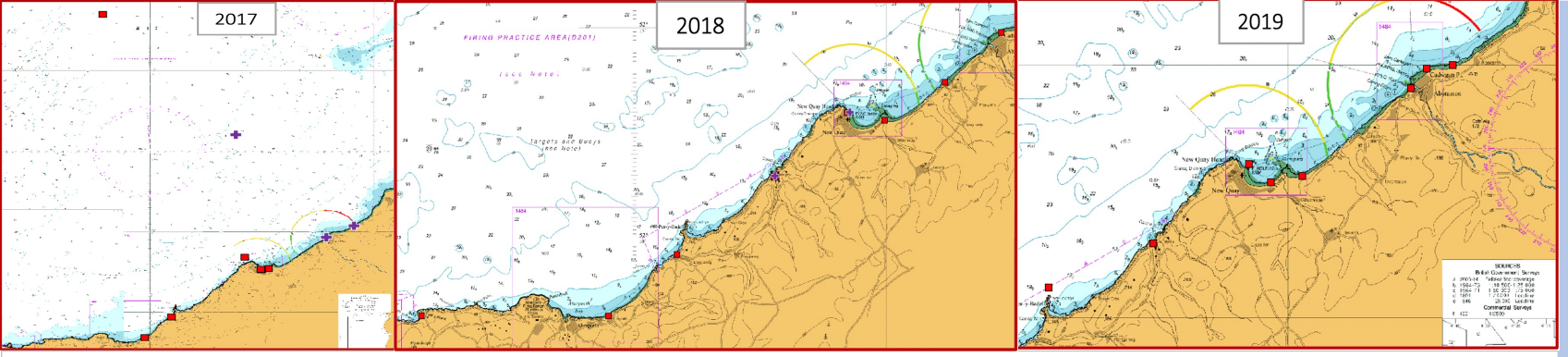

Figure 2.1.: Cetacean strandings within the proximity of Cardigan Bay SAC (CBSAC), 2017-2019.

Cardigan Bay SAC

Cardigan Bay Special Area of Conservation (SAC) was the primary focus for the independent project. MapInfo was used as a Geographical Information System (GIS) software; the first layer was the map of Wales (UK Data Service, 2001), the second layer was the marine raster images (Digimap, 2021a), 2017 and 2018 images has two layers of stranded cetaceans as 2019 image has one layer. The stranded cetaceans include Harpour Porpoise *(Phocoena phocoena)* and Short-Beak Common Dolphin *(Delphinus Delphis)* (Penrose, 2018; 2019; 2020).

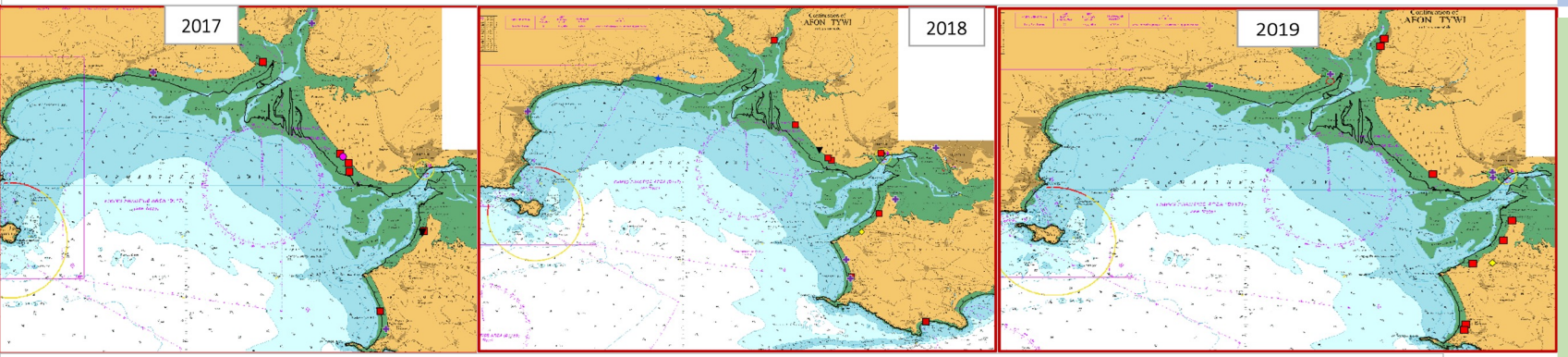

Figure 2.2.: Cetacean strandings within the proximity of Carmarthen Bay SAC (CmSAC), 2017-2019.

Carmarthen Bay SAC

Carmarthen Bay SAC was a comparative case study to Cardigan Bay SAC. On MapInfo, the first layer was the map of Wales (UK Data Service, 2001); the second layer was the marine raster images (Digimap, 2021b); 2017 and 2019 images has four layers of stranded cetaceans as 2018 image has five layers. The stranded cetaceans include Harbour Porpoise, Short-Beak Common Dolphin, Minke Whale *(Balaenoptera acuturostrata),* Bottlenose Dolphin *(Tursiops truncates),* Striped Dolphin *(Stenella coeruleoalba)* and Pigmy Sperm Whale *(Kogia breviceps)* and multiple unconfirmed species (Penrose, 2018; 2019; 2020).

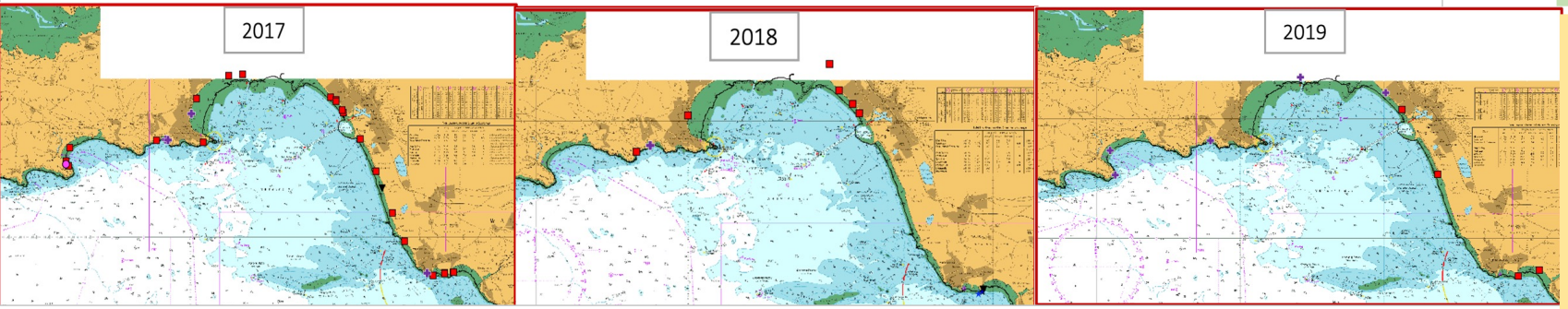

Figure 2.3.: Cetacean strandings at the coasts of Swansea, Bridgend and Neath Port Talbot (NPT), 2017-2019.

Swansea, Bridgend and Neath Port Talbot

The district boundary of Swanea, Bridgend and Neath Port Talbot was also a comparative case study to Cardigan Bay SAC. On MapInfo, the first layer was the map of Wales (UK Data Service, 2001); the second layer was the marine raster images (Digimap, 2021c); 2017 and 2018 images has four layers of stranded cetaceans as 2019 image has five layers. The stranded cetaceans include Harbour Porpoise, Short-Beak Common Dolphin, Minke Whale, Striped Dolphin and multiple unconfirmed species (Penrose, 2018; 2019; 2020).

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