

# 「行政院海岸巡防署海洋事務研究委員會—落實海洋生態保育教育座談會」會議摘要

Maritime Affairs Research Committee of Coast Guard Administration ,  
Executive Yuan – Forum of Implementation of Maritime Ecological Preservation and  
Education (Abstract)

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MARC 行政院海岸巡防署海洋事務研究委員會  
Maritime Affairs Research Council 落實海洋生態保育教育座談會



▲ 會後針對當日各項議題舉行綜合討論  
A general discussion on the issues  
raised in the forum

## 前言

海洋約佔了地球百分之七十的面積，在氣候上、資源上、生態上扮演著舉足輕重的角色，因此在面對氣候變遷、資源耗竭、生態失衡的當下，海洋的保育更是刻不容緩。4月22日，是世界地球日40週年紀念，本次座談會的主要目的，除了響應地球日「關心環境與自然生態」的理念外，最重要的是為了宣導海洋保育，齊心為守護海洋、關懷地球的永續發展而努力。

## Foreword

Oceans take up to 70% of surface of the Earth and are playing an important role in regard to climate, resources and ecology. Therefore, in light of current climatic changes, exhausted resources and ecological imbalance, it is critical and urgent to preserve our oceans. April 22 was the 40<sup>th</sup> anniversary of World Earth Day. In regard of resonating its theme of "care about environment and natural ecology", CGA hold this forum to advocate maritime preservation and continue to work hard to protect oceans and realize sustainable development of the earth.



座談會由中央研究院邵廣昭執行長、海洋國家公園管理處楊模麟處長、國立臺灣大學周蓮香教授及戴昌鳳教授，依序發表「談政府海洋生態保育政策及其作為」、「從海洋國家公園看海洋生態保育」、「台灣鯨豚保育研究與發展」及「台灣珊瑚礁保育現況與省思」等4篇專文，並由亞太糧食肥料中心李健全主任、中華民國溪流環境協會張崑雄理事長、海巡署東部地區巡防局澳海清局長及北部地區巡防局龔光宇局長擔任各篇與談人。

#### 海洋生態保育政策應符合永續及保育原則

邵廣昭執行長指出，自1990年代起，台灣漁獲量開始一路衰退，尤其是沿岸及近海漁業，其主要原因為過去的漁業只講求增產及照顧漁民的近利，而未顧及保育與漁民的長遠利益。

海洋漁業是迄今唯一仍在大自然中獵捕野生動物的產業，過漁及破壞性漁法對沿近海的生態系與生物多樣性造成嚴重傷害，惟有儘速保育及復育海洋生態才能維持海洋資源的永續，追求永續漁業就必須兼顧海洋生態之保育，這是國際潮流與普世的價值觀。

邵執行長更提出保育海洋最有效的措施是「限漁」及劃設「海洋保護區」，落實取締管理、遵守預防原則及以生態系取向來管理漁業資源；同時應重視海洋生態之調查研究並建置整合資料庫，將海洋納入國土規劃，修訂不永續的政策，採取保育優先的預防原則，輔導漁民轉業及漁業轉型，加強社會大眾對海洋保育的宣導教育，告訴大眾海洋生物多樣性的價值，除了提供食物外，其實還有許多更大的貢獻。

In the forum, Shao Kuang-chao, Executive Director of Central Research Institute, Yang Mo-lin, Director of Marine National Park Headquarters, Professor. Chou Lien-hsang and Professor. Tai Chang-feng from National Taiwan University made speeches about 4 articles, namely, Governmental Policies of Maritime Ecological Preservation and Efficacies, A View at Maritime Ecological Preservation from National Ocean Park, Research and Development of Cetacean in Taiwan, and Status Quo and Perspective of Coral Reef Preservation in Taiwan; Lee Chien-chuan, director of Asia & Pacific Food and Fertilizer Center, Chang Kun-hsiung, governor of Republic of China Creeks Environment Association, Pu Hai-ching, director of Eastern Coastal Patrol Office of Coast Guard Administration and Kung Kuang-yu, director of Northern Coastal Patrol Office of Coast Guard Administration also made speeches about these articles.

