

Dr. Jorge Gutiérrez

Dr. Jorge Gutiérrez current research focuses on the links between organismal activities and ecosystem processes, with particular emphasis on the role of physical ecosystem engineering (i.e., the physical modification of environments by organisms) in controlling fluxes of materials across ecosystem boundaries. Other interests include: the importance of ecosystem engineers for the maintenance of biodiversity, the evolutionary consequences of engineering feedbacks, and the integration of the ecosystem engineering concept into ecological theory.

Selected publications:

Jones, C.G. and Gutiérrez, J.L. (2007). On the meaning, usage and purpose of the ecosystem engineering concept. In: Cuddington, K., Byers, J., Hastings, A., Lambrinos, J. (Eds.), *Ecosystem Engineers: Plants to Protists*. Academic Press, New York, NY, USA. pp. 3-24.

Gutiérrez, J.L., Jones, C.G., Groffman, P.M., Findlay, S.E.G., Iribarne, O.O., Ribeiro, P.D. and Bruschetti, C.M. (2006). The contribution of crab burrow excavation to carbon availability in superficial salt marsh sediments. *Ecosystems* 9: 647-658.

Gutiérrez, J.L. and Jones, C.G. (2006). Physical ecosystem engineers as agents of biogeochemical heterogeneity. *BioScience* 56: 227-236.

Gutiérrez, J.L. and Iribarne, O.O. (2004). Conditional function of habitat structure: An example from intertidal mudflats. *Oecologia* 139: 572-582.

Gutiérrez, J.L., Jones, C.G., Strayer, D.L., Iribarne, O.O. (2003). Mollusks as ecosystem engineers: The role of shell production in aquatic habitats. *Oikos* 101: 79-90.