Alava, J.J., M.G. Ikonomou, P.S. Ross, D. Costa, S. Salazar, **D. Aurioles Gamboa** & F.A.P.C. Gobas (2009). Polychlorinated biphenyls and polybriminated diphenyls ethers in Galapagos Sea Lions (*Zalophus wollebaeki*). Environmental Toxicology and Chemistry, 28(11): 2271-2282. DOI: 10.1897/08-331.S1

Polychlorinated biphenyls and polybriminated diphenyls ethers in Galapagos Sea Lions (*Zalophus wollebaeki*)

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Concentrations of polychlorinated biphenyls (PCBs), polybrominated diphenyl ethers (PBDEs), polychlorinated dibenzo-pdioxins (PCDDs), and polychlorinated dibenzofurans (PCDFs) were measured in muscle–blubber biopsy samples from 21 Galapagos sea lion (Zalophus wollebaeki) pups that were live captured in the Galapagos Islands (Ecuador) using gas chromatography/highresolution mass spectrometry. Only traces of PBDEs were detected in one male pup, whereas PCDDs and PCDFs were not detected in any sample. The total concentration of PCBs (SPCB) in the pups averaged 104 mg/kg lipid (range, 49–384 mg/kg). No statistically significant differences in SPCB were observed among the four study sites in the Galapagos Islands. Concentrations of PCB congeners in Galapagos sea lion pups were dominated by low-molecular-weight congeners. These results suggest that global transport is the main source for PCBs in Galapagos sea lions. The SPCB levels were below immunotoxic and endocrine-disruption thresholds in pinnipeds, suggesting a limited risk of adverse health effects. The present study indicates that Galapagos sea lions can serve as a useful sentinel of pollutants with a long-range transport capacity and that Galapagos Islands are not exempt from the threats of global pollutants despite its remote locale.

Palabras clave: Galapagos Islands, Polychorinated biphenyls, Polybrominated diphenyl ethers, Galapagos sea lions