

# Fisheries *Refugia* Profiles: Trat Province, Thailand



# Geophaphy: Trat Province

- Areas: Land = 2,819 km<sup>2</sup>  
Seas = 7,257 km<sup>2</sup>  
Shoreline = 165 km
- Boundaries:  
North: Chanthaburi Province and Cambodia  
South: the Gulf of Thailand  
East: Cambodia (borderd by Banthat Mountains)  
West: Chanthaburi Province (boardered by Welu River)
- Main fresh water sources: Trat River, Welu River,  
Nam Chieo Canal
- Islands: 52 islands with Koh Chang is the third biggest island of Thailand (after Phuket and Koh Samui)
- Climate: one of the wettest places in Thailand (4,500 mm of rain per year)





## History:

- The history of Trat can be traced back to the early 17<sup>th</sup> century at Ayutthaya Kingdom; it was considered among the trade center cities of Southeast Asia.
- Trat has played an important role in the development of the country's stability and economy due to its strategic location as a checkpoint and buffer city. It was engaged in French-Thai War having Battle of Koh Chang in 1741.
- The population of Trat has long been a mix of Thai, Lao, Chinese, Khmer, and Vietnamese
- Trat is the most important border trade route between Cambodia and Thailand at Ban Hat Lek Border Market



N° 8 - Photo by J. Antonio, Bangkok

Un Coin de la Fête de WATH SAKET

## Population:

- Total 229,914 (2018)
  - Male 114,334
  - Female 115,580

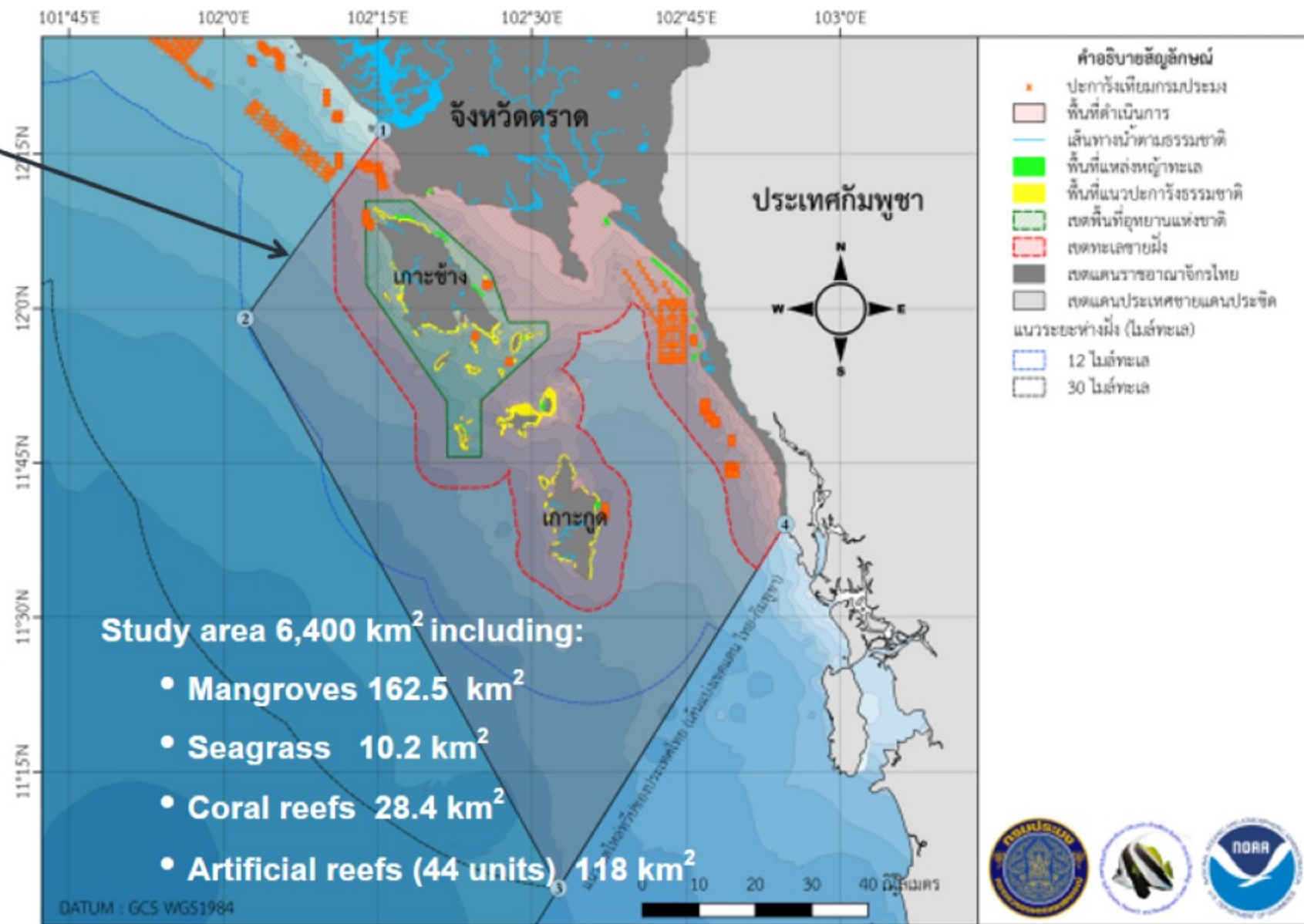
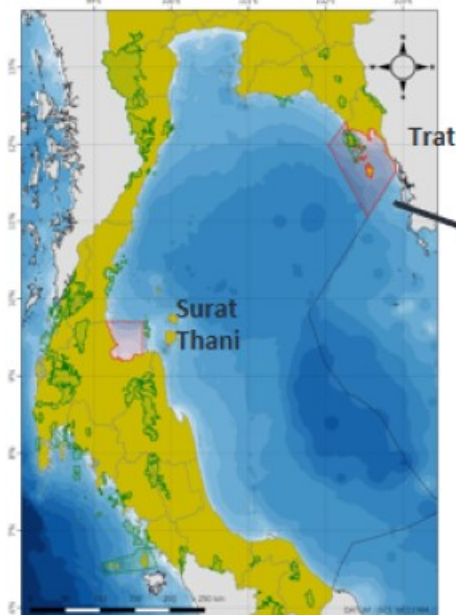
## Socio-economy:

- GDP 39,597 M฿ (2015)
  - GDP in agriculture sector 48%
  - GDP in non-agriculture sector 52%
  - GDP in fisheries sector 13%





# Study Area for Fisheries *Refugia* Project



## Geographic Location (tentative site for study):

1. 12°17'19.77"N 102°15'30.73"E
2. 11°59'2.55"N 102°2'6.96"E
3. 11°3'44.02"N 102°32'36.03"E
4. 411°39'3.38"N 102°54'38.18"E



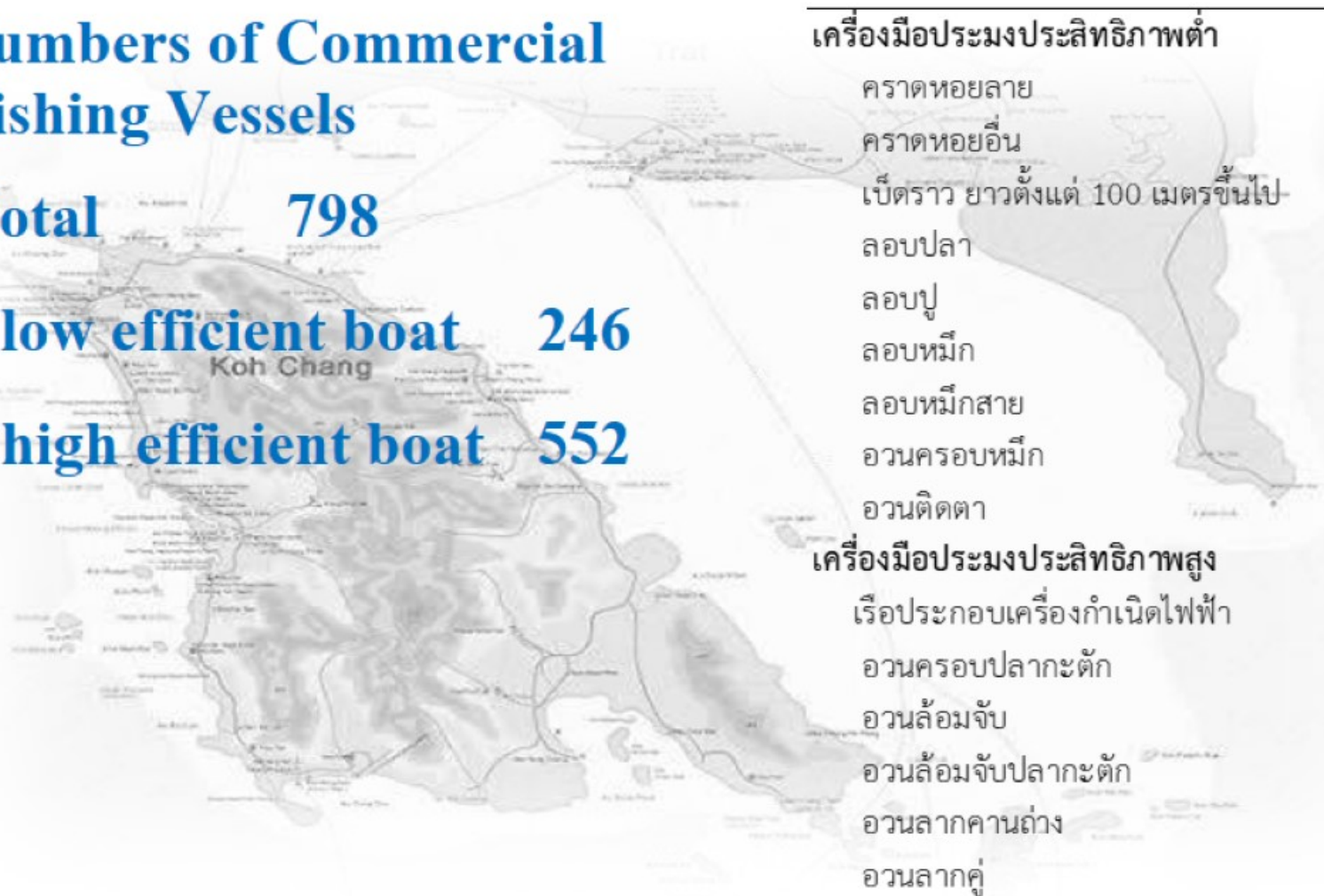
## Numbers of Commercial Fishing Vessels



**Total 798**

• **low efficient boat 246**

• **high efficient boat 552**



เรือประมง	จำนวน (ลำ)
<b>เครื่องมือประมงประสิทธิภาพต่ำ</b>	<b>246</b>
คราดหอยลาย	16
คราดหอยอื่น	4
เบ็ดราว ยาวตั้งแต่ 100 เมตรขึ้นไป	15
ลอบปลา	2
ลอบปู	72
ลอบหมึก	2
ลอบหมึกสาย	9
อวนครอบหมึก	88
อวนติดตา	38
<b>เครื่องมือประมงประสิทธิภาพสูง</b>	<b>552</b>
เรือประกอบเครื่องกำเนิดไฟฟ้า	102
อวนครอบปลากะตัก	208
อวนล้อมจับ	31
อวนล้อมจับปลากะตัก	17
อวนลากคานถ่าง	55
อวนลากคู่	4
อวนลากแผ่นตะเฆ่	135
<b>ผลรวมทั้งหมด</b>	<b>798</b>

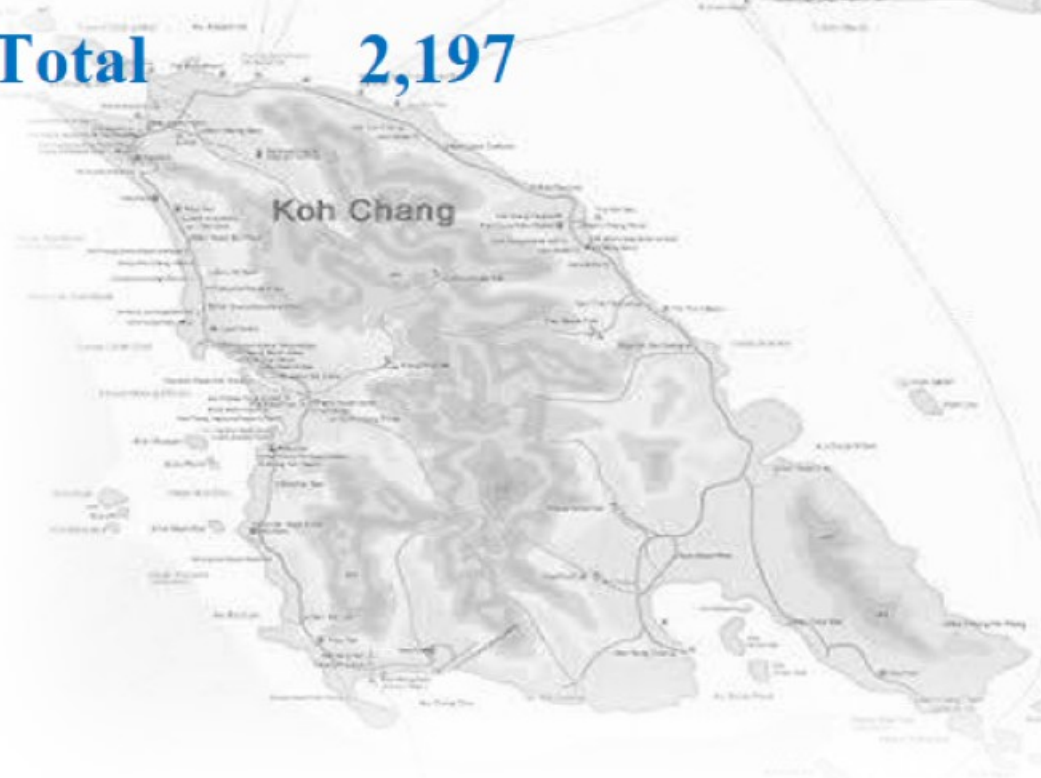
**low efficient boat**  
 Short-necked clam dredges  
 Other dredges  
 Long line than 100 m  
 Fish trap  
 Crabs trap  
 Squids trap  
 Octopus Pot  
 Squids falling nets  
 Gill net

**high efficient boat**  
 Light luring boat  
 Anchovy falling nets  
 Purse seine  
 Anchovy purse sine  
 Beam trawls  
 Pair trawls  
 Otther board trawls



## Numbers of Small-Scale Fishing Vessels

➤ **Total 2,197**



ชนิดเครื่องมือประมง	จำนวน (ลำ)	
อวนติดตา (อวนกุ้ง)	667	Shrimp gill net
อวนติดตา (อวนปู)	390	Crab gill net
ลอบปู	263	Crab trap
อวนลากแผ่นตะเฆ่	115	Otther board trawls
อวนติดตา (ปลาอื่นๆ)	94	Gill net
อวนรุน	94	Push net
อวนติดตา (ปลาทู)	68	Indo pacific mackerel gill net
เบ็ดมือ	64	Hook and line
ลอบหมึก	48	Squids trap
อวนครอบปลากะตัก	47	Anchovy falling nets
เบ็ดราว	38	Long line than 100 m
เรือปั่นไฟ	32	Light luring boat
อวนครอบหมึก	32	Squids falling nets
อวนติดตา (ปลากระบอก)	27	Crab gill net
คราดหอยลาย	13	Short-necked clam dredges
ลอบปลา	12	Fish trap
เครื่องมืออื่นๆ	193	Otter
<b>ผลรวมทั้งหมด</b>	<b>2,197</b>	

# Fishing Communities

83 Villages in 21 Sub-districts of 6 Districts

1. Muang District	8 Sub-districts	23 Villages
2. Khlong Yai District	3 Sub-districts	18 Villages
3. Khao Saming District	2 Sub-districts	10 Villages
4. Laem Gnop District	4 Sub-districts	16 Villages
5. Koh Kut District	2 Sub-districts	8 Villages
6. Koh Chang District	2 Sub-districts	8 Villages





# Local Fishing Community Organizations



Coastal  
Fisheries



Offshore  
Fisheries



Fish  
Processing



Aquaculture

47 Groups

## Existing Fisheries Management Measures in Trat Site

- 1) Determination of fishing gears, fishing methods, and fishing areas prohibited from fishing in coastal seas
- 2) Determination of fishing gears, fishing methods, and fishing areas prohibited from fishing in 15 fishing grounds covering the area of 5,800 rai (9.28 km<sup>2</sup>)
- 3) Determination of 4 aquatic sanctuaries
- 4) Notification on coastal seas: 3 nm from shoreline (commercial fisheries prohibited)

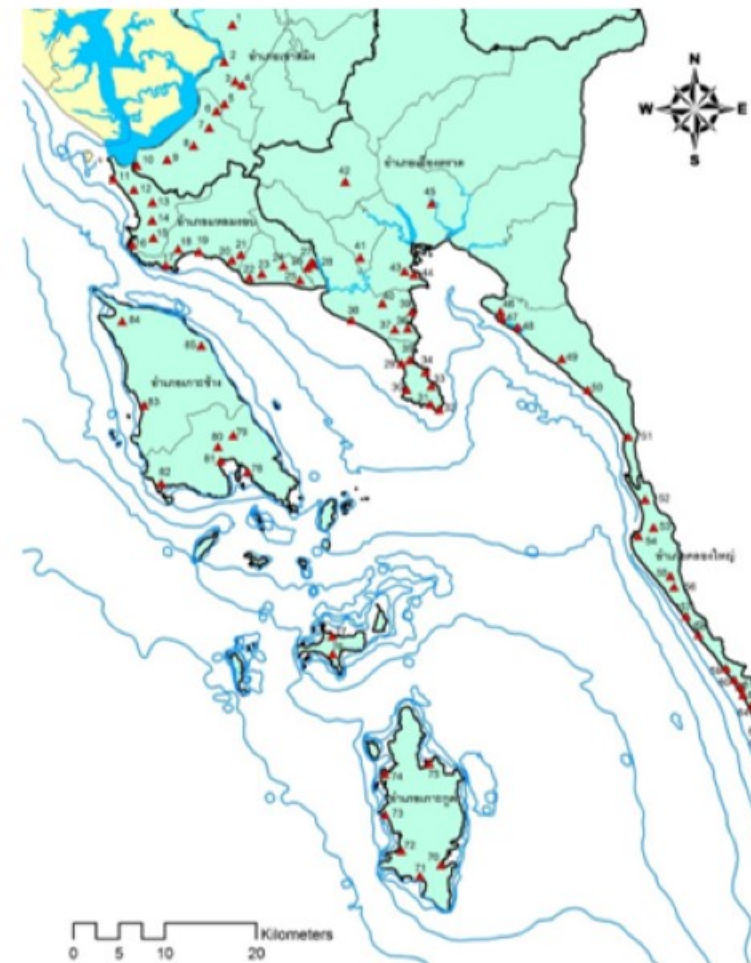




# Usage of *refugia* by threatened and endangered marine species in Trat Site

➤ Appearances of the following endangered species in the past 10 years

- Irrawaddy dolphin (*Orcealla brevirostris*)
- Finless porpoise (*Neophocaena phocinoides*)
- Green turtle (*Chelonia mydas*)
- Hawksbill (*Eretmochelys imbricata*)



A detailed map of the Trat province and Koh Chang island in Thailand. The map shows the coastline, major roads, and various geographical features. The title is overlaid in red text on the map.

