



Country Report

Sharks and Rays in Thailand

Tassapon KRAJANGDARA

Andaman Sea Fisheries Research and Development Center (Phuket)

Department of Fisheries, THAILAND

2014

Sharks and Rays in Thailand

Tassapon KRAJANGDARA

Department of Fisheries, THAILAND

tas19702011@hotmail.com

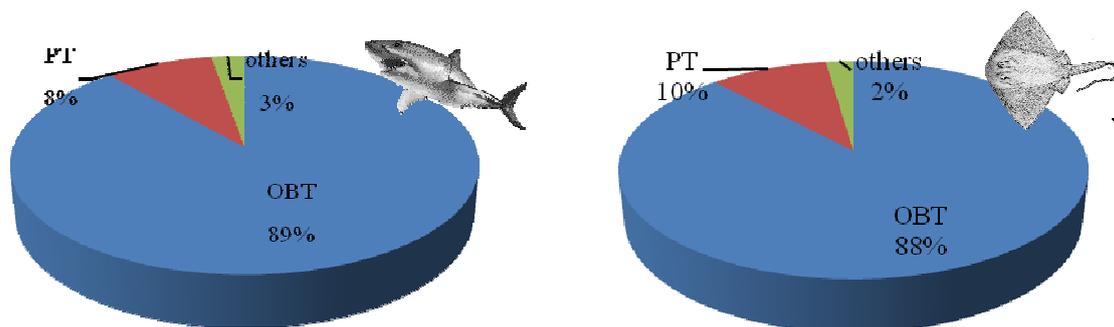
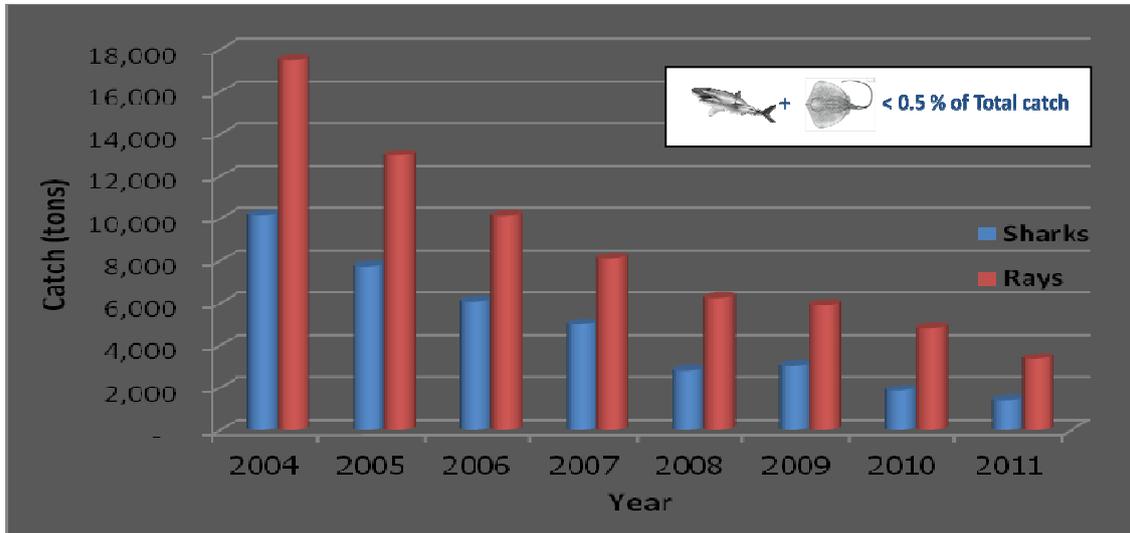
Status of sharks and rays by marine fishery

The marine fishery production of Thailand was harvested from the Gulf of Thailand and the Andaman Sea. Most of the production (90%) was caught by commercial fishing gears and the rest was caught by small scale fishing gears. Trawl fishery landed about 70% of the total production in Thai Waters. But, there is no shark's fishery in Thailand. Sharks and rays are caught by a number of fishing gears such as trawls, purse seines, long lines, gill nets and others, especially by the otter board trawl. Generally, sharks and rays are not the target species but caught as by-catch or incidental catch by commercial fisheries. There are no specific types of fishing gears to catch only these fish. Sharks and rays in the total catch of the demersal fish were in small proportions as less than 2% and 4%, respectively. Shark and ray productions were less than 0.5% of total marine fishery production. In Thailand, shark and ray productions are fully utilized. Most catch of sharks and rays are consumed in fresh or processed into products such as fish ball and dried salted fish. Dried shark fins and guitarfish fins are sold to Chinese restaurants and exported to Hong Kong, Taiwan, Singapore and others. Livers of them are used to extract oil and mix in fish oil and cosmetic or to feed brood stock in shrimp culture. Skins of them are used as leather produce to handbag, wallet, belt, shoes, etc. Furthermore, some parts of sharks and rays are used to produce souvenirs in different styles. Discarded parts of the fish such as heads, cartilages and other internal organs are used to supply fishmeal factory or as bait for fish and crab traps.

