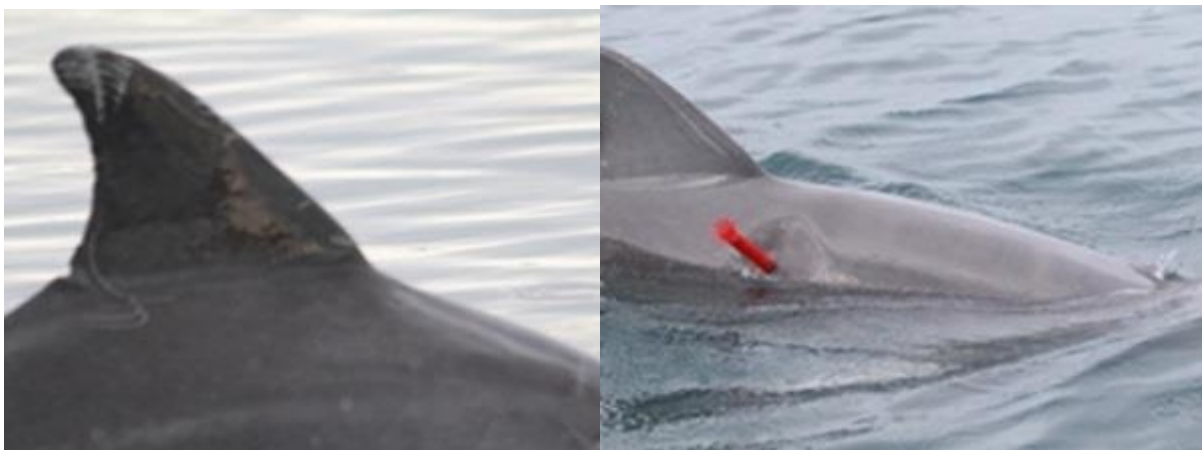


Project Update: November 2016

Skin samples of bottlenose dolphins were analysed to determine total mercury using a solid sample atomic absorption spectrometer (AMA-254, Altec). Results of these analyses show values of bio-acumulation that ranged between 94-2909 $\mu\text{g}/\text{kg}$ (mean=896 $\mu\text{g}/\text{kg}$). Although these values are relatively low compared to populations in Japan or Mediterranean, they're similar to other coastal populations such as the Florida's ones. These low values confirm the isotopic analyses that indicate dolphins in Bocas del Toro have coastal habits, since coastal fish are not Hg-rich. We have concerns regarding conservation status of dolphins in this area because it's possible they conform only the "inshore form", and therefore it's essential to implement a management plan to conserve this isolated population. Furthermore, dolphins distributed in the Amirante Bay, where is located the local port, show high and significant values of bioaccumulation in contrast to the other individuals, which demonstrate that dolphins are acquiring more pollutants in this bay.



Left: A calf surfing the wave. Photo by Dalia C. Barragán-Barrera. Right: A dolphin socializing. Photo by Betzi Pérez.



Left: A dolphin with skin lesions. Photo by Dalia C. Barragán-Barrera. Right: Collecting a biopsy to conduct Hg analyses. Photo by Dalia C. Barragán Barrera.