# Catches and Species Compositions of the Principal Fishing Gears in Trat Site

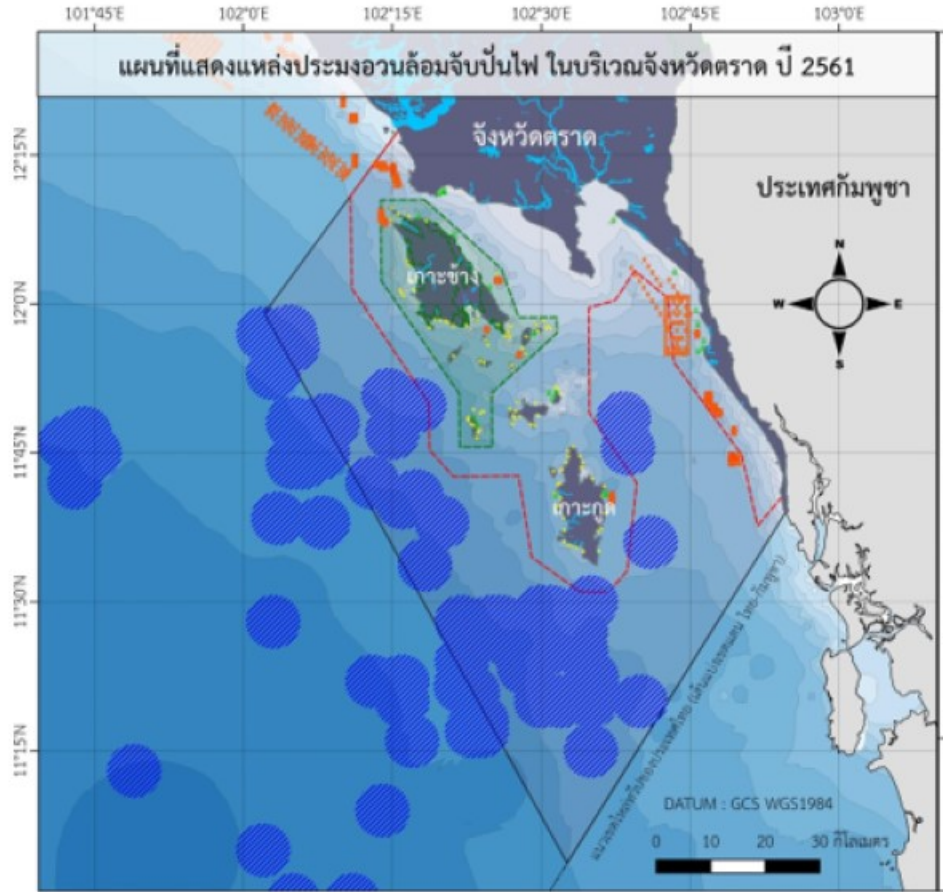


## Principal Fishing Gears in Trat Site



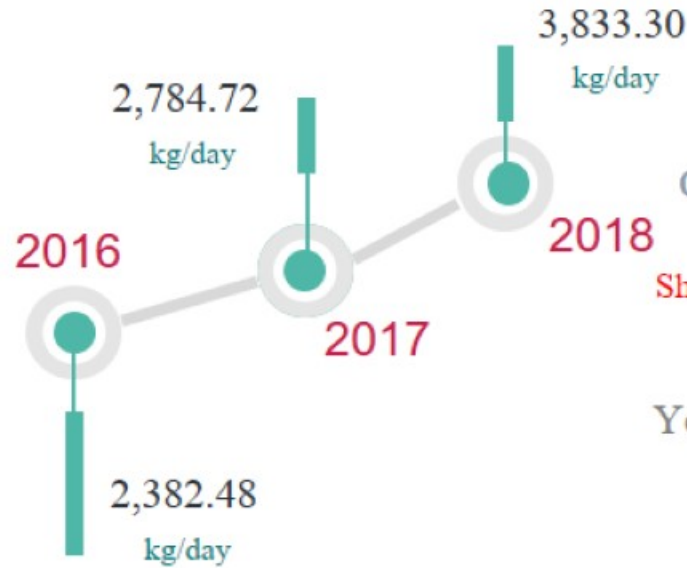
# Light Luring Purse Seines

## Fishing Areas



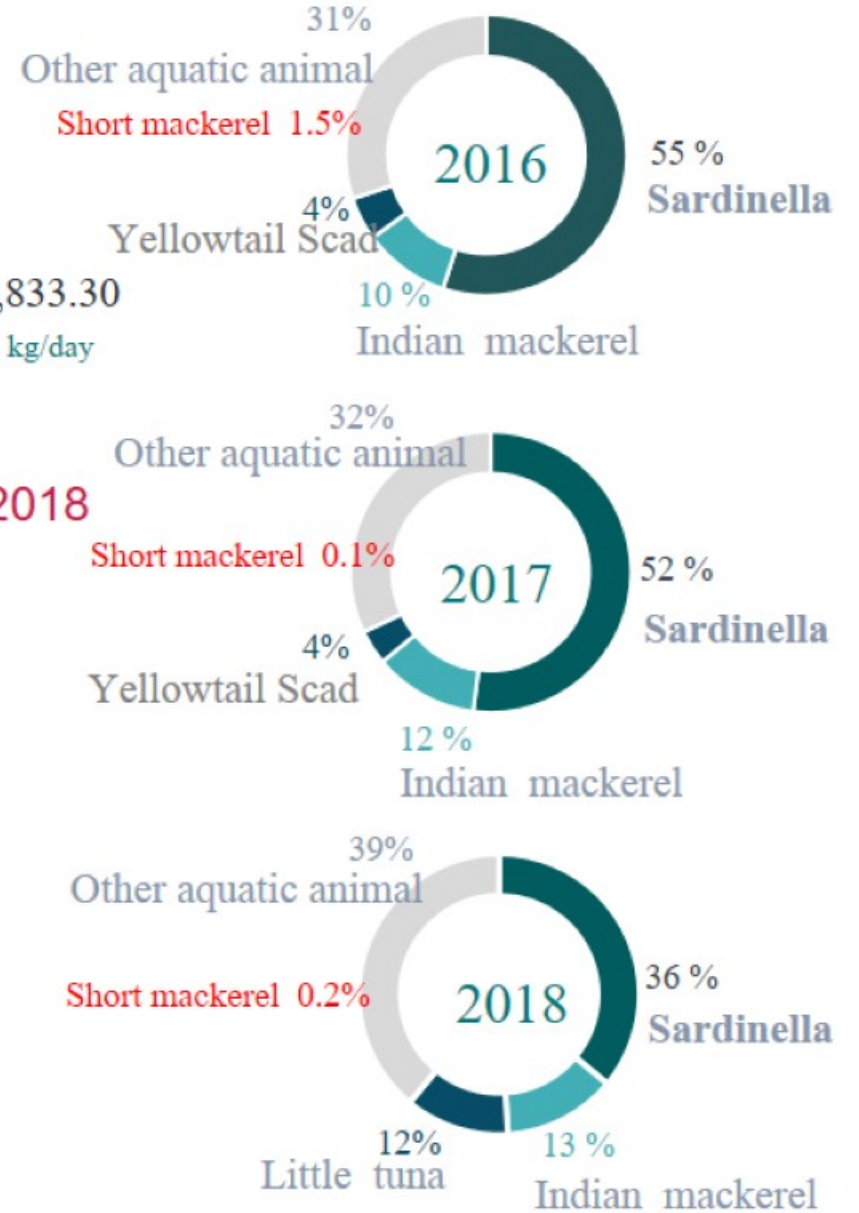
## Catch Rates

2016-2018



## Species Compositions

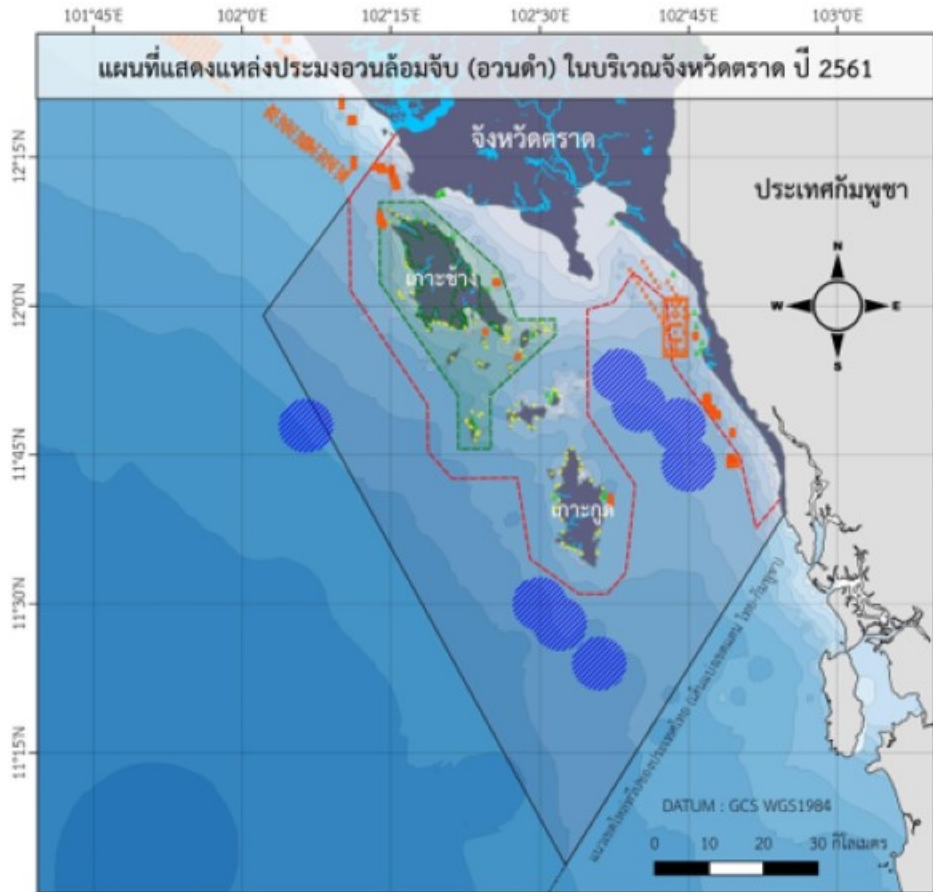
2016-2018



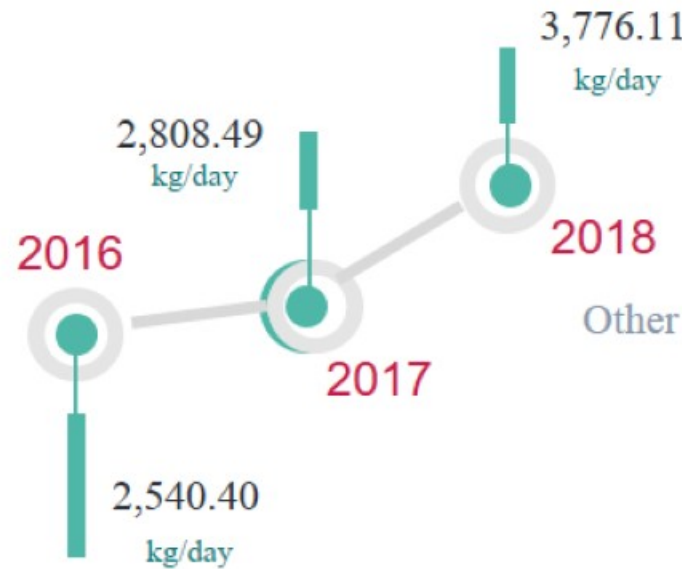


# Purse Seines

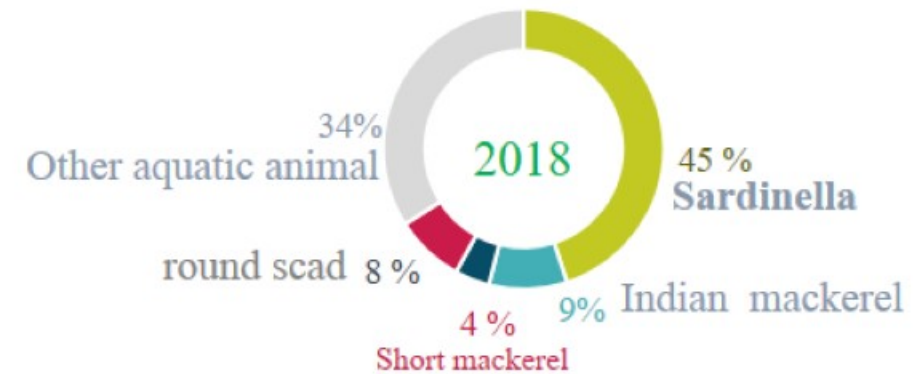
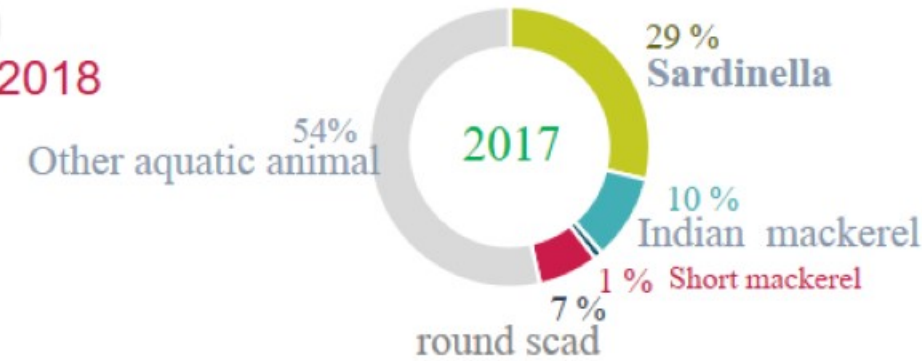
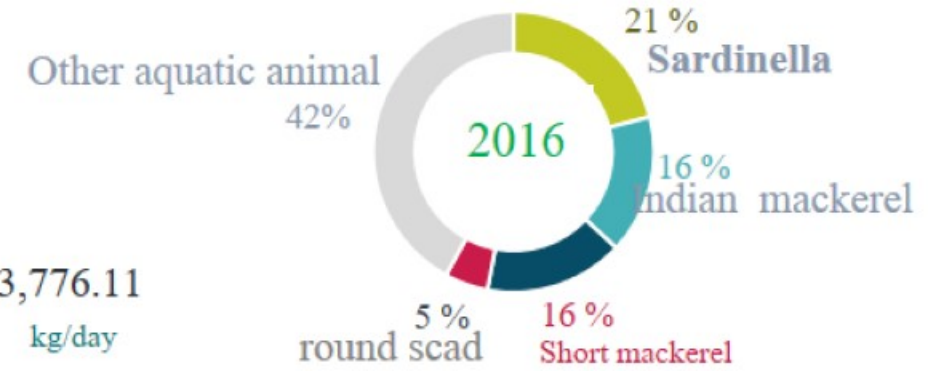
## Fishing Areas



## Catch Rates 2016-2018

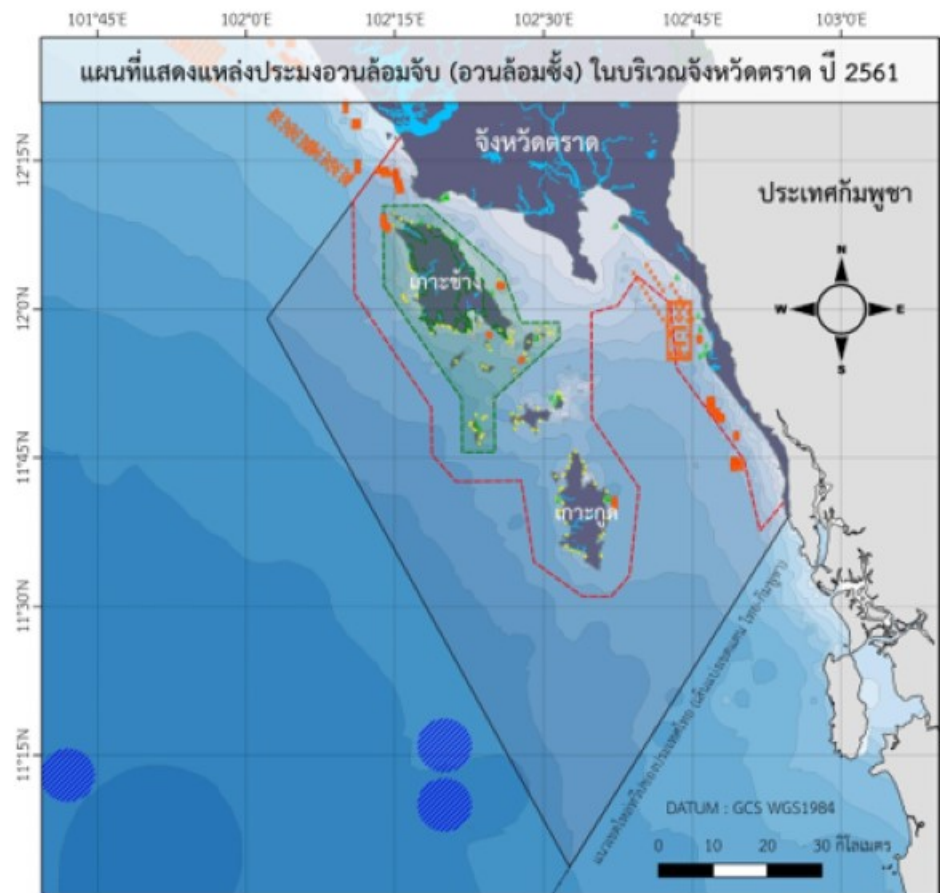


## Species Compositions 2016-2018

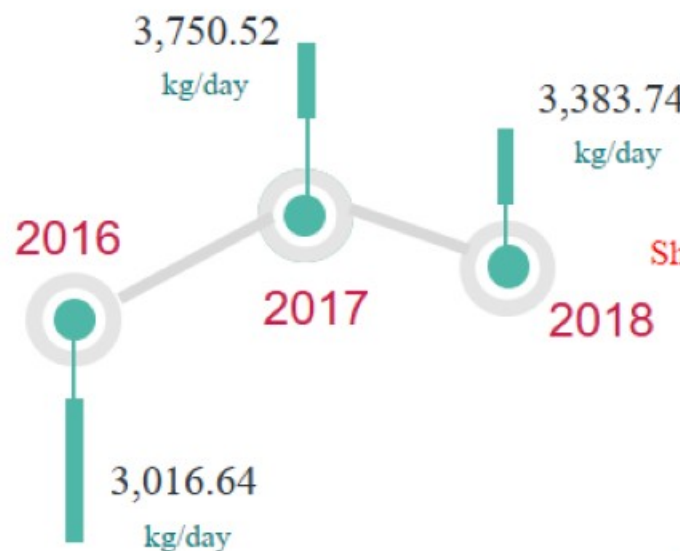


# Purse Seines with Fish Aggregating Devices

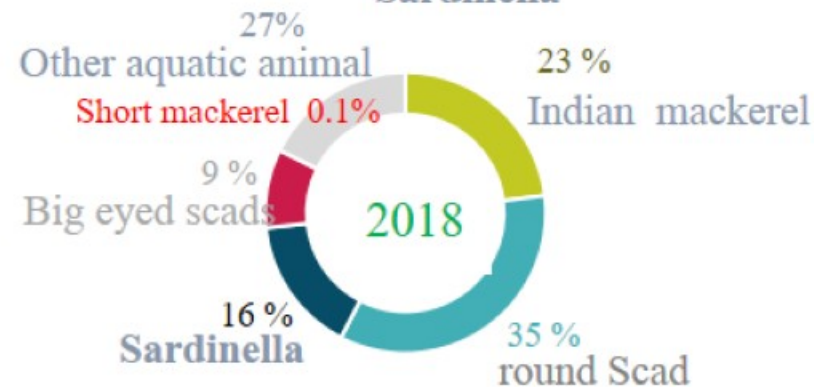
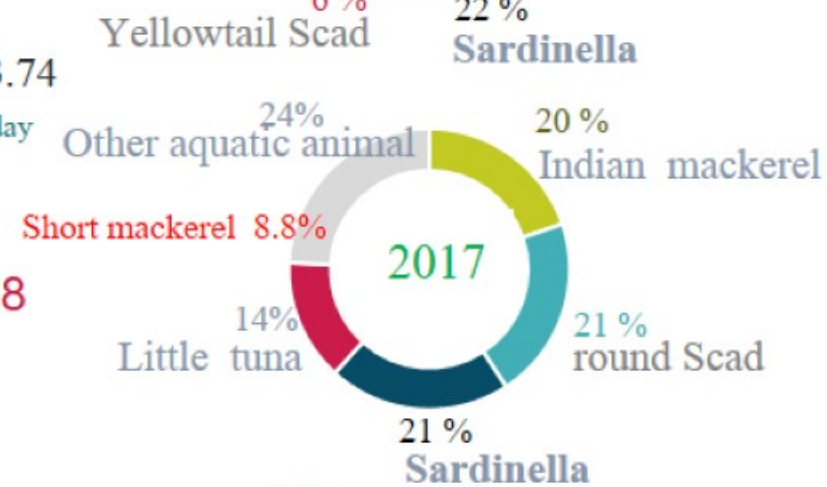
## Fishing Areas



