

文 | 顧嘉谿

Article | Gu Jia-xi

# 將台灣沿、近海漁業資源建置於 安檢資訊系統作業漁區之實益

## The tangible benefit of constructing a security inspection information system covering the fishing areas in conjunction with protecting Taiwan's coastal and near-shore fishery resources

### 壹、前言

本總局所屬「巡防區勤務統合中心」已於今（94）年7月1日全面運作，為尋求岸、海勤務統合後之執勤利基，實有必要將沿、近海之作業漁區、漁汛期、魚種、漁具漁法等因子一併瞭解，使其結合安檢資訊系統「作業漁區」功能，俾利「巡防區」據以指導勤務編排，預劃岸、海勤務。

### 貳、作業漁區功能增設

台灣周邊海域原來並無作業漁區之劃分，本總局為先期掌握沿、近海海域作業船隻狀況，即以「安檢資訊系統」現有架構，規劃增設「作業漁區」功能，將沿、近海漁民傳統作業漁場，區分30個作業漁區用以瞭解台灣周邊海域作業漁船動態，若將來能結

### Part 1 Foreword

The "Patrol group command duty integration center" under the Director General Coastal Patrol Agency "DGCPA" has come on full operation since July 1, 2005. In search of capturing the duty niche through the coastal and sea duty integration, there is a necessary to further discern relevant factors such as the coastal and near-shore fishing grounds, peak fishing season, fish types, fishing gears and fishing methods and the like, to better integrate security inspection information system's fishing site function, and to facilitate the patrol group command to refer to the system in duty formation and coastal sea duty preplanning.

### Part 2 Appending the functions of fishing grounds

As initially there has not been any fishing zone division in Taiwan's peripheral waters, the DGCPA, in a move to grapple in advance the state of fishing boats operating in the coastal and near-shore areas, has appended a fishing site function under the security inspection information system by dividing the coastal and near-shore fishermen's conventional fishing sites into 30 fishing zones, which is sought to discern the state of fishing boats operating in Taiwan's

合沿、近海漁業資源資料庫，將使海上勤務之派遣，獲得更有力之依據，對涉及不法之漁船，均能有效掌握其異常動態，有助查緝成效之提昇。

### 參、台灣沿、近海漁業種類及作業船數

漁船係從事海洋漁業之主要工具，故有海洋漁業即漁船漁業之說法。台灣海洋漁業分為「沿岸」、「近海」漁業、「遠洋」漁業等三種<sup>①</sup>，區隔之範圍係以領海（12 浬）<sup>②</sup>內外側或經濟海域（200 浬）<sup>③</sup>內外側而定。以下僅就台灣沿、近海漁業種類及作業船數說明如下<sup>④</sup>（本調查未含籠漁具、扒網漁業、地曳網、魷仔魚漁業、魚苗漁業、娛樂漁業等）：

#### 一、近海漁業之漁業種類：

巾著網、鯖圍網漁業、火誘網漁業（焚寄網）、中小型拖網、刺網漁業（包括流刺網）、其他網漁業、鮪延繩釣漁業、鯛及雜魚延繩釣漁業、曳繩釣漁業、一支釣魚業、其他釣漁業。

#### 二、沿海漁業之漁業種類<sup>⑤</sup>：

定置漁業、火誘網漁業、刺網漁業、其他網具漁業、一支釣漁業、延繩釣漁業、其他釣漁業、鏢旗魚漁業、遊漁業、其他。

#### 三、依「漁業署 93 年台閩地區漁業統計年報」指出，93 年台閩地區沿、近海漁業種類船筏數統計如下：

	巾著網 Wrap net	鯖鱈圍網 Mackerel and pompano wrap net	火誘網 Fire trapping	刺網 Dragnet	鮪延繩釣 Tuna rope fishing	鯛及雜魚延繩釣 Bream and other rope fishing	曳繩釣 Drag rope fishing	一支釣 One rod fishing	定置網 Fixed net fishing	鏢旗魚 Swordfish harpooning	合計 Total
台灣地區 The Taiwan region	71	38	1,473	1,637	2,339	3,763	64	1,723	5	73	11,186

peripheral waters. Which when combined with a coastal and near-shore fishery resource database in the future, will further enhance sea duty dispatch with a more dynamic basis, and allow an effective awareness of the fishing boats' movements in the wake of illicit boats to promote the seizure yield.

