



**KENTING NATIONAL PARK**

HEADQUARTERS  
272 KENTING ROAD, HENGCHUN, PINGTUNG  
TAIWAN, REPUBLIC OF CHINA



ENTD AUG 17 1993



Hawaii Institute of Marine Biology  
University of Hawaii  
Hawaii, 96744  
U.S.A.

May 15, 1987

Dear Sirs:

We are pleased to inform you that there was a sea turtle in sign of "HIMB, Hawaii University 96744; 4326-left foot; 4327-right foot" has been caught by fishermen at the Nan-Wan Bay of Kenting National Park on April 18, 1987, and been released back to the Pacific Ocean on May 7. According to our record, the species name of this sea turtle is Chelonia mydas (Linnaeus). It weights 115 kg, the health condition is well.

Attached please find a copy of map which shown the place where we caught and released the turtle. Since the turtle has traveled such a long distance, I am very curious about its living environment and other ecological data. If there is any information about its living history and the experimental data, please contact me. Your assistance would be very much appreciated.

With best wishes,

Sincerely yours,

*Tsann-Yang Tzou*

Tsann-Yang Tzou  
Research Fellow  
Division of Conservation &  
Research



**U.S. DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**NATIONAL MARINE FISHERIES SERVICE**  
Southwest Fisheries Center Honolulu Laboratory  
2570 Dole St. • Honolulu, Hawaii 96822-2396

June 1, 1987

F/SWC2

Dr. Tsann-Yang Tzou  
Research Fellow  
Division of Conservation & Research  
Kenting National Park  
272 Kenting Road, Hengchun Pingtung  
Taiwan, Republic of China

Dear Dr. Tzou,

I am writing to thank you for your most interesting letter of May 15, 1987 reporting the recovery of a large green turtle with tags 4326 and 4327. Our agency is currently using tags on sea turtles that bear the "HIMB" inscription.

The turtle that you documented was originally tagged by our cooperating researchers in the Pohnpei region of the Federated States of Micronesia. The turtle was tagged while nesting at Oroluk Atoll on June 2, 1986. Oroluk is located at approximately 7°35'N, 155°10'E, and has only a very small resident population of native Micronesians. Oroluk is said to be the most important nesting site for green turtles in the Pohnpei islands. However, our cooperative researchers have worked there during the 1985 and 1986 nesting seasons and have only been able to tag a total of 15 turtles. The Oroluk nesting colony appears to be severely depleted and in danger of becoming extinct.

We would very much like to learn more about the tagged turtle you found, as well as the marine habitat in the region where it was captured. Your assistance with the following questions will be greatly appreciated.

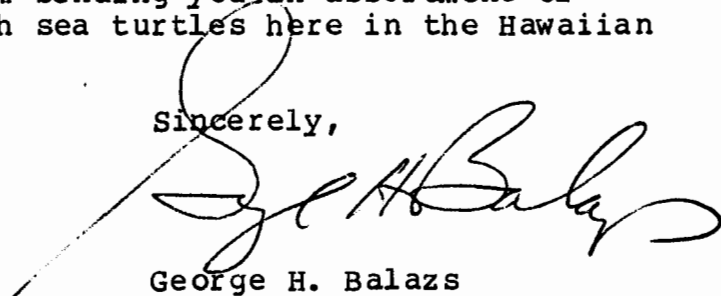
- 1). By what method was the turtle captured? Was it accidentally caught in another fishery, or was the fishing effort directed toward sea turtles?
- 2). Are other turtles known to regularly occur in the area where the tagged turtle was captured?
- 3). Have you heard of any other sea turtles with tags, past or present, having been captured in your area or anywhere else along the coast of your country?
- 4). Do the people in your area eat sea turtles or have a commercial fishery for them?



- 5). Are there any known nesting beaches for sea turtles in your area? If so, what species are involved?
- 6). What were the circumstances, and where was the turtle held, between the time it was captured on April 18th and later released on May 7th?

If any photographs were taken of the turtle, we would be grateful to receive a few copies. Again thank you for writing to report this important discovery. We look forward to hearing from you again. Under separate cover I am sending you an assortment of literature covering our work with sea turtles here in the Hawaiian Islands.

Sincerely,



George H. Balazs  
Zoologist

ENTD AUG 17 1993



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southwest Fisheries Center Honolulu Laboratory  
2570 Dole St. • Honolulu, Hawaii 96822-2396

June 2, 1987

F/SWC2

Mr. Flinn Curren  
Marine Resources Division  
Pohnpei State Government  
P.O. Box B  
Kolonia, Pohnpei  
Federated States of  
Micronesia 96941

Dear Mr. Curren,

I never thought that I would be writing to you again so soon with some exciting news. We have just received a letter from the Kenting National Park in Taiwan saying that the green turtle with tags 4326/4327 had been captured alive in Nan-Way Bay on April 18, 1987. The turtle was later released back into the sea reportedly in good health on May 7th. My records show that turtle 4326/4327 was tagged while nesting on Oroluk on June 2, 1986. She measured 99 cm in curved carapace length, and was only seen once at which time 72 eggs were laid.

This is an exceedingly important tag recovery for the Western Pacific. It suggests that at least some green turtles nesting at Oroluk are derived from resident foraging pastures in the South China Sea. The recovery also points out the critical importance of applying tags to nesting turtles, even in small numbers such as at Oroluk. The documentation of international migrations for sea turtles is absolutely essential if sound management strategies are to be formulated.

I will be in contact with you again after I obtain more information from officials at the Kenting National Park. In the meantime, I encourage you to incorporate this tag recovery in the note for Marine Turtle Newsletter.

Sincerely,

George H. Balazs  
Zoologist

cc: Dr. Helfrich, HIMB  
Mike Gawel  
Jack Woody, FWS National Sea Turtle Coordinator





## KENTING NATIONAL PARK

HEADQUARTERS  
272 KENTING ROAD, HENGCHUN, PINGTUNG  
TAIWAN, REPUBLIC OF CHINA

Dr. George H. Balazs  
U. S. Department of Commerce  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southwest Fisheries Center Honolulu Laboratory  
2570 Dole Street  
Honolulu, Hawaii 96822-2996  
U. S. A.