#### Policies of maritime ecological preservation shall comply with the principles of sustainable development and preservation

Executive Director Shao Kuang-chao pointed out that since 1990s, the fishery output of Taiwan began to drop, particularly coastal and offshore fishery. The main reason for this was that fishermen in the past only cared about bigger catch and short-term benefits, therefore, they ignored maritime preservation and their own long-term benefits.

Maritime fishing is the only industry in which people hunt wild animals in nature. Over-fishing and destructive fishing cause serious damage to coastal and offshore biologic systems and diversity. The only solution to this problem is to preserve and recover maritime ecology, so as to maintain sustainability of maritime resources. If we want to seek eternal yield from oceans and seas, we must take care of maritime preservation simultaneously. This is a wide accepted value in international community.

Executive Director Shao further said that the most effective way of maritime preservation is "reduce fishing effort" and the allocation of a "maritime protection zone", implementation of cancellation administration and adoption of preventive principles and orientation of ecological systems to administer fishing resources. Meanwhile, we shall pay attention to investigation and research of maritime ecology and establish an integrated database; we shall incorporate oceans into national territory plan and revise unsustainable policies, and take preventive principles focused on preservation, and help fishermen to find their second career and realize transformation of the fishing industry, and enhance education and preaching of maritime preservation to the public and tell them the value of maritime biologic diversity which not only provides food to us, but also makes many other great contributions as well.

### 海洋事務仍分散，有賴海洋委員會統合協調

李健全主任表示，未來組織再造將成立海洋委員會，而與海洋事務相關的部會有內政部的海疆劃界，農業部的海洋漁業，交通及建設部的航行、海運、港灣建設，科技部的海洋研究，環境資源部的海洋環境、資源保育，以及經濟及能源部的探勘、採礦。海洋委員會具有三項重要功能，第一個是聯繫，第二個是協調，第三個是統合，海洋政策的制定一定要考慮到所有相關部門，不可以從單一角度出發，宏觀的政策一定會遭遇阻力，因此統合相關意見是很重要的。以海巡署為主的海洋委員會，應更加強化海域管理及海域執法，沒有真正的大海域管理及海域執法，所有的學理都會落空。



### 東沙環礁國家公園—我國海洋保育新里程

楊模麟處長指出，東沙環礁國家公園於2007年1月7日公告設立，這代表國家公園資源保育由傳統陸域生態延伸至更廣的的海洋環境，不僅為我國海洋保育的新里程碑，也是積極參與全球海洋保育觀念的開始，東沙環礁國家公園五年（2007－2011）短期目標，主要在復育與監測研究，以恢復東沙環礁生態系的生物多樣性為首要任務。

楊處長說，未來海洋國家公園管理處兼負潛在海洋型國家公園之調查研究、評估規劃與設置，將繼續執行東沙環礁國家公園資源保育復育與監測研究，進行現地陸域昆蟲、植物、鳥類及海岸、地形變化觀察，研究樣區的量測，銀合歡等外來植物移除與原生植物培育等管理工作，加強教育宣導、強化國際交流合作與培養海洋人才，並與海巡機關建立友善合作的夥伴關係，共同推動海洋資源保育工作。

### Maritime affairs are scattered into different ministries, the coordinated integration by the Ocean Committee is needed

Director Lee Chien-chuan said, in the future the government will set up an ocean Committee. So far, departments involved with maritime affairs include the Ministry of Interior in charge of defining sea frontiers, and the Ministry of Agriculture in charge of fishery, and the Ministry of Transportation & Construction in charge of navigation, maritime traffic and harbor construction, and the Ministry of Science & Technology in charge of maritime research, and the Ministry of Environment and Resources in charge of maritime environment and resource preservation, and the Ministry of Economy and Energy in charge of exploration and mining. The Ocean Committee has 3 significant functions, the first is contact, the second is coordination and the third is integration. The making of marine policies must take all related departments into consideration. Policies resulting from a single perspective will result in unpopularity and resistance. Therefore, coordination of related opinions is very important. The Ocean Committee, mainly consisting of the Coast Guard Administration, will strengthen maritime area administration and law enforcement. When genuine maritime area administration and law enforcement are absent, all theoretical ideas and principles will be in vain.

