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Brianna G Payne* (brianna@andrews.edu), **James L Hayward**, **Shandelle M Henson**,
Libby C Megna and **Susana del Rocio Velastegui Chavez**. *Model of Marine Iguana Haulout
on Fernandina, Galapagos*. Preliminary report.

We use ordinary differential equation models, connected rigorously to field data, to measure the degree to which behavioral dynamics are a function of the abiotic environment. Specifically, we model the haulout dynamics of Galapagos marine iguanas (*Amblyrhynchus cristatus cristatus*) at Cabo Douglas on the Island of Fernandina in the Galapagos Archipelago. The study outlines a methodology potentially useful as a management tool and provides a nuanced understanding of marine iguana behavior and niche characteristics. (Received September 19, 2011)