Dear Dr. Balazs:

Thank you for your letter and the valuable references of June 1. In the letter of May 15, I have indicated the capturing place of the green turtle in an attached map. It is located in the east side of Nan-wan Bay, southern Taiwan. The habitat is a coral reef and relatively protected from current and wave actions. The turtle was captured accidentally by a beach seine. The beach seines are set up by local fishman for capturing commercial fishes. However, green turtles sometimes run into the seines and can not escape. Although there is no accurate statistics, as I know, more than 50 sea turtles has been caught by the beach seines in southern Taiwan in recent two years. Since the people at here do not eat sea turtles, all of them have been released back to the sea. The people (especially elder people) think turtle-releasing is a kind of moral benevolence which will add to their life or bring them good luck. But it only works when the turtles are released on some 'good days'. This is the custom of local people and it is why the turtle was captured on April 18th and released later on May 7th. During this period the turtle was reared in a big outdoor aquarium with good aeration and food supply. Although the local people have released more than 50 turtles the turtle I reported is the only one with tags. Other species of turtles also occur in this area but it is minor. Several years ago, there are 2-3 small nesting beaches in southern Taiwan. But as the population increased rapidly in recent years, the sea turtles are rarely come back to nest again. Since the study on sea turtles is minimal at here, we have very few information about their biology.

Enclosed please find three photos took on May 7th for the turtle.

With best wishes,

Yours sincerely,  
Tsann-Yang Tzou  
Tsann-Yang Tzou

June 23, 1987



KENTING NATIONAL PARK  
HEADQUARTERS  
272 KENTING ROAD, HENGCHUN, PINGTUNG  
TAIWAN, REPUBLIC OF CHINA

Dr. George H. Balazs  
U. S. Department of Commerce  
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June 23, 1987





**U.S. DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**NATIONAL MARINE FISHERIES SERVICE**  
Southwest Fisheries Center Honolulu Laboratory  
2570 Dole St. • Honolulu, Hawaii 96822-2396

June 30, 1987

F/SWC2:GHB

Dr. Tsann-Yang Tzou  
Kenting National Park  
272 Kenting Road, Hengchun, Pingtung  
Taiwan, Republic of China

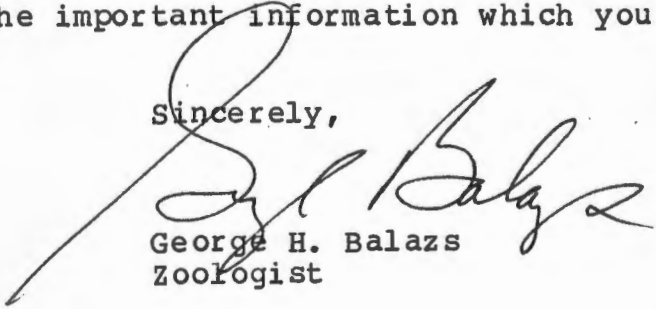
Dear Dr. Tzou:

I am most pleased to have received your letter of June 23, 1987 providing additional information on the tagged turtle recovered and safely released in your area. The reason for the delay in letting the turtle go was indeed interesting. If more people held such benevolent beliefs, I am sure that the survival status of sea turtles would be much improved!

If another turtle is ever found with a tag, I would greatly appreciate hearing from you, even if the tag address is from a different location.

Again, thank you for the important information which you supplied.

Sincerely,

  
George H. Balazs  
Zoologist



Teresa L. Herring  
P.O. Box 9  
Kolonias, Pohnpei 96941  
Federated States of Micronesia

October 22, 1985

Dr. George H. Balazs  
National Marine Fisheries Service  
P.O. Box 3830  
Honolulu, Hawaii 96812

Dear Dr. Balazs:

Attached is a copy of the final report for the 1985 nesting season at Oroluk Atoll. The turtle data that I sent to you in July with the humerus bones contains some incorrect information. Please refer to page 2, table 1 of the attached final report. The correct carapace length for turtle #2 is 95cm (initially recorded as 90.5cm). The correct carapace length for turtle #4 is 107cm (initially recorded as 100.7cm). This error is due to a misreading of the tape measure. The other measurements are correct.

An additional tagging was made in Pohnpei at Pohnpei Marine Resources Dept.. The data is as follows:

Green turtle; tag #4310/4311; size: 48.5cm; date: 9/17/85.  
It was captured at Kapingamarangi Atoll and transported to Pohnpei on field ship. It was confiscated, tagged and released.

In reference to your July 22, 1985 letter regarding US federal permits. I sent two applications for permission to work with green and hawksbill turtles before I ever talked to you about working under your laboratory's supervision. No permits were issued due to the lack of information on applications. This is OK. We are satisfied working under your supervision.

You previously mentioned that an instructional video on tagging procedures could be provided for our project. Is this still possible? It would be very useful here.

If you have any questions or if I can be of further assistance to you, then please let me know.

Sincerely,

*Teresa*  
Teresa L. Herring



# 1985 Sea Turtle Population Assessment of Oroluk Atoll

BY

Teresa L. Herring  
Peace Corps Volunteer  
Pohnpei, Federated States of Micronesia

## I. INTRODUCTION

Oroluk Atoll is a low coral atoll located northwest of Pohnpei (7°30'N, 155°20'E) (Figure 1). Since the early 1960's until present a group of 6 - 20 Kapingamarangi people have resided on Oroluk Island with Pohnpei government's consent. In the past, residents have observed large numbers of hawksbill sea turtles (Eretmochelys imbricata) and green sea turtles (Chelonia mydas) utilizing Oroluk Island as a nesting ground. Recently, there have been reports of drastic decline in green turtle nesting and little to no hawksbill turtle nesting. A rapid decline in nesting is due to increasing human population pressure, development of previously uninhabited islands and increasing hunting for turtles.

The inhabitants of Oroluk have built a stone holding pen, and turtles are placed within the pen to await the government field trip ship which calls about 4 - 6 times per year. Until recently turtles were loaded aboard the field trip vessel for return to Pohnpei, where they were either sold or eaten in the Kapingamarangi village there. The enforcement of the Endangered Species Act has put a stop to commercialization but subsistence use is still allowed under Federal Law (McCoy, 1982).

Due to the current population status of sea turtles in Micronesia, the hawksbill turtle is listed as endangered and the green turtle is listed as threatened. Therefore, certain hunting restrictions exist.

The nesting season is reported to be from May- September. Pritchard (1982) reports that nesting occurs in December and January, but residents I have interviewed contest this report. The small island near Keltie Pass (Figure 1) was once a turtle nesting ground, but is no longer utilized.