### Dongsha Atoll National Park-a new milestone of maritime preservation of our country

Chief Yang Mo-lin pointed out that Dongsha Atoll National Park was established in Jan. 7<sup>th</sup>, 2007. It represents that the preservation of national park resources is extended from traditional land ecology to more enormous maritime environment. It is not only a new milestone of maritime preservation in our country, but also the start of the idea of active participation in global maritime preservation. The 5-year short-term goal of Dongsha Atoll National Park is mainly about recovery and surveillance research; its main task is to restore biologic diversity and productivity of the Dongsha atoll ecological system.

Chief Yang said, in the future, the maritime national park will also take up such missions as investigation, research, planning and allocation of potential marine national parks. It will continue to carry out recovery, preservation, surveillance and research of resources of Dongsha Atoll National Park, and undertake observation of insects, plants and birds on land and the changes of coasts and terrains, the measurement of target research areas and deletion of invading plants such as white popinac, etc. and cultivation of native plants. It shall enhance education and propaganda and strengthen international exchanges and cooperation to nurture talents of the marine subject, and establish friendly partnership with the coast guard authority and mutually push forward the preservation of marine resources.



## 參加落實海洋生態保育教育座談會與會貴賓

Guests who participated in the Forum on the Marine Life Conservation



▲ 國立臺灣大學戴昌鳳教授  
National Taiwan University  
Professor Tai Chang-feng



▲ 國立臺灣大學周蓮香教授  
National Taiwan University  
Professor Chou Lien-hsang



▲ 中央研究院邵廣昭執行長  
CEO of Academia Sinica  
Shao kuang-chao



▲ 王署長致詞時強調：「保育海洋，海巡署責無旁貸」

Minister Wang stresses, "Marine life conservation is the CGA's unshakable responsibility."

### 建置實地現場監測，嚴格海域執法

張崑雄理事長認為，海洋部也好、海洋委員會也好，面臨的都是統合問題。各自為政易造成執法上的困難。未來勢必面臨更多、更瑣碎的海洋問題，尤其是海洋國家公園要統合所有的島嶼，變成整體的海洋國家公園，應整體、普遍的監測，提出整合性的委託研究計畫，而不是零碎的、個人做個人的監測報告，生態系的平衡是相當重要的，藉由監測了解每個地方生態狀況。海洋保育，國家公園可做長期性的實地監測，但是短期性、垂直性的部分，要靠海巡署嚴格執法。

### 台灣鯨豚保育與研究進展

周蓮香教授表示，1990年澎湖漁民屠殺海豚事件後，同年8月野生動物保育法的台灣保育類動物名錄增列了「鯨目」，所有鯨魚及海豚類改列為保育動物，此後開啟了台灣有系統的鯨豚科學研究與保育工作，也造就了東部賞鯨業的開展與繁榮，更在2003年開始推動「賞鯨標章」，目前已有八家業者擁有該標章，在經濟不景氣及競爭激烈下，高品質的賞鯨行程是否得以存續，是未來鯨豚保育提升的關鍵。

### Establishment of in-situ surveillance Enhancement of maritime area law enforcement

Governor Chang Kun-hsiung thought that no matter it is the Ministry of the Ocean or the Ocean Committee, they face the same problem: integration. Separate administration results in hardships of law enforcement. In the future, marine issues will become more numerous and more trivial. In particular, the marine national park will integrate all islands and form an overall marine national park. We should accordingly make general surveillance in entirety and present an integrated research plan, instead of making surveillance reports in individual and scattered ways. The balance of the eco-system is extremely important. We shall have an understanding of the ecological conditions of each and every place. In respect of maritime preservation and national parks, we shall conduct long-term on-site surveillance; while for the short-term and vertical part, the Coast Guard Administration shall enforce laws rigorously.

### Preservation and research of Cetacean in Taiwan

According to Professor Chou Lien-hsang, in the aftermath of the massacre of dolphins by fishermen in Penghu in 1990, Cetacea was incorporated into the list of animals under protection in Taiwan under Wildlife Protection Law. As a result, all whales and dolphins became animals under protection. Ever since then, the systematic science research and protection of whales and dolphins started in Taiwan which resulted in the initiation and later prosperity of the whale-watching business in the eastern region. In 2003, the "whale-watching badge" activity was promoted and by now 8 business owners have obtained such badges. In economic downturn and intense competition, whether the high-end whale-watching journey could be continued becomes the key to the issue of futuristic preservation of whales and dolphins.



