

Nesting population and frequency of visits in *dermochelys coriacea* in Malaysia

ABSTRACT

A total of 37,654 leatherback turtle visits were recorded over a period of 10 yrs (1967- 1976) on the east coast of peninsular Malaysia. The mean number of visits/yr was 3765 (range 1962-6721), made by 1924 individual turtles (1067-3103), with a mean number of visits/turtle/yr of 1.96 (overall general mean). The mean number of visits/yr made by a turtle tagged in any one yr was 2.89 (overall tagged mean). The number of visits declined somewhat during the last 4 yrs of the program. The turtles visited mostly between May and September, with a peak of 626 individuals and 1278 visits (34% of the mean annual total) recorded in July. The visit (nesting) frequency/mo/turtle increased from April (1.84 visits per month) to June (2.20) and tapered off in September (1.24). The breeding population was estimated to be 15,525 females, the yearly survival rate 0.89, and the proportion of return of tagged turtles 0.31. About 2039 newly matured females were calculated to join the breeding population every year, 65% of which (=1328 individuals) would return to this beach. Maximum use was recorded in the middle part of the nesting beach, and the highest number of nests/km was 886, recorded in 1972. 33.4% of the total tagged turtles (12,997) visited the beach only once (when they were tagged). Those that returned 2, 3, and 4 times constituted 19.9%, 15.6%, and 11.0% of all turtles that returned at least once in subsequent years. The maximum number of visits made by a turtle during the ten yrs was 14, recorded for 6 turtles. The number of visits was found to differ significantly among years, among months, and among sectors of the beach ($P < 0.001$).