The Department of Fisheries (DoF) has been compiling fisheries and aquaculture production statistics by main fish species for major types of fisheries on the basis of catch reports. This data is shown in Annual Fisheries Statistics of Thailand. However the statistics on sharks and rays are compiled and released officially under 2 categories: "sharks" and "rays" due to the difficulty in identification of species by fishermen. Therefore, "sharks" or "rays" mean total of shark or ray species that are loaded at fishing ports. Although most of landed sharks and rays are not identified into the species level, the researchers of DoF carry out the data collection on sharks and rays and distinguish shark and ray species based on the FAO species identification guides for fishery purposes: The living marine resources of the Western Central Pacific Vol.2 (sharks) and Vol.3 (Batoid fishes or rays).

According to the fisheries statistics of Thailand during 2004-2011, the trend of shark and ray catches dropped slightly. In 2011, both catch of sharks and rays remained less than 20 % of the catch in 2004. The average catch of sharks and rays was approximately 4,800 and 8,600 metric tons/year, respectively. While the catch of sharks in 2008 and of rays in 2007 to 2011 were lower than these average. Furthermore, the catch of sharks and rays by type of fishing gear showed that the otter board trawl (OBT) caught more than 80% of both shark and ray

productions. The second was the pair trawl (PT) which caught approximately 8-10 % of their catch. The trend of shark and ray catches from the otter board trawl is decreasing continuously like the total catch of sharks and rays as previous mentioned.



Source: The Marine Fisheries Statistics base on The Sample Survey (Department of Fisheries, 2002-2012)

Species diversity of sharks and rays

The first survey for the checklist of sharks and rays in Thailand was initiated by Prof. Supap Monkolprasit of the Faculty of Fisheries, Kasetsart University in 1977 and published in the article of “The Cartilaginous Fishes (Class Elasmobranchii) Found in Thai Waters and Adjacent Areas” in 1984. There were 7 families/29 species of shark and 6 families/38 species of ray. After that, the checklist was updated to 14 families/50 species of shark and 10 families/56 species of ray and was reported by Dr. Anuwat Natheewatana and Mrs. Amara Cheunpan of the Department of Marine and Coastal Resources (DMCR) in 2002 to support data in the draft of the National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks) of Thailand.

The Southeast Asian Fisheries Development Center (SEAFDEC) initiated “The regional ad-hoc study on shark” in 2003. This study was performed with the financial support from the Japanese Trust Fund granted to ASEAN-SEAFDEC member countries. The project of

data collection on shark and fisheries management in Thailand started in 2004 and the DoF gathered data from both of the Gulf of Thailand and the Andaman Sea. One of the project results is the checklist of sharks in Thai Waters and adjacent areas including 18 families and 59 species. After that, the DoF developed the NPOA-Sharks of Thailand following the International Plan of Action for the Conservation and Management of Sharks (IPOA-Sharks) in 2005.

Considering the marine animals in CITES list, the DoF initiated the program for collecting data of seahorses, sharks and rays in 2010. The data collection on sharks in Thailand was conducted during 2011-2012. The result was 39 species with 3 new records of shark were found. After that, the data collection on rays in Thailand started in 2013 with the financial support by the DoF and the Bay of Bengal Large Marine Ecosystem Project (BOBLME). One of the project results was 41 species with 12 new records of ray were discovered. The revision of checklist resulted in 19 families/64 species of shark and 11 families/71 species of ray, including of 22 new records of shark and ray during 2004-2014. The new record species were composed of 7 sharks and 15 rays that were recorded in the new checklist and mostly collected specimens from the Andaman Sea of Thailand.

