distributions with actual salinity levels. The species distribution data will allow us to investigate the extent of amphibian occupancy of coastal water bodies in the UK as well as the tolerance of individual species to salinity in the wild.

1.08.P-Tu017 Investigating the Relationship Between Bioaccumulated POPs and Biomarker Response in Spinner Dolphins, Stenella longirostris

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In the Brazilian coast, the spinner dolphin, S. longirostris,occurs predominantly at oceanic waters, concentrating at the upper continental slope, with occasional sightings at higher depths or along the continental shelf. Due to the overlap of its distribution with oil and gas extraction and production (E&P), S. longirostris was included as a priority sentinel species to be used in the ongoing Cetacean Monitoring Project (PMC-BS) carried out by Petrobras at the Santos Basin pre-salt province (25005'S 42035'W, 25055'S 43034'W). This study investigated the relationship between blubber burdens of polycyclic aromatic hydrocarbons (PAHs) and persistent organic pollutants (POPs) and biomarker response measured in the tegument of S. longirostris, sampled within the Santos Basin pre-salt province. Skin and blubber samples (n=16) were obtained opportunistically through remote biopsy, during telemetry or visual survey efforts. Blubber samples were analyzed for PAHs and POPs (PCBs, PBDEs and organochlorines). Skin samples were used to quantify glutathione S-transferase (GST) activity, cytochrome P450 1A (CYP1A) protein content and transcript levels of aryl hydrocarbon receptor (AhR), cytochrome P450 1B (CYP1B), estrogen receptor beta (ESR2), heat shock protein (HSP70) and UDP-glucuronosyltransferase (UGT1). To investigate the relationship between bioaccumulated PAHs and POPs and biomarker response, generalized linear models (GLMs) were constructed. Best fitted models indicated that PAHs levels contributed significantly to the observed variance of biomarker data. In particular, PAHs levels were negatively associated to CYP1B, ESR2, HSP70 and UGT1 transcript levels. Apart from PAHs, only mirex was negatively associated with AhR transcript levels and PBDEs were positively associated with UGT1 transcript levels. Regarding to PAHs, the predominance of negative associations may be due to the prevalence of two and three ring compounds, which have been shown to inhibit biomarker response, such as EROD and GST activity in other species. The negative relationship between PAHs and ESR2 also suggests a potential inhibitory effect over reproductive signaling. Taken together, our results suggest that the levels of bioaccumulated contaminants found in these samples, especially PAHs, may be of concern to S. longirostris local population and reinforce the need to continually monitor this species in the Brazilian coast.

1.08.P-Tu018 Polycyclic Aromatic Hydrocarbons (PAHs) in Cetacean From Western Mediterranean Coast

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Polycyclic aromatic hydrocarbons (PAHs) are persistent organic pollutants derived from the combustion of organic matter, highly lipophilic and present in all the world's seas and oceans, as well as in the atmosphere and soils. However, the analysis and impact of these compounds on cetaceans are scarce. Cetaceans, which are considered as oceanic sentinels of human and wildlife health, have been suggested to be especially susceptible to the toxic effects of PAHs. The aim of this work was to detect and quantify 16 PAHs in blubber samples from 58 individuals of various endemic cetacean species stranded on the Murcia coastline (Western Mediterranean) between 2011 and 2018. Only six of the 16 studied compounds were detected with detection frequencies ranging from 17.24% (anthracene) to 98.28% (phenanthrene). The concentrations detected are in line with those obtained by other authors in marine mammals from areas with high anthropogenic pressure. Phenanthrene was the PAH showing the highest concentrations (maximum 205.14 µg/kg lw.), followed by naphthalene, acenaphthene, fluoranthene, fluorine and anthracene. Our results in striped dolphin (the species with the largest number of samples, n=40) followed the same distribution pattern than others striped dolphins elsewhere, dominated by naphthalene (46.86 ± 27.48 µg/kg). This compound is used as a precursor in many industrial processes, as well as a component of pesticides and fuels, so high levels in the study area, characterized by its intensive agriculture (up to 10.9% of the total pesticides used in all of Spain), were expected. On the other hand, the profile of PAHs detected in the study area is mainly composed of low molecular weight compounds, which have the lowest carcinogenic and mutagenic potential. However, some studies have demonstrated the greater genetic susceptibility of Mediterranean cetaceans to the adverse effects of PAHs. Therefore, toxic effects affecting the status of studied populations should be addressed. This is the first work assessing PAHs concentrations in cetaceans from the Region of Murcia, so the data presented in this work could serve as a reference for future research.

1.08.P-Tu019 Organochlorine Pesticides, Polychlorinated Byphenils (PCBs) and Polybrominated Dyphenil Ethers (PBDEs) in Seven Mediterranean Endemic Cetacean Species

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Mediterranean Sea is considered as a hotspot for several persistent organic pollutants (POPs), whose potential health end-points include the reproductive, immune and endocrine systems, and are able to cause cancer. Status of most populations of Mediterranean cetacean species is not generally considered to be favorable and chemical pollution is commonly suggested as a probable cause. Long-term biomonitoring of these cetacean populations provide useful information on the POPs-pollution status of western Mediterranean Sea, which might have direct impact in wildlife and human health. We used blubber from 7 different species of cetaceans (n=57) stranded along the Murcia coastline (SE Spain) between 2011 and 2018 to study 16 different