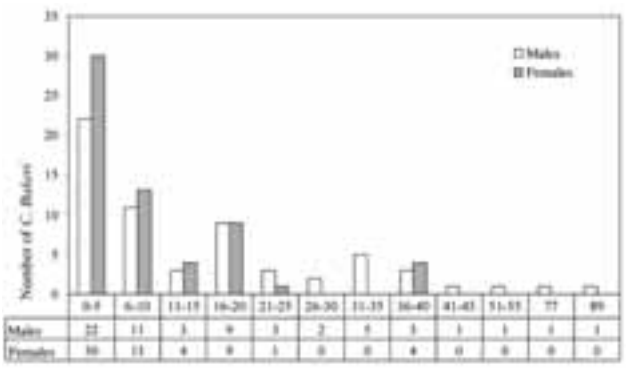
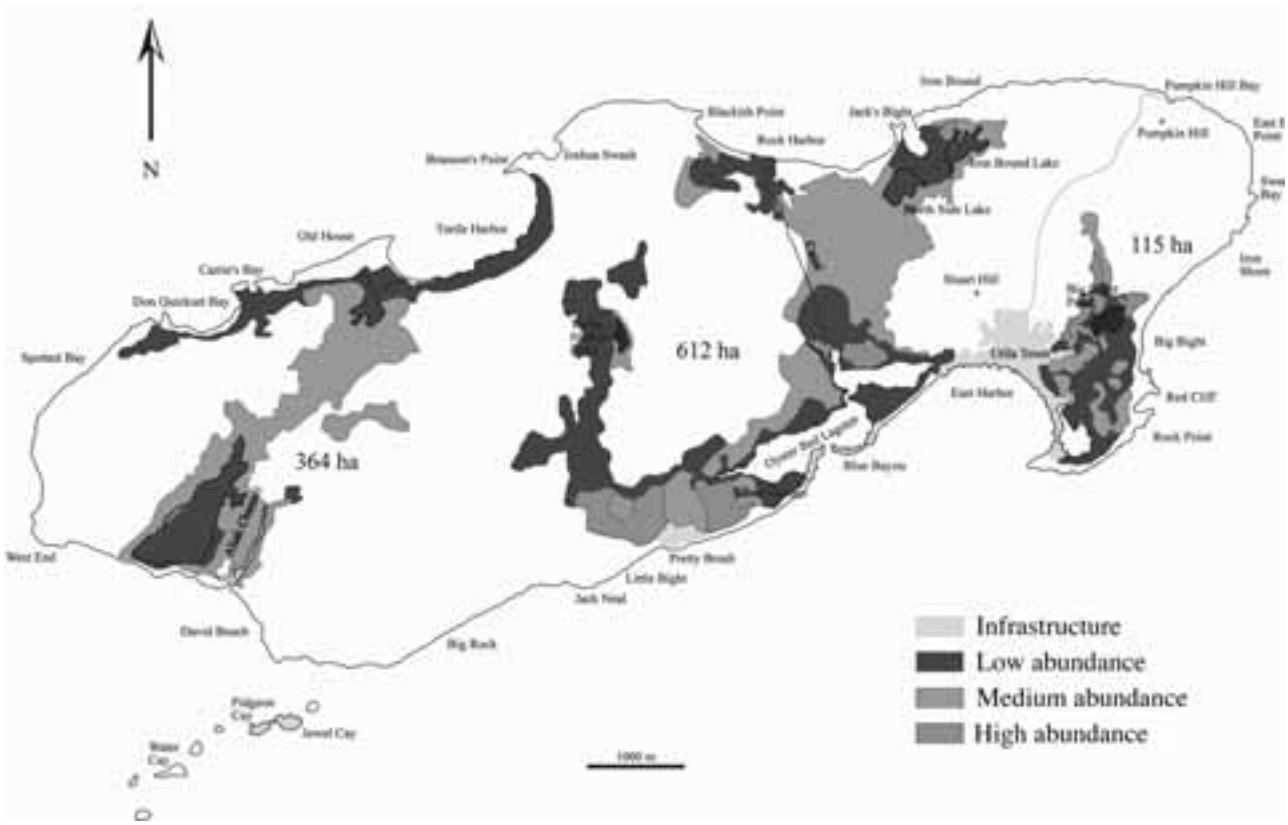


Distances between initial capture and recapture sites for *C. bakeri* in the three study areas. The x-axis is distance (m).

oration, and the flow of ground water, which collectively result in enormous fluctuations of salt content. Such abiotic conditions have a crucial influence on the distribution of individual mangrove species (Hogarth 1999, Tomlinson 1986) and may be responsible for the heterogeneous composition of Utila's mangroves.

The reasons for *Ctenosaura bakeri* adapting to specialized mangrove habitats on Utila are unclear. The species probably evolved from mainland-based ancestors. Potential ancestors may include the same ancestors as for *C. melanosterna* and *C. palearis*. *Ctenosaura similis*, which also occurs on Utila, belongs to a different subgenus (Buckley and Axtell 1990, Köhler et al. 2000, Köhler 2002). Access to the island may have involved over-water dispersal during hurricanes, as is known for *I. iguana* in the Lesser Antilles (Censky et al. 1998), or a landbridge to the mainland during the last ice age (Perfit and Heezen 1987, Pregill and Olson 1981). Two possible explanations for the habitat associa-



Hypothetical abundance of *C. bakeri* on Utila.

Table 2. Hypothetical total population of adult *Ctenosaura bakeri* on Utila. Calculations reflect extrapolations from actual capture data and from models 1 and 2.

Study Site	**#/ha** (capture data)	**#/ha** (model 1)	**#/ha** (model 2)	**Total Population Estimates** (1091 ha)
Blue Bayou	20	35	72	21,820 / 38,185 / 78,552
Big Bight Pond	37	43	70	40,367 / 46,913 / 76,370
Iron Bound	63	75	110	68,733 / 81,825 / 120,010