

Huang Chu-Chien

Institute of Zoology
Academia Sinica

**Distribution of Sea Turtles
in China Seas**

Introduction

To learn about the habits and geographical distribution of our sea turtles, we have made investigations from Haiyang Island of the Bohai Sea in the north through the Yellow Sea to the Zhoushang Islands of the East China Sea, then south along the coastal sea of Fujian (Fukien), Guangxi (Kwangsi), and Hainan Island of Guangdong (Kwangtung) to the Xisha Islands. The sea turtles increased in species and number as we sailed southward. Only a few scattered green turtles (*Chelonia mydas*), loggerhead turtles (*Caretta caretta*), and leatherback turtles (*Dermochelys coriacea*) were found in the Bohai Sea and Yellow Sea. Hawksbill turtles (*Eretmochelys imbricata*) appeared in the East China Sea. Sea turtles increased in number around Hainan Island, while only the islands in the South China Sea were the center of reproduction and habitat of the sea turtles in China.

Over the years, the fishermen of Hainan Island have often fished the Xisha and Nansha Islands. While sea turtles have been one of their quarries, their catches, made by hand from small sailing boats, have been small.

Individual Ecology and Distribution of the Sea Turtles

Sea turtles can be seen around Xisha Islands and Nansha Islands all year. One migrant population returns annually to reproduce beginning about April with the southwest warm currents. In addition, a local population resides there.

Four species of sea turtle are distributed in our country: the leatherback turtle, the loggerhead turtle, the green turtle, and the hawksbill turtle.

The Leatherback Turtle (Dermochelys coriacea)

The leatherback turtle's main egg-laying season is from May to June; 90 to 150 eggs are laid in each clutch. The young turtles hatch after 65 to 70 days and swim quickly out into the sea, but often a dozen eggs in each

clutch fail to develop. Leatherback nests are about 65 cm deeper than those of other sea turtles. This species continues to lay eggs even when disturbed while laying. Because leatherbacks cover their eggs with sand, their nests are hard to find. Leatherback turtles feed on algae, shrimps, crabs, molluscs, and fish.

In China, leatherbacks occur along the coastal seas of Guangdong (Kwangtung), Guangxi (Kwangsi), Fujian (Fukien), Zhejiang (Chekiang), Jiangxi (Kiangsi), Shandong (Shantung) and Liaoning.

The Loggerhead Turtle (Caretta caretta)

The loggerhead turtle nests from April to August, digging nests 33 to 65-cm deep and laying from 60 to 150 eggs in a clutch. The eggs generally hatch in about 2 months, depending on the season and the nest site. Loggerheads eat fish, shrimps, crabs and molluscs.

In China loggerheads are found along the coastal seas of Taiwan, Guangdong (Kwangtung), Guangxi (Kwangsi), Fujian (Fukien), Zhejiang (Chekiang), Jiangsu (Kiangsu), Shandong (Shantung), and Hebei (Hopei).

The Green Turtle (Chelonia mydas)

In the Xisha Islands, the green turtle's main breeding season is from May to July. Eggs can be found from April to December.

Large green turtles weigh about 450 kg (Figure 1). They often hold their head above water for 15 to 20 minutes when swimming. Mating is often observed from January to April. Males and females chase each other in a round-about way before mating, and they mate at the base of the reef. During the breeding season the female crawls up the beach beyond the high tide line,



Figure 1. Green turtles captured for market.

Table 1. Catch of sea turtles in Xisha region, 1959-70

Year	Catches (kg × 10 ³)
1959	130.63
1960	40.60
1961	54.02
1962	38.74
1963	103.01
1964	61.10
1965	181.35
1966	86.86
1967	149.91
1968	42.96
1969	104.78
1970	122.56

digs a big hollow pit with its fore limbs and then a nest pit 33 to 65-cm deep with its hind limbs. It will go back into the sea if disturbed immediately after landing but generally will not stop laying once it begins to lay. The female lays 3 times a year at intervals of about 2 weeks, 300 to 500 eggs annually. The spherical soft-shelled white eggs, 40 to 44 mm in diameter, are covered up with sand in the nest. Young turtles, 4-cm long, hatch in 40 to 50 days and quickly crawl into the sea. They eat algae, shrimps, crabs, molluscs, and fish.

In China green turtles are found along the coastal seas of Taiwan, Fujian (Fukien), Guangdong (Kwangtung), Guangxi (Kwangsi), Zhejiang (Chekiang), Jiangsu (Kiangsu) and Shandong (Shantung).

The Hawksbill Turtle (Eretmochelys imbricata)

The hawksbill, fierce and scarce, inhabits coral reefs, laying 3 clutches of eggs a year in the daytime in March and April. Each clutch consists of 130 to 200 eggs which hatch after 2 months or so. The hawksbill feeds mainly on fish, shrimps, crabs, molluscs, and algae.

In China, hawksbills are found along the coastal seas of Taiwan, Guangdong (Kwangtung), Guangxi (Kwangsi), Fujian (Fukien), Zhejiang (Cheking), Jiangsu (Kiangsu) and Shandong (Shantung).

Turtle Catch Records

The statistics of our Yong Xing purchasing station are shown in Table 1. Around the Xisha Islands, only the green turtle and the loggerhead turtle were objects of fishing, while the green turtle was the main object. Because the purchasing station has no classified statistics, the values shown in Table 1 represent both species. The amounts purchased in 1959-70 represent basically the catch of the area around the Xisha Islands.

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Karen A. Bjorndal
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Front cover: Adult female green turtle, *Chelonia mydas*, at French
Frigate Shoals, the major migratory breeding site for this species in
the Hawaiian Islands. Photo by G. H. Balazs.