### Part 3 The types of fishery and operating fishing boats number in Taiwan's coastal and near-shore areas

Fishing boats are a major tool for the ocean fishing industry, spawning the saying that the ocean fishery industry is of fishing boat fishery industry. Taiwan's ocean fishing industry is divided into three categories, the coastal, near-shore and offshore fishing industries<sup>1</sup>, and the parameters that segregate the lie in the territorial waters of 12 nautical miles<sup>2</sup> and the exclusive economic zone of 200 nautical miles<sup>3</sup>. Below provides a description to the types of fishery and operating fishing boats number in Taiwan's coastal and near-shore areas.<sup>4</sup>, and the survey has not included cage fishing gears, rack net fishing, bottom trawling, whitefish fishing, young fish farming industry, or leisure fishing and such:

#### I. The types of fishery in near-shore fishing:

The wrap net, mackerel draw net fishing industry, fire trapping fishing industry (hot trapping net), medium to small trawlers, dragnet fishing (including dispersed dragnet fishing), other net fishing, tuna rope fishing, bream and miscellaneous fish rope fishing, drag rope fishing, one rod fishing, and other fishing types.

#### II. The types of fishery in coastal fishing<sup>5</sup>:

The fixed spot fishing, fire trapping fishing, dragnet fishing, other net fishing, one rod fishing, extension rope fishing, other fishing, swordfish harpoon fishing, leisure fishing and others.

#### III. As revealed in the Fishery Administration's 2004 fishery statistics annual report for the Taiwan and southern China region, statistics on the types of boat/raft number in coastal and near-shore fishing are as follows:

①「台灣農家要覽」，漁業篇，頁2。

②行政院農業委員會漁業署93年「台閩地區漁業統計年報」，2004，頁482。

③行政院農業委員會漁業署93年「台閩地區漁業統計年報」，2004，頁481。

④行政院農業委員會漁業署93年「台閩地區漁業統計年報」，2004，頁123。

⑤行政院農業委員會漁業署93年「台閩地區漁業統計年報」，2004，頁123。

<sup>1</sup> The Taiwan Farmers Guide, fishery section, p.2.

<sup>2</sup> Executive Yuan Agriculture Council Fishery Administration's 2003 "Taiwan and southern China's fishery statistics yearbook, 2004, p.482.

<sup>3</sup> Executive Yuan Agriculture Council Fishery Administration's 2003 "Taiwan and southern China's fishery statistics yearbook, 2004, p.481.

<sup>4</sup> Executive Yuan Agriculture Council Fishery Administration's 2003 "Taiwan and southern China's fishery statistics yearbook, 2004, p.123.

<sup>5</sup> Executive Yuan Agriculture Council Fishery Administration's 2003 "Taiwan and southern China's fishery statistics yearbook, 2004, p.482.

## 肆、台灣沿、近海魚種分布

海洋豐富之蘊藏深不可測，它除了提供各種礦產外，重要的是提供了人類食物的來源，台灣四面環海，長久以來島內居民對海洋的依賴已密不可分。台灣沿、近海魚種依其特性概分為表層海水魚（洄游魚類）及底棲魚種，茲分述如下：

### 一、表層海水魚<sup>⑥</sup>

台灣黑潮暖流之主流在東岸由南北上，支流在夏季沿本島西岸北上，帶來極豐富之大洋性洄游魚類，如鰹、鮪、旗魚、飛魚、鯊等。冬季則有較寒冷之大陸閩浙沿岸冷水流自北南下，帶來一些如烏魚等季節性洄游之魚類，表層海水魚類一般多屬於紅色肉之洄游性魚類，包括鱸類、烏魚、旗魚類、鮪魚、鯖魚、鰹魚、鮫魚、鱈魚、黑鯛、眼眶魚、秋刀魚、河魨等（分布詳如對照表）：

### 二、底棲魚種<sup>⑦</sup>

台灣海峽之南方及南中國海之水團北上在澎湖群島匯集，使得台灣海域水文複雜，營養鹽豐富，基礎生產力高，海流匯集潮境處處，形成魚貝介類良好之繁殖與棲息場所，帶來各類底棲性海洋生物之幼生。台灣沿、近海底棲性海水魚類主要係屬白色魚肉，種類包含狗母、海鰻、扁魚、白帶魚、瓜子鯛、白鯛、馬頭魚、大眼鯛、黃花魚、鯛類、秋姑魚、金線紅姑魚等（分布詳如對照表）：



