Chayajit Deekrachang 2014: Life History and some Ecology of the Beaked Sea Snake (*Enhydrina schistosa* (Daudin, 1803)) in Songkhla Lake, Thailand.

Master of Science (Marine Science), Major Field: Marine Science, Department of Marine Science. Thesis Advisor: Assistant Professer Charuay Sakhsangchan, Ph.D. 141 pages.

Beaked sea snake (*Enhydrina schistosa*) is commonly found in Songkhla Lake and normally caught accidentally by fishing gears and thus, are always discarded and left to die. Therefore, the life history and ecology of beaked sea snake in Songkhla Lake need to be studied to gather scientific information on this aquatic species.

A total of 3,022 specimens of beaked sea snake (Enhydrina schistosa) were collected by gill net fishing gear types in Songkhla Lake between August 2012 and July 2013, mostly from the upper and middle zones of the lake. Catch rate of the snakes was related with the fishing effort. The sex ratio was about 1:1. Length-weight relationships were described by the following equation: in male W = 0.000343  $L^{2.993}$  ( $r^2$ = 0.575, n = 77), in female W = 0.00204  $L^{2.641}$  ( $r^2$  = 0.718, n = 79) and both male and female W = 0.000688  $L^{2.641}$ ( $r^2$  = 0.623 , n = 156), and the patterns of growth rate were allometric. Male beaked sea snakes could be distinguished from females from the following four aspects such as before vent girth, vent girth, tail depth and caudal length, which were significantly different at 95% level of confidence (P<0.05). The body length of both sexes was similar in size but most male of beaked sea snake were larger in girth than female, which was significantly different at 95% level of confidence (P<0.05). Beaked sea snake's habitat is in muddy grounds. It is a nocturnal predator. Mating season of beaked sea snake was noted to start in August until March. Reproductive organs of male and female were matured during July to November. The stomach contents were found to have 86 percent of fish in the family Ariidae and another 14 percent in the family Leiognathidae. The prey sizes preferred were related to the size of the beaked sea snake.

		//
Student's signature	Thesis Adviser's signature	