Distinction levels of shark and ray species in fish markets

The catch of sharks and rays was unloaded at the fishing ports along the coast of the Gulf of Thailand and the Andaman Sea of Thailand. 50 species of common shark and ray were found and sold without species identification. According to the data collection on sharks and rays in Thailand by the DoF, there are 8 families/29 species of common shark and 6 families/21 species of common ray found at the fishing ports and fish markets.

Shark or cha-lam (Thai name) is categorized into 8 families as follows:

- 1) Hemiscylliidae (Bamboo shark, cha-lam-kob) = 3 species
- 2) Ginglymostomatidae (Nurse shark, cha-lam-ki-sao) = 1 species
- 3) Stegostomatidae (Zebra shark, cha-lam-suea-dao) = 1 species
- 4) Alopiidae (Thresher shark, cha-lam-hang-yaw) = 2 species
- 5) Triakidae (Hound shark, cha-lam-ma) = 2 species
- 6) Hemigalaeidae (Weasel shark, cha-lam-nu) = 3 species
- 7) Carcharhinidae (Ground shark, cha-lam-nu, cha-lam-hu-dam) = 16 species
- 8) Sphyrnidae (Hammerhead shark, cha-lam-hua-kon) = 1 species

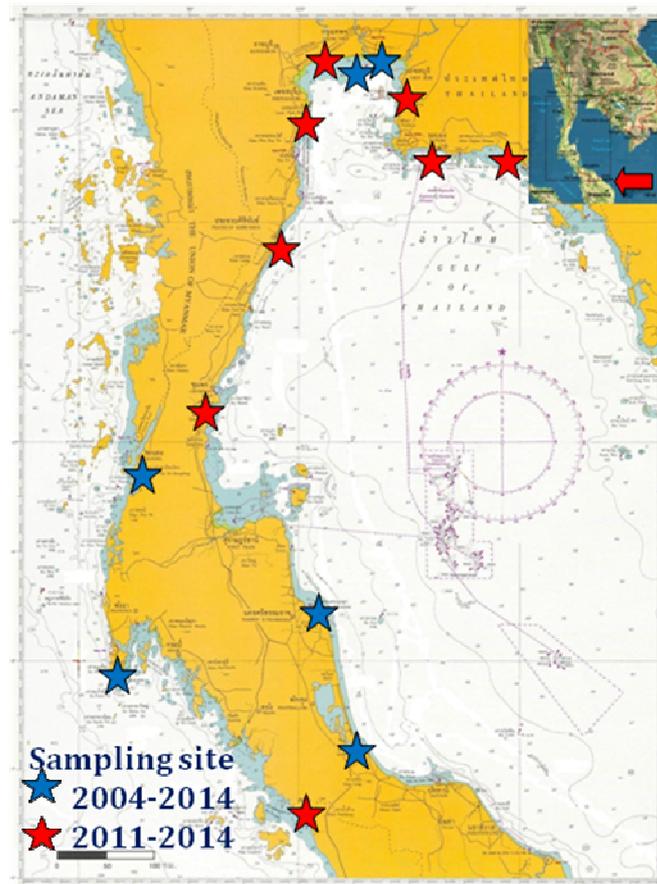
Ray or gra-ben (Thai-name) is categorized into 6 families as follows:

- 1) Rhinidae (Wedgefish, ro-nin and ro-nan) = 3 species
- 2) Rhinobatidae (Guitarfish, ro-nan) = 1 species
- 3) Dasyatidae (Whiptail stingray, gra-ben) = 12 species
- 4) Gymnuridae (Butterfly ray, gra-ben-phi-suea) = 2 species
- 5) Myliobatidae (Eagle ray, gra-ben-nok) = 2 species
- 6) Rhinopteridae (Cow nose ray, gra-ben-ja-muk-wua) = 1 species

Most of common shark and ray at the fishing ports and fish markets are in 3 families: Carcharhinidae, Hemiscylliidae and Dasyatidae. The dominant species of sharks and rays are *Carcharhinus sorrah*, *Chiloscyllium punctatum*, *C. griseum*, *Neotrygon kuhlii*, *Dasyatis zugei*, *Himantura imbricata*, *H. walga* and *H. gerrardi*.

Data collection on sharks and rays programs

The DoF started the survey and data collection on sharks in 2004 with the financial support by SEAFDEC. In 2011, the DoF collected data on sharks and increased the sampling site along the coastal province of Thailand. After that, the DoF and BOBLME had the project for the data collection on rays in 2013. The programs composed 3 modules of fishery, biological and utilization data. The outcome of this program will support the national policy for management shark and ray resources and the NPOA-Sharks of Thailand in the near future.



