly enhance enforcement efforts in the “exclusion zone” as recommended by CIRVA. In addition to the on-going problem with the vaquita, additional research is needed on the bycatch of other small cetaceans, especially *Tursiops* taken in the totoaba fishery.

References:

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- Natoli, A. and P. Rosel. 2018. Report of the SM/SD Joint Intersessional Workshop: Resolving *Tursiops* Taxonomy Worldwide. Report to the SC in Bled, Slovenia. April 2018