

TABLE 3.—SIMILARITY COEFFICIENT MATRIX FOR THE HERPETOFAUNA OF THE THREE MAJOR ISLANDS OF THE BAY ISLAND GROUP.¹

	Utila	Roatán	Guanaja
Utila	<i>18</i>	<i>13</i>	<i>9</i>
Roatán	<i>72</i>	<i>27</i>	<i>17</i>
Guanaja	<i>50</i>	<i>81</i>	<i>21</i>

¹Italicized numbers represent the total fauna of each area; numbers above those italicized indicate shared species and those below are the SC values.

INTER-ISLAND RELATIONSHIPS

The species compositions of the herpetofauna of the three major islands of the Bay Island group are distinctive and nonrecurrent (Table 2) in the sense of Savage (1967). Of a total of 35 species present on the island group as a whole, only 8 or 23% occur on all three of the major islands, 15 or 43% occur on two of the three islands, and 12 or 34% occur only on one island.

A similarity coefficient ($SC = 100c/n_1$, where c equals the number of species common to two faunas and n_1 equals the number of species in the smaller of the two faunas) matrix for the three islands is presented in Table 3. Utila, with 18 species, shares the greatest number with the island closest to it, *i.e.*, Roatán. Roatán, with 27 species, shares the greatest number with the island closest to it, *i.e.*, Guanaja. Guanaja, with 20 species, shares the greatest number with Roatán. Nine species are shared between Utila and Guanaja, including the eight species that occur on all three islands and one (*Ctenosaura similis*) that has not been found on Roatán and apparently does not occur there.

Of those 14 species that occur on only two islands, 8 are common to Roatán and Guanaja, 5 to Roatán and Utila, and only 1, mentioned above, is common to Utila and Guanaja, and not found on the middle island, Roatán.

Of the 13 species found on only one island, four are found on Utila, five on Roatán, and four on Guanaja.

COLONIZATION OF THE BAY ISLANDS

The present-day species compositions of the herpetofauna of the three major islands in the Bay Island group are largely depauperate, but distinctive reflections of the mainland herpetofauna. The low level of differentiation on the islands suggests that colonization and/or separation of the islands from the mainland has been relatively recent. The evidence presented by Vinson and Brineman (1963) suggests that the