

## **EFFECTS OF HUMAN DISTURBANCE ON GHOST CRABS (*Ocypode*) IN COSTA RICA**

*Michael Maurer, Colorado College*  
*Advisor: Paul Hanson, PhD*

Beaches are currently a source of economic development. In Costa Rica, many beaches are used either for tourism or fishing. The presence of people at beaches without conservation is possibly causing irreversible damage to the environment of beaches. My project uses ghost crabs (*Ocypode*) living on the beach as an indicator species with respect to the health of the beach where they are present. I compared two beaches that were more disturbed to two beaches that were relatively undisturbed by the presence of anthropogenic activity. Both “undisturbed” beaches had a greater number of burrows than the two “disturbed” beaches. Playa Azul was my “undisturbed” beach best suited for ghost crabs and Jaco was observed being the most “disturbed”. Playa Azul had about twice as many burrows as Jaco and their mean diameter was about twice as large. My data indicates that human disturbances have an effect on the population of ghost crabs and their body size. I hope my research will be used to strengthen the possibility of ghost crabs as an indicator species for beaches throughout the world.