NPOA-Sharks of Thailand

The DoF established the NPOA-Sharks of Thailand in 2005. But the implementation of NPOA-Sharks lacked stakeholder consultation for briefing and explaining to public. Only the data collection on sharks and rays in Thailand was conducted by the DoF. However, the DoF has a plan for stakeholder consultation in this year before the improvement of NPOA-Sharks.

Although the NPOA-Sharks is not complete at this moment, the DoF has been performing activities for endorsing the NPOA-Sharks of Thailand such as:

1. The project of data collection on sharks in 2004, 2011-2012 and on rays in 2013-2014.
2. Regular monitoring survey by Fishery research vessel of DoF.
3. Capacity building of the officials and other relevance of DoF to identify shark and ray species and data collection with 2 programs:
 - Shark identification training course for the government officials at the Ranong Marine Fisheries Station during 10-11 March, 2011.
 - Ray identification training course for the government officials at the Andaman Sea Fisheries Research and Development Center (Phuket) during 18-22 March, 2013.
4. Promotion on sustainable use and conservation of shark and ray such as:
 - Presentation in terms of “Species, maturation and fishery of shark in the Andaman Sea of Thailand” in the domestic symposium on marine fisheries and Annual fishery symposium of the DoF in 2005.
 - Produced PVC chart (shark identification sheet) and shark poster in 2004 and PVC chart (ray identification sheet) in 2013.



- Published field guides for shark and ray identification in 2006 and 2013.
5. Sharing the knowledge on shark conservation to stakeholder such as releasing the bamboo sharks (*Chiloscyllium* spp.) and blacktip reef shark (*Carcharhinus melanopterus*) to the sea during 2004-2013 by DoF, DMCR, Royal Thai Navy, University, Private Aquarium, Scuba Diving Club, etc and sharing information to institutions within country and Thailand eShark Project (www.sharkguardian.org).

National policy for management shark and ray resources

At present, the only shark management measure in Thailand relates to whale shark (*Rhincodon typus*). This species is protected in Thailand with a ban on whale shark fishing within Thai Waters (Ministerial Proclamation of The Ministry of Agriculture and Cooperatives dated 28 March, 2000). There are no further management measures targeted specifically at sharks and rays. However, the other policies for management marine resources

can indirectly support the protection of sharks and rays in Thai Waters as follows:

- Prohibition fishing by trawlers and push netters within a distance of 3,000-5,400 m from the shoreline and within a perimeter of 400 m of any stationary gear through the year.
- The number of new entry trawler is limited and push netter is banned. To freeze of trawling fleet, The Ministry of Agriculture and Cooperatives has issued a Ministerial Rule dated 17 September, 1996.
- Fish protection in the conservation areas of the Gulf of Thailand and the Andaman Sea during the spawning and breeding season (Closed season): 15 Feb-15 May in the area of the Gulf of Thailand, covering the area of 26,400 km² and 1 Apr-30 Jun in the area of the Andaman Sea, covering the area of 4,696 km².
- Designation of marine protected area (MPA) in the marine national parks of Thailand. There are 16 national marine parks, covering a total area of 5,154 km² (average size 322 km²). The total area under protection represents over 2% of the shelf area.

Status of sharks and rays based on IUCN Red List

Regarding to the checklist of sharks and rays in Thailand based on the existing data, 64 species of shark and 71 species of rays were recorded in 2014. The status of these fishes based on IUCN red list reported that 19 sharks and 29 rays as threatened species (CR+EN+VU). While the endangered species of sharks and rays are scalloped hammerhead shark (*Sphyrna lewini*), great hammerhead shark (*S. mokarran*), Maekong freshwater stingray (*Dasyatis laosensis*), Maeklong whipray (*Himantura kittipongi*), longnose marble whipray (*H. oxyrhynchus*), white-edge freshwater whipray (*H. signifier*), mottled eagle ray (*Aetomylaeus maculatus*) and ornate eagle ray (*A. vespertilio*).