## Catch Rates 2016-2018



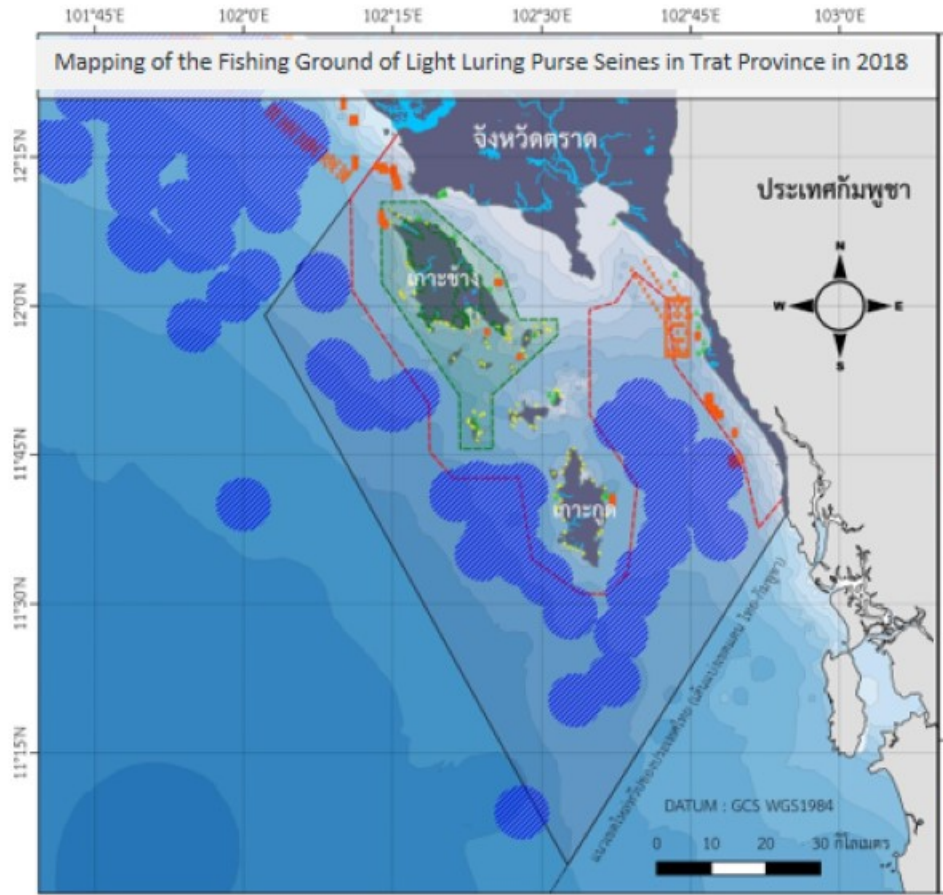
## Species Compositions 2016-2018



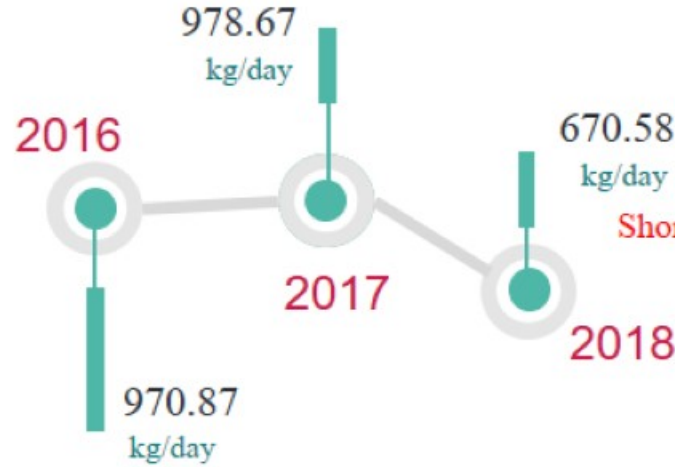


# Light Luring Anchovy Falling Nets

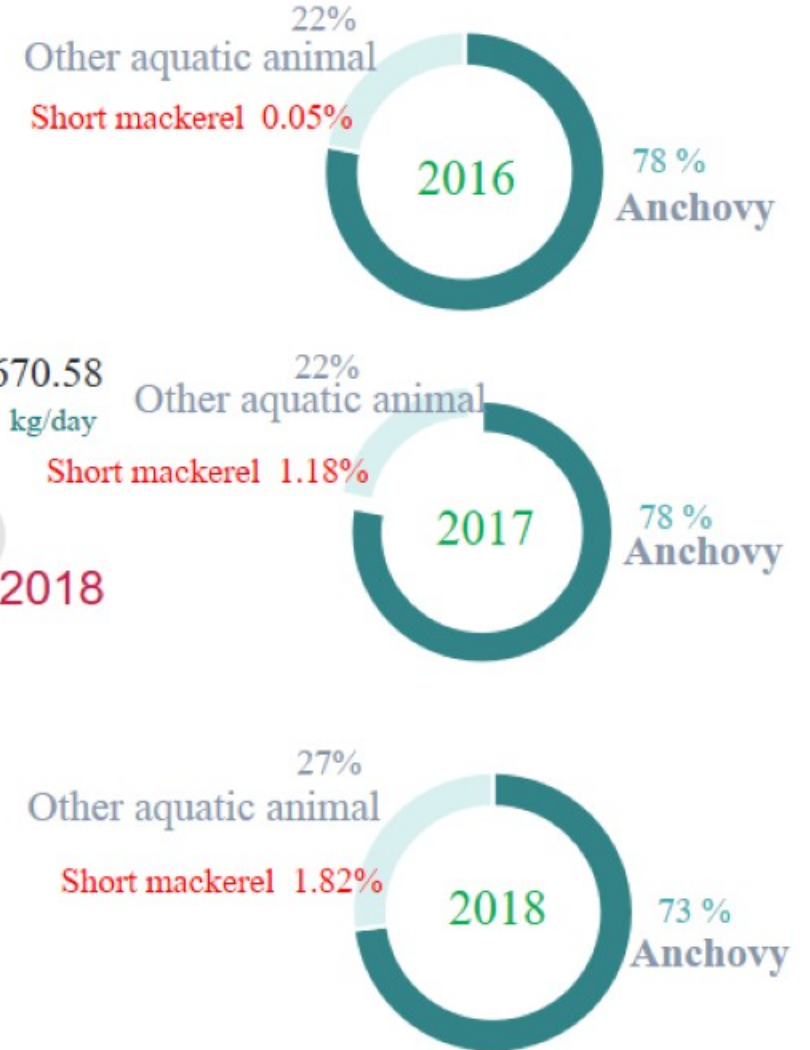
## Fishing Areas



## Catch Rates 2016-2018

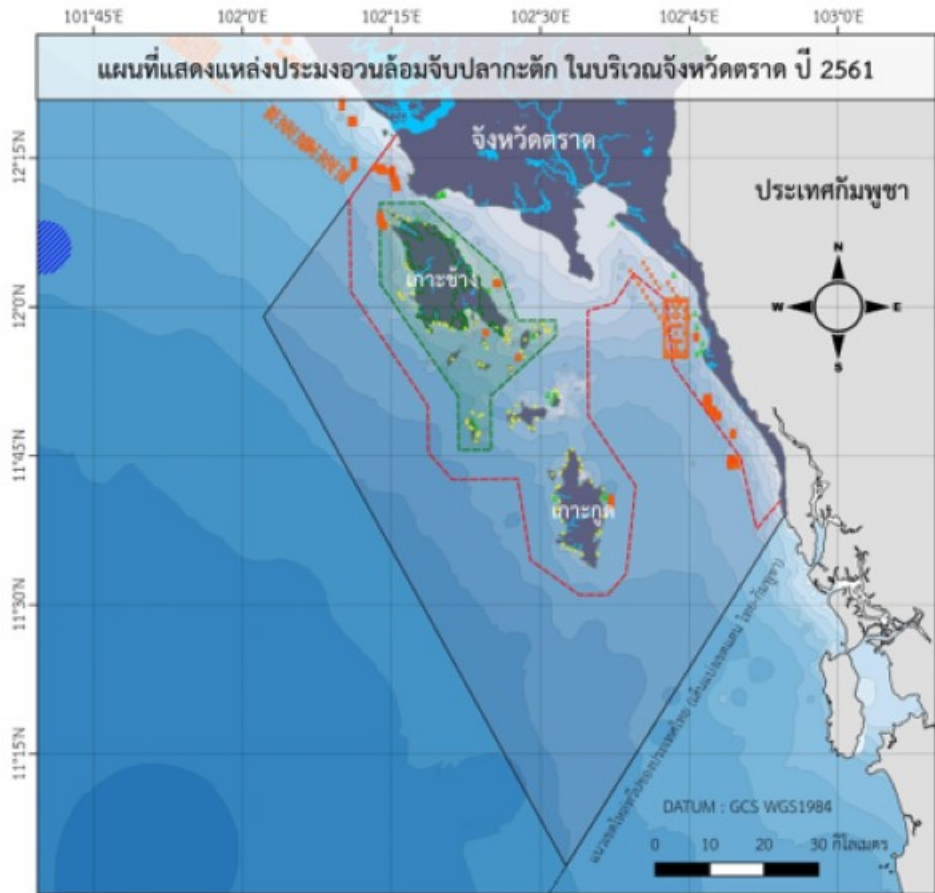


## Species Compositions 2016-2018



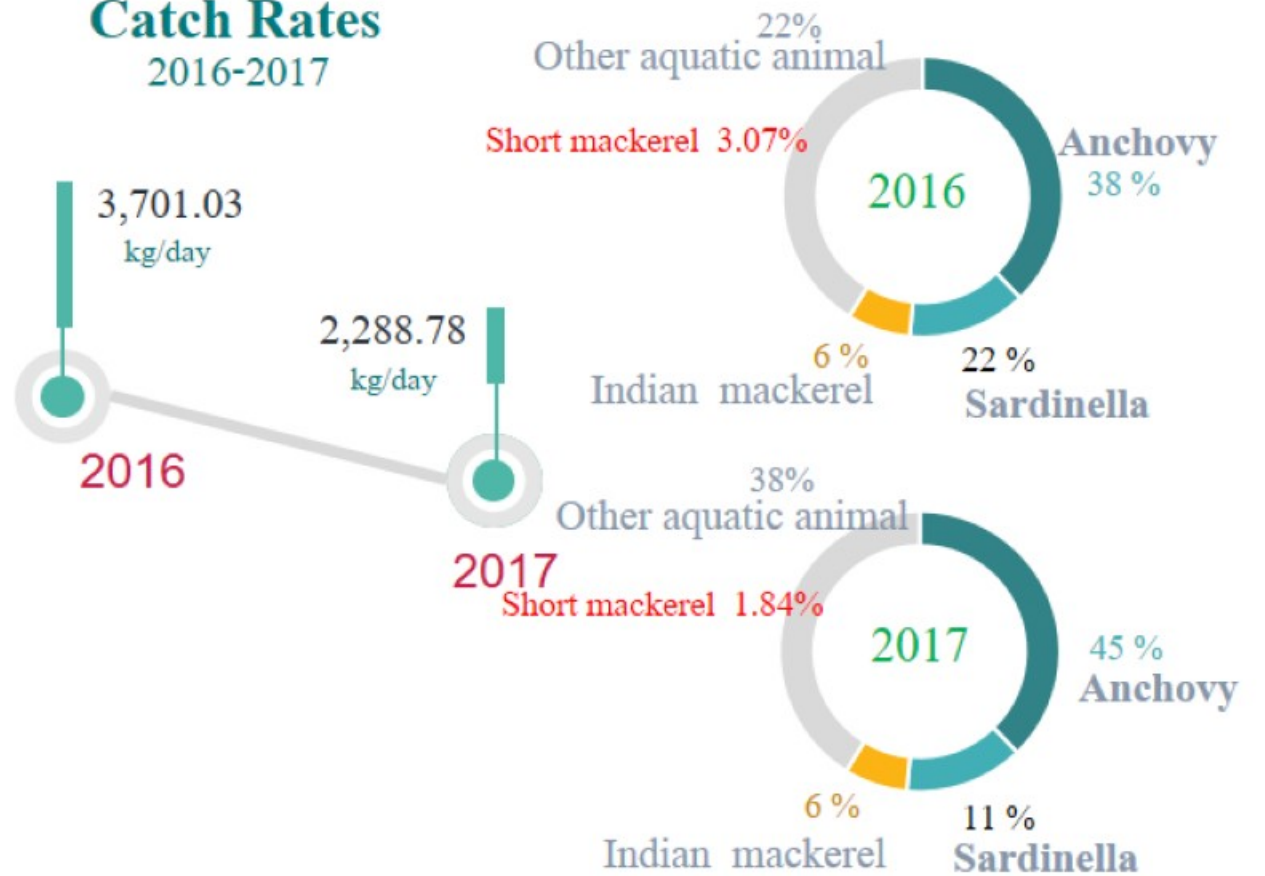
# Anchovy Purse Seines

## Fishing Areas



## Species Compositions 2016-2017

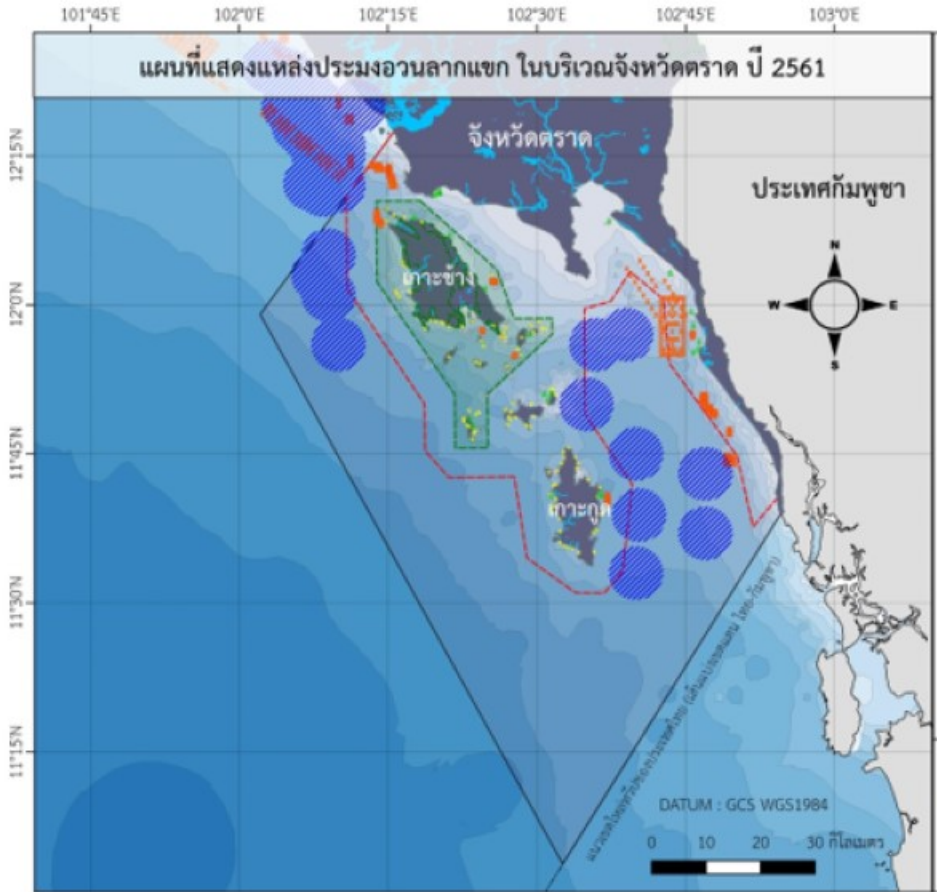
### Catch Rates 2016-2017



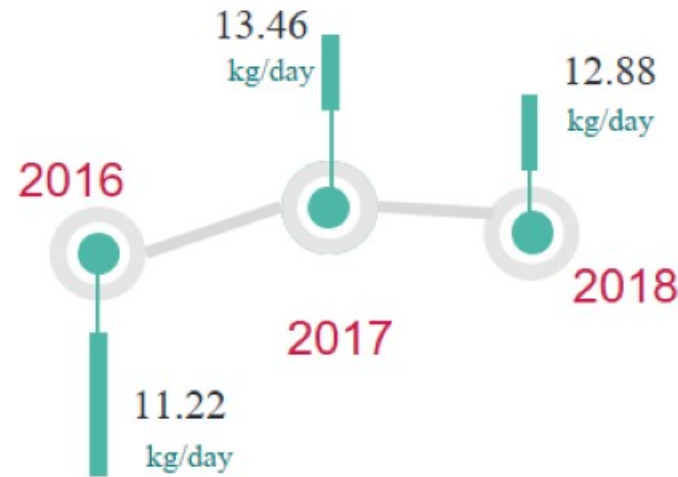


# Beam Trawls

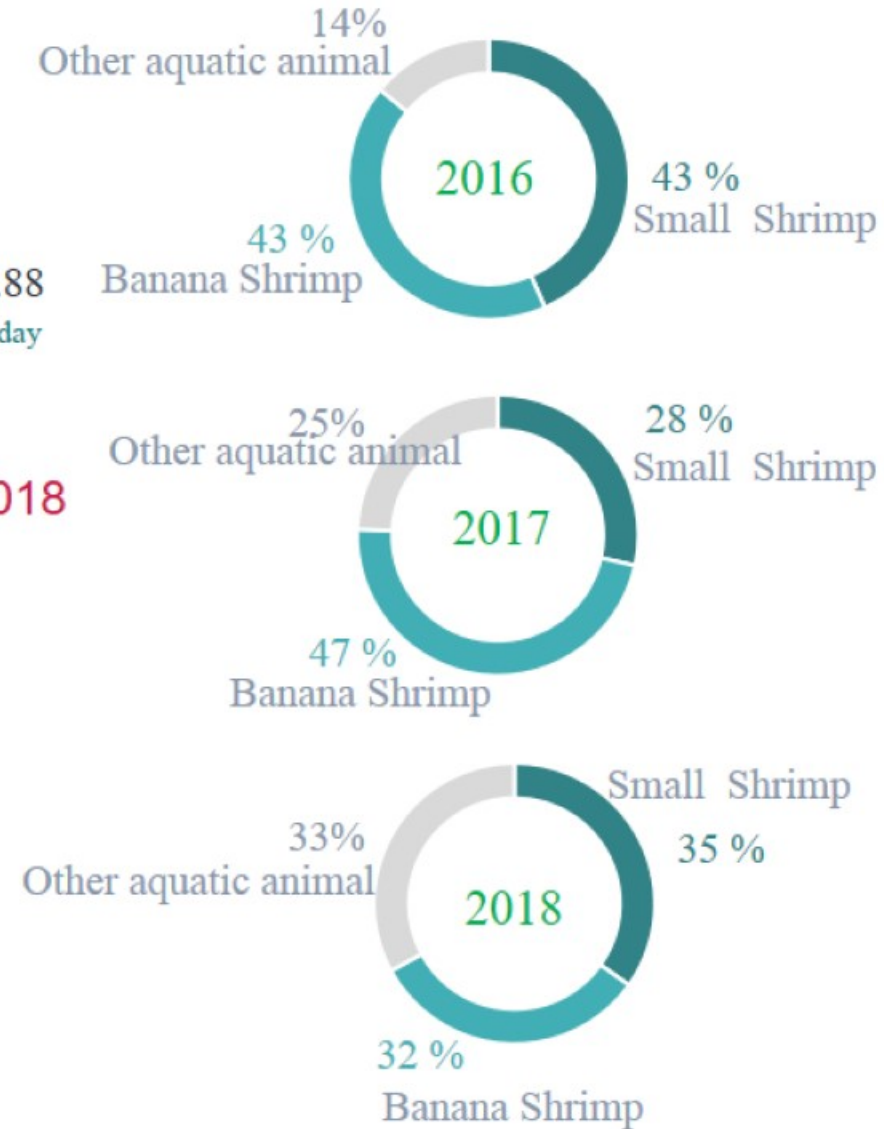
## Fishing Areas



## Catch Rates 2016-2018

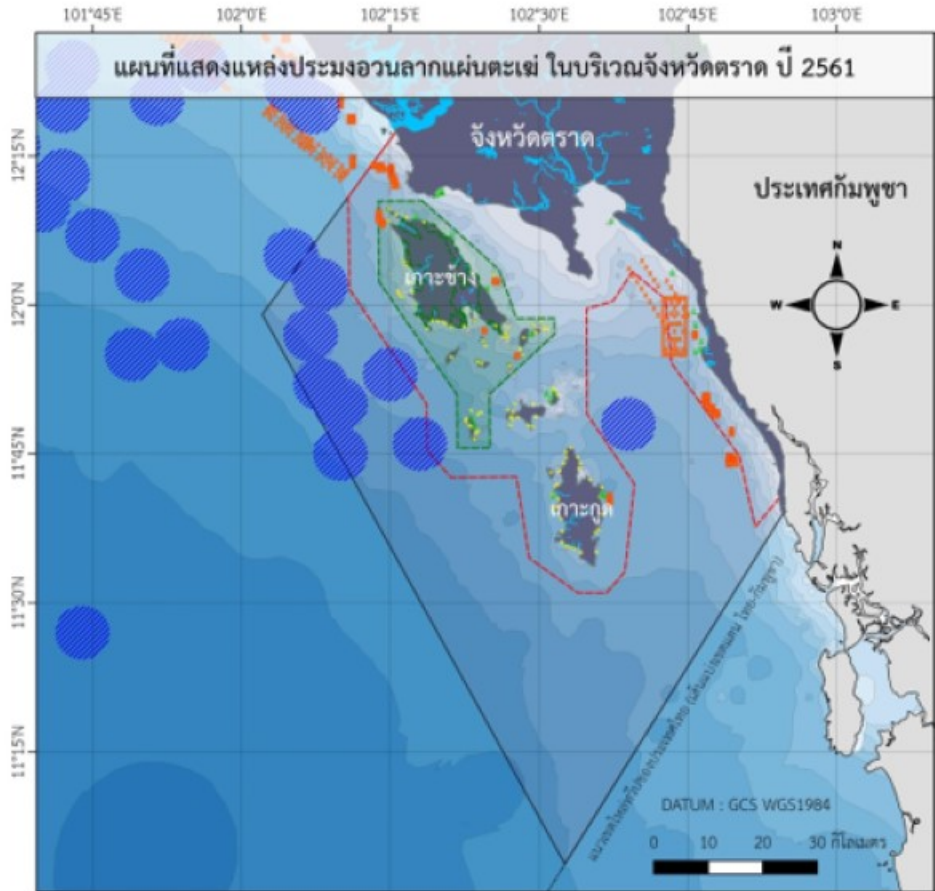


## Species Compositions 2016-2018

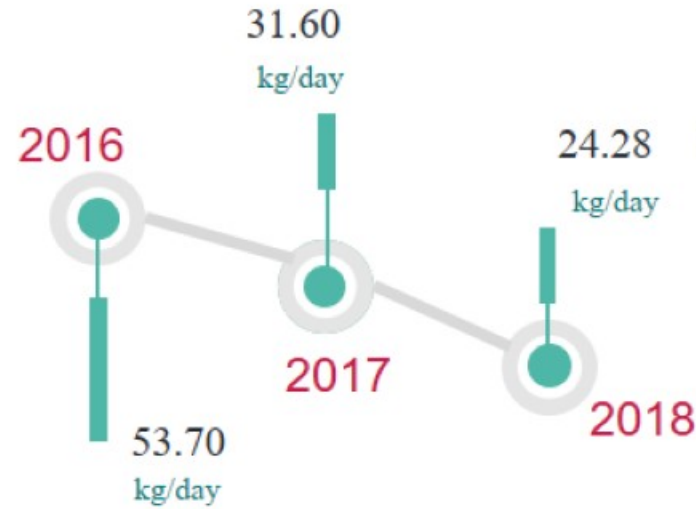


# Otter Board Trawls

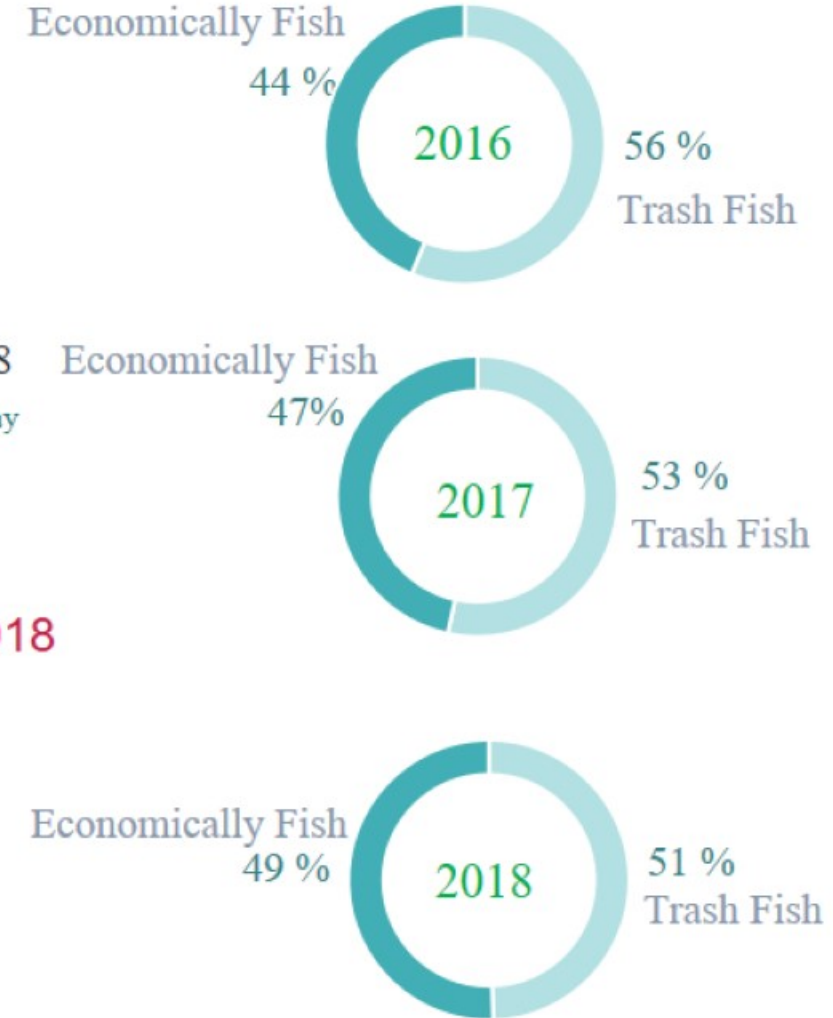
## Fishing Areas



## Catch Rates 2016-2018



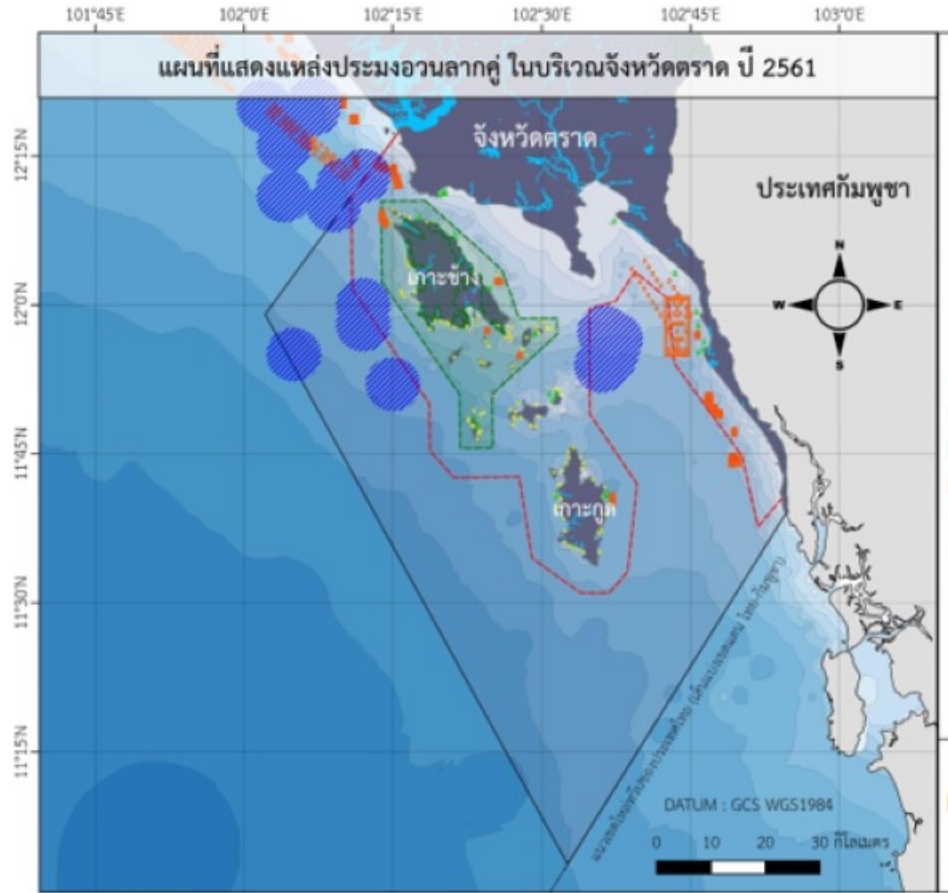
## Species Compositions 2016-2018



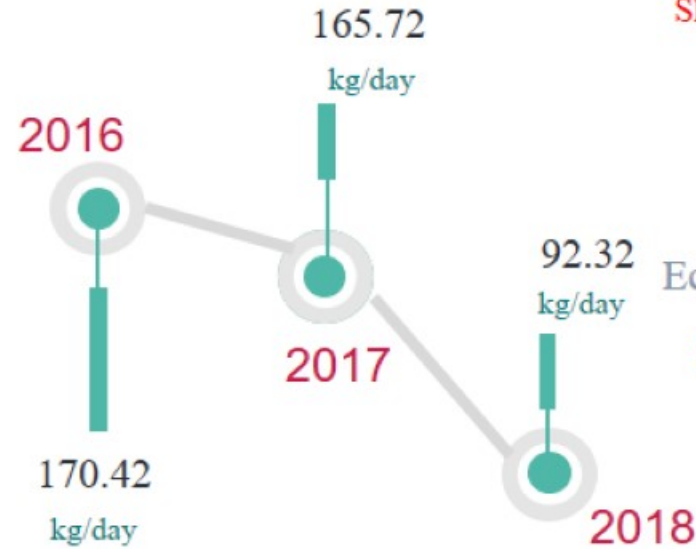


# Pair Trawls

## Fishing Areas



## Catch Rates 2016-2018

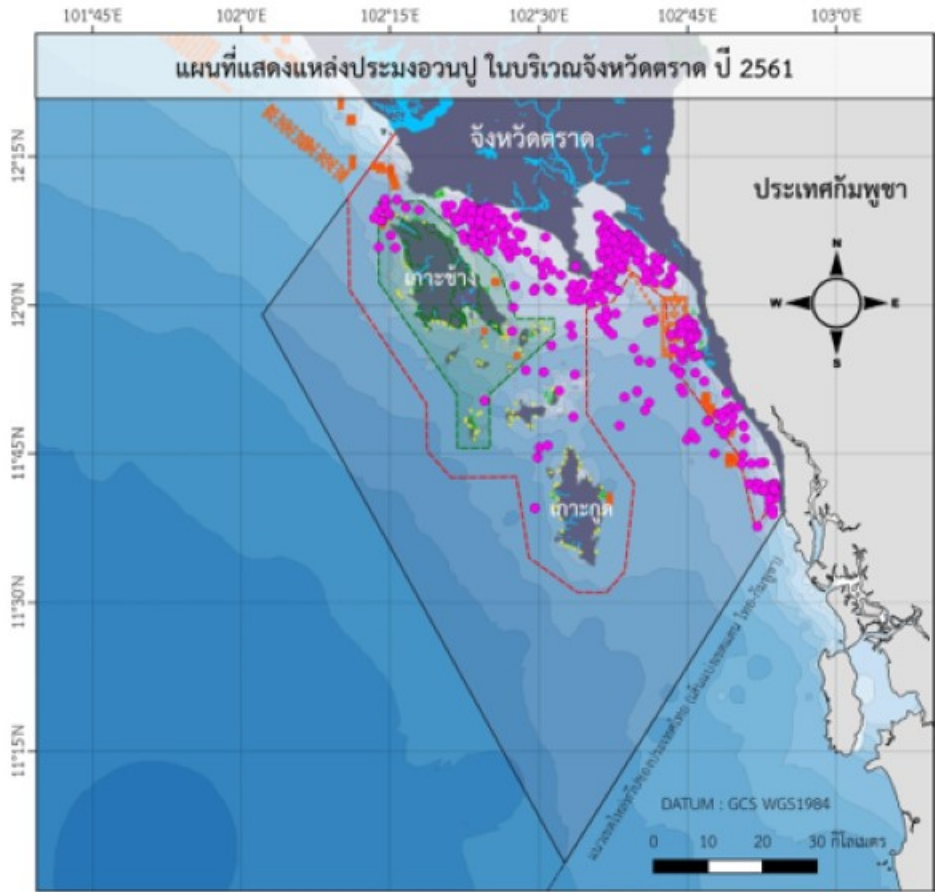


## Species Compositions 2016-2018

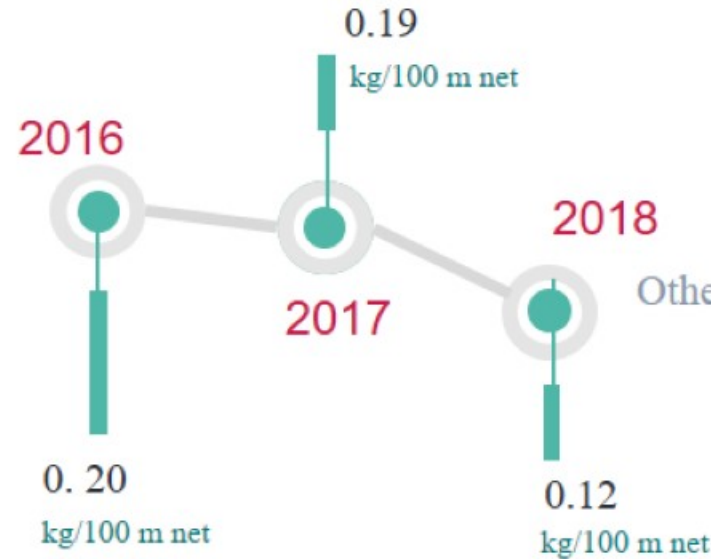


# Crab Gill Nets

## Fishing Areas



## Catch Rates 2016-2018



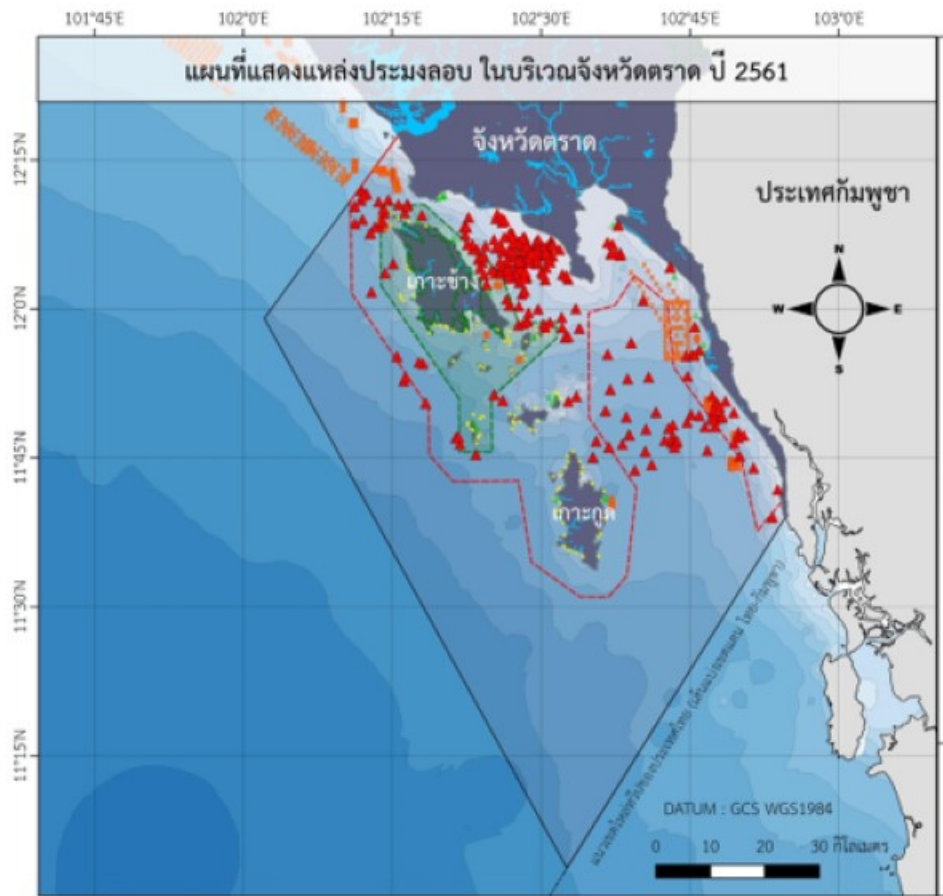
## Species Compositions 2016-2018





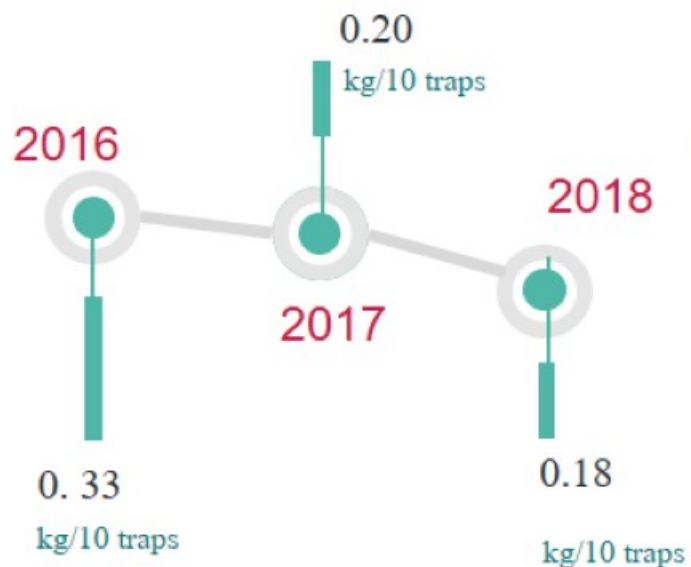
# Crab Traps

## Fishing Areas



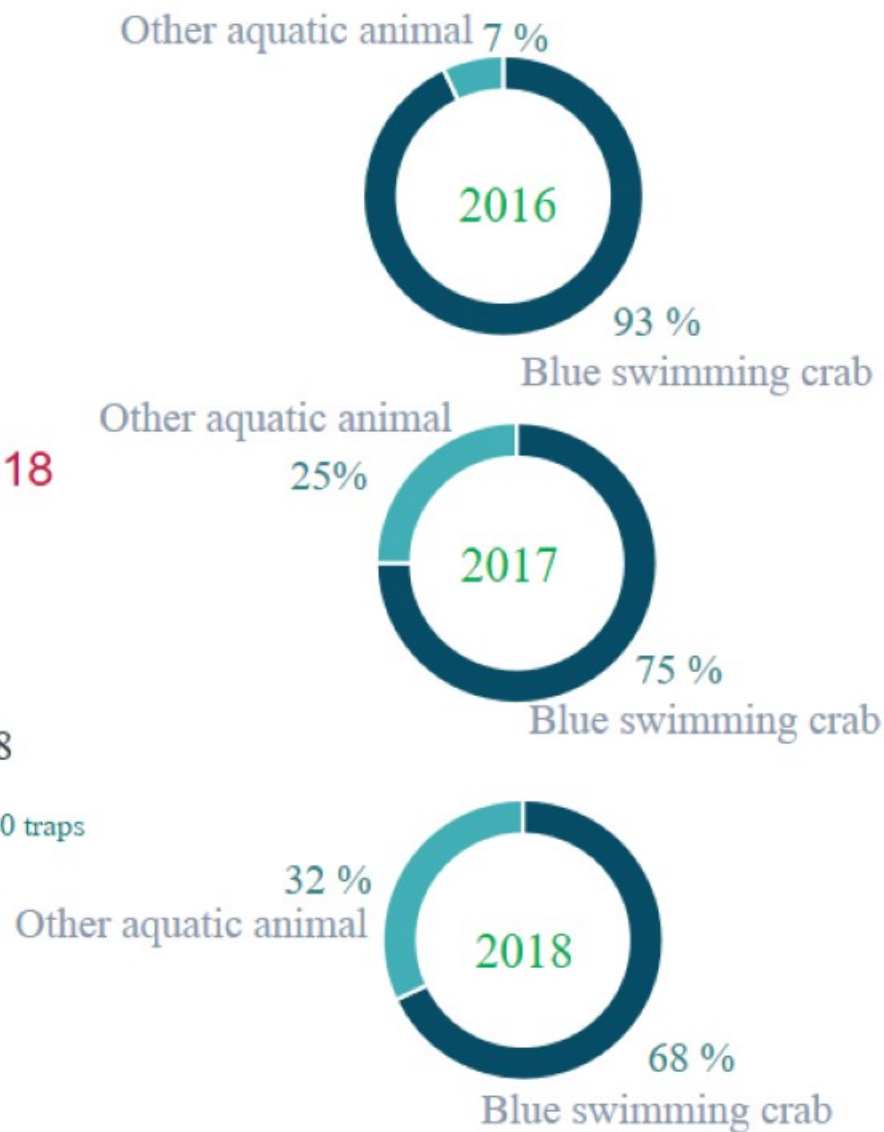
## Catch Rates

2016-2018



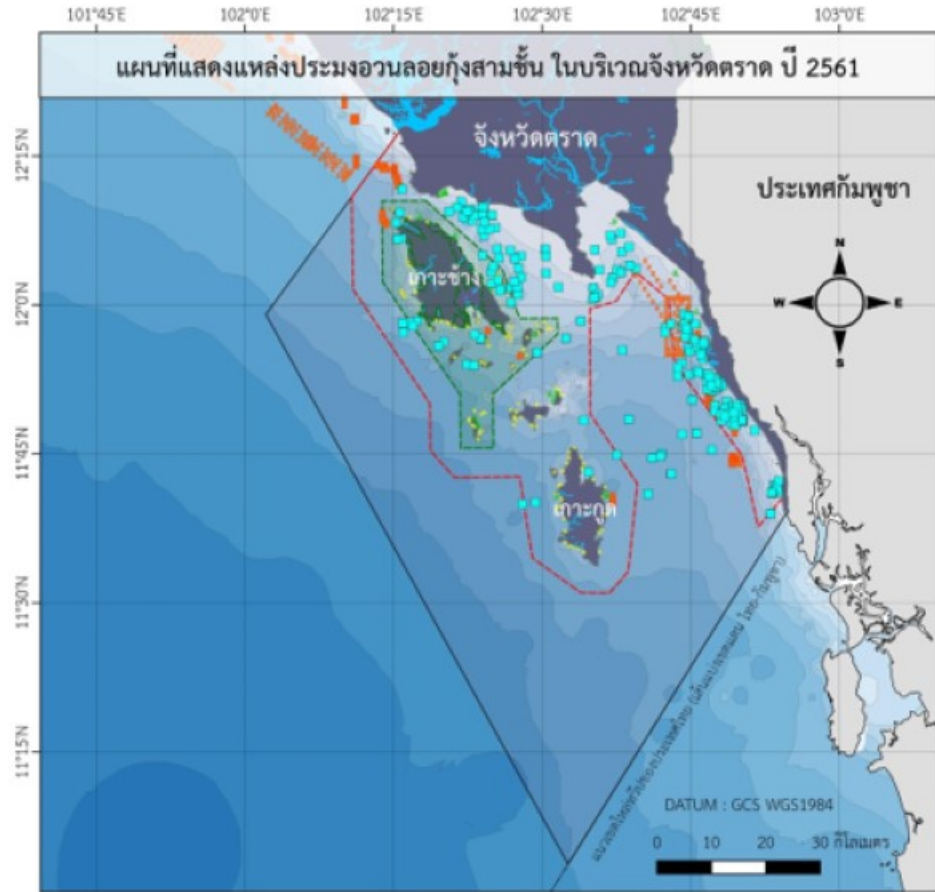
## Species Compositions

2016-2018

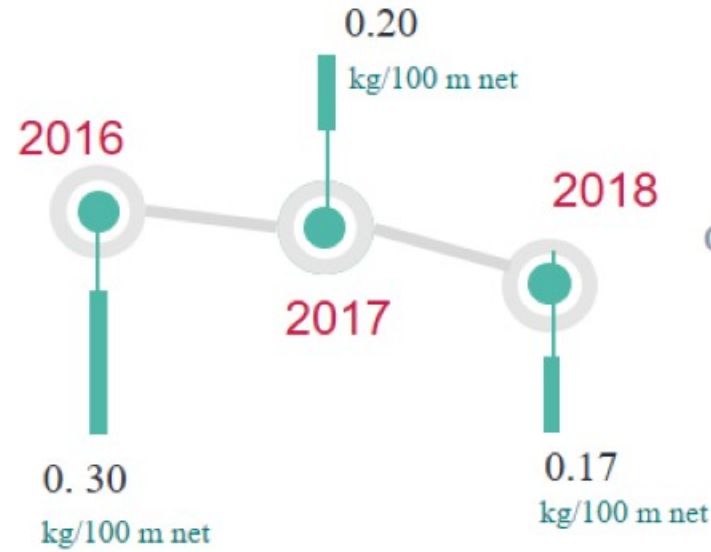


# Shrimp Gill Nets/Trammel Nets

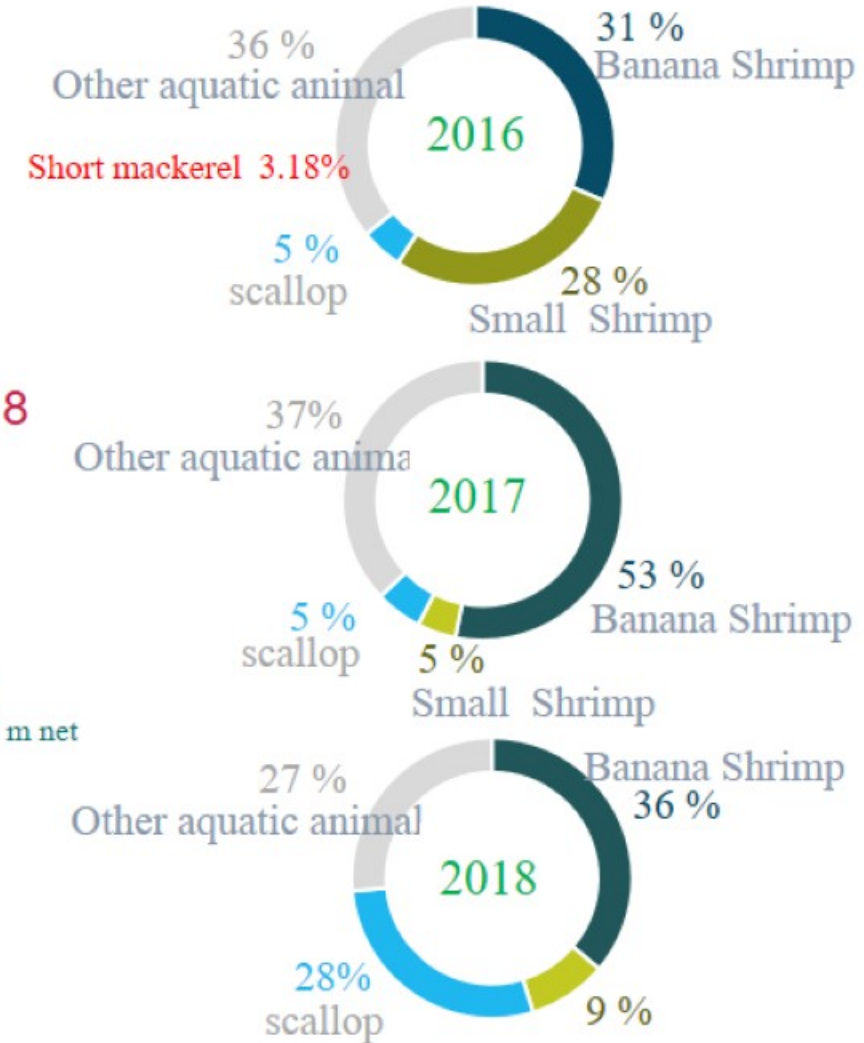
## Fishing Areas



## Catch Rates 2016-2018



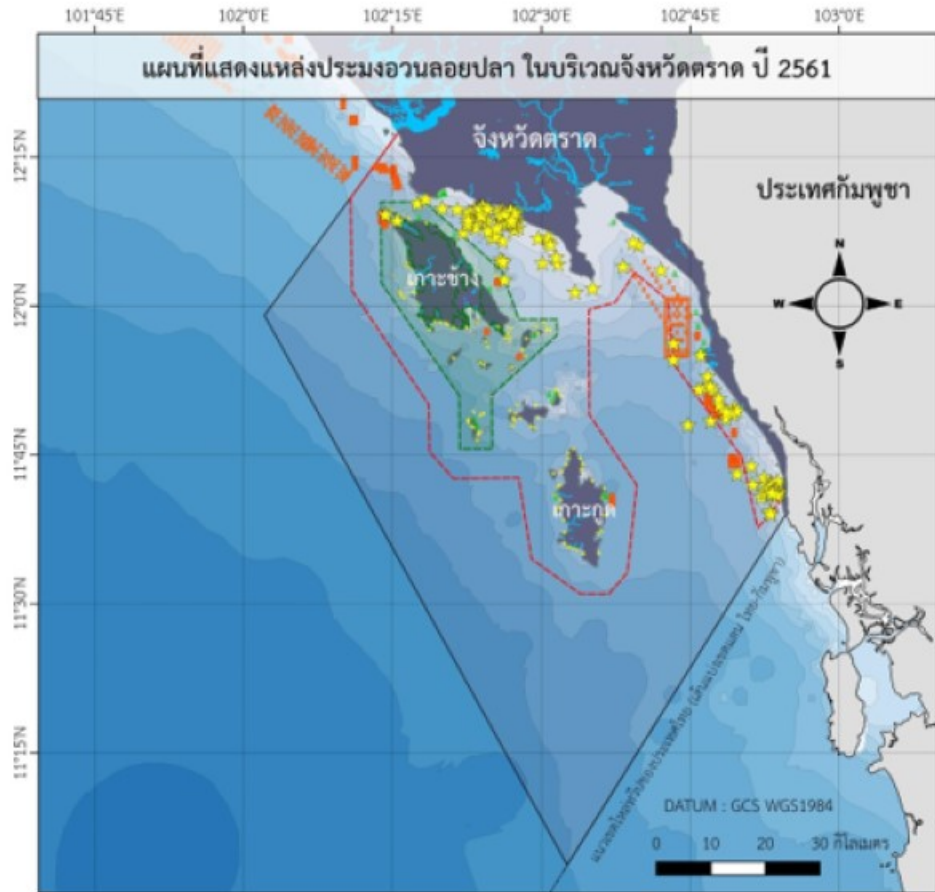
## Species Compositions 2016-2018



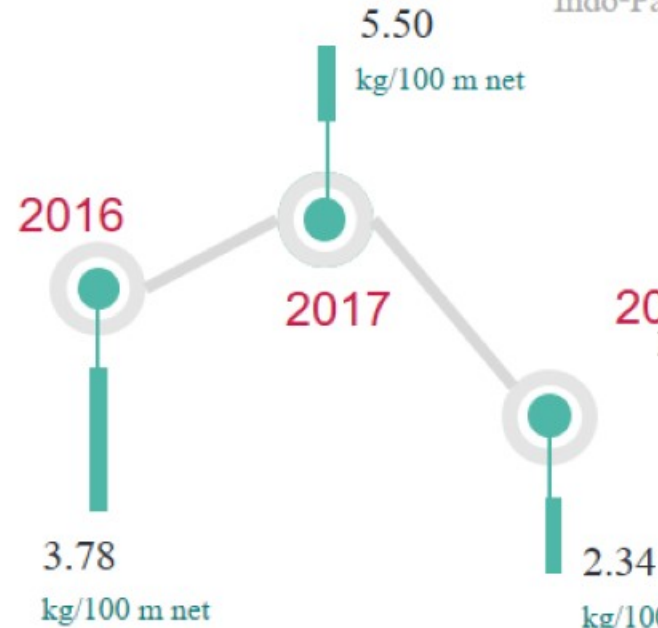