● 罕見之大洋性魚類「棘鬼頭刀」  
The rarely seen oceanic fish of the hammer head fish

## Part 4 The distribution of fish types in Taiwan's near-shore and coastal areas

With the rich resources of the ocean being extensive and beyond measure, it not only provides a host of minerals but more importantly it provide mankind with a food source. With Taiwan being surrounded by sea on her peripheral, for long time since the residents of the island have developed an inseparable tie to the ocean. Taiwan's coastal and near-shore fish types, by characteristics, can be roughly divided into surface saltwater fish (migratory fish types) and bottom-dwelling fish types, which are separately described below:

### I. Surface saltwater fish<sup>6</sup>

Taiwan's main current, the Japan Current, runs northward from south on the east coast, with branch current runs northward on the island's west coast in summer season, brining an abundance of oceanic migratory fish varieties, such as the bonito, tuna, swordfish, flyfish, sharks and so forth. In winter season, with colder continental cold water flow running southward from the north along the mainland's Fujien and Zhejiang coasts bring certain seasonal migratory fish varieties, such as the mullet. Surface saltwater fish varieties largely fall under red flesh migratory fish varieties, which include the pomfret, mullet, swordfish, pompano, mackerel, tuna, cod, sea bass, eye liner fish, silver sword, puffer fish and so forth. Refer to the comparison table for their distribution.

### II. Bottom dwelling fish species<sup>7</sup>

The northward waters combined the water from south of the Taiwan Strait and the south China Sea together in Penghu Island, bring a complex hydrology to the Taiwan sea areas that are rich with nutrients and a high fundamental productivity, where ocean currents gather to form tidal zones, creating a good habitat for fish and mollusks to thrive, brining in the seedlings of a variety of bottom dwelling marine creatures. The bottom dwelling saltwater fish varieties in Taiwan's coastal and near-shore areas are primarily those of white flesh fish, with varieties including garoupa, sea eel, paddlefish, tail fish, sea pass, white pomfret, horsehead fish, yellow fin, bream, autumn fish, gold autumn fish and the like (Refer to the comparison table for their distribution):

⑥ 鄧廣昭，「台灣常見魚介類圖說」。

⑦ 鄧廣昭，「台灣常見魚介類圖說」。

<sup>6</sup> Shao Guang-zhao, Illustrated compendium of frequently seen fish and mollusks in Taiwan.

<sup>7</sup> Shao Guang-zhao, Illustrated compendium of frequently seen fish and mollusks in Taiwan.