Risk status	Sharks	Rays
CR - Critically endangered species	0	4
EN - Endangered species	2	6
VU - Vulnerable species	17	19
NT - Near Threatened	24	9
LC - Least Concern	6	7
DD - Data Deficient	10	16
NE - Not Evaluated	1	7
No data	4	3
Total	64	71

CITES listings of sharks and rays

In the appendix II of CITES, there are 5 species of shark in Thailand such as whale shark (*Rhincodon typus*), oceanic whitetip shark (*Carcharhinus longimanus*) and 3 hammerhead sharks (*Sphyrna mokarran*, *S. lewini* and *S. zygaena*). Furthermore there are 4 species of

sawfish (ray species) in the appendix I, but they are endangered species or perhaps extinct from Thai Waters. There is no record of manta rays (*Manta* spp.) in Thai Waters, only mobula rays (*Mobula* spp.) were found. The manta ray is an oceanic and migratory species. However, it was found occasionally in the Andaman Sea of Thailand by divers (by interview only).

Regarding the current management measure for the protection of shark and ray, there are no separated management policies concerning shark and ray, except a whale shark. The whale shark fishery in Thai Waters is prohibited, according to the Thai regulation in 2000. The oceanic whitetip shark and smooth hammerhead shark (*S. zygaena*) are the rare species in Thai Waters. They were not found in the survey at sampling sites. Two species of hammerhead shark were found, but the great hammerhead shark (*S. mokarran*) is a rare species and found only 1 individual at the Ranong fishing port. While the scalloped hammerhead shark (*S. lewini*) is a common species and occasionally found, but it isn't protected. However, it is caught in low quantity by trawlers and isn't caught by the fishery research vessel of DoF in the survey along the coast of Thailand during 2011-2012. The scalloped hammerhead shark was less than 0.5% of the total sharks from both of the Gulf of Thailand and the Andaman Sea. It was used for local consumption.

Current limitations

- Lack of Elasmobranch specialists and guide books or field guides to identify unknown species or products and derivatives from sharks and rays.
- Lack of database system for stock assessment and management shark and ray resources.
- Lack of cooperation from stakeholder.
- Lack of regular data collection. (In the past, only in 2004, 2011 and 2013)
- Lack of programmes for awareness raising to stakeholders.
- Lack of integration among institution.
- Funding for shark research and CITES implementation is very limited.

Needs

- Capacity building of the new Taxonomist or Biologist (young scientist) to support the NPOA-Sharks.
- Train customs officials and other relevance in the supply chain to identify sharks, rays and products in trade.
- Landed sharks and rays are identified into the family level.
- Develop and implement comprehensive awareness programs.
- Collaborations among institution within country.