# Short Mackerel Gill Nets

## Fishing Areas



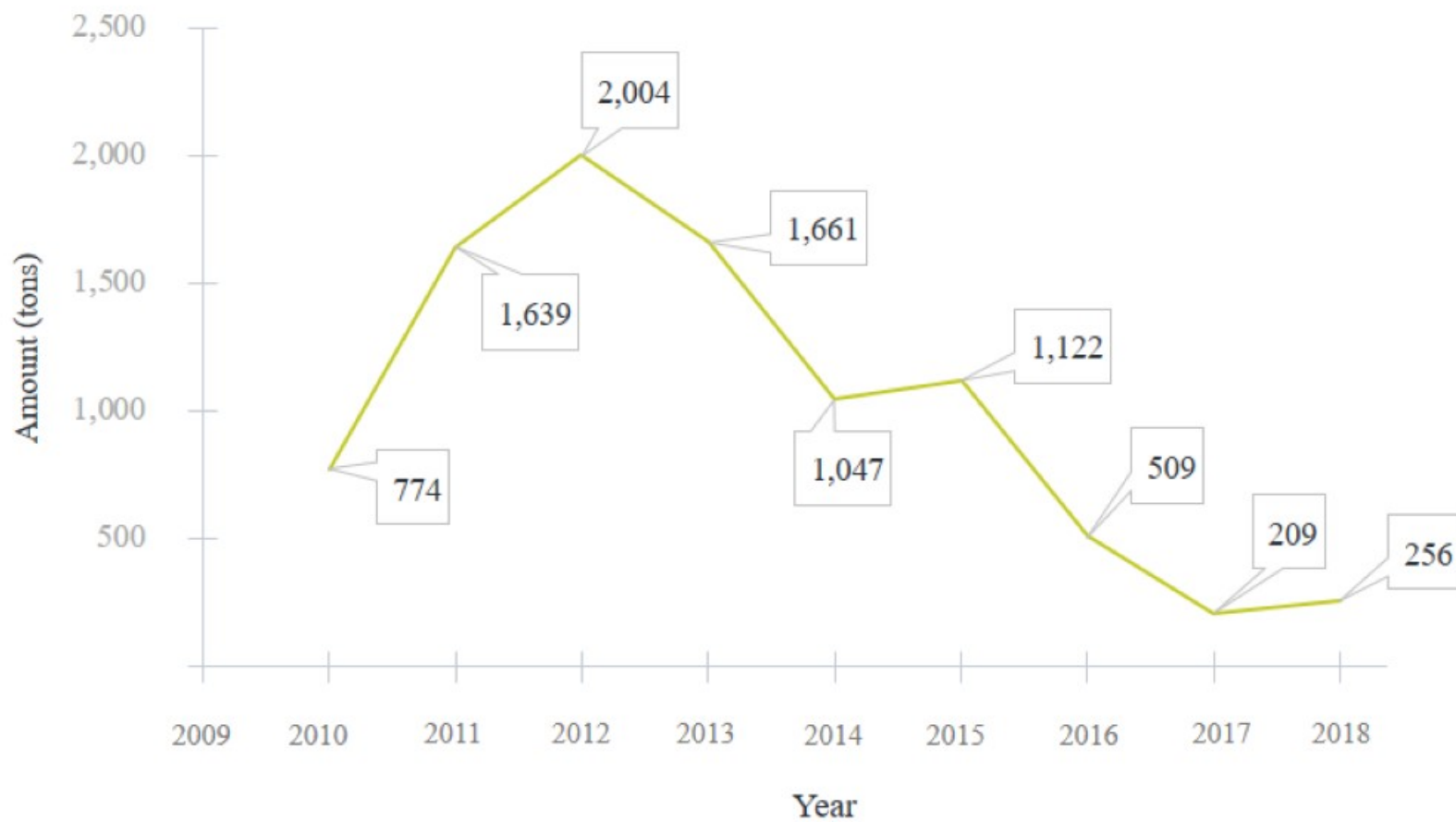
## Catch Rates 2016-2018



## Species Compositions 2016-2018



Landings of short mackerel (tons) at the fishing ports in Trat Site







# Priority Species Information



**Common Name:** Short mackerel, Indo-Pacific mackerel

**Scientific Name:** *Rastrelliger brachysoma* (Bleeker, 1851)

**Thai Local Name:** Pla Thu (Pla = Fish)

**Morphology:** Body very deep; head equal to or less than body depth; gill rakers very long, visible when mouth is opened; snout pointed; silver body colour; colour of spinous dorsal fin yellowish with a black edge, pectoral and pelvic fins dusky, other fins yellowish

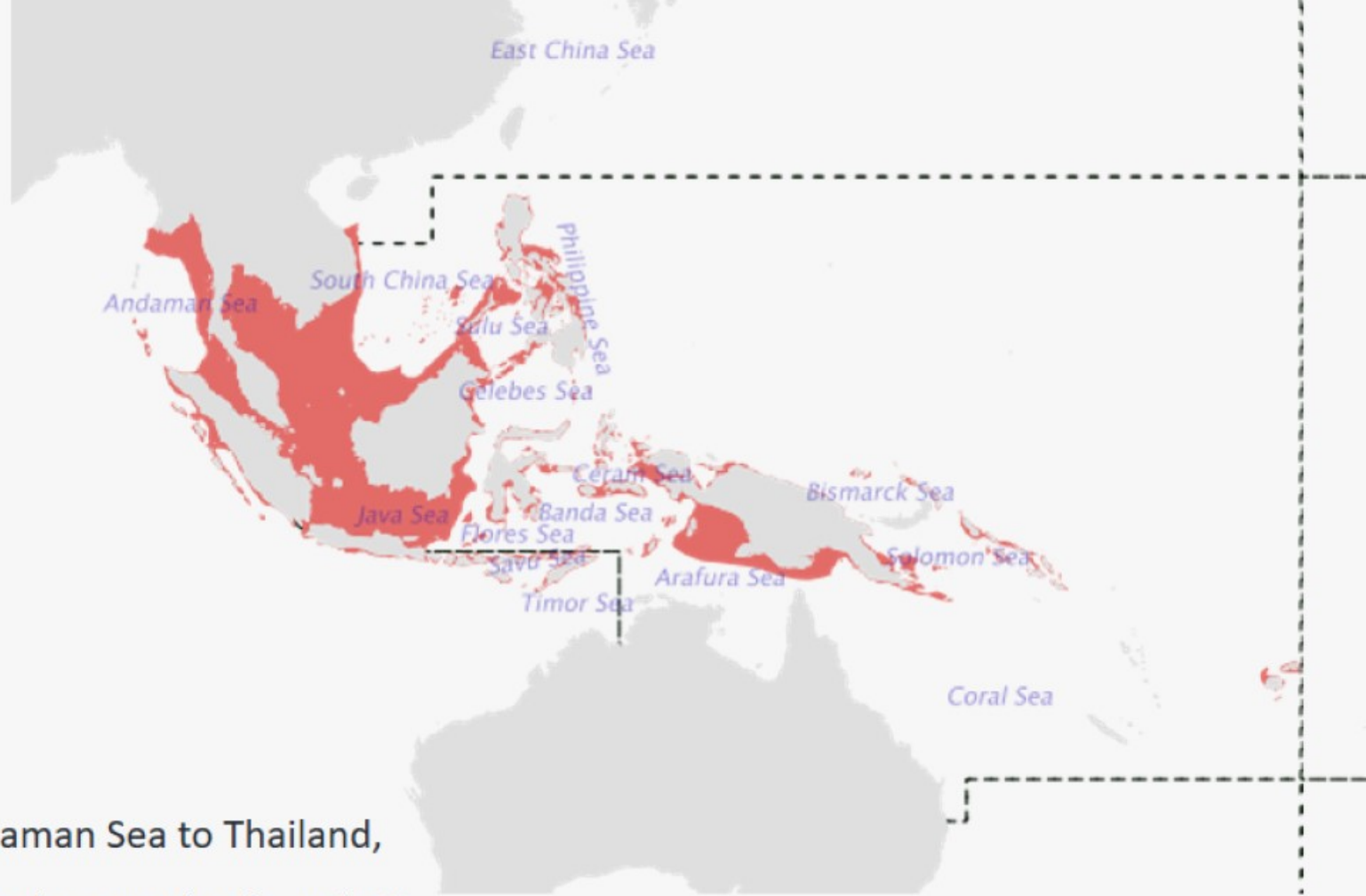
**Length at First Maturity ( $L_{50}/L_m$ ):** 16.98 cm

**Size:**  $L_\infty = 22.23$  cm, common length = 16-18 cm

**MSY:** 112,416 tons



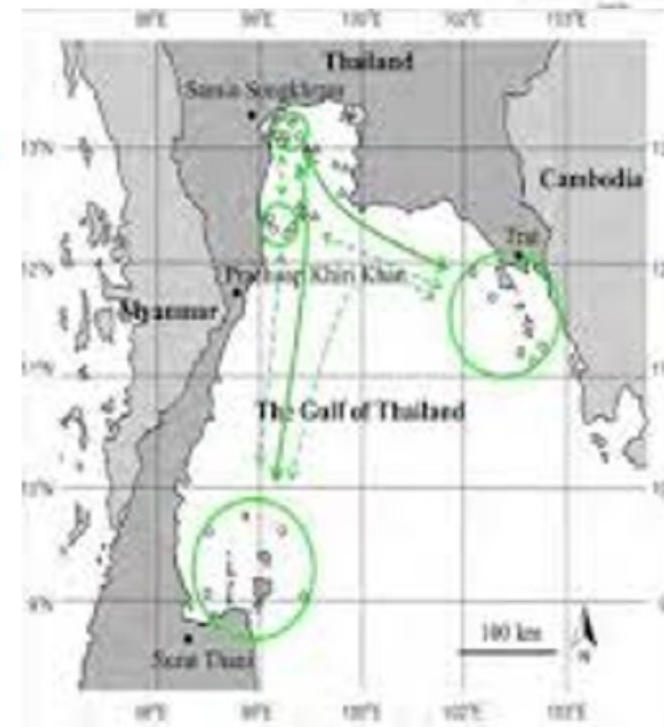
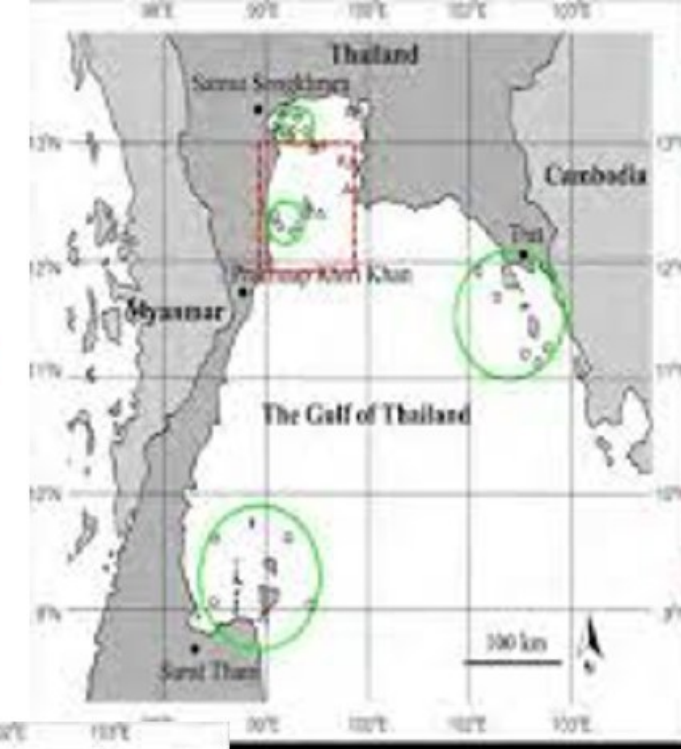




**Distribution:** Indo-Pacific Region; from Andaman Sea to Thailand, Indonesia, Papua New Guinea, Philippines, Solomon Islands and Fiji, at water temperature of 20-30°C and water depth of 15-200 m

# Populations of Short Mackerel in the Gulf of Thailand

- There are possibly 4 different populations in the Gulf of Thailand, namely, **Trat**, Samut Songkram, Prachuap Kiri Khan, and Surat Thani
- Stocks were found migrate among the 4 populations:
  - **Trat** – Samut Songkhram
  - **Trat** – Prachuap Khiri Khan
  - Surat Thani – Samut Songkhram
  - Surat Thani – Prachuap Khiri Khan

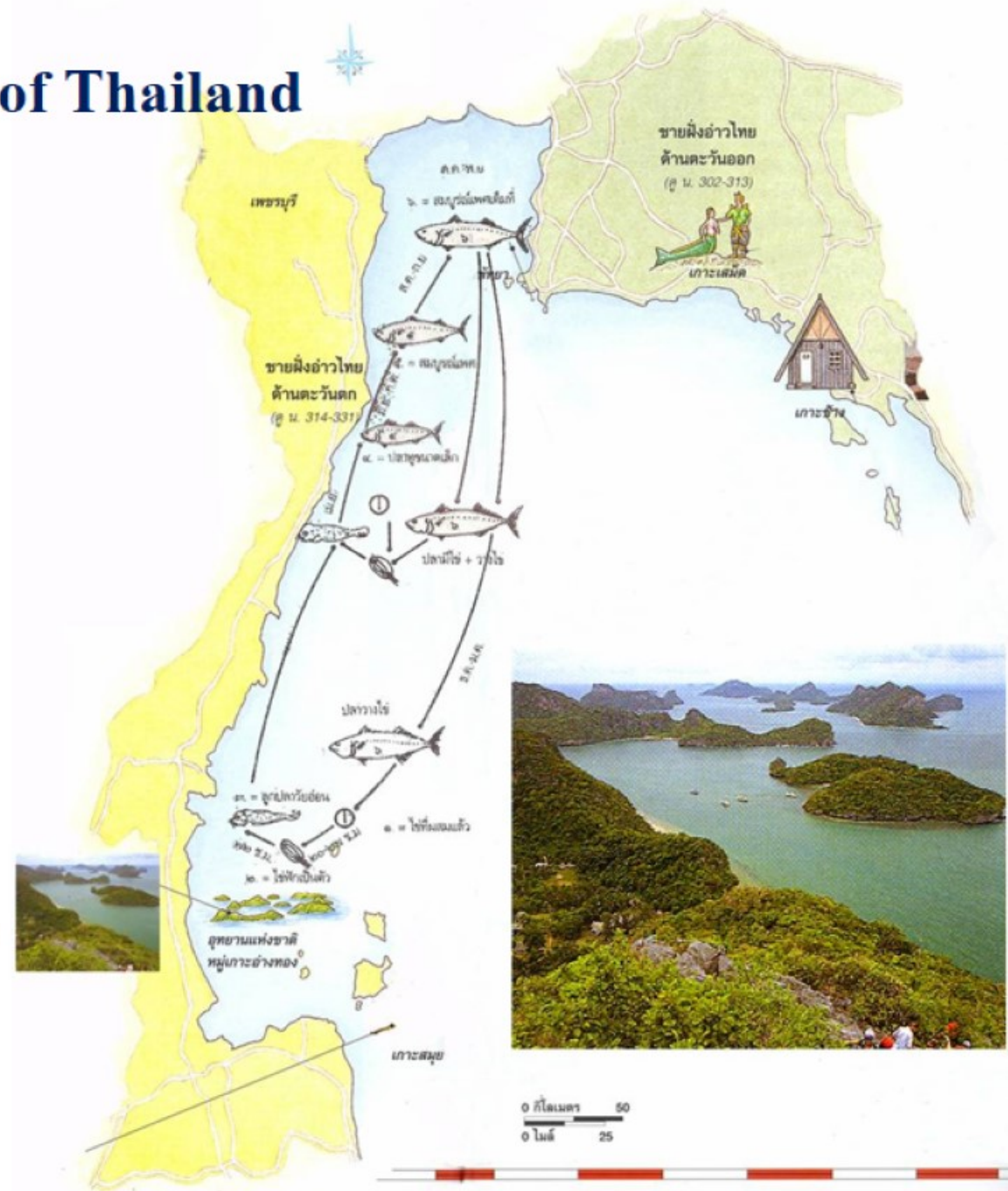


**Cited from:** SEAFDEC. 2017. Report of the Experts Group Meeting on Stock Status and Geographical Distribution of Anchovy, Indo-Pacific Mackerel and Blue Swimming Crab (AIB) Species in the Gulf of Thailand, Bangkok, Thailand, 22-23 September 2016, Southeast Asian Fisheries Development Center.