▲ 亞太糧食肥料中心  
李健全主任

Director of the  
Food and Fertilizer  
Technology Center  
for the Asian and  
Pacific Region  
Lee Chien-chuan

▲ 中華民國溪流環境協會  
張崑雄理事長

Chairman of the Society  
of Streams, R.O.C.  
Chang Kun-hsiung

▲ 海巡署東巡局局長  
濮海清

Ex-Bureau Chief of  
the Eastern Coastal  
Patrol Office, CGA,  
Pu Hai-ching

▲ 海巡署北巡局局長龔光宇

Bureau Chief of the North  
Coastal Patrol Office, CGA,  
Kung Kuang-yu

▲ 海洋國家公園管理處處  
長楊模麟

Director of the  
Marine National Park  
Headquarters  
Yang Mo-lin

為了處理鯨豚擱淺工作，1996年11月成立了「中華鯨豚擱淺處理組織網」(Taiwan Cetacean Stranding Network, TCSN)，自海巡署成立以來，海邊現場緊急處理有了最佳工作夥伴，同時各縣市政府也開始重視鯨豚擱淺的處理，使得擱淺鯨豚的處理效率與專業日漸提升。

千禧年後，中華白海豚成了鯨豚保育的焦點，台灣的中華白海豚目前處在非常脆弱的關鍵點，亟待建立跨縣市的海洋保護區或相關保育制度，守住海洋資源日漸枯竭的西部海域。

#### 鯨豚保育工作應加強民眾保育教育

濮局長海清指出，台灣鯨豚保育工作，可以分成三大區塊：

- (一) 第一大區塊：保育工作者，包括學者、機構、中華鯨豚協會、媽祖魚聯盟。令人感動的是多個環保團體發起全民認股購地，買下彰化外海兩百公頃的白海豚洄游廊道，搶救剩下不到一百條的台灣白海豚，已有一萬五千多人響應行動，每股只要119元。保育工作者都盡心盡力絞盡腦汁，這個區塊是沒有問題的。

In order to tackle stranding of whales or dolphins, "Taiwan Cetacean Stranding Network (TCSN)" was established in November, 1996. Since the founding of the Coast Guard Administration, it has become the best working partner in case of shore on-site emergencies; at the same time, county and municipal governments are paying more attention to the stranding problem; as a result, the efficiency and professionalism of tackling the stranding of whales and dolphins keep increasing always.

After the Millennium, the Chinese white dolphin has become the focus of the protection of whales and dolphins. The Chinese white dolphin in Taiwan is at a fragile critical point so far. We desperately need a cross-region marine protection zone or relevant protection system to safeguard the western maritime area in which marine resources are gradually exhausting.

#### Whales and dolphins protection education shall be enhanced to the public

Director Pu Hai-ching pointed out that the work of whales and dolphins protection in Taiwan could be divided into the following 3 major segments:

- (I) Segment one: protection workers, including scholars, institutions, the Chinese White Dolphins Association, and the Matsu Fish Alliance. The most touching thing was that several environment protection groups initiated the public shareholding and land purchase activity and bought the white dolphin migration corridor offshore Zhanghua which covers more 200 hectares. Their aim was to rescue the less than one hundred white dolphins. Altogether more than 15,000 people took part in this activity. The price of each share was only 119 Yuan. Protection workers are trying their best to protect these animals. This segment is no problem.

(二) 第二大區塊：現場處理者，包括海巡署、縣市政府保育科、林務局、中華鯨豚擱淺處理組織網、鯨豚復健收容單位，一旦接獲通報，海巡人員帶著「鯨豚擱淺處理手冊」15至20分鐘內第一個到達現場。從91年起，海巡署處理407隻擱淺的鯨豚，成功救援221隻，取締宰殺販售鯨豚23件，13,000公斤，在花蓮台東地區，這六年就處理了101隻擱淺及誤入定置漁網的鯨豚，所以現場的初步處理靠我們岸際一萬多名的海巡弟兄，這個區塊也沒有問題。