Checklist of sharks in Thai Water and adjacent areas, 2012						
Family	No.	Thai name	English common name	Scientific name	Status	IUCN Redlist
1) Squalinidae	1	cha-lam-nang-fa	Angel shark	<i>Squatina</i> sp.	-	-
2) Squalidae	2	cha-lam-naum-yaw	Piked dogfish	<i>Squalus acanthias</i> Linnaeus, 1758	-	VU
	3	cha-lam-maew	Shortnose spurdog	<i>S. megalops</i> (Macleay, 1881)	++	DD
	4	cha-lam-lang-naum	Shortspine spurdog	<i>S. mitsukurii</i> Jordan & Snyder, 1903	+	DD
	5	cha-lam-long-dam	Velvet belly lantern shark	<i>Etmopterus spinax</i> (Linnaeus, 1758)	-	LC
3) Hexanchidae	6	cha-lam-pak-jing-jog	Sharpnose sevengill shark	<i>Heptranchias perlo</i> (Bonnaterre, 1788)	+	NT
4) Heterodontidae	7	cha-lam-na-wua-lai	Zebra bullhead shark	<i>Heterodontus zebra</i> (Gray, 1831)	+	LC
5) Orectolobidae	8	cha-lam-kob-yi-pun	Japanese wobbegong	<i>Orectolobus cf. japonicus</i> Regan, 1906	+	-
	9	cha-lam-kob-jud	Indonesian wobbegong	<i>O. leptolineatus</i> Last, Pogonoski & White, 2010	+	NT
6) Hemiscylliidae	10	cha-lam-lai	Grey bamboo shark	<i>Chiloscyllium griseum</i> Muller & Henle, 1838	+++	NT
	11	cha-lam-kob-lai	Indonesian bamboo shark	<i>C. hasselti</i> Bleeker, 1852	+	NT
	12	cha-lam-kob	Slender bamboo shark	<i>C. indicum</i> (Gmelin, 1789)	+	NT
	13	cha-lam-kob	Whitespotted bamboo shark	<i>C. plagiosum</i> (Bennett, 1830)	+	NT
	14	cha-lam-kob	Brownbanded bamboo shark	<i>C. punctatum</i> Muller & Henle, 1838	+++	NT
7) Ginglymostomatidae	15	cha-lam-ki-sao	Tawny nurse shark	<i>Nebrius ferrugineus</i> (Lesson, 1831)	++	VU
8) Stegostomatidae	16	cha-lam-suea-dao	Zebra shark	<i>Stegostoma fasciatum</i> (Hermann, 1783)	++	VU
9) Rhincodontidae	17	cha-lam-wan	Whale shark	<i>Rhincodon typus</i> Smith, 1828	+	VU
10) Odontaspidae	18	cha-lam-sai	Sand tiger shark	<i>Carcharias taurus</i> Rafinesque, 1810	-	VU
11) Megachasmidae	19	cha-lam-pak-gwang	Megamouth shark	<i>Megachasma pelagios</i> Taylor, Compagno & Struhsaker, 1983	-	DD
12) Alopiidae	20	cha-lam-hang-yaw-na-nu	Pelagic thresher	<i>Alopias pelagicus</i> Nakamura, 1935	++	VU
	21	cha-lam-hang-yaw	Bigeye thresher	<i>A. superciliosus</i> (Lowe, 1841)	++	VU
	22	cha-lam-hang-yaw	Thresher shark	<i>A. vulpinus</i> (Bonnaterre, 1788)	+	VU
13) Lamnidae	23	cha-lam-pak-ma	Shortfin mako	<i>Isurus oxyrinchus</i> Rafinesque, 1810	+	VU
14) Scyliorhinidae	24	cha-lam-kob-lai-hin-on	Marbled catshark	<i>Atelomycterus marmoratus</i> (Bennett, 1830)	++	NT
	25	cha-lam-kob-jud	Bristly catshark	<i>Bythaelurus hispidus</i> (Alcock, 1891)	-	DD
	26	cha-lam-kiaw	Brown spotted catshark	<i>Halaelurus buergeri</i> (Muller & Henle, 1838)	+	DD
15) Proscylliidae	27	cha-lam-maew-jud	Finback catshark	<i>Proscyllium magnificum</i> Last & Vongpanich, 2004	+	NE
16) Triakidae	28	cha-lam-ma-jud-kae	White-spotted hound shark	<i>Mustelus</i> sp.B (Western form)	+	-
	29	cha-lam-ma	Starspotted smooth-hound shark	<i>M. manazo</i> Bleeker, 1854	+	DD
	30	cha-lam-ma	Arabian smooth-hound shark	<i>M. mosis</i> Hemprich & Ehrenberg, 1899	+	DD
	31	cha-lam-ma-la-to	Bigeye hound shark	<i>Iago omanensis</i> (Norman, 1939)	+	LC
17) Hemigaleidae	32	cha-lam-nu	Hooktooth shark	<i>Chaenogaleus macrostoma</i> (Bleeker, 1852)	+	VU
	33	cha-lam-nu	Sicklefin weasel shark	<i>Hemigaleus microstoma</i> Bleeker, 1852	++	VU
	34	cha-lam-nu	Snaggletooth shark	<i>Hemipristis elongata</i> (Klunzinger, 1871)	++	VU
	35	cha-lam-nu	Straight-tooth weasel shark	<i>Paragaleus tengi</i> (Chen, 1963)	+	DD
18) Carcharhinidae	36	cha-lam-suea	Silvertip shark	<i>Carcharhinus albimarginatus</i> (Ruppell, 1837)	++	NT
	37	cha-lam-krib-kae	Bignose shark	<i>C. altimus</i> (Springer, 1950)	+	DD
	38	cha-lam-krib-kong	Graceful shark	<i>C. amblyrhynchoides</i> (Whitley, 1934)	++	NT
	39	cha-lam-nu-hua-laem	Grey reef shark	<i>C. amblyrhynchus</i> (Bleeker, 1856)	++	NT
	40	cha-lam-la-chik	Pigeye shark	<i>C. amboinensis</i> (Muller & Henle, 1839)	++	DD
	41	cha-lam-nu-hua-laem	Copper shark	<i>C. brachyurus</i> (Gunther, 1870)	++	NT
	42	cha-lam-nu-hua-laem	Spinner shark	<i>C. brevipinna</i> (Muller & Henle, 1839)	++	NT
	43	cha-lam-nu	Whitecheek shark	<i>C. dussumieri</i> (Muller & Henle, 1839)	++	NT
	44	cha-lam-krib-yaw	Silky shark	<i>C. falciformis</i> (Muller & Henle, 1839)	++	NT
	45	cha-lam-hu-kae	Bull shark	<i>C. leucas</i> (Muller & Henle, 1839)	++	NT
	46	cha-lam-nu	Blacktip shark	<i>C. limbatus</i> (Muller & Henle, 1839)	++	NT
	47	cha-lam-nu	Oceanic whitetip shark	<i>C. longimanus</i> (Poey, 1861)	-	VU
	48	cha-lam-krib-dam-yai	Blacktip reef shark	<i>C. melanopterus</i> (Quoy & Gaimard, 1824)	++	NT
	49	cha-lam-krib-diang	Dusky shark	<i>C. obscurus</i> (LeSueur, 1818)	+	VU
	50	cha-lam-hu-dam	Sandbar shark	<i>C. plumbeus</i> (Nardo, 1827)	-	VU
	51	cha-lam-thao	Blackspot shark	<i>C. sealei</i> (Pietschmann, 1913)	+	NT
	52	cha-lam-ka-dong-sung	Spottail shark	<i>C. sorrah</i> (Muller & Henle, 1839)	+++	NT
	53	cha-lam-ja-muk-to	Tiger shark	<i>Galeocerdo cuvier</i> (Peron & LeSueur, 1822)	++	NT
	54	cha-lam-thao	River shark	<i>Glyphis</i> sp.	+	-
	55	cha-lam-hu-dam	Siliteye shark	<i>Loxodon macrorhinus</i> Muller & Henle, 1839	++	LC