# Life Cycle of Short Mackerel in the Gulf of Thailand

1. Short mackerel mainly spawn in the peak spawning season during February- April in the middle Gulf of Thailand, off Prachuap Kiri Khan and Chumphon Provinces.
2. The larvae drift to the coastal seas and grow up while ongoing move north toward the nutrient-rich area in the upper Gulf of Thailand.
3. The fish of maturing stage reach the upper Gulf around August-September, feeding until mature in October-November, During the time of December – January, they move back to the south and continually spawn in the same spawning ground around February- April



# Occurrences of Short Mackerel in Trat Site



Juvenile



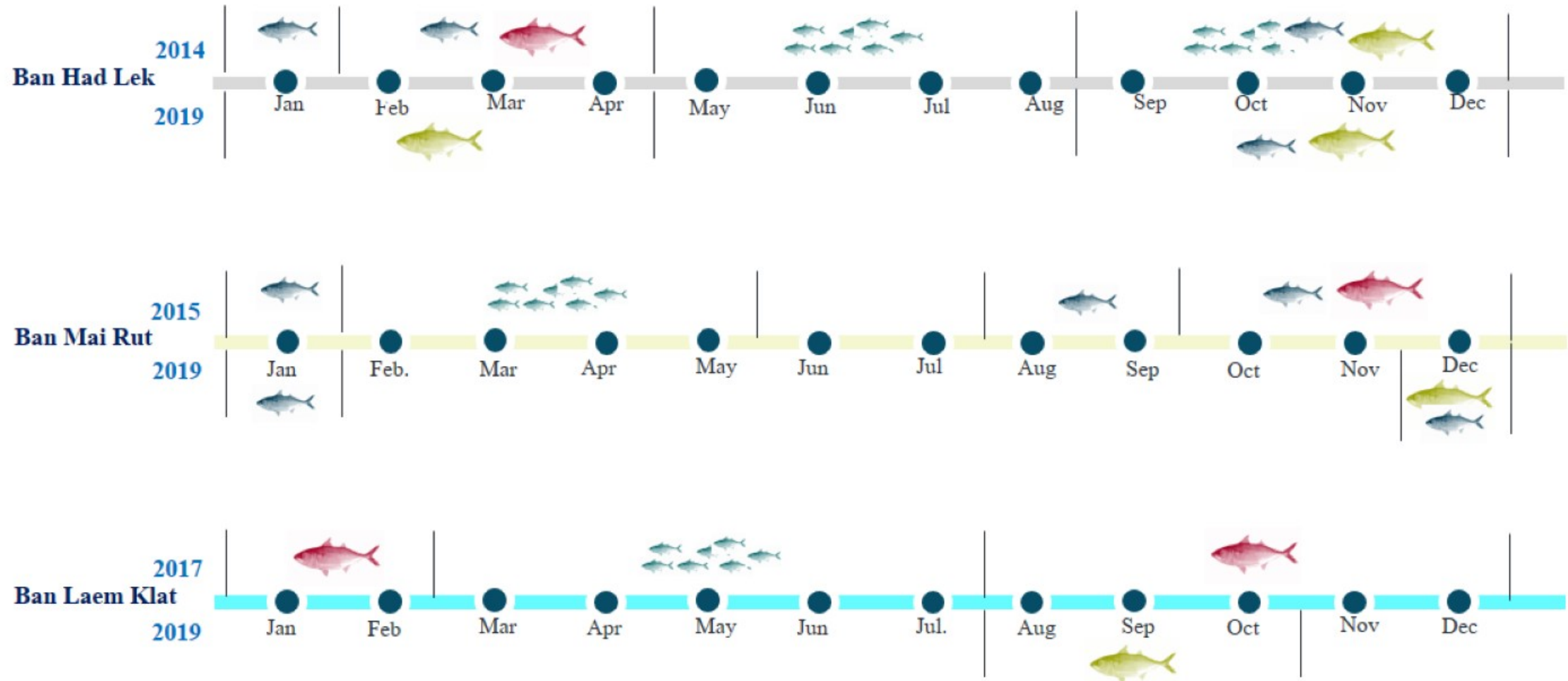
13-15 cm  
(25-25 fish/kg)



16-18 cm  
(15-17 fish/kg)



Mature fish with eggs





# Occurrences of Short Mackerel in Trat Site



Juvenile



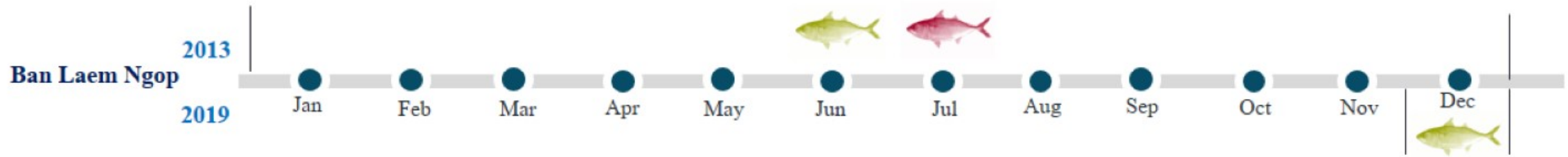
13-15 cm  
(25-25 fish/kg)



16-18 cm  
(15-17 fish/kg)

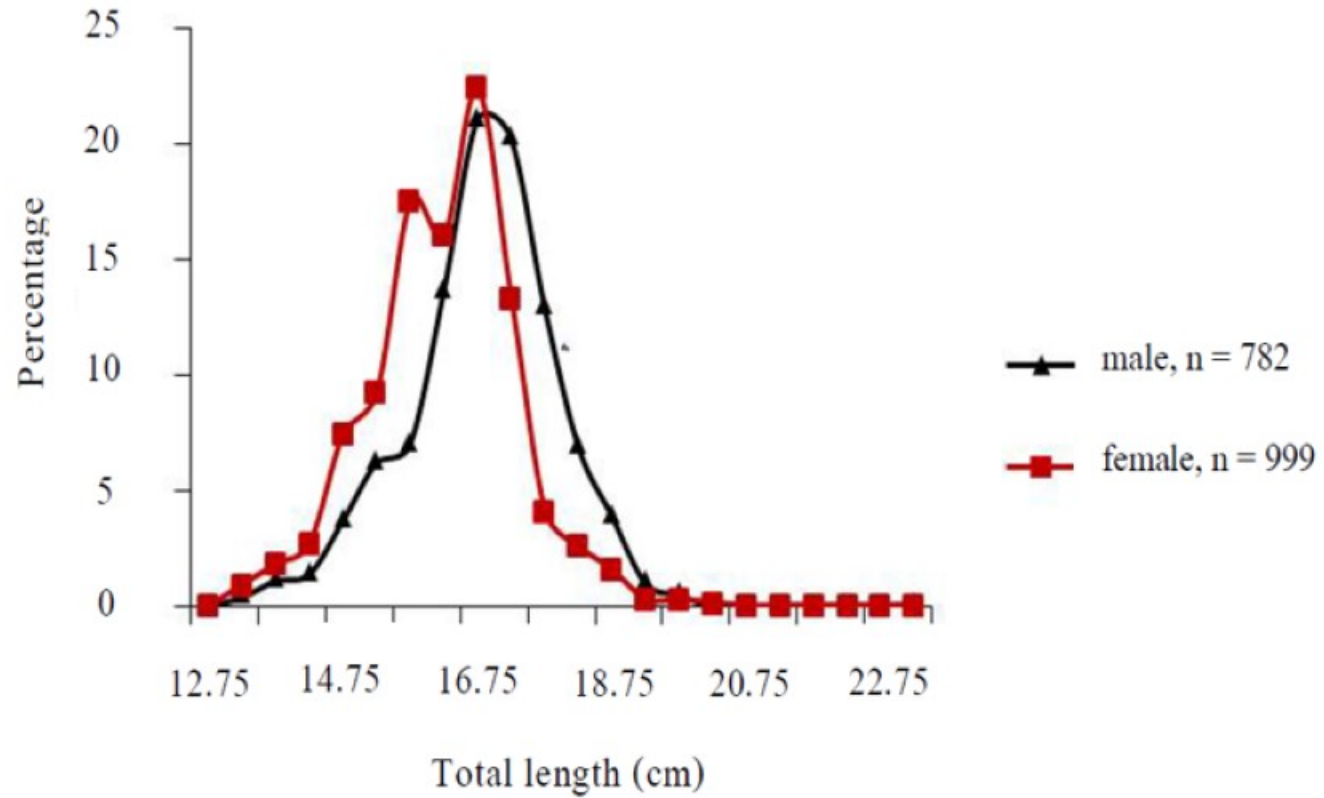


Mature fish with eggs





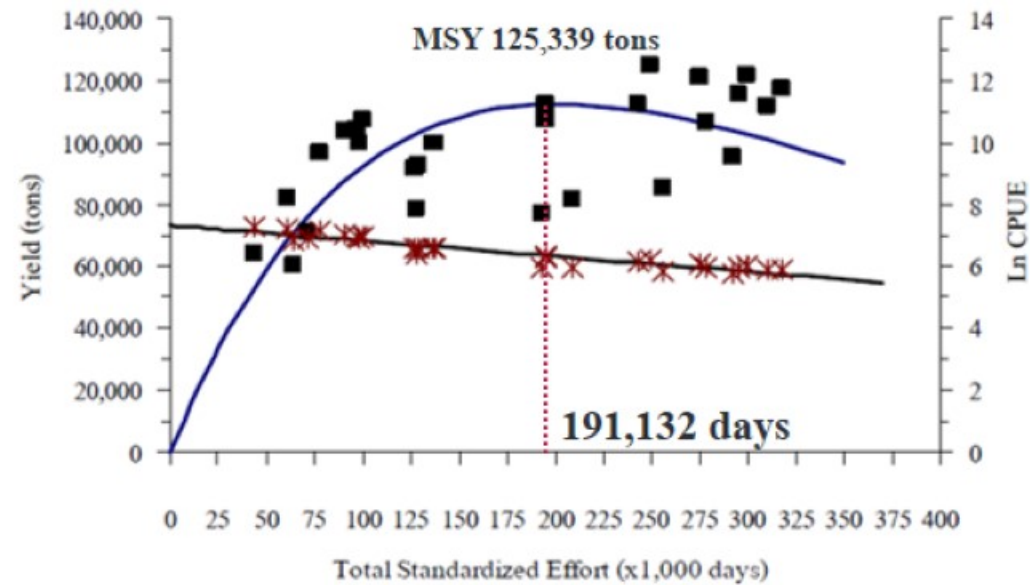
## Size Frequency of Short Mackerel in the Eastern Gulf of Thailand







## Total standard fishing efforts vs total catches and CPUEs for short mackerel gill net fisheries in Thai Waters

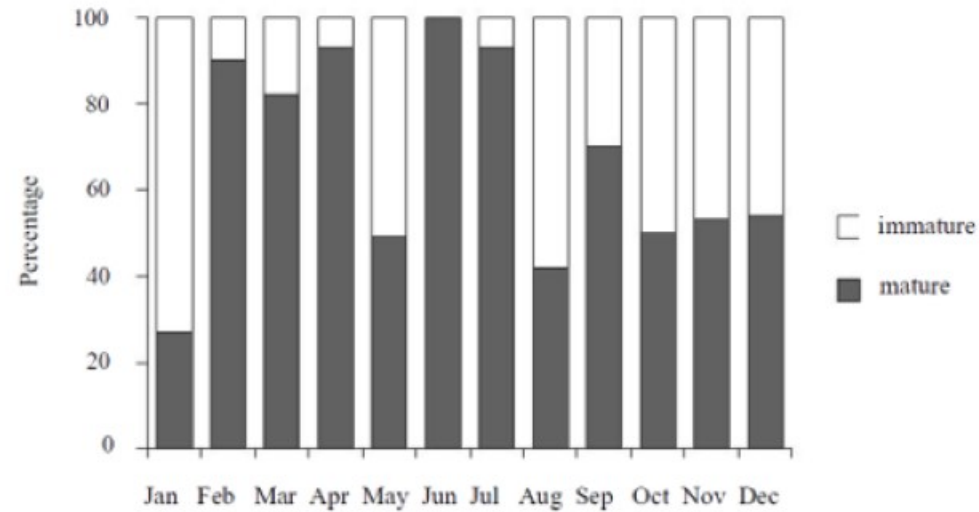


ภาพที่ 8 แสดงความสัมพันธ์ระหว่างปริมาณแรงงานประมงมาตรฐาน (จำนวนวันทำประมงของเครื่องมืออวนล้อมติดปลา) กับปริมาณการจับปลาทั้งหมด (เมตริกตัน) และอัตราการจับต่อหน่วยการลงแรงประมง (กิโลกรัม/วัน) ของการประมงปลา ระหว่างปี 2515 - 2552 ตามวิธีการของ Fox

**Figure 8** Relationship between total standard fishing effort (#day of mackerel encircling gill net) and total catch and CPUE (kgs/day) of Indo-Pacific mackerel fisheries, 1982 - 2009 by Fox's model

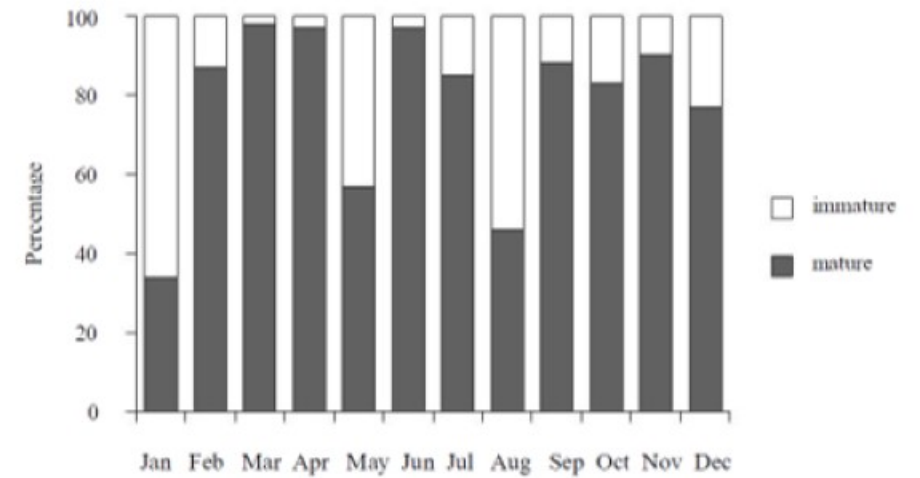


## Annual Maturation of Short Mackerel in Trat Site



ภาพที่ 5 ร้อยละของระยะเจริญพันธุ์ของปลาหาง (Rastrelliger brachysoma) เพศผู้บริเวณจังหวัดตราด ปี 2552

**Figure 5** Percentage of male mature of Indo-Pacific mackerel (*Rastrelliger brachysoma*) in Trat Province, 2009

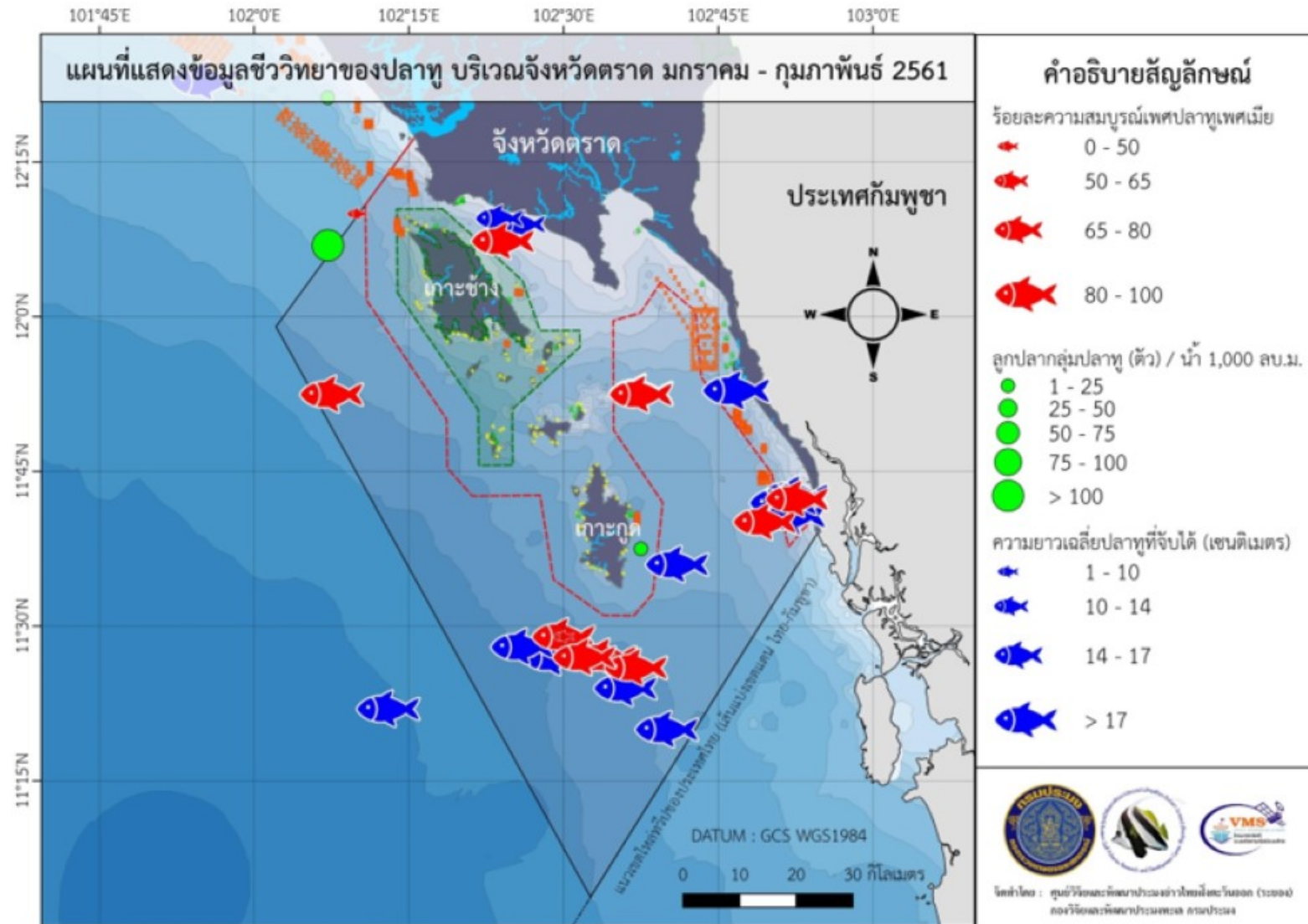


ภาพที่ 6 ร้อยละของระยะเจริญพันธุ์ของปลาหาง (Rastrelliger brachysoma) เพศเมียบริเวณจังหวัดตราด ปี 2552

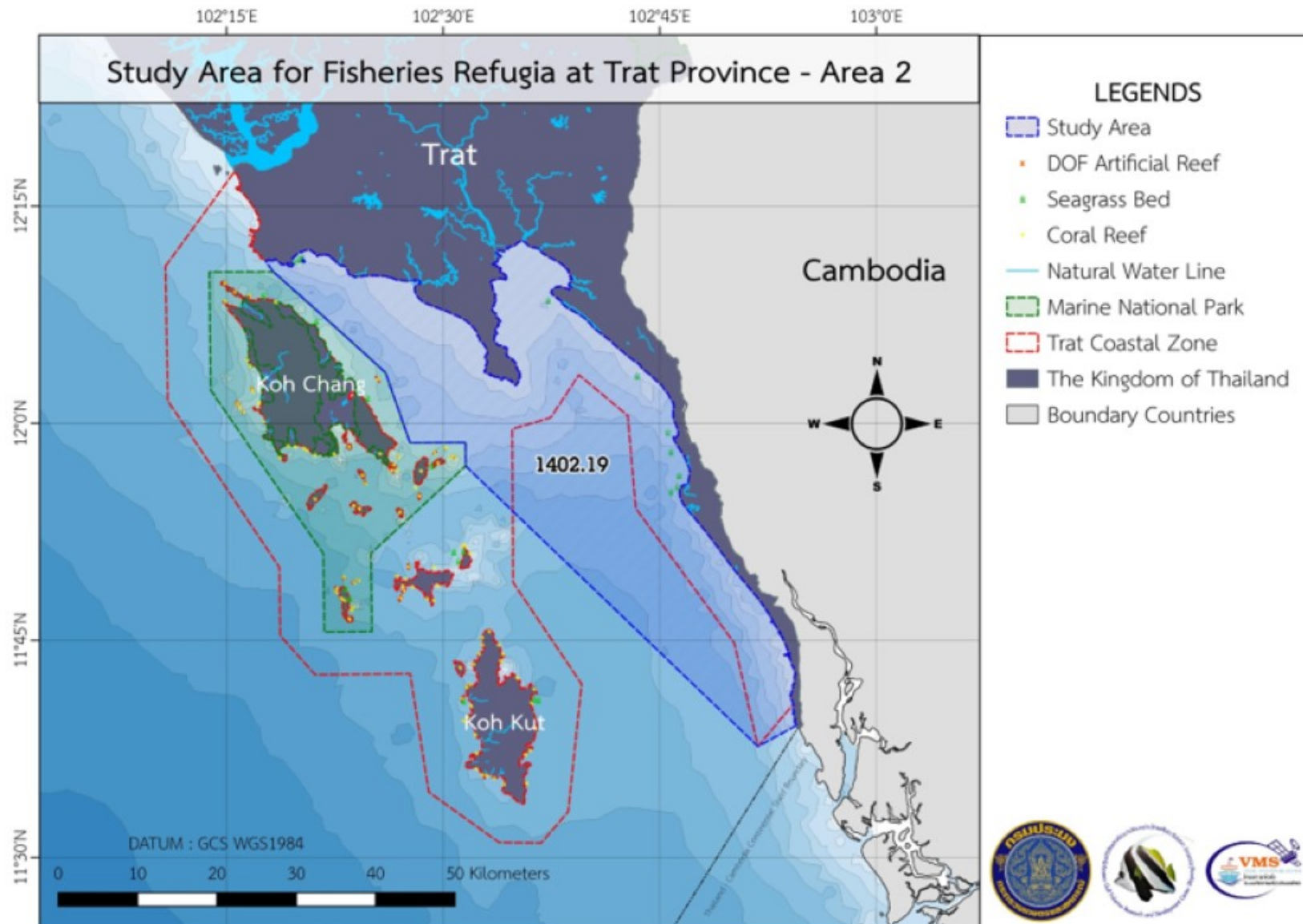
**Figure 6** Percentage of female mature of Indo-Pacific mackerel (*Rastrelliger brachysoma*) in Trat Province, 2009



## Distributions of larval, juvenile, adult, mature, and fully mature short mackerel in Trat Site during peak spawning period: January – February 2018



