

**NATURAL HISTORY AND IMPACT OF HUMAN DISTURBANCE ON THE  
TIGER BEETLE *Opilidia macrocnema obliquans* ON COSTA RICA'S  
CENTRAL PACIFIC COAST**

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The tiger beetle *Opilidia macrocnema obliquans* was studied during March and April 2014 at the beach Playa Mantas in Punta Leona Hotel and Club, Costa Rica, with the purpose of describing the natural history of and possible human impact on the species. The abundance of beetles within eight 20m long transects as well as other environmental parameters were recorded from 0600 to 1700 hrs for ten days. The number of humans and tiger beetles within transects along the length of the beach as well as other environmental parameters at 1100, 1300, and 1500 hrs were recorded on another 10 days, as well as detailed observations on the behavior of tiger beetle individuals on these days. For four days the temperature of the sand every meter up the beach from the water line to the dry sand was recorded from 0600 to 1700 hrs, as well as the time individual beetles spent within these zones. Adult tiger beetles were active at a temperature range of 20.0-44.9°C and most active at 0800, 1400, and 1500 hrs ( $P=0.0034$ ). At low temperatures the beetles sunbasked, and at high temperatures stilted above the hot sand ( $P<0.0001$ ). The beetles spent most of their time on wet sand within one meter of the water line ( $P<0.0001$ ). There they hunted small crustaceans and scavenged omnivorously. No relationship was found between the abundance of humans and that of *O. macrocnema obliquans* ( $P=0.2784$ ).