(三) 第三大區塊：教育民眾保育觀念，今年3月8日我們在長濱處理一隻擱淺20分鐘後就死亡的偽虎鯨，用膠布覆蓋石塊壓著，夜間12時離開，深夜還有排兩班巡邏，沒想到5點多去巡邏時，偽虎鯨竟被民眾解體偷走快要半隻，所以今天最大的問題就是：教育民眾保育觀念，這一部分又可分為三大部分：

- 1、第一部分是一般的民眾：包括賞鯨民眾、潛水及水上活動的民眾，這部分沒有問題。
- 2、第二部分是購買食用的民眾：沒有需求就不會有供給，鯨豚肉一斤賣150元至180元，買一斤要250元，是很貴的，改變吃海豚（海豬肉）補月子的食補觀念，沒有需求就不會捕捉。
- 3、第三部分是漁民朋友：常有漁民、漁會反映，作業時受海豚干擾或漁獲遭海豚啃掠食，造成漁獲損失，要求適度捕捉，事實上有研究顯示，延繩釣與曳繩釣的漁獲量在海豚干擾下確有影響。海豚數量過多與漁民爭魚，不慎誤捕時，常因漁獲量少，夾帶進港販賣，除了禁捕處罰外，應研擬像鯨鯊類限制捕捉的成功配套措施，讓漁民不要再捕殺。

(II) Segment two: on-site workers, including the Coast Guard Administration, protection sections of county and municipal governments, forestry administrations, China Cetacean Stranding Network, institutions of whales and dolphins recovery acceptance. Once they receive notification, Coast Guard staff will arrive at site in 15 to 20 minutes carrying Manual of Whales and Dolphins Stranding Handbook. Since 2002, the Coast Guard Administration has tackled 407 cases of stranding of whales and dolphins and has successfully saved 221 of them and dismissed 23 cases of slaughter and sales of whales and dolphins worth 13,000 kg. In Hualian and Taidong, the Coast Guard Administration has successfully tackled 101 cases of stranding and erroneous entry into fixed fishing web of whales and dolphins in the past 6 years. We have more than 10,000 coast guards who are handling primary on-site treatment. This segment is also no problem.

(III) Segment three: protection education to the public. In March 8, we were treating a false killer whale which dies 20 minutes after stranding. We covered it with adhesive tape and stones and left at 12 o'clock at night. When we were patrolling again at 5 o'clock in the morning, we found that half of the carcass was cut off and taken away by local residents. So, the biggest problem that we have today is to educate the public with protection ideas and this can be sub-divided into 3 major parts:

1. Part 1: ordinary people, including whale-watching people, people who like scuba diving and water activities. They are no problem.
2. Part 2: people who buy and eat whale and dolphin meat. Supply does not come when there is no demand. The selling price of whale or dolphin meat is NTD 150-180 per 0.6 kg, and the buying price is NTD 250 per 0.6 kg, which is very expensive. People shall change their idea of nourishing new mothers with dolphin (marine pig) meat. When there is no need, people will not hunt these animals.
3. Part 3: fishermen. Sometimes, fishermen or fishing associations report that when they are fishing, they are disturbed by dolphins, and sometimes dolphins eat the fish that they hunt, so they ask to kill dolphins. In fact, researches have shown that the volumes of fish hunted with longline fishing or troll fishing diminish because of raids by dolphins. When the number of dolphins is big, they compete with fishermen. When dolphins are miscaught, fishermen usually kill and sell them. In addition to penalties, we shall also devise successful supporting measures, like the prohibiting the hunting of whale-sharks, so that the cetacean will not be slaughtered by fishermen anymore.



