



Chapter 1

INTRODUCTION

Thailand is located in the tropical and subtropical zones and is a biologically rich country with many types of aquatic and terrestrial habitats. Approximately 7 percent of the world's species of flora and fauna occur in Thailand and many of them, including several species of reptiles are threatened with extinction. Twenty-six native species of turtles have been found in this country; three species of these are terrestrial turtles or tortoises. At present information on turtles of Thailand is still scant, and habitats are rapidly disappearing.

Das (1991) reported that large number of freshwater turtles and land tortoises, among them the yellow tortoises (*Indotestudo elongata*), were imported into China annually for the preparation of drugs. In a report on turtle trade, Shibata (1975) mentioned that the country of origin was Thailand (in Das, 1991).

Thirakhupt and van Dijk (1994) found that the yellow tortoise is the most widespread turtle species of western Thailand, particularly in the area around Khao Nang Rum, Huai Kha Khaeng Wildlife Sanctuary. Therefore this population can be studied over a long period. Since Huai Kha Khaeng Wildlife Sanctuary is well known for its World Heritage status comprising the most intact and well protected forest, it was chosen as the area for studying the ecology of yellow tortoise.

Worldwide, there are few studies on home range sizes and activity patterns of terrestrial turtles. In this study, yellow tortoises of different sex and age classes were fitted with radio transmitters of suitable size and strength. This enabled them to be relocated whenever required and ensured a steady supply of habitat selection and movement data.

The objectives of this study were ;

1. to determine the home range size of the yellow tortoise, *Indotestudo elongata*.
2. to describe activities of the yellow tortoise.
3. to describe some environmental conditions affecting the activities of the yellow tortoies.
4. to conduct a preliminary study on the survival ability of captive yellow tortoises when released back to natural habitat.

The benefits of this study should provide new and useful basic information as follows :

1. Information on home range sizes, which could be used for determining reserve areas for the yellow tortoise, and could possibly be used for other terrestrial turtles of Thailand.
2. New basic information on the population ecology of terrestrial turtles which is still little known for asian species.
3. Information on the survival of captive yellow tortoises that were released back to natural habitat.