PARAPHYLETIC RELATIONSHIPS WITHIN CTENOSAURA PECTINATA .

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The majority of Iguana species are either threatened or endangered and thus a better understanding of their genetic diversity may help save them from extinction. In this study we will be examining the genetic variations within the species *Ctenosaura pectinata* (among others) found throughout Mexico. The focus of the laboratory work will be to extract, amplify, and sequence the gene cytochrome b from several Iguana tissue samples. From our analysis of genes sequenced from theses species, we will then be able to build upon a phylogenetic tree already in progress. Phylogenetic trees are vital to the understanding of Iguana species' because they provide a foundation for the genetic diversity of these animals. Not only will this build a greater knowledge on the relationships within a species, it will also help answer questions on their behaviors, divergence, and concentrations within specific regions.