



Wielgus, J., M. Gonzalez-Suárez, **D. Auriol Gamboa** & L.R. Gerber (2008). A noninvasive demographic assessment of the sea lions base on stage-specific abundance. *Ecological Applications*, 18(5): 1287-1296. DOI: 10.1890/07-0892.1

A noninvasive demographic assessment of the sea lions base on stage-specific abundance

Jeffrey Wielgus, Manuela Gonzalez-Suárez, David Auriol Gamboa & Leah R. Gerber

A pressing need exists to develop new approaches for obtaining information on demographic rates without causing further threats to imperiled animal populations. In this paper, we illustrate and apply a data-fitting technique based on quadratic programming that uses stage-specific abundance data to estimate demographic rates and asymptotic population growth rates (

Palabras clave: Specialist, antibacteriana, california sea lion, *zalophus californianus*, demography, abundance, inverse estimation, marine mammals, noninvasive techniques, population viability analysis, quadratic programming

Para obtener copia del documento contacta con el autor (dgamboa@ipn.mx) o con el personal de la biblioteca (bibliocicimar@ipn.mx).