Conservation attempts by residents have existed for many years. Fencing, if available, or logs are placed around approximately 50% of the nests to hold the emerging hatchlings. The hatchlings are held in an ice chest- type container for 3- 4 months until the carapace is hard and the turtle large enough to avoid predation. The hatchlings are fed clam meat. The remaining uncovered nests are allowed to hatch naturally. Other conservation methods include: no harvesting of eggs, females are only captured after nesting and, as reported by a recently returned resident, only one turtle is eaten monthly.

The Oroluk project goals for nesting season 1985 were to assess the sea turtle population and tag turtles with identification tags, assess the coconut crab (Birgus latro) population and to make other general resource observations. Oroluk Atoll is a large rookery for various bird species. Future bird population assessments will be conducted. It is important to note that the remoteness of Oroluk Atoll makes transportation and work there difficult.

## II. METHODS

Nightly patrols were made from June 1- July 10, 1985 on Oroluk Island (Figures 1&2). As the female turtle was laying her eggs, a straight-line carapace length was measured and the number of eggs counted. On her return to the sea she was turned over and two Inconel tags applied, one on each front flipper. All information was recorded on data sheets, including: identification tag numbers, date/time, carapace length, false crawl or nest, number of eggs, nest location, weather conditions and identifiable bodily characteristics (Table 1). A false crawl is defined as an attempt by the female turtle to crawl on land in search of a nest site, but if disturbed she will not nest and return to the sea. Also, old discarded humerus bones were collected and sent to National Marine Fisheries Service, Hawaii, for age dating.

The coconut crab population was assessed almost nightly by randomly selecting a station with 2- 4 sampling areas. Each area was stepped-off to be 30- 35 sq. meters in size (average 32 sq. meters). In each area were placed 5- 7 coconut halves as bait that were allowed to remain for 1- 2 hours before counting the crabs. All sized crabs were counted and usually the largest were captured and eaten. The project team observed that the crabs preferred to crawl on grass and coral areas and would not crawl on sandy areas. It should be noted that these crabs may have been repeatedly counted in different stations. Data was collected on the date, time and total number of coconut crabs in each area (Table 3).

## III. RESULTS AND DISCUSSION

Table 1. Green sea turtle nesting data at Oroluk Island, June 1 to July 10, 1985.

Turtle #	Tag #	Date/time	Carapace length(cm)	False crawl/Nest	#Eggs
1	4302;4303	6-4-85/0135	110cm	false crawl	--
"	"	6-11-85/0500	"	nest	120
2	4304;4305	6-26-85/0105	95cm	false crawl	-
3	4306;4307	7-1-85/ 0505	100cm	nest	132
4	4308;4309	7-4-85/0405	107cm	nest	128

The green sea turtle was the only species of turtle seen and tagged by the project team. Three nests and two false crawls occurred (Figure 2). Four female turtles were tagged. The project team explained to the Oroluk residents the importance of this work and tagging efforts. The residents agreed not to kill or eat turtles with tags.

The residents of Oroluk reported the total number of nests for each month of the 1985 nesting season (Table 2). The first nest was laid on April 24, 1985.

Table 2. Monthly nesting of green turtles at Oroluk Island, 1985.

	<u># of nests</u>
April	1
May	20
June	3
July	18
August	7
September	1
October	0
total # nests	<u>50</u>

Table 3. Coconut crab data at Oroluk Island, 1985.

Station #	Date	Time	Area #	# Crabs in each area
1	6/4	2224	1	9
			2	6
			3	9
			4	5
2	6/5	2230	5	0
			6	4
			7	4
3	6/6	2343	8	14
			9	24
			10	23
4	6/8	2202	11	10
			12	7
5	6/10	2230	13	7
			14	6
			15	7
6	6/11	2110	16	3
			17	10
			18	7
			19	3
7	6/12	2355	20	5
			21	7
			22	15
8	6/13	2158	23	5
			24	5
			25	3
9	6/14	2205	26	10
			27	25
10	6/15	2215	28	20
			29	15
			30	30

Continued Table 3. Coconut crab data at Oroluk Island, 1985.

Station #	Date	Time	Area #	# Crabs in each area
11	6/16	2215	31	25
			32	17
			33	20
12	6/17	2225	34	15
			35	13
			36	16
13	6/18	2156	37	8
			38	20
			39	16
14	6/19	2240	40	20
			41	15
			42	21
15	6/20	2302	43	16
			44	21
			45	17
16	6/21	2113	46	13
			47	15
			48	24
17	6/22	2138	49	11
			50	25
			51	15
18	6/23	2245	52	12
			53	18
			54	13
19	6/24	2302	55	10
			56	5
			57	15
20	6/25	2230	58	10
			59	5
			60	10
21	6/26	2235	61	0
			62	10
			63	5
22	6/27	2150	64	13
			65	11
			66	3
23	6/28	2115	67	2
			68	3
			69	3
24	6/29	2215	70	0
			71	0
			72	0
25	6/30	2230	73	15
			74	20
			75	13
26	7/2	2305	76	5
			77	3
			78	4

There were 869 coconut crabs counted in 78 areas (26 stations). It is estimated that .35 coconut crabs per square meter inhabit Oroluk Island.

$$\frac{869 \text{ total \# crabs} / 78 \text{ areas}}{2496 \text{ total \# sq. meters} / 78 \text{ areas}} = \frac{11.14 \text{ average \# crabs}}{32 \text{ average sq. meters}}$$

$$= .35 \frac{\text{coconut crabs}}{\text{sq. meter}}$$

Budget

This budget is planned to support a working team of two people for 2 months. These figures are not exact.

A. Transportation	\$169.00
B. Provisions (food)	400.00
C. Equipment	231.00
D. Labor	1000.00
Total cost	= \$1791.00

IV. CONCLUSION

The sea turtle is a valuable food resource. The meat provides an important source of nutrition to people of the FSM in their subsistence lifestyle. A decline in the sea turtle population will adversely effect the availability of this food resource. It is obvious that a rapid decline in turtle nesting exists at Oroluk Atoll. Conservation and management measures must be established soon in order to stabilize and increase the population.

Since the nesting season at Oroluk is reported to be from May to September, an accurate account of the nesting population can not be made if the project team is there for only one month. It is strongly recommended that the turtle assessment work be reported for the full 1986 nesting season at Oroluk Atoll.

Prospective plans exist to establish Oroluk Atoll as a marine reserve. In order for these plans to be met, more resource assessment and research work must be conducted.