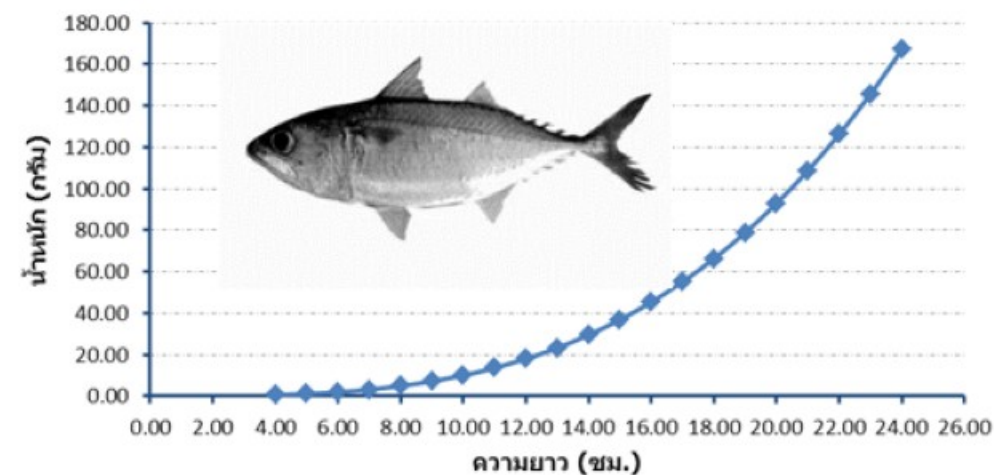
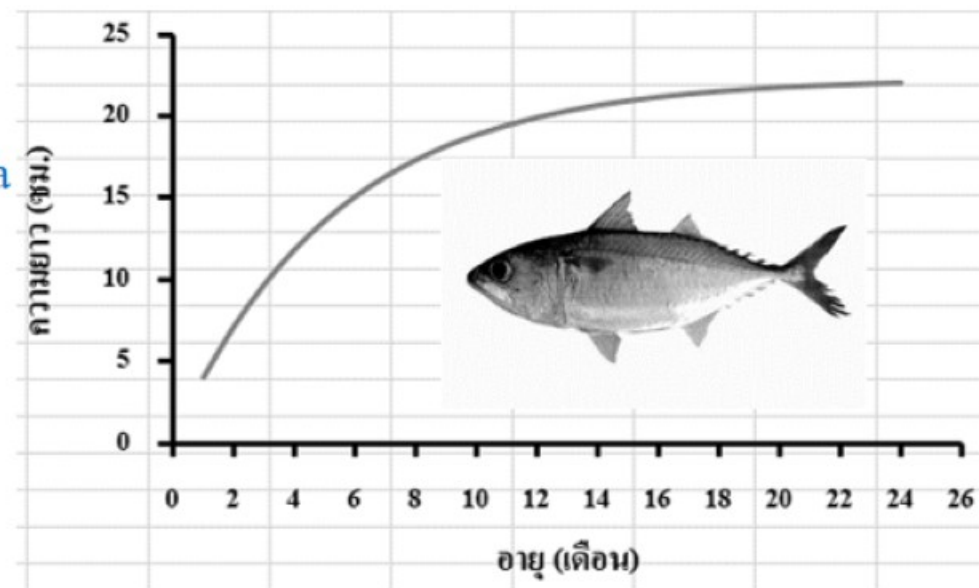
# Tentative actual fisheries *refugia* boundary, prepared for community forums in Trat Site

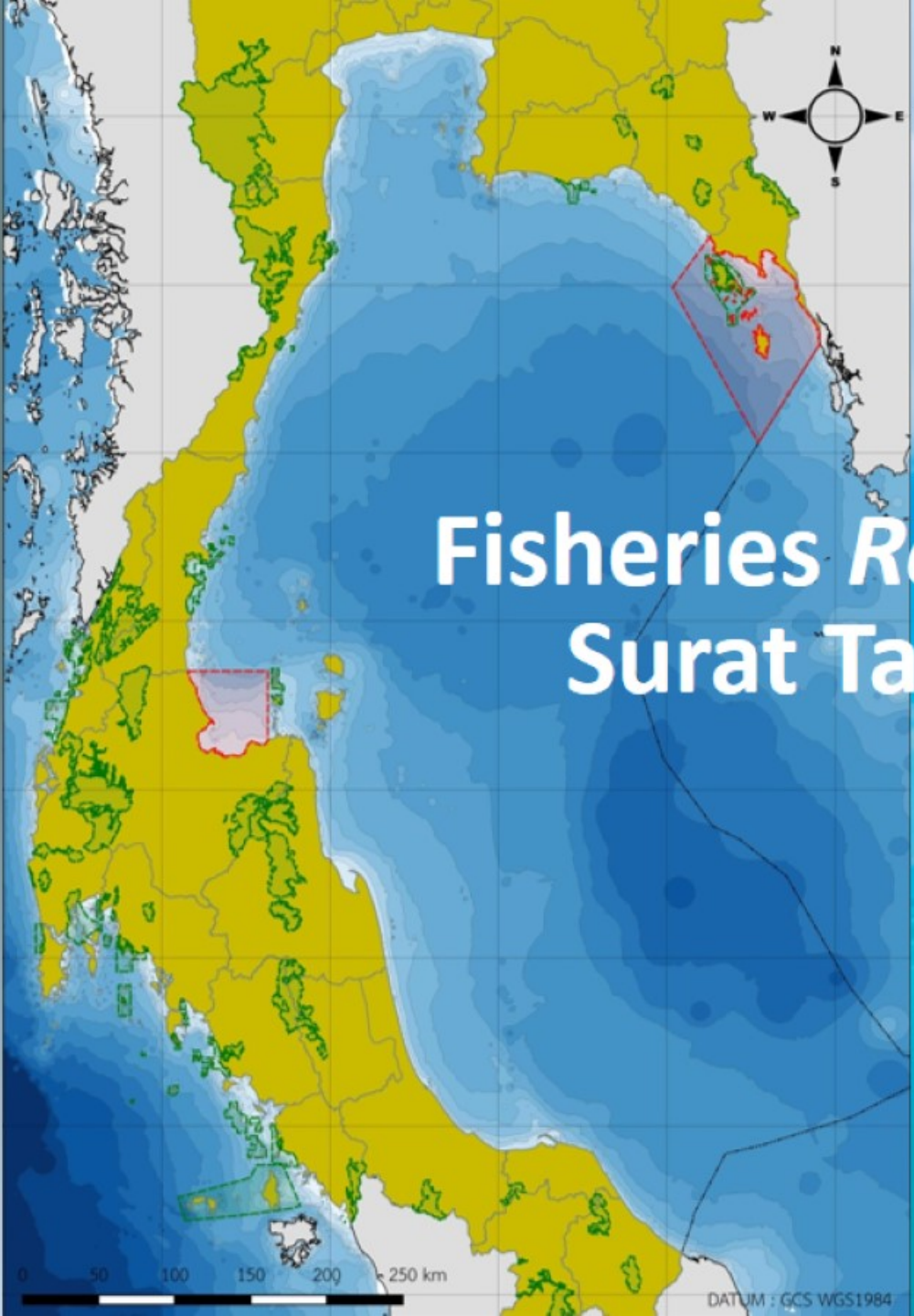




# Estimated population of short mackerel while implementing fisheries *refugia* management

- 1 — **256,000 kg** landing of short mackerel (in 2018)
- 2 — **25,600 kg** landing of short mackerel in 10 % of fishing area and 2 month (Jan-Feb)  
average weight 73 g/fish (17 cm)
- 3 — equal to a number of **350,685 fish**
- 4 — which was **175,342 female fish**
- 5 — **17,534,246,575.34 eggs** by 100,000 spawners
- 6 — **175,342,465 larvae** hatch rate = 1%
- 7 — survive to marketable size **1,753,424 fish** survival rate = 1%
- 8 — **= 127,100 kg** weight of survival/year





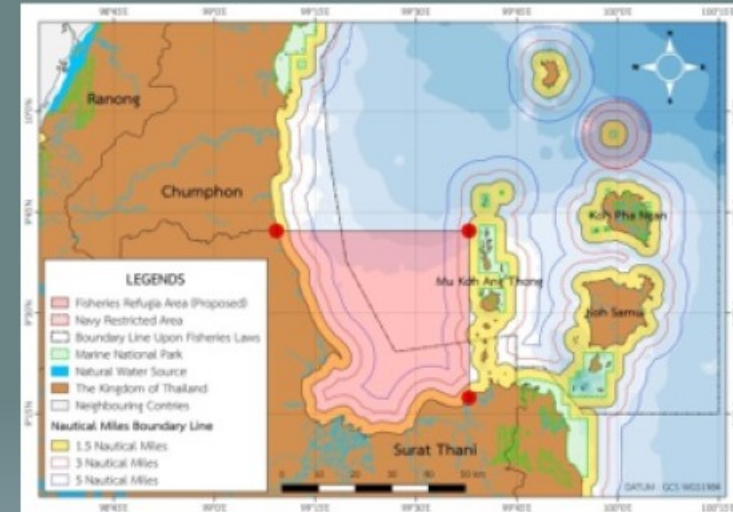
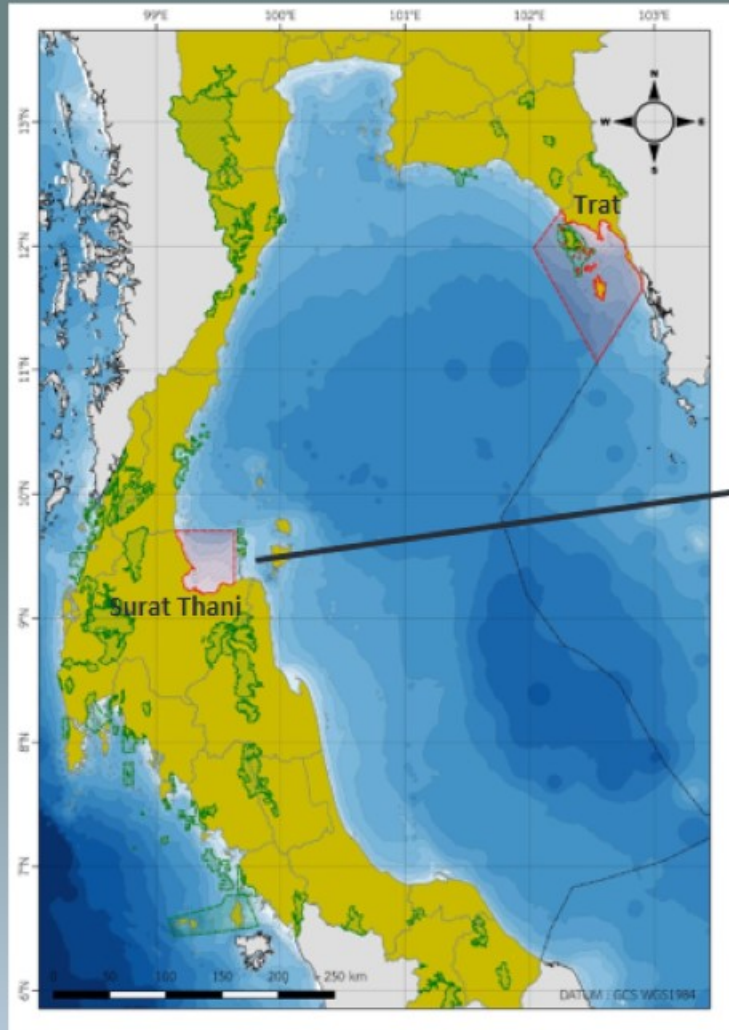
# Fisheries *Refugia* Profiles: Surat Tani, Thailand



DATUM : GCS WGS1984



## Site Name (2): Surat Thani



### Geographic Location (tentative site for study):

1.  $9^{\circ}42'15.00''\text{N}$   $99^{\circ}9'12.00''\text{E}$
2.  $9^{\circ}42'15.00''\text{N}$   $99^{\circ}37'52.16''\text{E}$
3.  $9^{\circ}17'25.47''\text{N}$   $99^{\circ}37'52.16''\text{E}$

# Geophaphy: Surat Tani Province

- **Areas:**  
Land = 12,892 km<sup>2</sup> (the Largest of the southern provinces of Thailand)  
Islands = 419 km<sup>2</sup>  
Shoreline = 157 km
- **Boundaries:**  
North: Ranong and Chumphon Provinces, and the Gulf of Thailand  
South: Krabi and Nakhon Si Thammarat Provinces  
East: Nakhon Si Thammarat Province and the Gulf of Thailand  
West: Phang Nga Province
- **Main fresh water sources:** the Tapi River and the Phum Duang River
- **Islands:** 108 islands (the most in the GoT) ; Koh Samui is the second biggest island of Thailand (after Phuket), and Mu Koh Ang Thong is a Marine National Park
- **Climate:** tropical climate with fairly stable temperatures throughout the year at the average of 27°C, having rainfall around 1,850 mm per year





# History:

- It can be traced back to the prehistoric times when Semang (Sakai) and original Malays lived in **Surat Thani** .
- In the 13<sup>th</sup> century, the city became a part of the Srivijaya Empire which ruled over the Malay Peninsula as well as parts of Java.
- When the empire collapsed, it was divided into 3 main areas: Chaiya, Thathong, and Kiri Rat, which were ruled by Nakhon Si Thammarat under King Rama IV.
- These 3 areas were eventually combined under just the name Chaiya, which was later changed to **Surat Thani**
- **Surat Thani** means “city of the good people”. It is also known as “the city of a hundred islands” as there are many big and small islands in the Gulf of Thailand lay off the coast of the province.



## Population:

- Total 1,063,501 (2018)  
Density 83/km<sup>2</sup>

## Economy:

- GDP 191,177 M฿ (2015)
  - GDP in agriculture sector 26%
  - GDP in non-agriculture sector 74%
- Economic Composition
  - Vending
  - Hotel and tourism
  - Agriculture
  - Fisheries





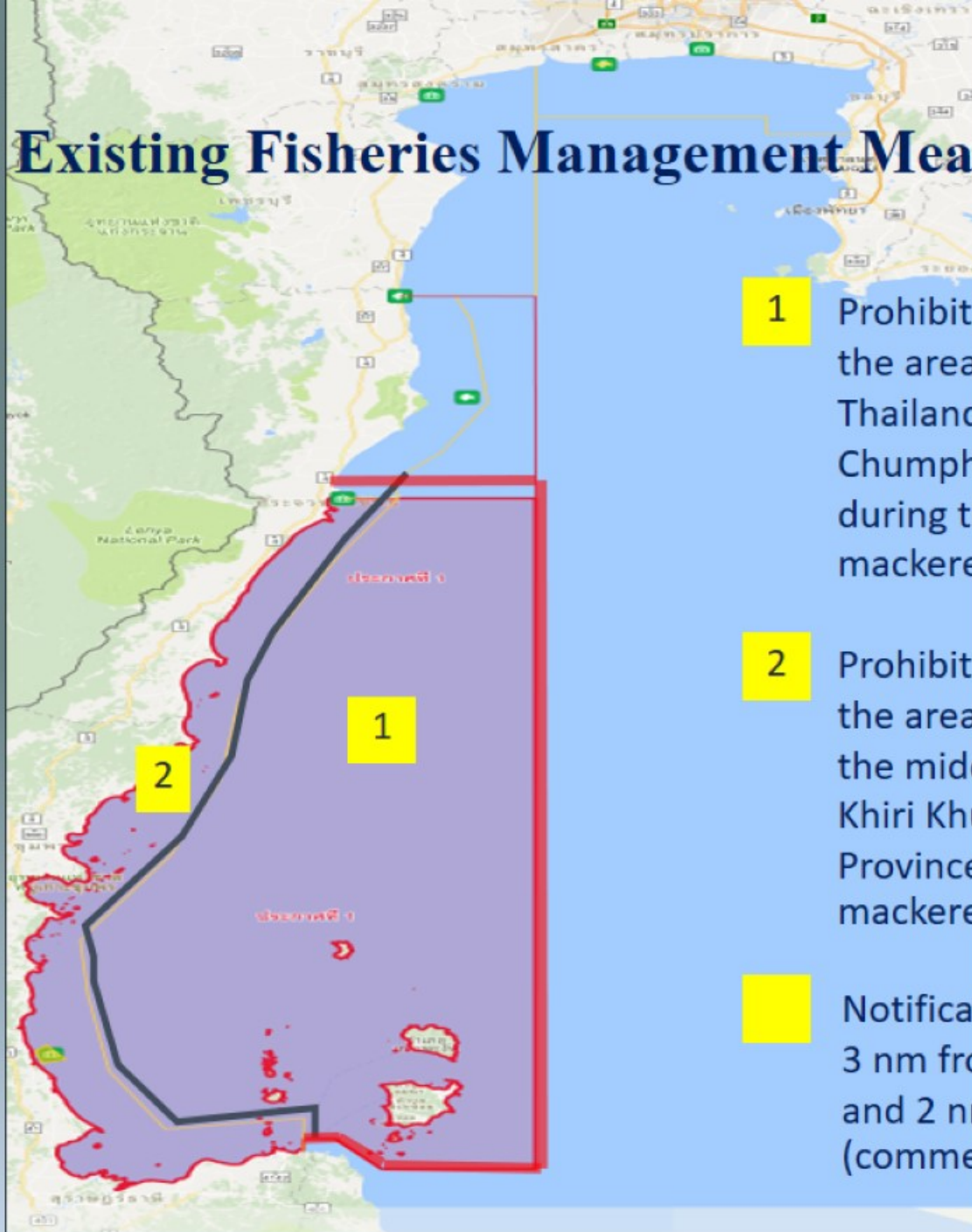
# Main Fishing Gears in Surat Thani Site

- Otter trawl
- Pair trawl
- Beam trawl
- Purse seine
- Anchovy purse seine
- Gill net
- Crab trap
- Crab gill net





# Existing Fisheries Management Measures in Surat Thani Site



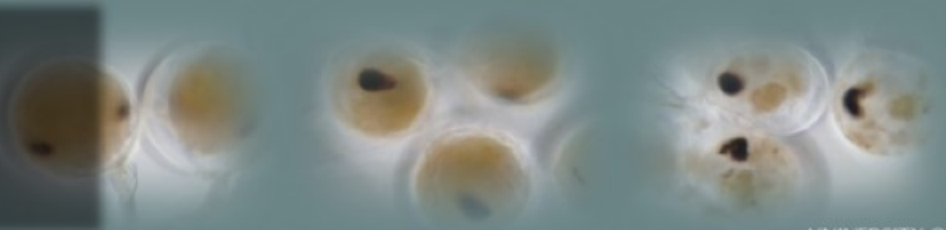
1 Prohibition of some fishing gears fishing in the area of 27,000 km<sup>2</sup> in the middle Gulf of Thailand, off Prachuab Khiri Khun, Chumphon, and Surat Thani Provinces, during the spawning season of short mackerel, 15 February – 15 May each year

2 Prohibition of some fishing gears fishing in the area of 5,300 km<sup>2</sup> along 7 nm off shore in the middle Gulf of Thailand, off Prachuab Khiri Khun, Chumphon, and Surat Thani Provinces during the nursery period of short mackerel, 16 May – 14 June each year

3 Notification on coastal seas:  
3 nm from shoreline of mainland;  
and 2 nm from shoreline of islands  
(commercial fisheries prohibited)

Some Information of  
Blue Swimming Crab Resources, Fisheries,  
and Ecosystem in Surat Thani Site

# Blue Swimming Crab



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**Common Name:** Blue Swimming Crab

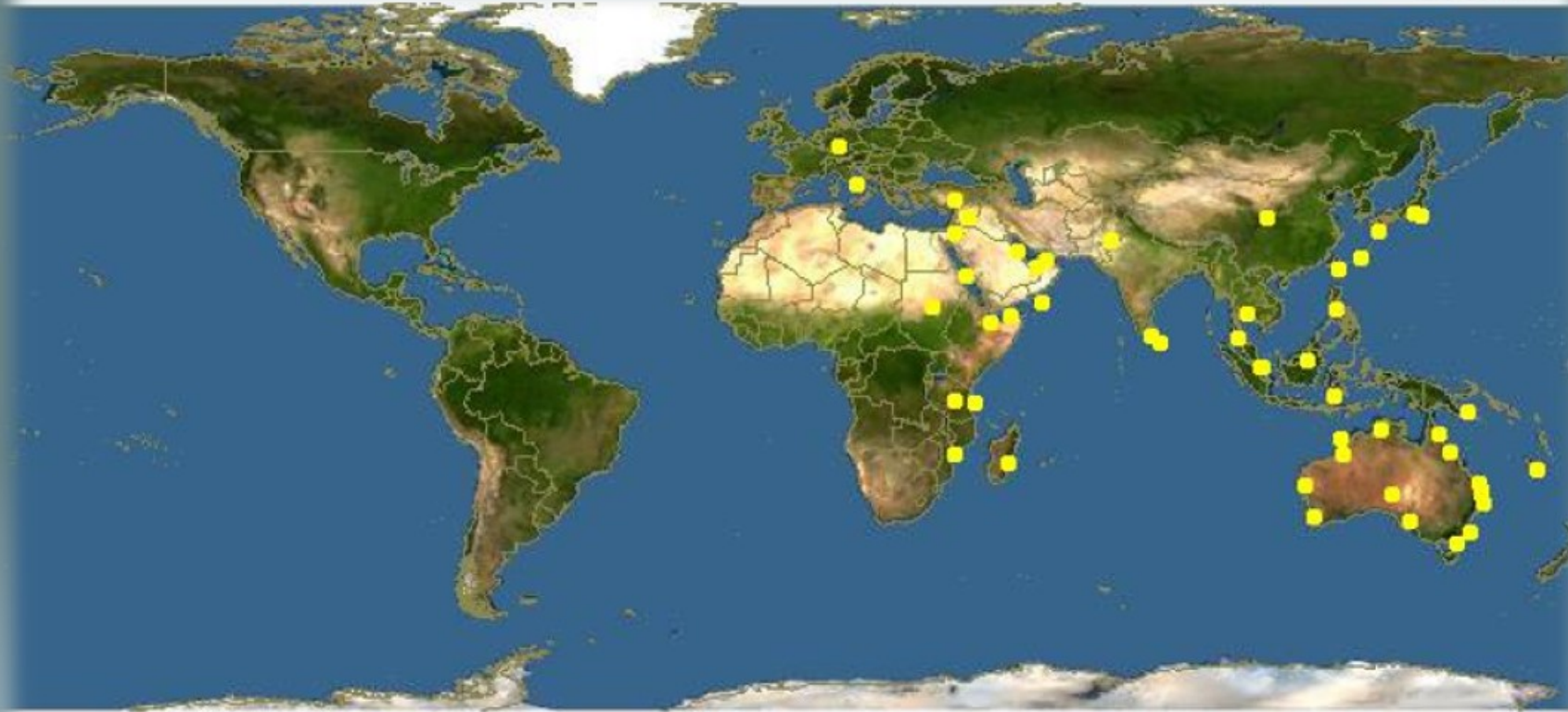
**Scientific Name:** *Portunus pelagicus*, Linnaeus (1758)

**Thai Local Name:** Pu Ma (Pu = Crab)

Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)



# Distribution of Blue Swimming Crab



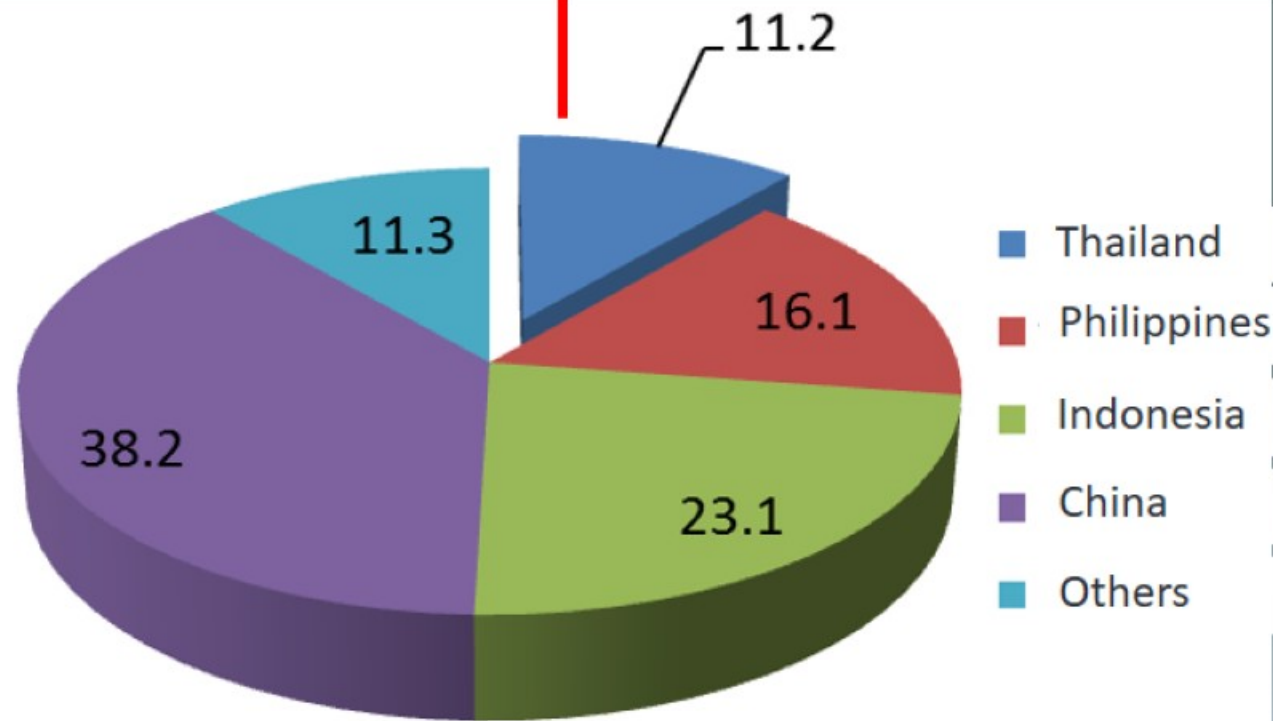
Coastal areas of the tropical and temperate zones, as well as estuary along Africa, Indian Ocean, Indo-Pacific, and Australia

Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)