### 台灣珊瑚礁保育現況及省思

戴昌鳳教授說，珊瑚礁單位面積的生產力大約是周遭熱帶海洋的50~100倍，而且有二萬種以上的海洋生物以珊瑚礁為棲所、依賴珊瑚礁維生，或利用珊瑚礁做為繁殖下一代的場所，由此可見，珊瑚礁在維繫海洋生態平衡上扮演非常重要的功能，因此珊瑚礁常被稱為「海中熱帶雨林」或「海洋綠洲」。

台灣位於熱帶至亞熱帶之間，周圍海域又有黑潮流經，海水溫暖，除了西部沿海的沙質海域不適合珊瑚著生外，本島的南、北、東部和各離島沿岸海域，都有珊瑚分布。

北部及東北角海域是北部民眾最主要的海洋活動區域，海洋生態承受龐大的遊憩壓力，過漁、海底垃圾和沈積物污染問題非常嚴重；北方的彭佳嶼、棉花嶼及花瓶嶼三島，由於生產力高，是我國北部最重要漁場，因過漁和破壞性漁法的影響，海底珊瑚和魚類群聚都受到嚴重衝擊。

東部海岸，近年來海岸遊憩活動增加、潛水漁業、非法捕魚、過漁壓力和土地開發的影響，使得大部分礁區的珊瑚覆蓋率大幅降低。綠島和蘭嶼過漁壓力普遍很高，另一方面，海洋環境變遷和污染則造成珊瑚黑病蔓延，珊瑚礁的健康狀況令人擔憂。

南部恆春半島沿海是台灣本島珊瑚生長最佳的區域，政府於1984年成立墾丁國家公園，但是並未落實管理；在龐大的遊憩壓力、沈積物污染、有機物質污染、核三廠溫排水、油污染、過漁壓力等的影響之下，部分地點的珊瑚覆蓋率大幅降低，大型及經濟性生物的數量稀少，2005年間發起成立實質管理的「後壁湖海洋生態保護示範區」，經由墾丁國家公園警察隊和海巡單位的強力執法，以及民間團體的配合，短時間內保育成果明顯。

### Status quo and perspective of preservation of coral reef in Taiwan

Professor Tai Chang-feng told that the productivity of coral reef per unit area is about 50-100 times than surrounding tropical seas, and there are over 20,000 kinds of marine creatures that are living in or depending on coral reef for life, or taking it as the place for breeding offspring. Therefore, we can see that coral reef is playing a very important role in maintaining the marine ecological balance. So, it is usually called "marine tropical rain forest" or "marine oasis".

Taiwan is located between the tropical and the sub-tropical zone. In its surrounding waters, Kuroshio flow through, bringing warm sea waters. Except for the sandy maritime areas in Taiwan's western coasts, which are not fit for coral growth, coral is seen in the southern, northern and eastern parts of Taiwan and her offshore areas.

The northern and northeastern maritime areas are the places where northern residents conduct most of their marine activities. The marine ecological systems of these places are under tremendous pressure. Over-fishing, marine garbage and waste accumulation are all serious problems; Pengjia Islet, Mianhua Islet and Huaping Islet in the north are the most important fishing areas in the northern part of our country, due to their high marine product output. However, seafloor coral and fish gatherings are seriously undermined because of over-fishing and destructive fishing.

In the eastern coast, because of increasing fish migration, scuba fishing, illegal fishing, over-fishing and land development in recent years, the coral coverage rate of most coral areas dropped dramatically. Green Island and Lan Islet are under high pressure of overly fishing. On the other hand, the evolution and pollution of marine environment caused the spread of the Black Coral Disease. The health conditions of coral reefs are quite worrisome.

The coastal area of Hengchun Peninsula in the south is the best area for coral growth in Taiwan. In 1984, the government established the Kending National Park but management was not fully implemented. Under tremendous pressure from fish migration, pollution accumulation, organic substance pollution, wasting water from nuclear power plant, oil contamination, and over-fishing, the coral coverage rate in some areas dropped significantly, resulting in reduction of large-scale and economic marine creatures. In 2005, the Houbihu Marine Ecological Protection Demonstration Zone was established and managed materially. Coupled with strong law enforcement by the police crew of Kending National Park and the coast guard and cooperation from civil groups, prominent protection performance was achieved within a short period of time.