V. ACKNOWLEDGMENTS

The 1985 sea turtle population assessment project was funded by the Economic Development Authority. Mike Gawel, FSM Chief of Marine Resources, acted as advisor to the project. Dr. George H. Balazs, Wildlife Biologist for National Marine Fisheries Service, Honolulu, Hawaii, provided technical information, permission to tag turtles and supplied the tags. Tashiro Ludwig

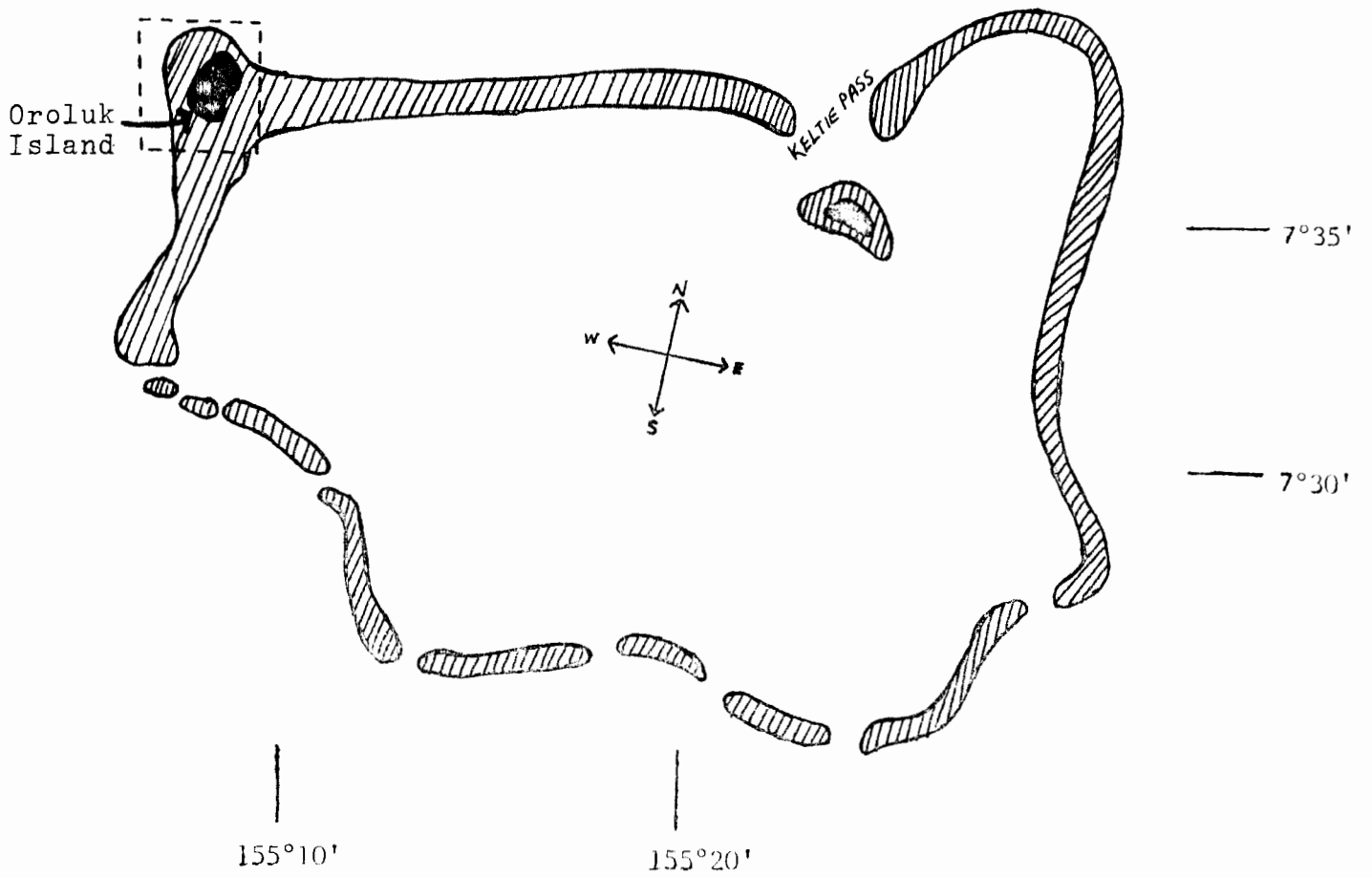
and Flinn Curren, Pohnpei Marine Resources Division, provided technical assistance. Kikuo Apis and Dan Perrin, Conservation and Resources Surveillance, provided project support. The project was successful due to the hard work of the project team: Akapito Semens, Roy Lawson and the Oroluk residents.

#### VI. REFERENCES

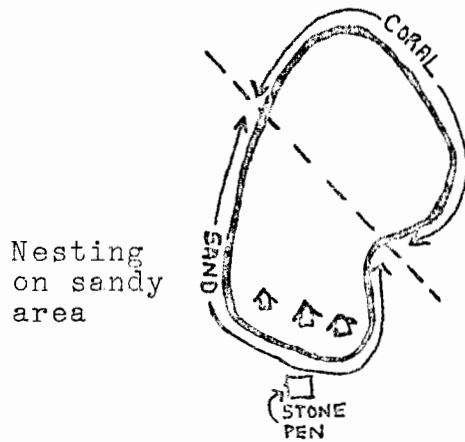
- McCoy, Mike A. 1982. Subsistence Hunting of Turtles in the Western Pacific: The Caroline Islands. In, Bjorndal, K. (Ed.). The Biology and Conservation of Sea Turtles. Smithsonian Institution Press, Washington, DC, pp. 275- 280.
- Pritchard, Peter C. H. 1982. Marine Turtles of Micronesia. In, Bjorndal, K. (Ed.). The Biology and Conservation of Sea Turtles. Smithsonian Institution Press, Washington, DC, pp. 263- 274.