**伍、台灣沿、近海漁場、漁獲物、漁汛期對照概要表：**

船筏種類	漁場	漁獲物	漁汛期
巾著網	烏魚：西部沿岸 烏鯧：東石至茄苳沿海新竹至台中沿海。 圓花鰹：蘇澳至花蓮沿海含龜山島附近海域、澎湖海域。 台灣馬加鰹、扁甲鰹、眼眶魚：東石至茄苳沿海。 灰海荷鰹：蘇澳外海。	烏魚、烏鯧、眼眶魚、圓花鰹、扁甲鰹、台灣馬加鰹、灰海荷鰹	烏魚：11月至翌年1月。 烏鯧：12月至3月、4月至11月。 眼眶魚：4月至8月。 圓花鰹：4月至9月。 扁甲鰹、台灣馬加鰹：12月至2月。 灰海荷鰹：7月至10月。
近海火誘網（焚奇網） 沿海火誘網（棒受網、叉手網）	鎖管：彭佳嶼附近海域和澎湖群島西方海域。桃、竹沿岸4至8哩海域。 鰹類：彭佳嶼、澎湖群島和台灣淺堆等海域。	魷、鎖管、臭肉鰹、丁香、皮刀、海鯰、黑鰹、紅尾。	焚奇網漁期自農曆3月23日起至8月15日止，鎖管與鰹類主要漁期均在6月至8月間，盛漁期時，漁船多至漁場附近之漁港寄港，如鎖管盛漁期，南方澳附近船隻多至野柳寄港，澎湖漁船亦有至枋寮寄港者
鮪延繩釣	呂宋島東方、民答那峨東方、帛琉南方、中國南海北部、東沙島以南。	黃鰹鮪、大目鮪、長鰹鮪、黑鮪、旗魚、鯊魚、鬼頭刀、鰹、油魚。	呂宋島東方、民答那峨東方、帛琉南方：7月至9月。 中國南海北部、東沙島以南：翌年1月至3月。
刺網	底刺網：東部、宜蘭、彰化、嘉義。 浮刺網：台東 流刺網：西北部海域、西部海域、台灣海峽、基隆外海、西沙、南沙群島、澎湖 圍刺網：屏東恆春。 大目流刺網：台灣海峽、基隆外海、西沙、南沙、澎湖、台灣東部海域。 鮫魚底流刺網：雲林縣。	東部底刺網：紅甘鰹、青甘鰹、紅目鰹、石斑。 彰化底刺網：黃鰹鯛。 宜蘭、嘉義底刺網：沙梭。 嘉義縣底刺網：黑鯛。 屏東恆春底刺網：四破魚。 浮刺網：旗魚、鯊魚。 流刺網：白腹鰹、闊腹鰹、烏魚、黑鰹、午仔魚、鯊魚。 鮫魚底流刺網：鮫魚。	週年：紅甘鰹、青甘鰹、紅目鰹、石斑。 沙梭：3月至6月。 黃鰹鯛：4月至10月。 黑鯛：6月至10月。 四破魚：4月至11月。 旗魚、鯊魚：9月至2月（浮刺網）。 白腹鰹：11月至1月。 闊腹鰹：11月至1月。 烏魚：冬至前後 黑鰹：10月。 鯊魚：11月至7月（大目流刺網）。 鮫魚底流刺網：4月至8月。
鯖鰹圍網	北部：澎佳嶼、釣魚台。 南部：東沙群島	花腹鯖、白腹鯖、花飛、紅扁鰹、黃帶鰹。	東北：8至翌年1月。 西南：3月。
鯛及雜魚延繩釣	基隆、淡水、蘇澳、新竹、安平、彌陀、梓官、高雄、東港、澎湖及東部成功沿海。	底棲魚類：鯛類、嘉鱚、狗母、赤鯨、金線、紅目鰹、白口、鮫魚。 表層魚類：大鯊、油魚、鬼頭刀、鯖、黑皮旗魚、正鰹、鰹類、白帶魚、黃鰹鮪、鰹類、白鰹。	漁期為週年，主要漁期集中在12月至6月，7月至11月漁獲量較少。
曳繩釣	沿岸黑潮或其支流流經之海域。	鰹類、鮪類、鬼頭刀、鰹類、旗魚類、鰹及鯊魚	漁獲期週年，上半年1至6月漁獲較佳，下半年7月至12月顯著減少，6月為產量之高峰。
一支釣	主要漁場分布於本省東部沿近海域，例如豐濱、東河、台東、大武及蘭嶼外海。	紅目鰹、赤鯨（水深200公尺以淺）。 紅甘鰹（80至250公尺）。 濱鯛、石斑（180至300公尺）。 紅鑽魚、花笛鯛（300至450公尺）	漁期為週年。
定置網	沿岸大陸棚淺水海域。	宜蘭地區春夏盛漁期為齒鰹；秋冬則有鰹甘類、旗魚、鮪魚、鰹魚、鮫魚、鬼頭刀、鶴鱗 花東地區有翻車魚、丁挽旗魚	每年漁期約9月中開始至翌年7月上中旬結束，盛漁期為每年3至6月。
鏢旗魚漁業	北部、東部與西南部之近海大陸棚外緣附近海域。	旗魚、鯊、鮪魚等大型高經濟價值之表層性魚類。	漁期為9月至翌年6月，風浪洶湧之際。