澎湖地區由於捕撈和採集海洋生物，加上毒、電、炸魚及三層網等不當漁法的使用，使珊瑚礁資源逐漸枯竭，2008年的寒流與冷水入侵事件，數百種海洋生物大量死亡，珊瑚礁生態系受到嚴重打擊。只有南部的望安、七美等諸島海域，仍有密集珊瑚生長，為澎湖海域珊瑚礁的復原保留生機。

小琉球嶼由於過度捕撈、箱網養殖和高屏地區大量污染物質流入的衝擊，幾乎處處都有泥沙覆蓋。南海的東沙和南沙群島，因遠離陸地污染源，環境適合珊瑚生長，內政部營建署於2007年成立東沙環礁國家公園，推展東沙環礁的保育和復育，南沙群島的珊瑚礁分布很廣，珊瑚種類豐富，向來被國際間認為是海洋生物多樣性熱點；我國管轄的太平島和中洲礁周圍海域歷年曾經發生過珊瑚大量死亡事件，目前部分海域仍有珊瑚生長旺盛，部分海域則在恢復之中。

戴教授呼籲，台灣海域的珊瑚礁是非常珍貴的天然資產，它不但是重要的海洋資源，也對台灣的永續發展有重大影響，應該設立海洋保護區加強執法，有效防治海洋污染，妥善規劃和管理海洋遊憩活動，推展海洋環境教育，以更積極的行動確保珊瑚礁的繁衍生長。

In Penghu area, the coral resources are being exhausted gradually due to fishing and collection of marine creatures and improper fishing methods such as poisoning, electrifying and exploding and three-layer fishing net. In 2008, the invasion of cold currents caused the death of hundreds of marine creatures and the eco-system of coral reef was heavily blown. Now, only maritime areas surrounding Wang'an and Qimei islands in the south still have thriving coral growth which retains hope for the recovery of the coral reefs in the Penghu maritime area.

In the Small Ryukyus Island, almost every place is covered with sand and mud due to over-fishing, net cage breeding and the inflow of great amount of pollutants from Kaohsiung and Pintung area. Nansha Islands and Dongsha Islands in the South China Sea are far away from pollution sources on land, therefore the environment there are suitable for coral growth. The Construction Administration of the Ministry of Interior established the Dongsha Atoll National Park in 2007 to promote protection and recovery of Dongsha atoll. The coral reefs in Nansha Islands are scattered in wide area and are rich in species. The islands are regarded world-widely as a hot spot of marine biologic diversity. In the surrounding maritime areas of Taiping Island and Zhongzhou Reef under jurisdiction of our country, incidents of massive coral death occurred in the past. So far coral is still thriving in part of this maritime area and under recovery in other areas.

Professor Tai appealed that the coral reefs are valuable natural resources, very influential to the sustainable development of Taiwan. Therefore, marine protection zones shall be established, and law enforcement shall be strengthened, and marine pollution shall be effectively prevented and treated, and marine tourism and recreation activities shall be properly planned and managed, and marine environmental education shall be promoted, and more active measures shall be taken to ensure the reproduction and growth of coral reefs.





### 貫徹執法，保育海洋

龔光宇局長表示，海洋生態保育與漁業資源維護，為當前社會主要議題，北巡局採下列作為：取締距岸3浬內捕魚，檢查燈火漁船作業，管控多層流刺網濫捕，限制魷魚過度捕撈，舉發非法捕撈珊瑚船，查緝非法捕撈鯨與鯊，驅離大陸船越界捕魚、查察毒、電、炸魚、禁止破壞人工魚礁，以及杜絕非法潛水採捕。龔局長呼籲我們都是地球上的生命共同體，透過大家的配合與努力，讓海洋資源得以生生不息。

### 落實執法與切實裁罰

如何落實執法？戴昌鳳教授認為應從制度面檢討，海巡人員取締破壞海洋生態保育等違法行為，應給予適當的點數和積分，讓基層同仁願意去做。濮海清局長回應表示，漁業署或地方政府的各項規定，海巡署都有執行，然而在執行上真正碰到的困擾，第一個是漁民的陳情抗議，第二是民意代表的壓力，第三是取締案件送縣市政府裁罰，都只給口頭告誡，不開罰。

至於如何抵抗漁民和地方的壓力，與會人員認為讓海巡署權責相符是最主要的，而這一點應從基本組織架構與相關法律檢討設法解決。

### Execution of law enforcement, preservation of the oceans

Chief Kung Kuang-yu said that preservation of marine ecology and protection of fishing resources are part of the main topics of the current society. Accordingly, Northern Coastal Patrol Office will take the following measures: to ban fishing within 3 nautical miles offshore, inspect lamplight fishing boats while they are working, control overly usage of multi-layer drift gill net, prohibit overly hunting of anchovy, penalize illegal coral-hunting boats, outlaw illegal hunting of whales and sharks and expel cross-border fishing boats from the mainland, inspect poisoning, electrifying and exploding, stop damage to artificial fishing reef and eradicate illegal scuba fishing. Chief Kung advocated that we are all creatures living on Earth and we shall work hard together to guarantee sustainability of marine resources.