ORCLUK ATOLL

■ land  
▨ reef



ORCLUK ISLAND



\*Note: map not drawn to scale

Figure 1. Location of project

OROLUK ISLAND

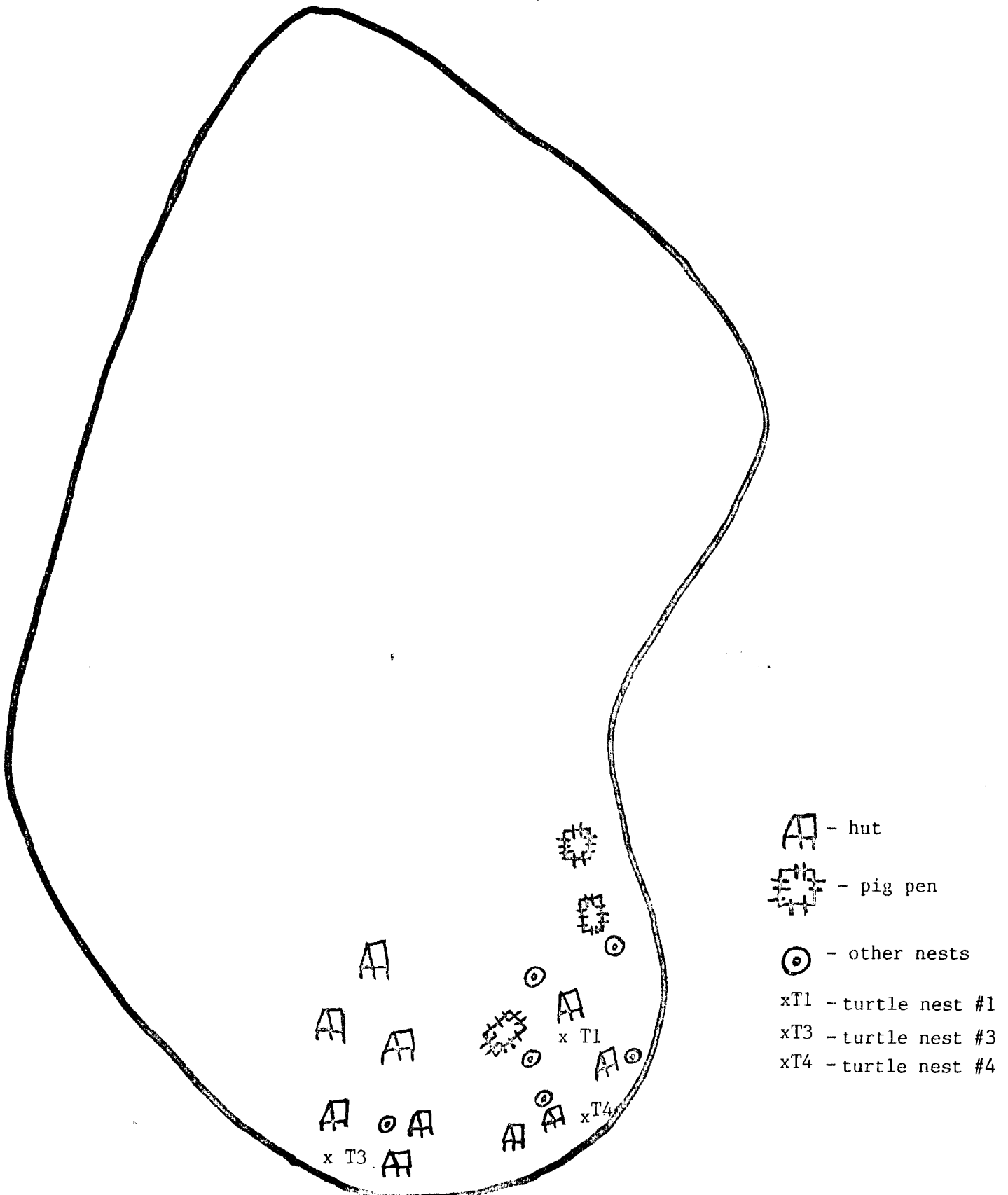


Figure 2. Map of Oroluk Island

pig pen

Map of Oroluk Island

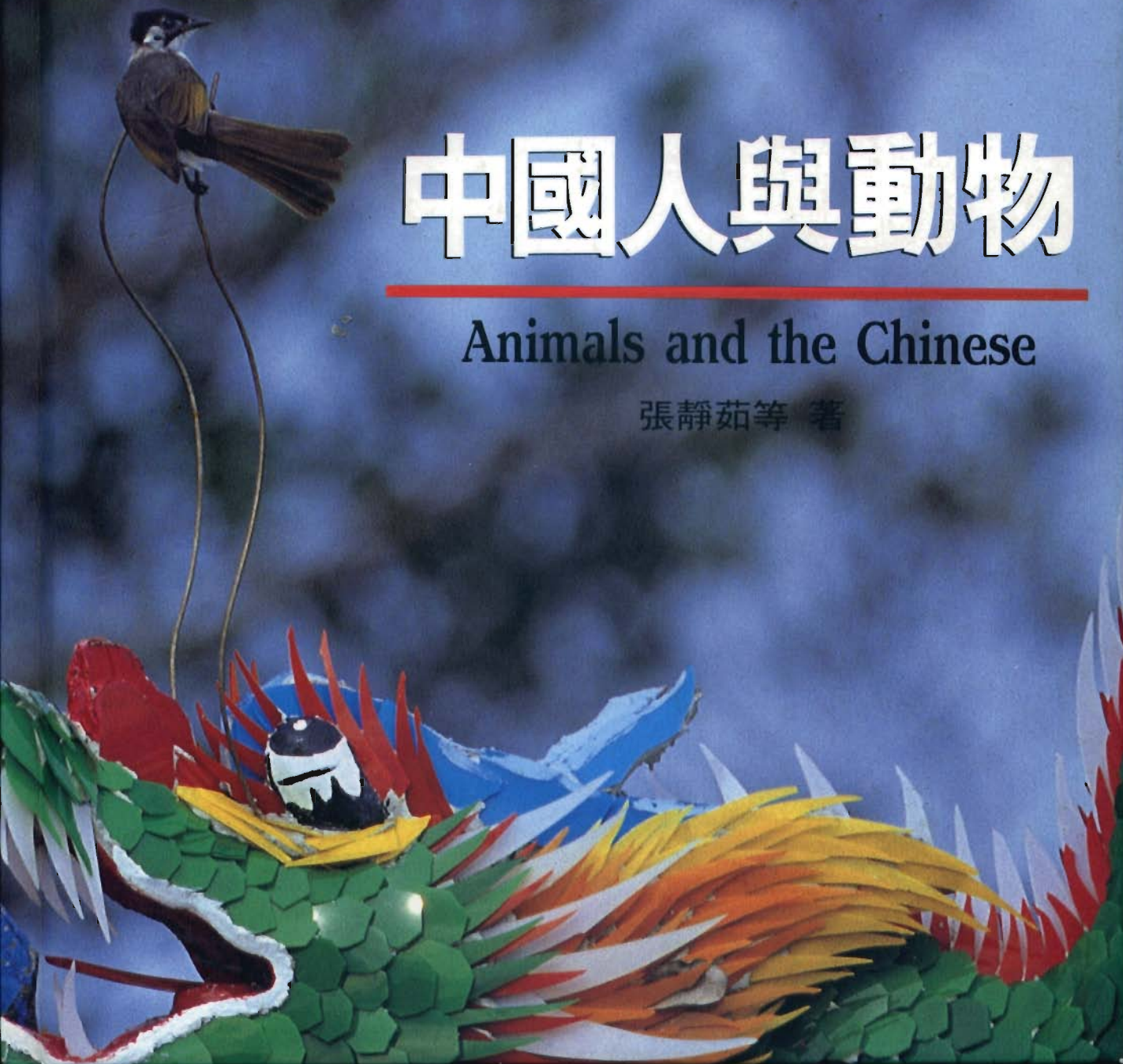


《生態保育系列》

# 中國人與動物

Animals and the Chinese

張靜茹等 著



# 序(一)

Preface I

## 子子孫孫永實用

■ 胡志強

經濟發展與文明進步的目的，應該是為了讓人們生活得更有尊嚴。光華雜誌出版「中國人與動物」的動機，是希望今天人們在物質生活已無匱乏的同時，仍能確保一個更適合人們長久居住的環境。這也是尊重和愛護我們的下一代，表示我們了解自然資源是向後代子孫暫借，而為之保留一塊充滿自然生機的淨土。人們開發這個世界的時候，不但要尊敬自然，進而更要尊敬與自然互動而產生的文化。

在生態保育已成爲世界大勢所趨，並凝聚爲全球性的行動之時，臺灣地區經濟的蓬勃發展有目共睹。緊接著，生活環境品質、生態保育工作，是否隨著經濟進展而逐日提升，也是我們欲躋入更進步、文明國家之林的更高標竿。我們由十年前開始規劃成立墾丁第一個國家公園，拉開了生態保育工作序幕，其間面臨的困境與努力，也有必要讓世人知曉。

從光華雜誌多年來所累積的有關生態保育的報導中，我們了解到，不論

物質或精神，都必須倚賴健康的自然環境來提升；了解到只有尊重自然，才能創造健全的下一代，社會也才能更和諧；了解只有認識自己的土地，才可能愛護這塊土地，並累積社會的反省能力；也只有透過人人深層的思考，才可能化爲行動，才有辦法真正做好生態保育。

生態關懷絕不只是口號，但保育工作要能扎根，還需要人們由內心徹底了解，關心自然生命與人性之間有密不可分的关系。自然資源一旦被破壞，再難完全重生。我們衷心希望，能讓這塊土地上永恆的自然價值，被人們寶惜尊重。



發行人

# Guarding Nature's Treasures for Future Generations

By Jason C. Hu

**T**he purpose of economic development and civilization's progress ought to be to give people's lives greater dignity. *Sinorama* is publishing *Animals and the Chinese* in the hope that today, living free from material want, we will be sure to preserve a suitable living environment for the long term. By so doing we are showing respect and love to our future generations, showing that we understand both that natural resources are being temporarily borrowed from our children and grandchildren and the importance of keeping a clean land full of natural vitality for them. When people pursue development, they not only must respect nature but go a step further to respect the culture that comes from the interaction of man and nature.

As the ecological conservation movement has established itself worldwide, the economic prosperity brought by the development of Taiwan has been undeniable. The question today is can the quality of the living environment and ecological conservation work be pursued day in and day out with the same vigor? These higher standards will be necessary if we are to enter the ranks of the more advanced and civilized countries. Since a decade ago, when planning on the first R.O.C. national park in Kenting raised the curtain on ecological conservation work here, we have needed to let the people of the world know the difficulties we have faced and the efforts we have made.

