

SOME ASPECTS OF THE REPRODUCTIVE BIOLOGY OF SEA SNAKES,  
LATICAUDA SEMIFASCIATA (REINWARDT) AND  
LATICAUDA LATICAUDATA (LINNAEUS) ON  
GATO ISLET, CEBU WITH NOTES ON  
SEA SNAKE FISHERY

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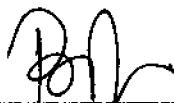
A Thesis

Presented to

the Faculty of the Graduate School  
University of San Carlos

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science in Biology

  
by

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Primitivo T. Bacolod

May 1982

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This thesis entitled "SOME ASPECTS OF THE REPRODUCTIVE BIOLOGY OF SEA SNAKES, LATICAUDA SEMIFASCIATA (REINWARDT) AND LATICAUDA LATICAUDATA (LINNAEUS) ON GATO ISLET, CEBU, WITH NOTES ON SEA SNAKE FISHERY," prepared and submitted by Primitivo T. Bacolod in partial fulfillment of the requirements for the degree of Master of Science in Biology has been examined and is recommended for acceptance and approval for ORAL EXAMINATION.

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## ABSTRACT

Some aspects of the reproductive biology of the two species of sea snakes, the Laticauda semifasciata (Reinwardt) and the Laticauda laticaudata (Linnaeus), that congregate at Gato Islet, off northern Cebu Island in the Philippines, were studied from January, 1979 to February, 1980.

The females of L. semifasciata and L. laticaudata lay eggs in crevices and on the rough surfaces of the walls of Gato caves throughout the year. The clutch size increases with body length in both species. It ranges from 1 to 10 in L. semifasciata, and from 1 to 5 in L. laticaudata. Sex ratio is in favor of females in L. semifasciata and of males in L. laticaudata. Their size at sexual maturity is probably reached at about 68 cm (SVL) in the male and 97 cm (SVL) in the female of L. semifasciata, and between 62-66 cm (SVL) in both sexes of L. laticaudata.

Testis lengths vary slightly from month to month in both species, indicating a non-seasonal pattern of reproduction. The results of histological examination of testes from a limited sample size suggest seasonality in their spermatogenesis. But the presence of spermatozoa which lined the lumina of the seminiferous tubules and the epididymis in regressed testes indicates a year-round breeding potential.

These two species of sea snakes have been heavily collected for their skin and meat. Overexploitation has to be regulated to prevent complete depletion of these species. The catch statistics of L. semifasciata gathered for a period of six years, documents a tremendous decline in their population on Gato Islet. The present state of commercial sea snake fishery, a conservation plan, and management recommendations are included in this paper.

Aseasonality of reproduction suggestive in the laticaudine species must be further studied. Gato Islet is an egg-laying site for these species. It should be declared a sanctuary.

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