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Phylogeography of California and Galápagos sea lions and population structure within the California sea lion

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We investigate the phylogeography of California (*Zalophus californianus*) and Galápagos (*Z. wollebaeki*) sea lions and describe within-population structure for the California sea lion based on mitochondrial DNA. Fifty control-region haplotypes were found, 41 from *Z. californianus* and 9 from *Z. wollebaeki,* with three fixed differences between the two species. Ranked population boundaries along the range of *Z. californianus* were defined based on the Monmonier Maximum Difference Algorithm, resulting in five genetically distinct populations, two in the Pacific Ocean and three inside the Gulf of California. A Minimum Spanning Network showed a strong phylogeographic signal with two well-defined clusters, *Z. californianus* and *Z. wollebaeki*, separated by six base-pair differences, supporting the existence of two genetically distinct species with an estimated divergence time of ~0.8 Ma. Results are discussed in the context of the historical geologic and paleoceanographic events of the last 1 Ma in the eastern Pacific.

Palabras clave: zalophus californianus, population structure, California sea lions, phylogeography