From the experience we have gained at *Sino-*

*rama* making ecological reports, we know that both the body and the spirit need a healthy natural living environment. Only by respecting nature can we bring healthy future generations into this world, and only by so doing will society be more harmonious. By understanding the land, we can learn to care for it and society will learn how to reflect upon its actions. And if everyone thinks about these issues deeply, this can be turned into action that brings effective ecological conservation.

Concern for the ecology is not only a slogan. But if conservation work is to be done thoroughly, it requires that people have an understanding deep down inside that nature is inextricably bound together with humanity. Once a natural resource is damaged, it is extremely hard to restore completely. We sincerely hope that we can let this world's eternal natural value be treasured and respected by people.



Publisher



我的長相就是這樣，不難看吧！陣陣漣漪是吐氣時造成的。 Here's what I look like — not bad, huh?

# 海龜回家

A Sea Turtle Goes Home

文／圖・鄭元慶

爬過沙灘，方一觸到清晨涼冽的海水，半個多月來的懷疑和疲憊，驟地消失。然後我開始認真思考所謂「成見」的問題。

或許真的和年齡、閱歷有關；有了這兩次經驗，我對人類的看法的確有了改變。

我是隻「海龜」，作學問的稱作「綠蠔龜」，身長九十公分，寬六十公分，體重目前總在一百廿公斤上下。

海中歲月長。閒著也是閒著，我常常一邊游、一邊想些事情。據說，在二億五千萬年前的龜類已在地球上這麼游著了。除了海龜，還有陸龜、淡水龜，細分種類有二百五十種之多。最小的只七公分長，最大的有六百八十公斤……。不知道牠們是不是也和我一樣，聽、嗅、視覺靈敏，能辨別顏色却看不遠？並且愛思考？

### 我好比那淺水龍困沙洲

今年四月十八日，天氣有些悶熱，我游著、想著，忍不住打了個盹兒，不想醒來却跟一羣傻魚兒困在張大網裏。挨到日落，漁民收網時，看到我縮頭縮尾（怕嘛！）地躺在網裡，就有人眉開眼笑地嚷著可論斤出售，還有個年紀大些的叫著說：「海龜肉比牛肉好吃哪！」

曾經聽同伴們說過，日本南方小笠原羣島的居民，有吃海龜肉的習慣，難道這裡的人也一樣？我對人類感到失望。

我仍然把腦袋和四肢都緊緊縮在殼裡。海龜類壽可百歲，除了天賦，就靠這身雖薄却硬的甲冑了。相信嗎？它貌不驚人，却經得起鱷魚大咬一口呢。

還是得想個辦法，慌亂之中倒也心生一計；當下就盡量伸展前腳，「秀」出腿上的不銹鋼「護身符」。一位眼尖的漁民看到了問：「這是什麼？」一陣議論，他們終於承認，我是隻不平凡的海龜，也就不敢隨便「處理」。

**A**s soon as I crawled over the beach and touched the cold morning seawater, the doubts and fatigue I had felt over the past few weeks suddenly vanished. Then I began to think about what I had been through.