# Production of Blue Swimming Crab



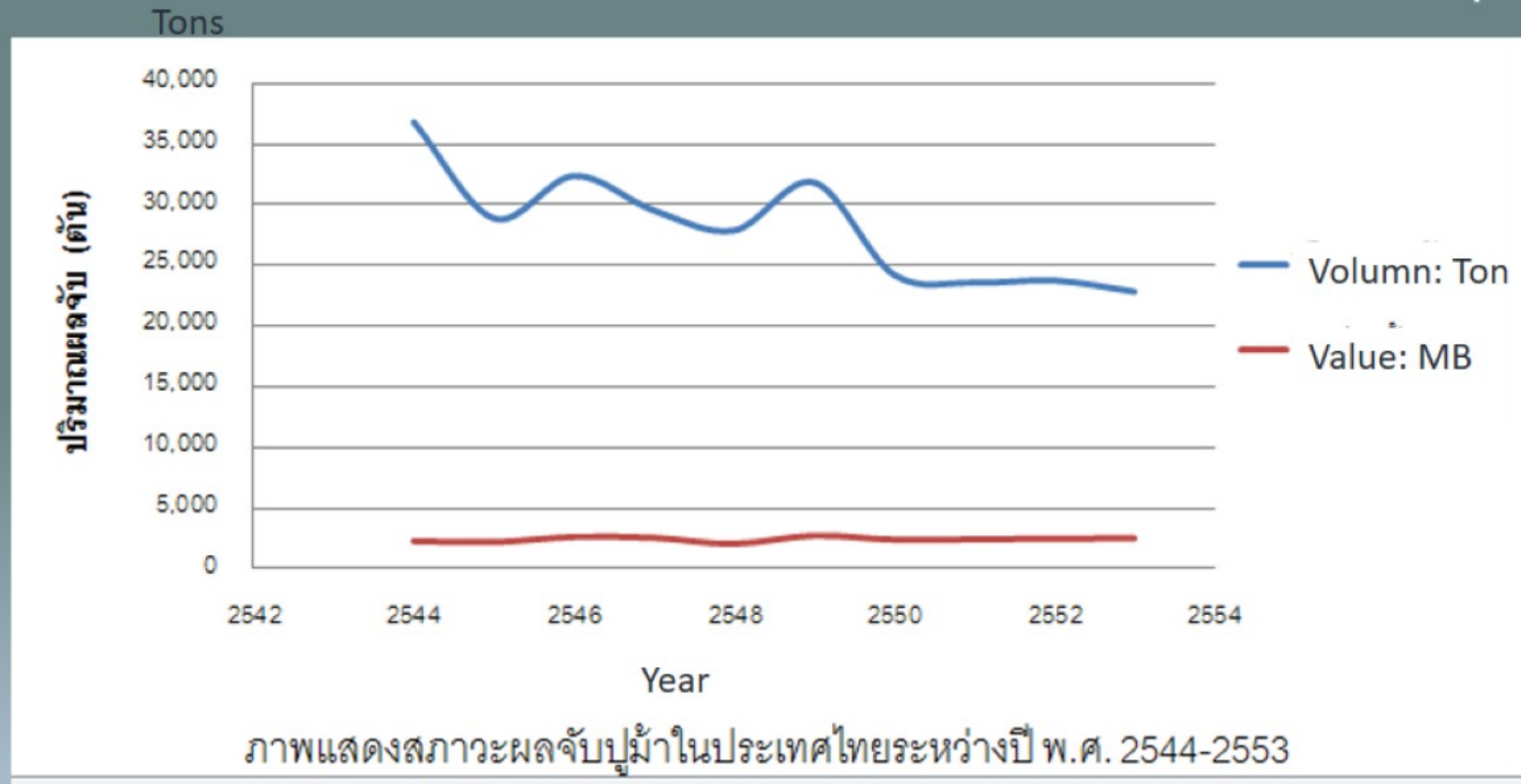
Quantity: 20,000 tons, Value: 3,200 million bahts



**Global Production of Blue Swimming Crab**

(cited from FAO)

# Production of Blue Swimming Crab in Thailand During 2001-2010)





# Fishing Gears for Blue Swimming Crab

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## Gill Net

Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)



# Fishing Gears for Blue Swimming Crab

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## Collapsible Crab Trap

Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)

# Collapsible Crab Trap

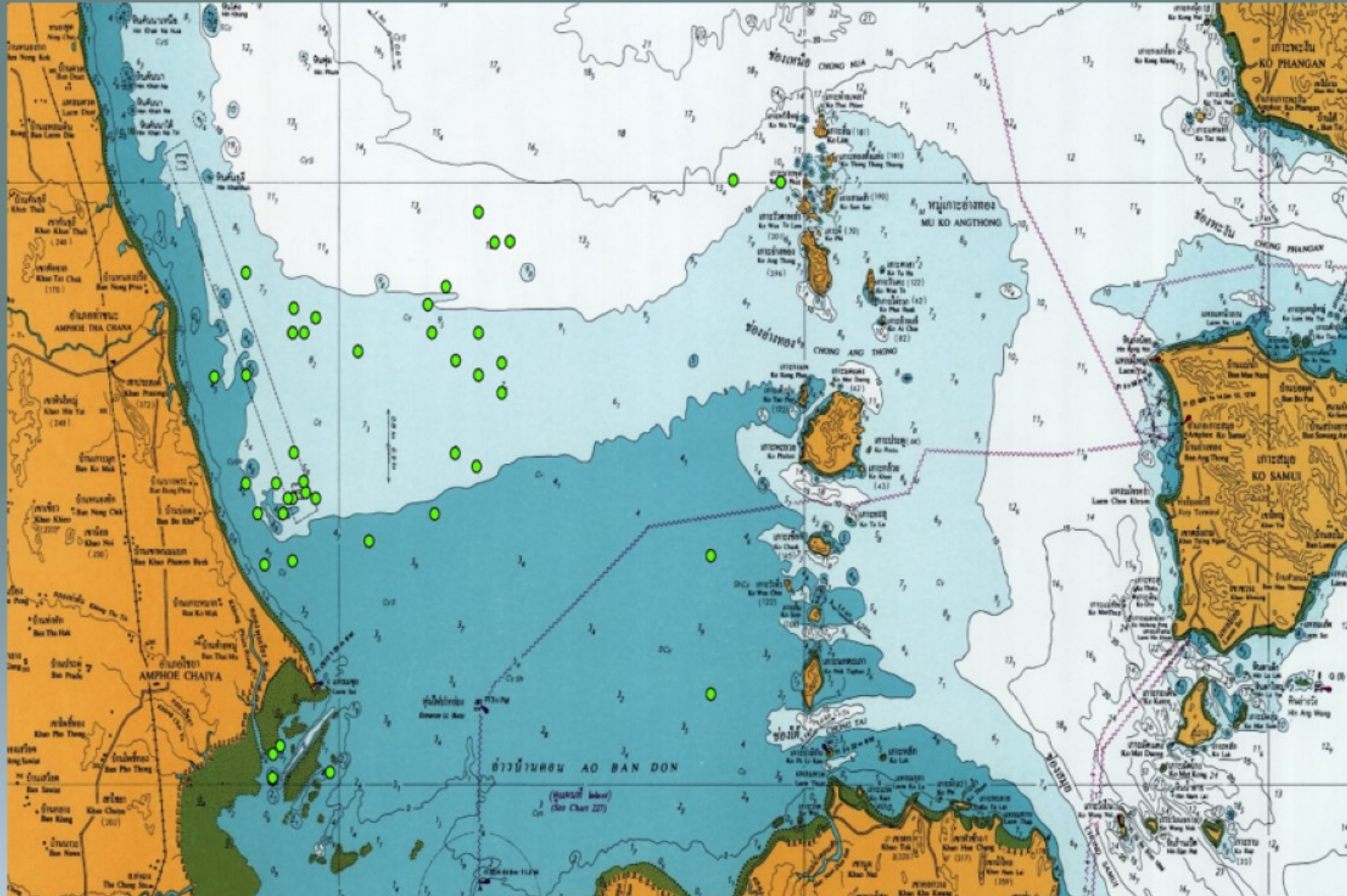
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Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)



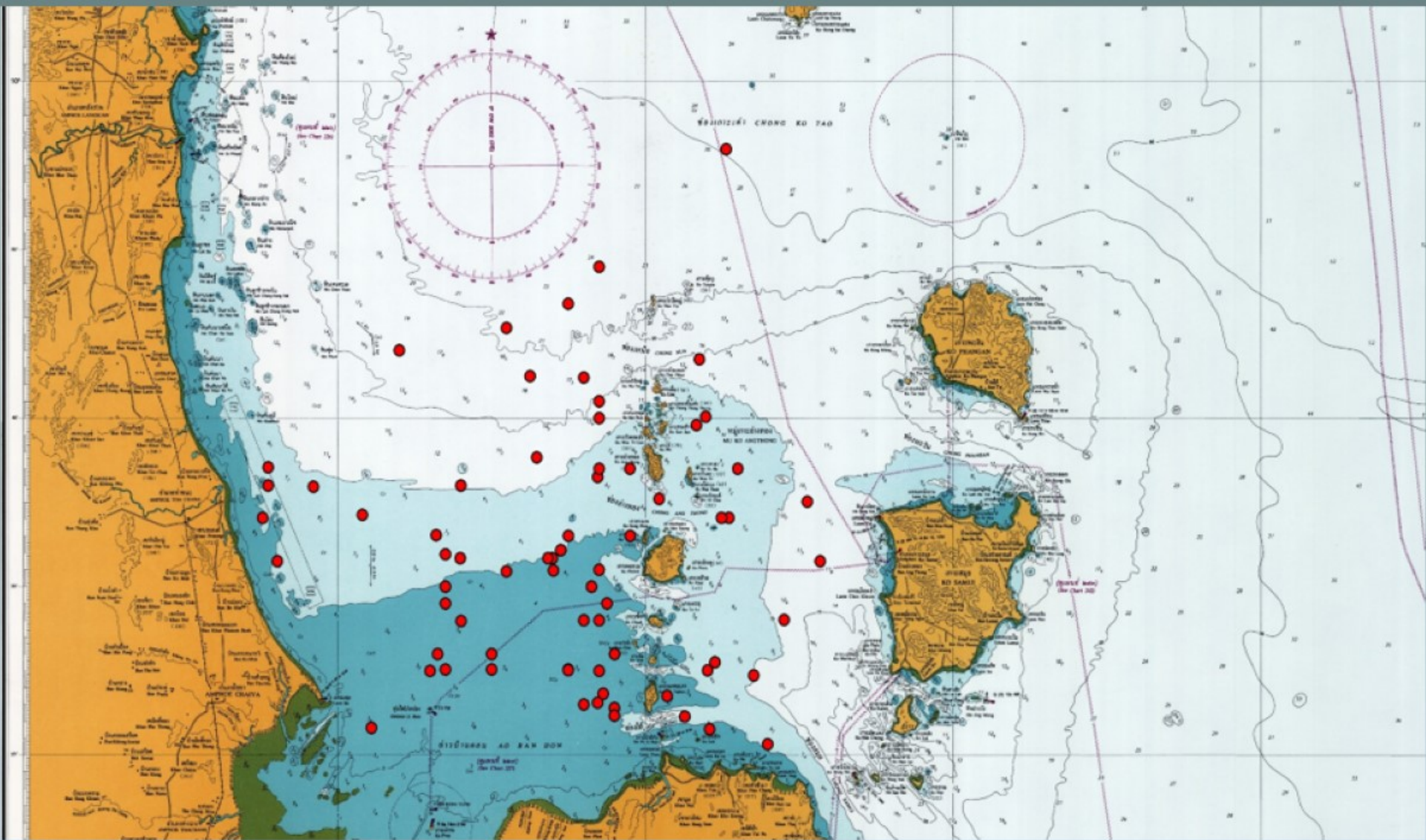
# Fishing Grounds of Crab Gill Net Fisheries



Source: Middle Gulf Fisheries Research and Development Center (Chumphon)



# Fishing Grounds of Crab Trap Fisheries



Source: Middle Gulf Fisheries Research and Development Center (Chumphon)



# Catching Sizes of Blue Swimming Crab in Thailand

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## Size decreased



**1987**

Avg. Carapace length: 14 cm

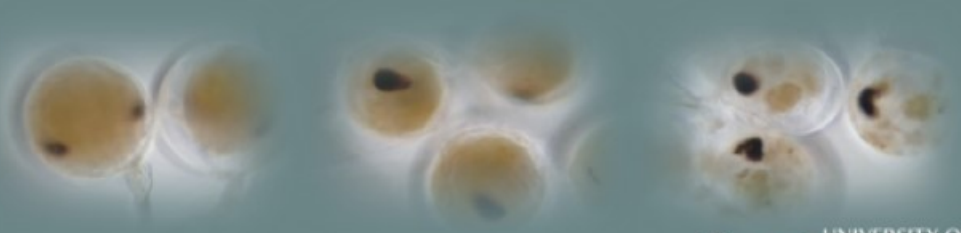


**2007**

Avg. Carapace length: 8 cm

Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)

# Mating Behavior



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❖ After female molting

❖ 8-10 hr coupling



❖ 1-2 hr mating



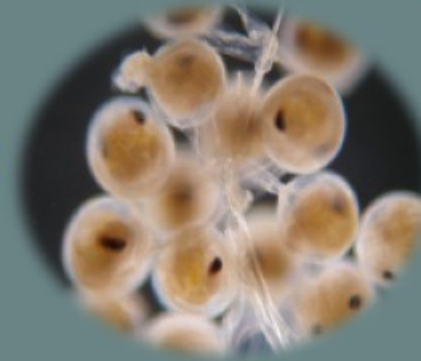
# Life Cycle of Blue Swimming Crab



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998,292 eggs

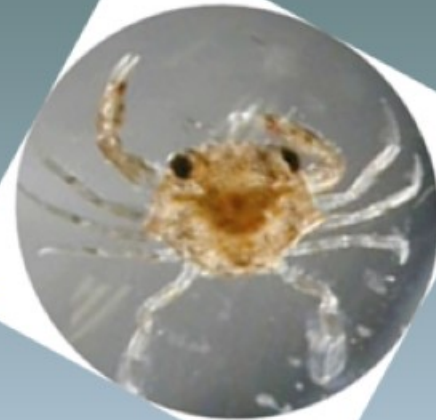
berried crab



65 % hatched



648,890 larvae



20,765 first crabs

**3.2% survived**



160 mature crabs

0.77 % survived

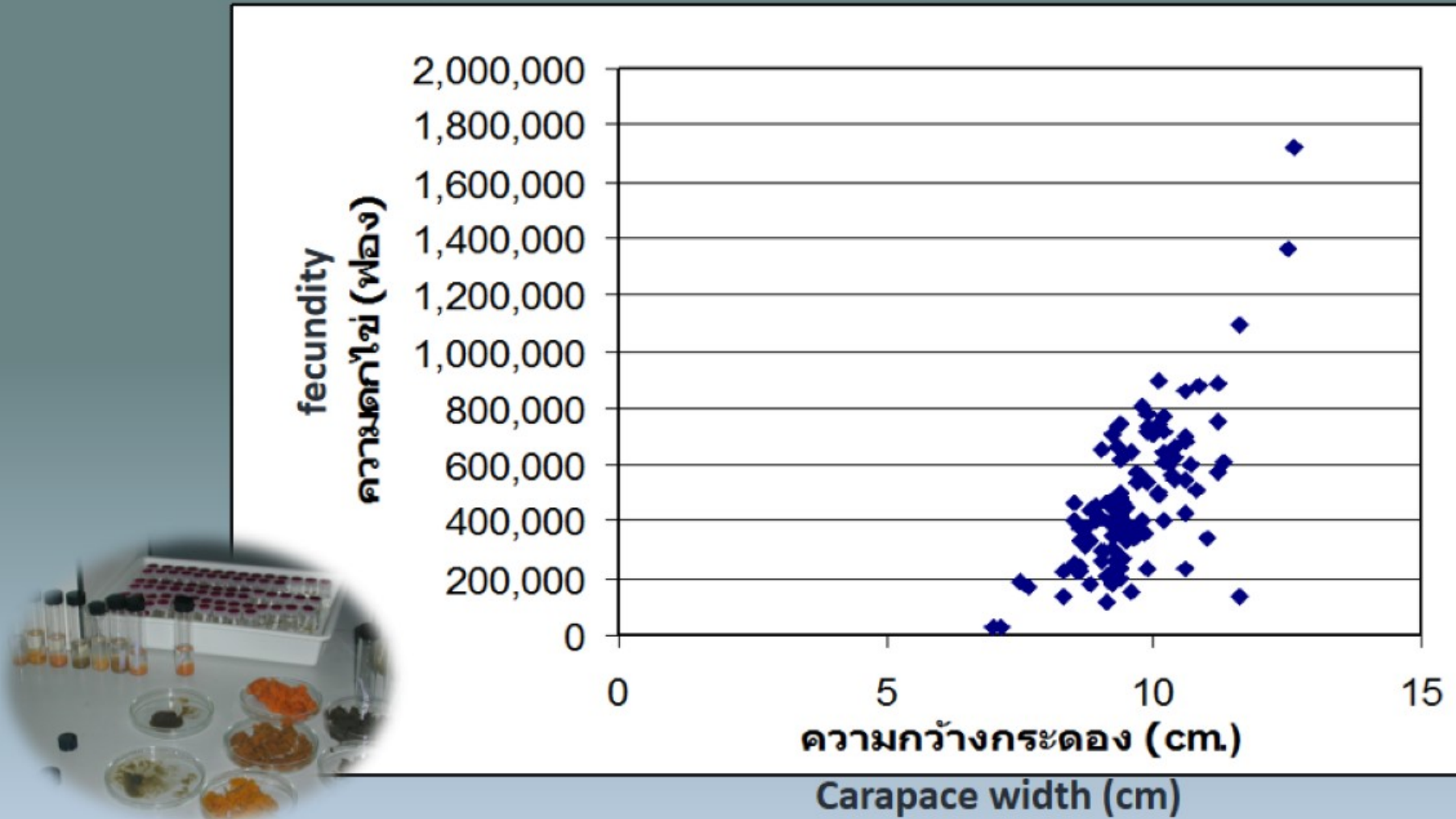
Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)

# Fecundity of Blue Swimming Crab



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Fecundity: 229,538-2,850,061 eggs

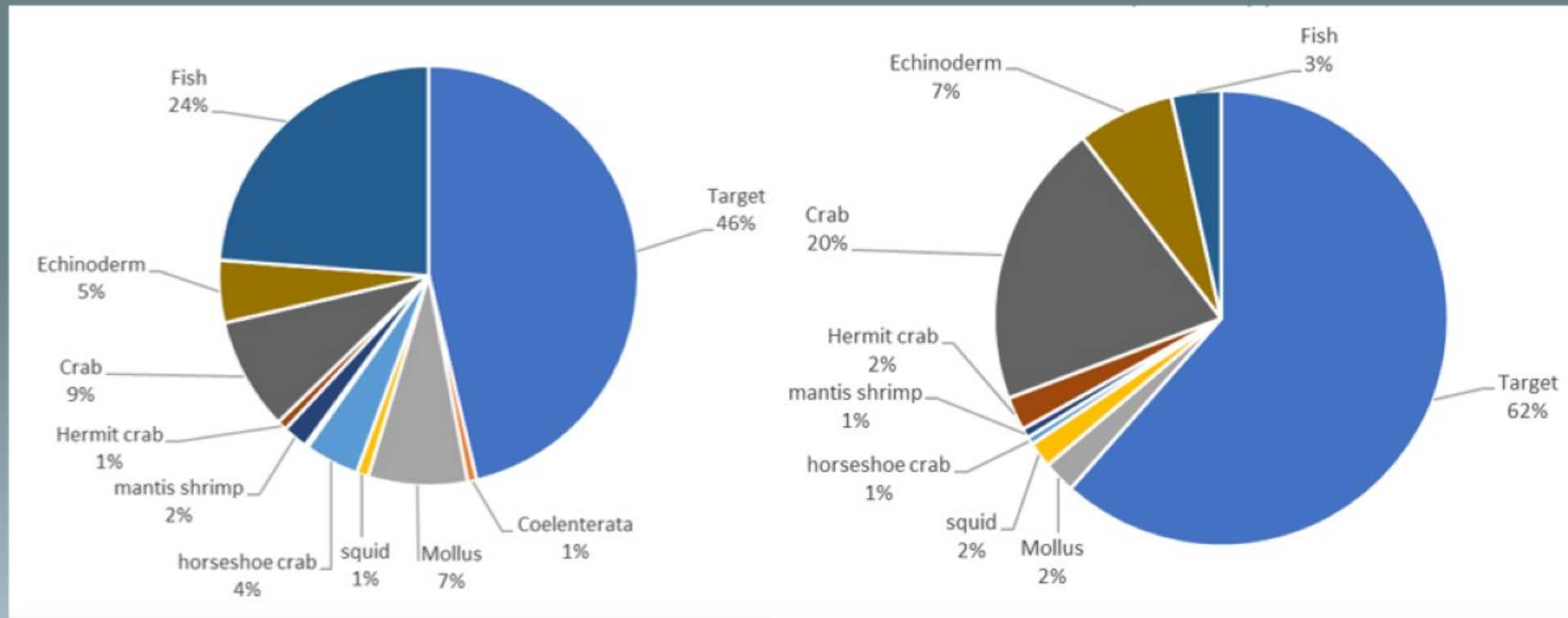


Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)



# Catch Composition by Weight

สัดส่วนองค์ประกอบชนิดเชิงน้ำหนักตัวจากเครื่องมืออวนและลอบ



Crab Gill Net

Crab Trap

## Catch Composition (%) of Crab Gill Net Fisheries in Surat Thani Site in 2018

สัตว์น้ำ	Jan	Feb	March	April	May	June	July	Aug.
กลุ่มกุ้ง	3.49	0.00	0.00	0.18	0.00	0.00	0.45	4.68
กลุ่มกุ้ง	0.00	0.28	0.00	0.00	0.00	0.00	0.90	0.00
กลุ่มปลา	36.51	4.30	0.00	0.00	0.00	0.00	11.96	0.07
กลุ่มปู								
- <i>Portunus pelagicus</i>	53.81	92.15	97.94	98.14	98.40	98.67	84.81	93.63
- <i>Charybdis feriatus</i>	0.00	3.27	1.67	1.68	1.60	0.38	1.07	0.86
- other crab	6.19	0.00	0.40	0.00	0.00	0.95	0.21	0.77
กลุ่มหมึก	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00
กลุ่มหอย	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
สัตว์น้ำอื่นๆ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ผลรวม	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
อัตราการจับ (กก./อวน 100 เมตร)	0.12	0.46	0.29	0.63	0.19	0.19	0.41	0.27

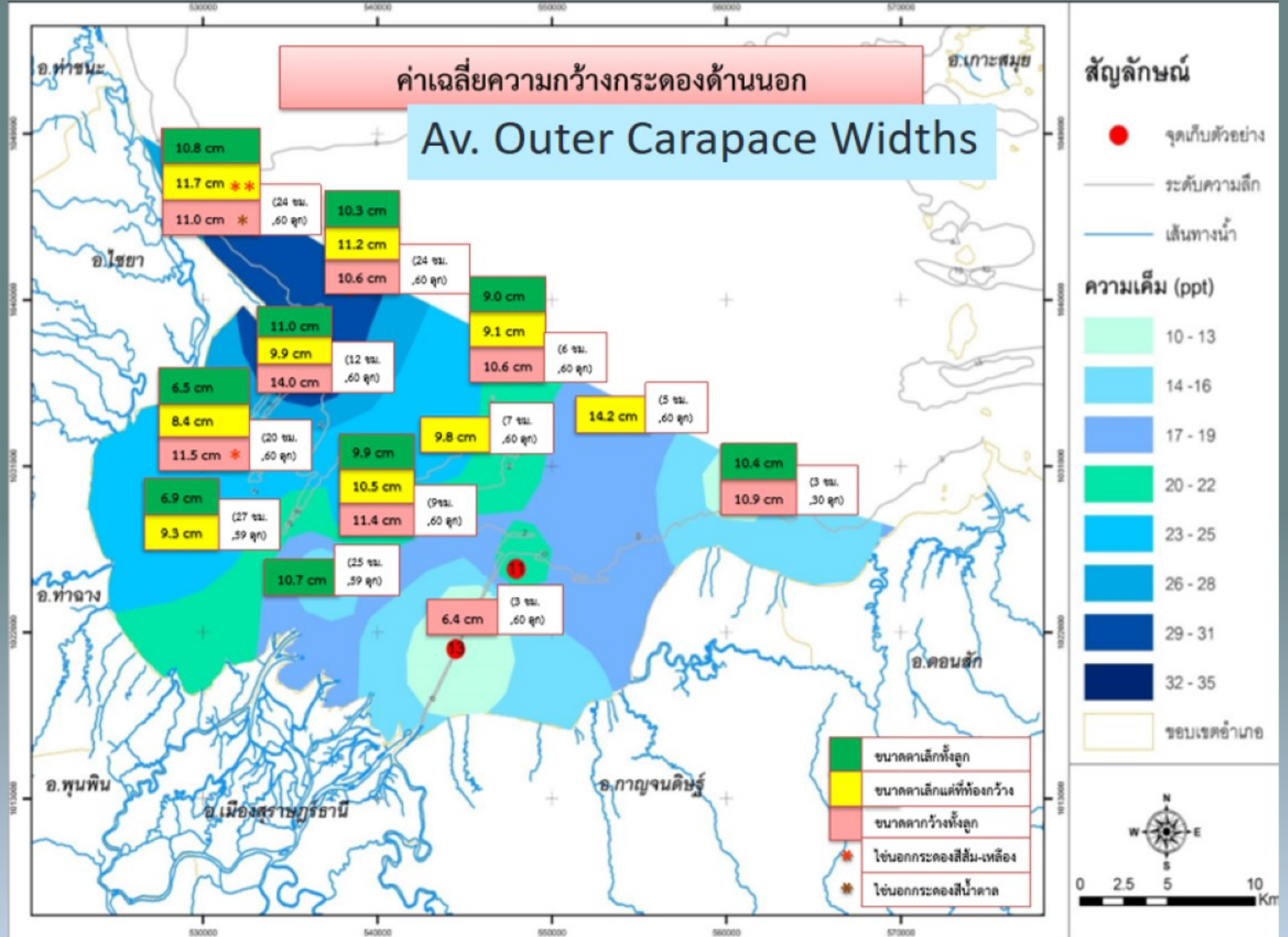
Source: Middle Gulf Fisheries Research and Development Center (Chumphon)