Family	No.	Thai name	English common name	Scientific name	Status	IUCN Redlist
18) Carcharhinidae	56	cha-lam-ta-lek	Sicklefin lemon shark	<i>Negaprion acutidens</i> (Ruppell, 1837)	+	VU
	57	cha-lam-hua-baht	Milk shark	<i>Rhizoprionodon acutus</i> (Ruppell, 1837)	++	LC
	58	cha-lam-hu-dam	Grey sharpnose shark	<i>R. oligolinx</i> Springer, 1964	+	LC
	59	cha-lam-hu-dam	Spadenose shark	<i>Scoliodon laticaudus</i> Muller & Henle, 1838	++	NT
	60	cha-lam-hu-dam-lek	Whitetail reef shark	<i>Triaenodon obesus</i> (Ruppell, 1837)	++	NT
19) Sphyrnidae	61	cha-lam-hua-kon-yaw	Winghead shark	<i>Eusphyr a blochii</i> (Cuvier, 1816)	-	NT
	63	cha-lam-hua-kon	Scalloped hammerhead shark	<i>Sphyrma lewini</i> (Griffith & Smith, 1834)	++	EN
	62	cha-lam-hua-kon	Great hammerhead shark	<i>S. mokarran</i> (Ruppell, 1837)	+	EN
	64	cha-lam-hua-kon	Smooth hammerhead shark	<i>S. zygaena</i> (Linnaeus, 1758)	-	VU