## Part 5 Comparison table for Taiwan's near-shore and coastal fishing sites, fishery catch and peak fishing seasons

Type of boats and rafts	Fishing sites	Fishery catch	Peak fishing season
Wrap net	Mullet: western shores Black bream: Tungshih till Cheting near-shore, Hsinchu till Taichung near-shore. Spot bonito: Suao till Hualien near-shore that includes Turtle Mountain Island off shore and Penghu near-shore. Taiwan rockfish: Tungshih till Cheting near-shore. Gray ganoid: Suao coastal seas	Mullet, black bream, eye fish, spot rockfish, flat pompano, Taiwan rockfish, gray ganoid	Mullet: Nov to the next Jan Black bream: Dec. to Mar, Apr to Nov Eye fish: Apr to Aug Spot bonito: Apr to Sept Flat pompano, Taiwan rockfish: Dec. to Feb Gray ganoid: Jul to Oct
Near-coast light trapping net (fire trapping net) Near-coast trapping net (rod net, cross net)	Calamari: around the Pong Jia Island waters, west of Penghu island, 4 to 8 nautical miles off the coast of Taoyuan, Hsinchu Rockfish: Pong Jia Island, Penghu island and Taiwan shallow reef seashore.	Paddlefish, calamari, stinky minnow, clove, knife fish, sea catfish, black bream, red tail	The fishing season for loigh trapping net begins from lunar March 26 to Aug. 15, with peak fishing season for calamari and rockfish falls between Jun and Aug. In fishing peak season, fishing boats tend to gather around nearby port to stash their catch, where boats in Nanfangao often berth in Yeliu and Penghu boats birth in Fangliao.
Tuna rope fishing	East of Lu Sung Island, east of Minatare, south of Palau, north of South China Sea, south of Pratas Island	Yellow fin tuna, large eye tuna, long fin tuna, black tuna, swordfish, shark, knife fish, bonito, lard fish	South of the Lu Sung Island, east of Minatare, and south of Palau: Jul to Sept. South of the South China Sea, south of the Pratas Island: Jan. next year to Mar
Dragnet	Bottom trawl net: East, Ilan, Changhwa, Chiayi. Buoyant dragnet: Taitung Dragnet: Northwest. Western, Taiwan Strait, Keelung offshore, Pratas Island, South China Sea Wrap net: Hengchun of Pintung. Large mesh dragnet: Taiwan Strait, Keelung offshore, Pratas Island, South China Sea Penghu island, Eastern Taiwan. Merlin bottom dragnet: Yunlin.	Bottom dragnet in the east: red snapper, green snapper, red-eye garoupa, sea bass Bottom dragnet in Changhwa: yellow fin bream Bottom dragnet in Ilan, Jiayi: sand snapper Bottom dragnet in Pintung, Hengtsuen: whitefish Buoyant dragnet: swordfish, shark. Dragnet: white belly	Yearly: Red snapper, green snapper, red eye garoupa, sea bass Sand snapper: Mar to June Yellow fin break: Apr to Oct Black bream: June to Oct Paddlefish: Apr to Nov Swordfish, shark: Apr to Feb (buoyant dragnet) White belly rockfish: Nov. to Jan. Broad belly rockfish: Nov. to Jan.
Mackerel and paddle fish wrap net	North: the Pong Jia Island, the Shakalin island South: the Prata Island	Spot belly mackerel, white belly mackerel, spot flyfish, red pampano, yellow fin bream, rockfish, broad belly rockfish, mullet, black bream, noon fish, shark Rockfish bottom dragnet: rockfish	Northeast: August to next Jan. Southwest: March Mullet: around the winter solstice Black bream: Oct Shark: Nov to Jul (large mesh dragnet) Rockfish bottom dragnet: Apr to Aug
Garoupe and miscellaneous fish rope fishing	Keelung, Tamsui, Suao, Hsinchu, Anping, Mito, Zheguan, Kaohsiung, Donggang, Penghu, and eastern Cheng Kong costal seas.	Bottom dwelling fish varieties: bream, tial fish, pomfret, red snapper, gold snapper, red eye pompano, white mouth, rockfish. Surface fish varieties: large shark, lard fish, knife fish, mackerel, black swordfish, paddlefish, rockfish, tail fish, yellow fin tuna, pompano, white bream	The fishing season being all year round, with prime fishing seas largely concentrated from Dec. to June, with July to Nov being the low catch season.
Drag rope fishing	Coastal Japan current of saltwaters that its branches flow through	Sturgeon, tuna, knife fish, paddlefish, swordfish, mackerel, sharks	The fishing season being all year round, with Jan. to June being better, and the volume drops from July to Dec., and June being the peak fishing season
One rod fishing	Main fishing sites are distribution on the island's eastern coastal and near-shore areas, such as Fong Bin, Dong Her, Taitung, Da Wu and Orchid island open seas	Red eye snapper, red perch (at up to 200m deep). Shore pompano, sea bass (180m to 300m) Red diamond, spot bream (300m to 450m)	The fishing season being all year round
Fix net placement	Shallow waters around the continental reefs	Spring/summer peak fishing season in Ilan being the paddlefish; in autumn and winter, there are pompano, swordfish, tuna, paddlefish, rockfish, knife fish, minnow. The Hualien and Taitung areas contain the paddlefish, hooked swordfish.	The yearly fishing season span from mid Sept. to the following early July, and the peak fishing season being from March to June.
Swordfish harpooning	Near shore continental reefs in the north, south and southwest, and seas beyond the continental reefs	Large size, high economic valued swordfish, shark, tuna of surface swimming fish varieties	The fishing season being from Sept. to the following June when the tides are rough

