

tropical and temperate populations: 185.8 cm vs. 170.7 cm for LSM and 195.7 cm and 179.8 cm for maximum adult size. The observed differences are likely adaptations of these populations to their tropical and temperate ocean habitats as predicted by Allen's rule.

Comparison of Humpback Whale Songs from Gabon and Abrolhos Bank, Bahia, Brazil

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The purpose of this work was to investigate the relationship of humpback whale populations off Gabon and Brazil through song comparisons. Songs sessions were recorded off Cape Lopez (1°S 8°E), Gabon in 2002, 2001 and 1999, and on Abrolhos Bank (18°S 39°W), Brazil in 2002 and 2001. Spectrograph analysis allowed definition of themes (designated by numbers), phrases and units (designated by letters) in each sample. In both Gabon and Brazil: 1) the 2002 songs were composed of the same five distinctive themes (12345) plus a mixed theme 1-4 segment; 2) themes were sung in same order including the recurring repetition of themes 4 and 5 *i.e.*, 1234545; 3) the relative proportion of the song dedicated to specific themes was comparable, with greatest difference from one region to another 8%; and 4) common changes occurred in the song from 2001 to 2002, for example: neither Brazil or Gabon 2001 songs included the 2002 theme 4, yet both regions had a theme not present in 2002 (theme 0) *i.e.*, 2001 themes in both regions:12350, and; in both locations, 2001 theme 5 was (ABABcc)(ABABcc), whereas in 2002 was (AB)(AB)(AB). The 1999 Gabon songs contained none of the same themes as the 2001 or 2002 samples. Gabon-Brazil songs in any one year had more in common than Gabon-Gabon songs with a two year separation. These similarities strongly suggest the Brazil and Gabon humpback whale populations mix. Possibilities include: 1) a significant overlap in feeding grounds leading to regular interchange of individuals between the two breeding areas; or 2) Gabon and Brazil are way-points on the same migratory route. Funding in Brazil provided by Instituto Baleia Jubarte, Society for Marine Mammalogy, Fundacao O Boticario de Protecao a Natureza/MacArthur Foundation, and a scholarship from the Brazilian Government to RSS-L; in Gabon by National Geographic Society.