Maybe it has something to do with age and experience, but with these two experiences behind me, my idea of humans has really changed.

I'm a sea turtle, *Chelonia mydas japonica* to be exact, 90cm long, 60cm wide and about 120kg in weight.

We've got plenty of spare time in the sea, and I do a lot of thinking while I'm drifting about. They say turtles have been around for some 250 million years and come in over 250 different species, including land and freshwater varieties, ranging in size from 7cm long to 680kg in weight. . . . I wonder if they can all see, hear and smell as well as I can? If they can see colors but are nearsighted like me? And if they like to think?

**Netting a whopper:** April 18th was warm and sunny. I was drifting around, thinking like I do, when I wound up dozing off. When I woke up, I found myself caught in a net with a bunch of stupid fish. The fishermen hauled us in at sunset. They let out a whoop when they found me, curled up in my shell (I was scared), and started jabbering about how much they could fetch for me. Why, one old geezer even cried out, "Turtle meat's tastier than steak!"

I had heard a buddy of mine once say they eat sea turtle on the Ogasawara Islands in southern Japan. Don't tell me people here do that, too, I thought. I was disappointed in the whole human race.

I stayed huddled up in my shell. We sea turtles can live up to a hundred, you know, thanks largely to our hard, thin armor. You don't believe me? Our shells may not look like much but they'll withstand a big chomp from a crocodile.

I had to think of something fast. Then it came to me. I stretched out a foreleg and flashed one of my stainless steel "lucky charms." A keen-eyed fisherman spotted it and said, "What's that?" After some discussion, they finally realized that I was no common garden-variety sea turtle and shouldn't be "disposed of" quite so summarily.

**A blessing in disguise:** These "lucky

## 大難不死、必有「後福」

說起這道「護身符」，那也是不知多少個日出日落、潮來汐往之前的事了。那時我還是隻幼龜，在美國夏威夷羣島附近給人打撈了起來。一陣虛驚，這些夏威夷大學的海洋生物研究人員並沒有太折騰我，只觀察一番，在我兩隻前腿各套了一片號碼牌後竟把我放了。

感謝上帝，我邊游邊想，原以為此命休矣，沒料到能夠大難不死，至於前腿上的牌子也不算太礙事。更沒想到的是這回，它又成了我的「護身符」。

但他們終究沒有輕易放掉這筆發小財的機會，為了想探聽探聽「行情」，他們找來一個叫陳恆裕的中年人。

聽他們說起來，這陳先生是位貝類專家，當年龍宮貝殼和白蝸牛就是他發現的，他也是省立博物館的榮譽標本製作專家。自從老伴中風後，就在此地（臺灣南端的恆春）買塊地，做起進口貝殼的生意。

陳恆裕果然是個內行人。看了名牌後面的英文字，他立刻知道我是夏威夷大學用來作研究的，我有責任在身，他主張把我放掉。

## 海龍王的恩賜？

漁人們却認為我是海龍王的恩賜，至少要「意思」一下才能放我走，承蒙抬舉，我的身價還真不低，陳恆裕搖搖頭，走了。

我暫住在其中一位漁民家裏。

過了半個多月，漁人們終於明白耗下去也不是辦法，決定削價賣給陳恆裕。五月六日。我永遠也不會忘記的日子，這位陳先生帶我回到他家，歇在有打氣幫浦、住來還挺舒服的池裏，接著他打電話給墾丁國家公園管理處，請他們協助放生，並寫信給夏威夷大學告知此事。

當天就有報社的駐地方記者聞風而至。第二天，我的新聞和照片果然見了報，小出一陣鋒頭。那天傍晚，還有一家雜誌社的編輯遠從臺北趕來（真快！四百多公里的路，我得爬多久！），慷慨的陳恆裕殷勤接待，又



(上)美國夏威夷大學研究人員替我掛的名牌，成了我的護身符。

(above) The tag that the researchers put on me is my lucky charm.

(右)龜甲很硬但不重，它護衛了我一生，我喜歡這個甜蜜的負擔。

(right) My shell's protected me all my life; it's a burden I don't mind bearing.

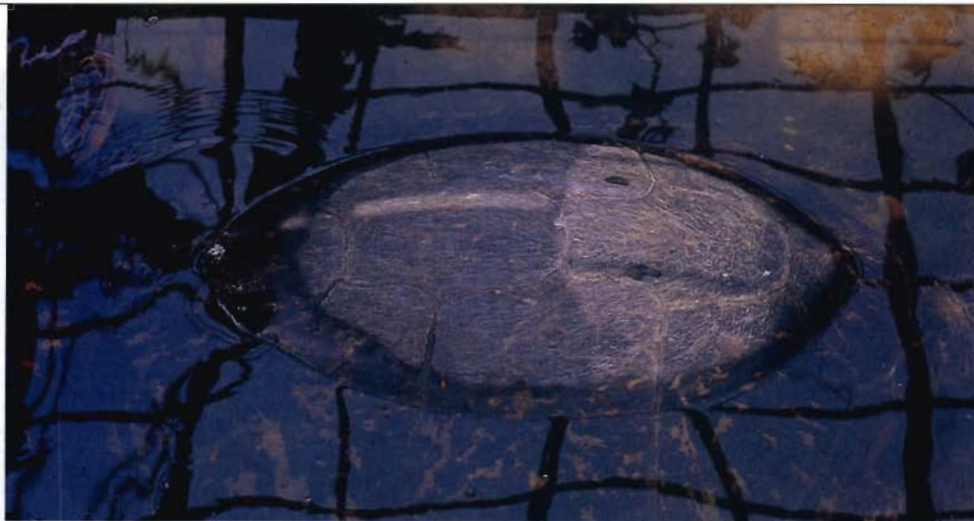
為他解釋我的來歷。他說：

「海龜的成長速率很慢，夏威夷的海洋生物專家，曾經捉了六百隻年幼的海龜，標示後放生。過段時間捉回七十隻，但多數沒有明顯變化。他們推測要一、二十年，才達到成熟階段。跟大多數動物比較起來，海龜的成長真是够慢的了。」

到底是專家，由於上回「大難不死」的經歷，知道得比我還清楚，原來，我還對研究萬物生靈的學術界有點貢獻呢！

## 老祖宗占卜用

他又說：「海龜具有迴游特性，多數都固定在一個地方覓食，然後到另一處產卵。有一種海龜會集體從巴西海岸，游過一千六百公里，每年二月左右到達非洲和南美間的亞



charms” of mine go back a long, long way. When I was a youngster, some marine biologists from the University of Hawaii plucked me out of the sea near Hawaii. It was scary, but they didn’t mistreat me. They just looked me over, attached a numbered tag to each of my front legs and then let me go.