## 陸、結論

查緝機關與人蛇及走私集團鬥智過程中，應隨時處於上風，沿、近海漁業資源調查及統整分析之最終目的，乃希望結合「安檢資訊系統」達成下列三項執法利基：

### 一、觀察漁具、推斷該船至作業漁區之合理性：

經由安檢資訊系統內建之漁業資源資料庫，將其與漁船攜帶之漁具相互比對、分析，用以研判漁船攜行之漁具是否為從事水上採捕或養殖時應備之工具，如發現可疑即可循勤務指揮系統，通報「巡防區」，由其調派海上服勤船、艇，備妥偵蒐器材嚴密監控，必要時予以蒐證。

### 二、提供巡防區預劃海上勤務：

「巡防區」可透過沿、近海漁業資源資料庫，配合台灣周邊漁場之漁汛期，先期預劃重點海域之勤務，除了可以精減陸上人力外，一旦發現走私、偷渡情事，即可立即執行海上攔截、緝捕工作，減少上岸後緝捕之困難。

### 三、提供有關海洋保育參數：

近年來各地方政府為了發展觀光產業，皆舉辦各種海上活動（如飛魚祭），對保育類魚種（如鯨、鯊、豚）及資源枯竭魚種（如飛魚、魩仔魚）之魚體及魚卵均有超額捕撈情形，本總局負有協助主管機關執行海洋環境保護及海洋資源保育工作，可提供各作業漁區之漁船數據，以利主管機關或地方政府推動具體之保育工作（如減船措施、休漁計劃等）。

有關台灣周邊海域作業漁場之議題，經本組與水產試驗所請教研討，或因氣候、洋流、水文環境、食物來源等之因素影響，僅能得知作業漁場之概略位置，無法標定作業漁場之精確位置。就因其取得作業漁場之詳實位置，有其困難之處，實務上必須發展進步之探魚技術，以利在有效作業漁場獲取較多漁獲量。而對於沿、近海漁業資源資料庫之建構，涉及專業知識、科學儀器、人員訓練及長時間經驗累積等等，才能夠完整建立

## Part 6 Conclusions

In the brain wrestle between law enforcement agencies and the human trafficking rings and smuggling rings, it is imminent that the administration needs to gain an upper hand, for the ultimate goal in coastal and near-shore fishery resources investigation and overall analysis rests on achieving the three law enforcement niches by joint linking the security inspection information system:

### I. To observe the fishing gears in deducing the rationality of a fishing boat's operating in a certain fishing site:

The fishery resources database instilled at the security inspection office can be utilized for comparing and analyzing whether the fishing gears on board the fishing boats meet the required tools for conducting marine catching or cultivating. Of any suspicion, a report may be filed with the patrol group command through the duty command system to dispatch seafaring vessels and boats equipped with evidence gathering equipment for conducting stringent surveillance, backed by evidence gathering when deemed necessary.

### II. To provide preplanned sea duties in the defense patrol zones:

The patrol group command may preplan sea duties at focused sea territories through the coastal and near-shore fishery resources database, coordinated with fishery information on Taiwan's peripheral sea territories that not only helps to downsize the manpower on land but can effectively move to execute sea interception, crackdown and arrest work in the event of smuggling or human trafficking to reduce the difficulty of seizure on dry land.