### Implementation of law enforcement, realization of penalty

How to actualize law enforcement? Professor Tai Chang-feng thought we should re-examine our systems and suggested to give credits to coast guards when they stop law-breaking actions which are ruining marine ecological preservation, so that the local law enforcement staff are willing to perform their duties. Director Pu Hai-Ching responded that the Coast Guard Administration is implementing rules and regulations set forth by the Fishery Administration and local governments. The real problems that coast guards encounter when they are enforcing laws are protests of fishermen and pressure from representatives of public opinions, and when they deliver the cases to county or municipal governments for verdict, the local governments usually only give oral warnings to law breakers instead of real penalties.

As to how to tackle pressure from fishermen and local people, participants of the meeting thought that the Coast Guard Administration shall take full responsibilities and rights in regard to marine preservation. To realize this, we need to re-examine and redesign the basic organizational structure and relevant laws.

◀ 座談會進行實況

The forum discussions in progress

### 保育海洋，海巡署責無旁貸

王進旺署長表示，海岸巡防法賦予海巡署執行漁業巡護、漁業資源維護、海洋環境保護及保育等職責。因此，保育海洋海巡署責無旁貸。新的政府組織預定在2012年正式上路，海洋委員會負責統合各部會相關海洋政策規劃、推動及協調，海巡署為海委會之執行機關，他期勉同仁能廣泛涉獵海洋相關知識、注意國際海洋事務發展趨勢，以更積極的態度參與海洋政策的規劃及推動。

### 結語

四月初英國宣布將印度洋的英屬查哥斯群島及附近海域劃為海洋保護區，成為目前全球最大的海洋保護區，為保護海洋跨出了一大步。在台灣，從「後壁湖海洋生態保護示範區」、「跳石海洋生態保護示範區」及「東沙環礁國家公園」的設立，相信在民眾保育意識的抬頭、學者專家的倡議與協助、公權力的執行，以及切實的裁罰，多管齊下，在一段時間後保育是可以有具體成果。

「幸福不是一切，人還有責任」，知識應化成力量，在生活中知行合一，身體力行，用愛守護海洋、用心關懷地球，這是身為地球一份子的責任與義務。

(本文作者任職於海岸巡防署企劃處)

### Coast Guard Administration responsible for marine preservation

Director Wang Ginn-wang said that the Coast Guard Law renders such duties as fishing patrol and protection, maintenance of fishing resources, protection and preservation of marine environment to the Coast guard Administration. Therefore, to protect and preserve the oceans is a very responsibility of it. The new governmental organization will be officially launched in 2012. The Ocean Committee is responsible for unifying the planning, promotion and coordination of marine policies of various departments, and the Coast Guard Administration will act as the executive branch of the Ocean Committee. He hopes that colleagues will have a mastery of rich marine knowledge and pay attention to developmental trends of international marine affairs, and participate in the planning and promotion of marine policies with a more enthusiastic attitude.

### Conclusion

In early April, UK pronounced that the British Chagos Archipelago and surrounding maritime areas in the Indian Ocean are allocated as a marine protection zone, becoming the biggest marine protection zone worldwide so far. This is a great step forward on the road of marine protection. In Taiwan, the Houbihu Marine Ecological Protection Demonstration Zone, the Tiaoshi Marine Ecological Protection Demonstration Zone and Dongsha Atoll National Park have been established. We believe that, as the public is more conscious of marine protection and preservation, and experts and scholars are enthusiastically advocating and promoting it, and the execution of it by governmental branches, plus implementation of penalties, the preservation will be effective and beneficial after a period of time.

"Happiness is not everything; human beings have their responsibility for it." We should transform knowledge into power, and practice knowledge in daily life. As a member of the Earth, this is our duty to protect oceans with love and care about the Earth deep from our hearts.

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