## Catch Composition (%) of Crab Trap Fisheries in Surat Thani Site in 2018

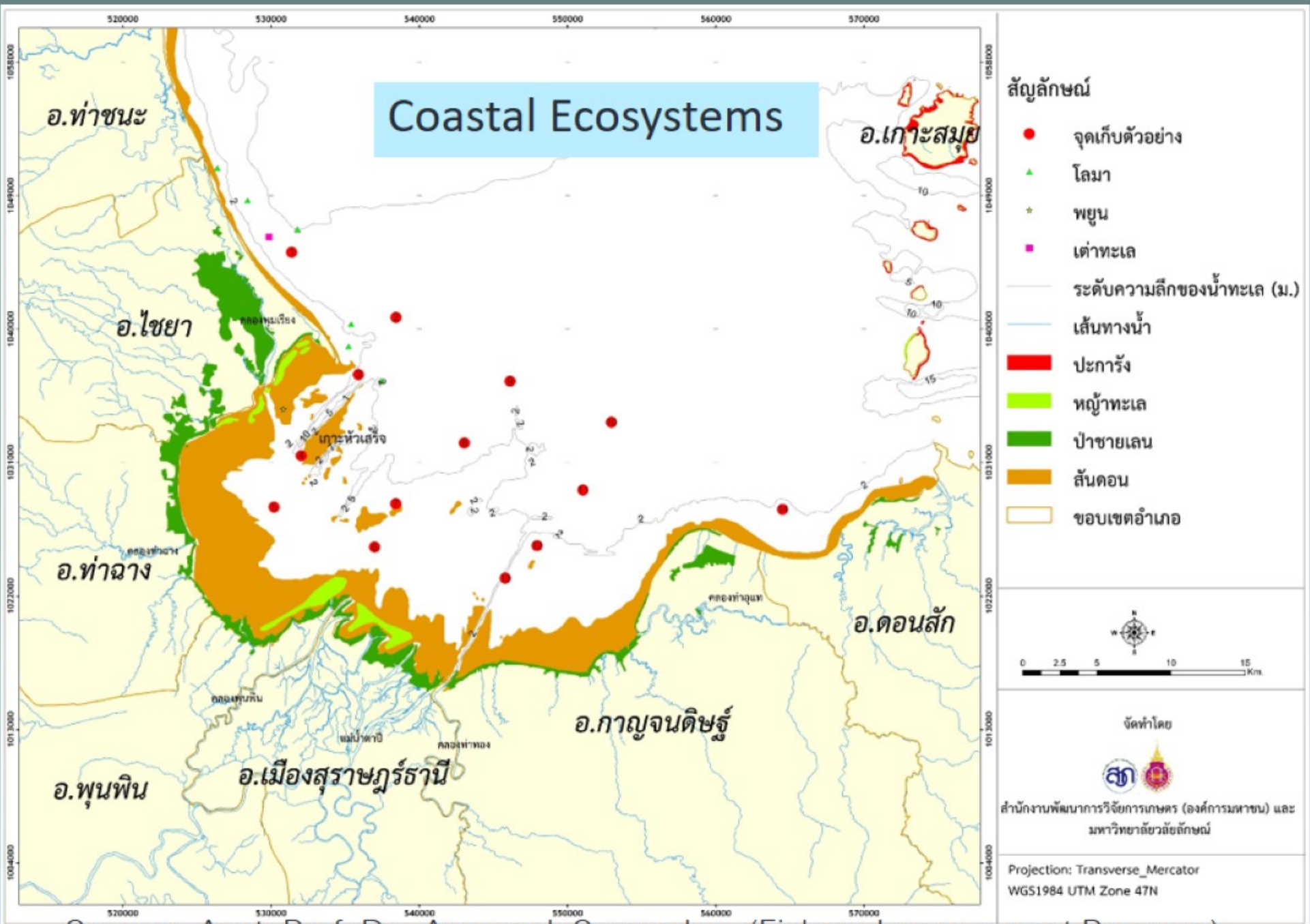
สัตว์น้ำ								
	Jan	Feb	March	April	May	June	July	Aug.
กลุ่มกั้ง	0.00	0.83	0.00	0.00	0.28	0.00	0.00	0.00
กลุ่มปู								
Portunus pelagicus	93.00	87.73	62.86	84.16	91.19	73.84	94.89	100.00
Charybdis feriatus	6.42	9.84	25.16	15.68	8.50	4.90	3.88	0.00
other crab	0.58	0.99	11.98	0.16	0.02	21.25	0.00	0.00
กลุ่มหมึก	0.00	0.61	0.00	0.00	0.00	0.00	1.23	0.00
ผลรวม	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
อัตราการจับ (กก./สอบ 10 ลูก)	0.130	0.104	0.144	0.127	0.172	0.263	0.219	0.242

Source: Middle Gulf Fisheries Research and Development Center (Chumphon)

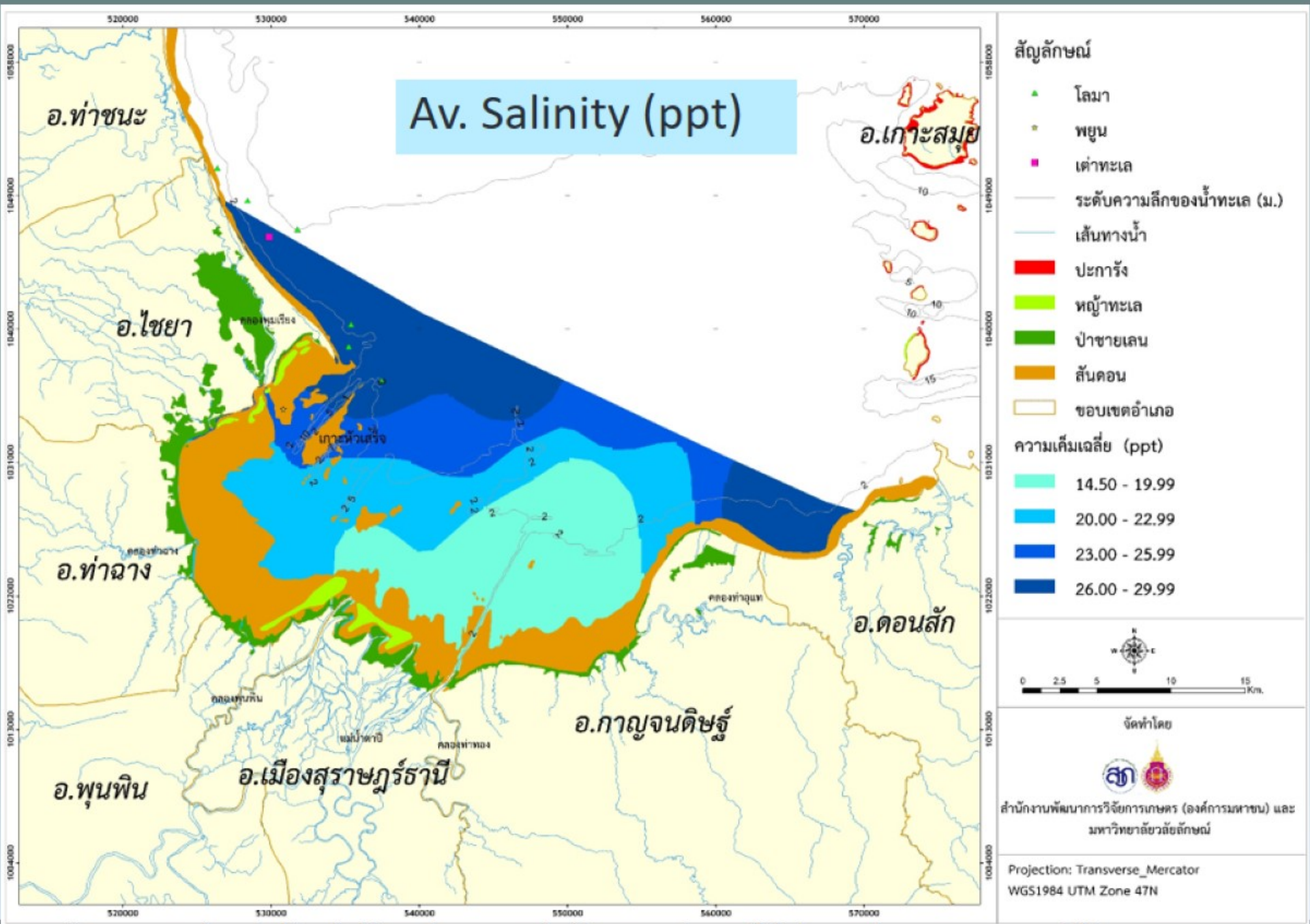


Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)



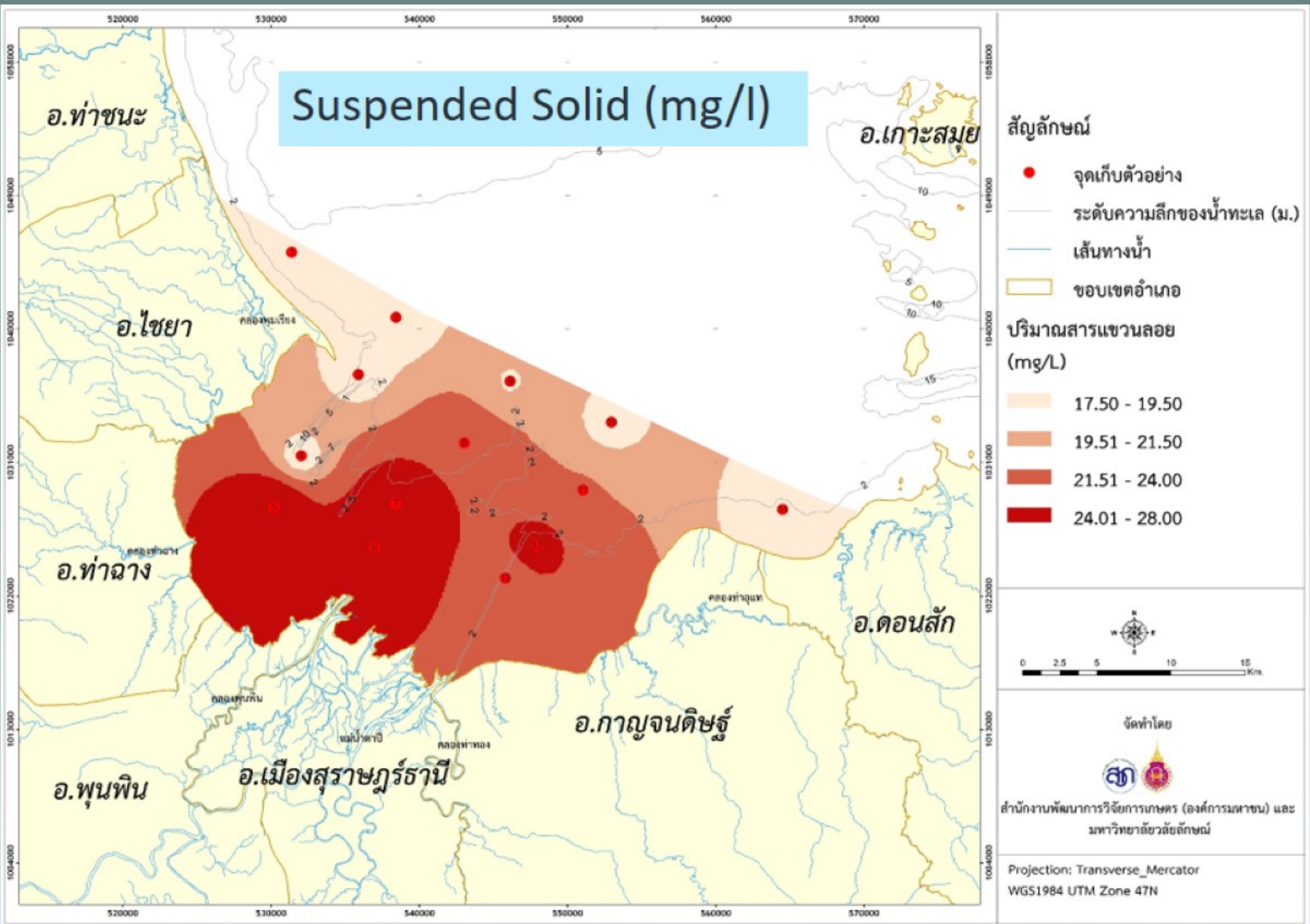


Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)

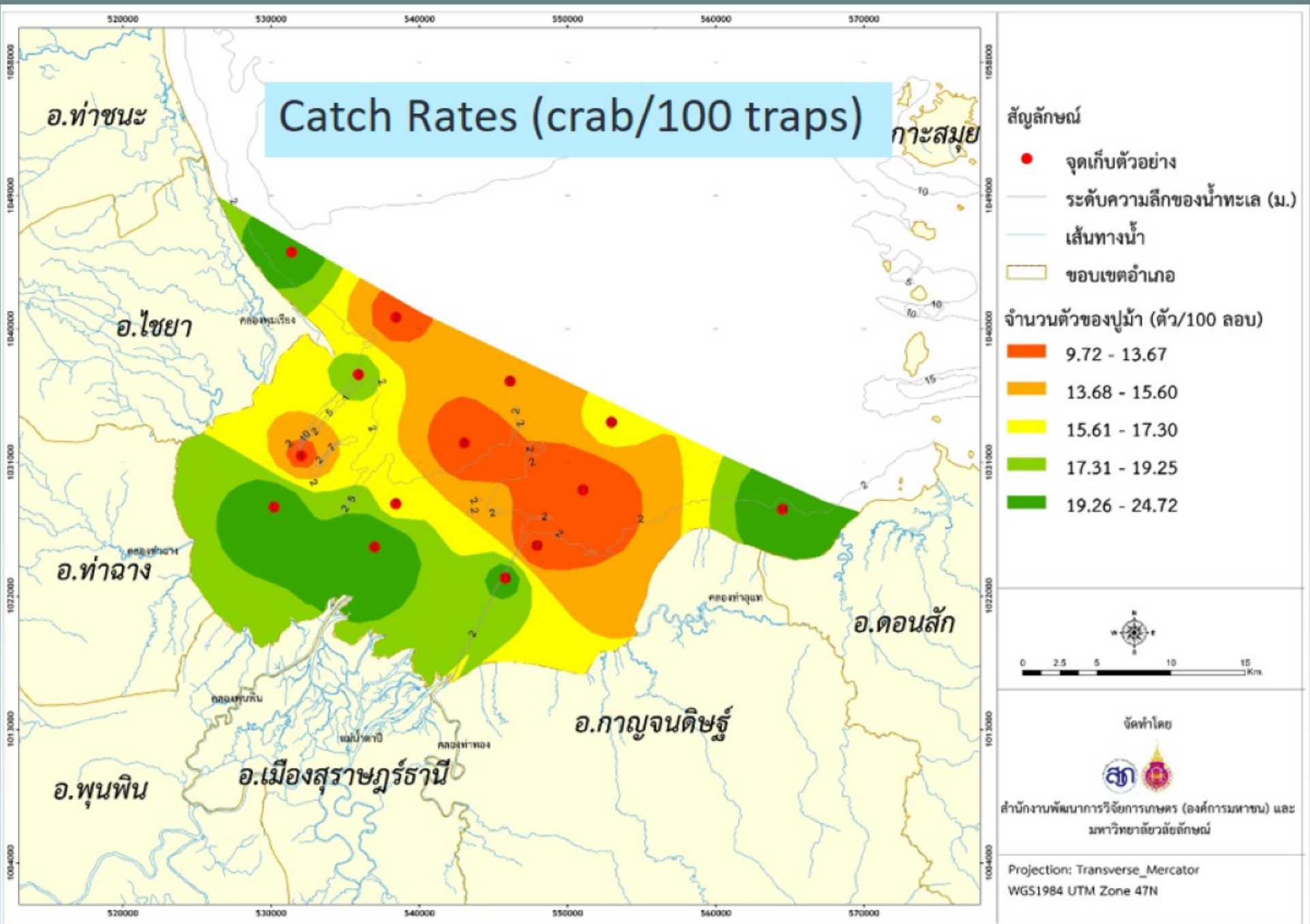


Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)



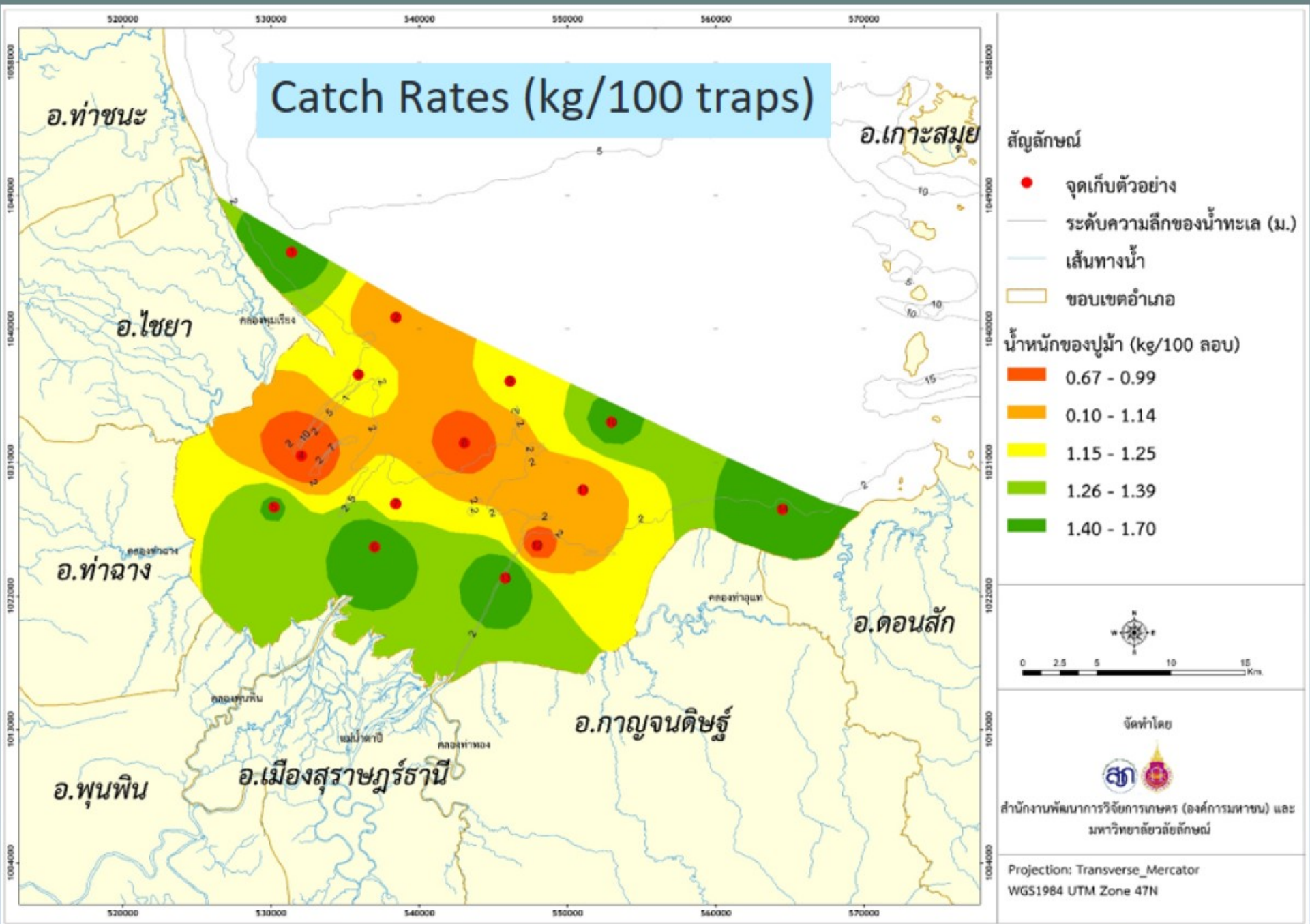


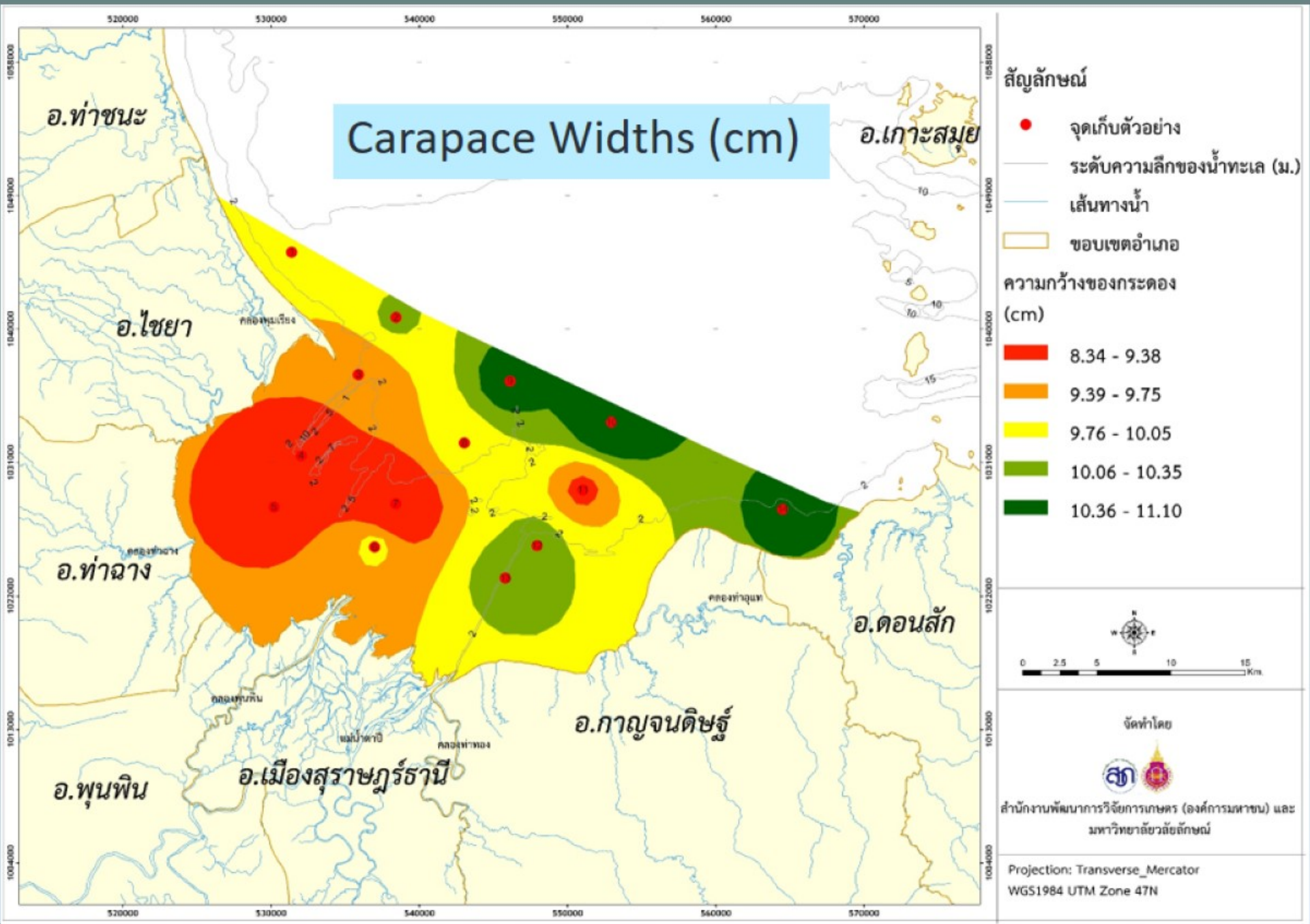
Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)



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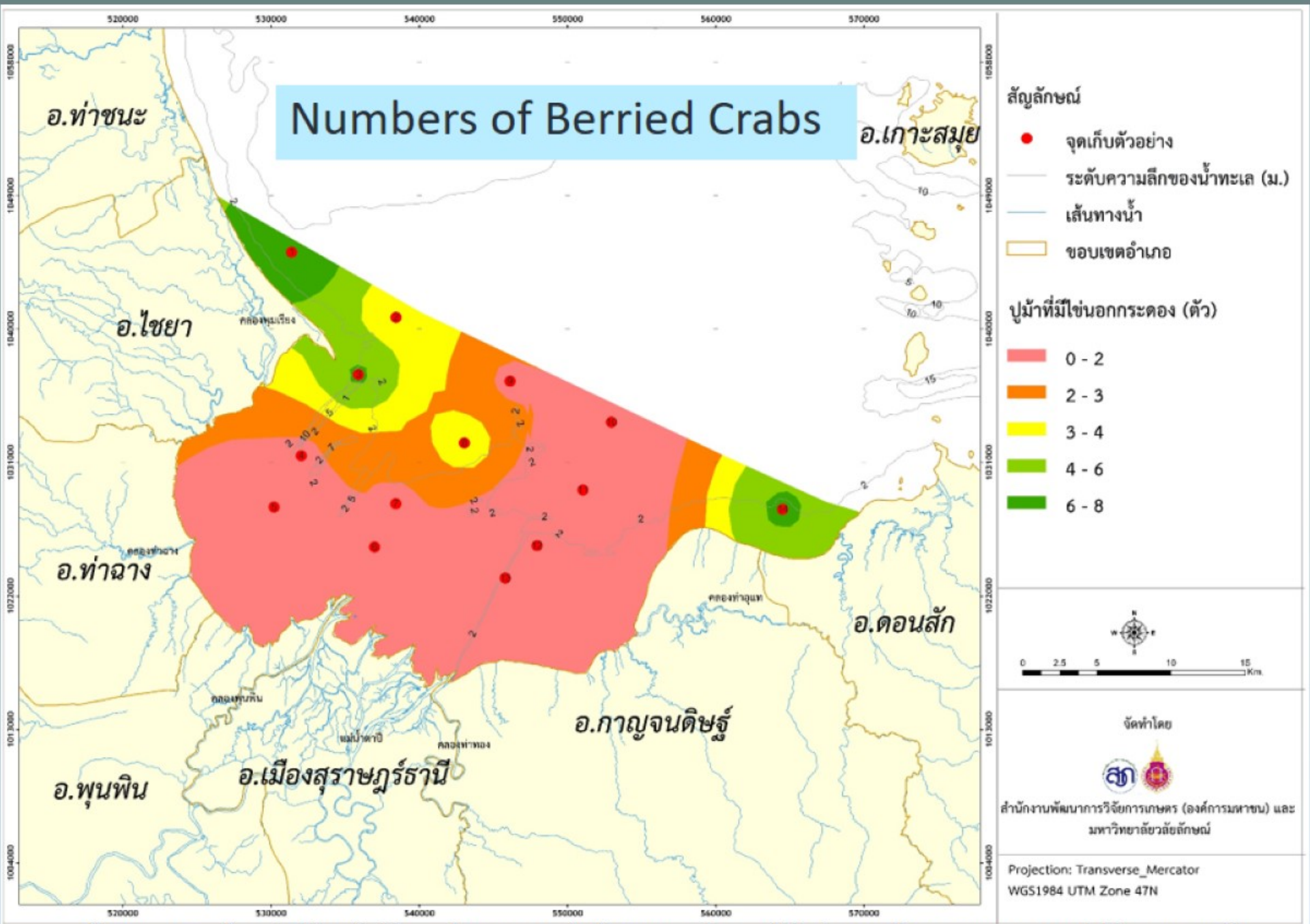






Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)





Source: Asst. Prof. Dr. Amonsak Sawusdee (Fishery Improvement Program)

# Thank You





A grayscale map of Southeast Asia and surrounding regions. The countries labeled are Burma, Vietnam, Laos, Thailand, Philippines, Malaysia, and Indonesia. The text 'Thank You' is written in a large, teal, sans-serif font across the center of the map. A faint 'PIXT' watermark is visible in the middle. A small inset map of the Pacific region is in the bottom right corner.

**Thank You**