### III. To provide relevant marine conservation parameters:

With local governments moving to stage a variety of maritime activities, such as the flyfish festival in search of tapping into the tourism industry, in terms of preserving the fish varieties (such as the whales, sharks, dolphins) and fish varieties in exhausted resources (such as the flyfish and whitefish), and excessive trapping of fish and fish roes, the DGCPA is responsible for facilitating the competent government agency in carrying out marine environment protection, marine resources conservation work by offering the boat number at a variety of fishing sites, which would facilitate competent government agencies or local governments in promoting tangible conservation work, such as fishing boat reduction measure, fishery rotation plan and so forth.

With regard to the subject of fishing sites in Taiwan's coastal waters, the section's inquiry and discussion with the Aquatic Testing Center only yielded approximate locations of the fishing sites as hindered by factors of the climate, ocean currents, hydrological environment, food source and like, but unable to pinpoint the exact location for marking the fishing sites. As hindered by the difficulties in obtaining the precise location of the fishing sites, there is a need in practical implementation to further develop fish exploring techniques in order to derive a large amount of fishery catch at valid fishing sites. With the mapping of coastal and near-shore fishery resources database that involves professional knowledge, scientific instruments, personnel training and long-time accumulation of experience and such that cannot be single-handedly completed by single agency, there is a necessity for the competent government authorities to join in the action in order

其可資利用之資料庫，礙於上述因素，非一己之力即能建立完成，必須經由相關主管機關協助與配合，透過其專業領域指導，方可建置完成；本文意起拋磚引玉之效，旨在喚起有關主管機關注意與重視，基於行政一體、資源共享，冀能共同戮力完成並共享其成果，一來有助於查緝成效之提昇，另一方面更有益於推動具體之保育工作。

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- (作者任職於海岸巡防總局檢查管制組)

to conclude the launching under whose professional domain. The purpose of this article aims to draw attention to the issue by presenting the facts and emphasis to relevant government authorities, in anticipation that a joint effort will be made to conclude launching the fishery resource database, as bound by the concept of single administration for resources sharing, which would allow all agencies to share the fruit, which is not only beneficial in excelling the interdiction yield, but is also inductive in further promoting tangible conservation work.

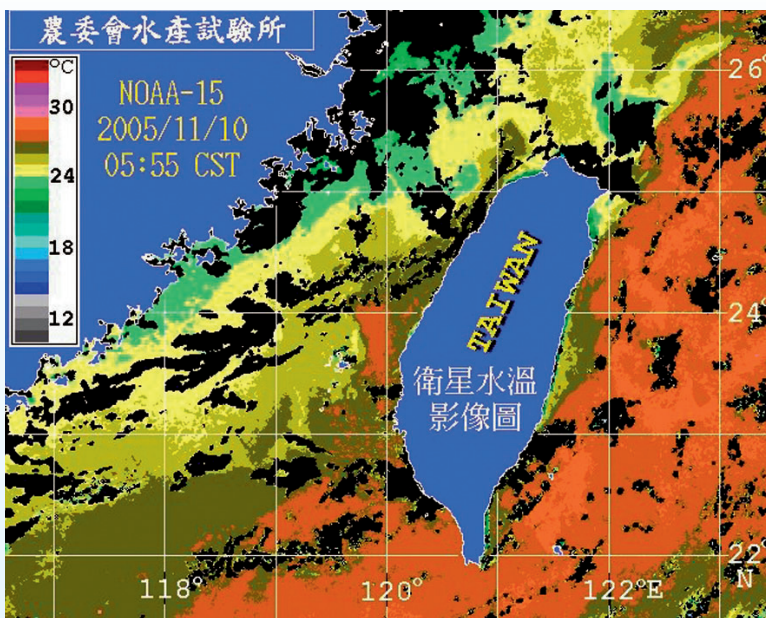
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- (The author is currently with the Coast Guard Administration DGCPA control division)



● 保育區設置鳥瞰圖  
A bird's eye view of the preservation zone launched

● 衛星水溫影像圖  
A satellite water temperature imaging



● 保育魚類設置人工魚礁  
The artificial marine reefs installed for fish preservation