Thank God, I thought as I swam away. I’d figure I was a goner for sure. As for the tags, they didn’t bother me very much — and they even turned out to be my “lucky charms.”

The fishermen didn’t give up their get-rich-quick scheme so easily, though. To find out what my “going rate” was, they called in a man named Chen Heng-yu.

From what I heard them say, Mr. Chen is a crustacean expert who discovered two new species of crustaceans and a taxidermist emeritus for the Taiwan Provincial Museum. After his wife suffered a stroke, he bought some land in the area (at Heng-chun, on the southern tip of Taiwan) and started up a shell-importing business.

Mr. Chen really is an expert. He took one look at the English on the back of my tags and found out that the University of Hawaii was using me for research. I was on a mission, he said, and urged them to let me go.

**Special gift?:** But the fishermen seemed to think I was a special gift from the Dragon King of the Ocean. And they deserved a little “consideration” for letting me go. Mr. Chen just shook his

head and left.

I stayed in one of their houses for a while. After a couple of weeks, they realized they were getting nowhere and cut a deal with Mr. Chen.

May 6th. That’s a day I’ll never forget, the day Mr. Chen took me to his house and put me in a comfortable, aerated pool. He called Kenting National Park Headquarters and asked them to help let me go and write to the University of Hawaii to notify them about what had happened.

The same day some local reporters turned up, and the next day my story and pictures were all over the papers. That evening a writer showed up from a magazine in Taipei. (He was really quick! I hate to think how long it would have taken me to crawl all that way!) Mr. Chen hosted him warmly and explained my background this way:

“Sea turtles have a very slow growth rate. Marine biologists at the University of Hawaii marked 600 young sea turtles and let them go. After a while, they caught 70 of them again. Most had hardly changed. They suspect it takes 10 or 20 years for sea turtles to mature, a very slow growth rate compared with that of most other animals.”

It turned out he knew more about it than I did. It seemed I was making some small contribution to scientific research, at any rate!

**Ancestral divination:** “Sea turtles migrate long distances, from fixed feeding areas to fixed spawning grounds,” he continued. “One kind

松森羣島的沙灘上產卵。它每隔十二天產下幾十個蛋，六月之後又集體游回巴西海岸覓食海草。這種海龜每隔二到三年就廻游一次。」

這我就知道得比他更清楚了（家務事嘛！），但他提到另一件事却令我驚訝。他說，在古代中國的商朝，人們若有疑問不能解決，就用龜甲占卜算卦，以定凶吉，並將結果刻在龜甲上。這還發展成中國最古老的文字「甲骨文」。我縮了縮頭，想不到咱先祖還有這段歷史。

第三天上午，我又認識了一個來客。這人叫鄒燦陽，畢業於臺灣大學海洋研究所，是墾丁國家公園管理處保育研究課的工作人員，他開了一部車，帶了幾個幫手——一看就知道是來送我回「家」的！

### 重返大海

這鄒燦陽，帶著一身南臺灣燦亮的陽光，笑咪咪地指著我說，海龜是國際自然保育聯盟公布禁止捕殺及販賣的動物。墾丁國家公園管理處成立後，已明令漁民不得捕捉，被捉的多半是像我一樣，自己卡在定置網中的。除了少數知識不足，又貪點小便宜的漁民，大多數網到海龜的漁民，多會通知管理處處理，「海龜放生，我們最拿手了」，他說：「已經放過好幾批啦！」

說著他們把我搬上車，行前在我身上寫了幾個字，就像前腿的「護身符」一樣，這也證明了我不平凡的際遇。往海邊的旅途雖然顛簸，但一想到即將重返大海，也就忍了下來。

行程中，我又開始思考：海中多年，也慣見弱肉強食的生存本質，但畢竟大自然裏，除了優勝劣敗的生存競爭，還有些別的。

車子停在一個叫「風吹沙」的地方，大夥兒合力把我放在沙灘上。

嗅著海風的味道，看著水面的反光，我急切地向前爬去。一步步的脚印留在身後，算是我曾「到此一遊」的見證。

然後，我重返大海。



（原載光華七十六年六月號）



要爬回海裡，還有一小段路。慢慢爬吧！  
Still a ways to go yet; just keep up the pace.





哇！還剩幾步路就可重返大海了。  
Wow! Just a few more steps.

travels 1,600km from the Brazilian coast to the beaches of Asunción Island, where they arrive in February. The females lay dozens of eggs every 12 days. After June, they return en masse to Brazil. Each turtle migrates once every two or three years.”

Now *that* I happen to know more about than he does (family business, you know!). But he mentioned something else that surprised me. He said turtle shells were used by the Chinese of the Shang Dynasty (16th to 11th centuries B.C.) to record the answers to questions about divination. These “shell-and-bone inscriptions” are the oldest form of writing preserved in China. I never imagined my ancestors had a history like that.

On the morning of the day after that, I met a new visitor. His name was Tsou Tsan-yang. He works at Kenting National Park and graduated from the Institute of Marine Science at National Taiwan University. He brought along several assistants — as soon as I saw them, I knew they had come to take me home!

**Return to the sea:** Smiling, Mr. Tsou pointed to me and said that the capture and sale of sea turtles is prohibited by many wildlife protection organizations as well as by the park. Most of those that are caught have usually gotten themselves stuck in nets like I did. Most fishermen, except for a few greedy ones who don't know any better, notify the park if they net one. “We've let a bunch of them go,” he said. “It's our specialty.”

They carried me to the car and wrote a few words on my back, like the ones on my “lucky charms,” to protect me. The road to the seashore was bumpy, but I put up with it when I thought of where I was going.

Along the way I pondered: In the ocean it's strictly a dog-eat-dog world, but there seems to be something more in life than just the survival of the fittest.

The car stopped at a place called Fengchuisha, and everybody pitched in and carried me onto the beach.

Sniffing the salt sea air and glimpsing the sparkling waves, I crawled as fast as I could. The footprints I left behind me were my “Kilroy was here.”

And then, I was back in the deep. **S**

*(text & photos by Cheng Yuan-ching/  
tr. by Peter Eberly/  
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