Checklist of rays in Thai Water and adjacent areas, 2014

Family	No.	Thai name	English common name	Scientific name	Status	IUCN Redlist
1) Pristidae	1	cha-nag-pak-laem	Point sawfish	<i>Anoxypristis cuspidata</i> (Latham, 1794)	-	CR
	2	cha-nag-yak	Largetooth sawfish	<i>Pristis pristis</i> (Linnaeus, 1758)	-	CR
	3	cha-nag-fan-lek	Smalltooth sawfish	<i>P. pectinata</i> Latham, 1794	-	CR
	4	cha-nag-khiao	Green sawfish	<i>P. zijsron</i> Bleeker, 1851	-	CR
2) Rhinidae	5	ro-nin, gra-ben-tong-nam	Bowmouth guitarfish	<i>Rhina ancylostoma</i> Bloch & Schneider, 1801	++	VU
	6	ro-nan-jud-kao	Whitespotted wedgetfish	<i>Rhynchobatus australiae</i> Whitley, 1939	++	VU
	7	ro-nan-jud-kao	Smooth nose wedgetfish	<i>R. laevis</i> (Bloch & Schneider, 1801)	++	VU
	8	ro-nan-jud-kao-lai	Broadnose wedgetfish	<i>R. springeri</i> Compagno & Last, 2010	+	VU
3) Rhinobatidae	9	ro-nan-med	Granulated guitarfish	<i>Glaucostegus granulatus</i> (Cuvier, 1829)	+	VU
	10	ro-nan-hua-sai-yak	Thailand pointed guitarfish	<i>G. cf. granulatus</i> (Cuvier, 1829)	+	-
	11	ro-nan-hua-jing-jog	Clubnose guitarfish	<i>G. thouin</i> (Lacepede, 1798)	+	VU
	12	ro-nan-ja-mug-kwang	Widenose guitarfish	<i>Rhinobatos obtusus</i> Müller & Henle, 1841	+	VU
	13	ro-nan-hua-sai-jud-kao	Spotted guitarfish	<i>R. punctifer</i> Compagno & Randall, 1987	+	DD
	14	ro-nan-hua-sai	Brown guitarfish	<i>R. schlegelii</i> Muller & Henle, 1841	++	DD
4) Narcinidae	15	ro-nan-med	Granulated shovelnose ray	<i>R. ligonifer</i> (Cantor, 1849)	-	-
	16	gra-ben-fai-fa-nam-tan	Brown numbfish	<i>Narcine brunnea</i> Annandale, 1909	+	NE
	17	gra-ben-fai-fa-in-dia	Largespotted numbfish	<i>N. indica</i> Henle, 1834	+	DD
	18	gra-ben-fai-fa-jod	Darkfinned numbfish	<i>N. maculata</i> (Shaw, 1804)	+	DD
	19	gra-ben-fai-fa-jud-lek	Tonkin numbfish	<i>N. prodorsalis</i> Bessednov, 1966	+	DD
5) Narkidae	20	gra-ben-fai-fa-jud-dam	Blackspotted numbfish	<i>N. timlei</i> (Bloch & Schneider, 1801)	+	DD
	21	gra-ben-fai-fa-hang-jud	Spottail sleeper ray	<i>Narke dipterygia</i> (Bloch & Schneider, 1801)	+	DD
	22	gra-ben-fai-fa-lang-riab	Finless sleeper ray	<i>Temera hardwickii</i> Gray, 1831	+	VU
6) Rajidae	23	gra-ben-lang-naum-jud	Sulu sea skate	<i>Okamejei jensenae</i> Last & Lim, 2010	+	NE
7) Dasyatidae	24	gra-ben-hang-hwai	Whip stingray	<i>Dasyatis akajei</i> (Muller & Henle, 1841)	++	NT
	25	gra-ben-hang-san	Short tail stingray	<i>D. brevicaudata</i> (Hutton, 1875)	+	LC
	26	gra-ben-lao	Maekong freshwater stingray	<i>D. laosensis</i> Roberts & Karnasuta, 1987	+	EN
	27	gra-ben-ta-lek	Smalleye stingray	<i>D. microps</i> (Annandale, 1908)	+	DD
	28	gra-ben-hang-naum	Cow stingray	<i>D. ushiei</i> (Jordan & Hubbs, 1925)	+	DD
	29	gra-ben-pak-laem	Sharpnose stingray	<i>D. zugei</i> (Muller & Henle, 1841)	+++	NT
	30	gra-ben-kao	Whiptail stingray	<i>Himantura bleekeri</i> (Blyth, 1860)	++	NE
	31	gra-ben-chao-phra-ya	Giant freshwater stingray	<i>H. chaophraya</i> Monkolprasit & Roberts, 1990	++	VU
	32	gra-ben-lai-dok	Pink whipray	<i>H. fai</i> Jordan & Seale, 1906	+	LC
	33	gra-ben-ma-laeng-wan	Whitespotted whip ray	<i>H. gerrardi</i> (Gray, 1851)	+++	VU
	34	gra-ben-jud-kao	Mangrove whip ray	<i>H. granulata</i> (Macleay, 1883)	+	NT
	35	gra-bang	Scaly whip ray	<i>H. imbricata</i> (Bloch & Schneider, 1801)	+++	DD
	36	gra-ben	Golden whip ray	<i>H. jenkinsii</i> (Annandale, 1909)	++	LC
	37	gra-ben-mae-kong	Maeklong whipray	<i>H. kittipongi</i> Vidthayanon & Roberts, 2005	+	EN
	38	gra-ben-lai-suea	Marbled freshwater whip ray	<i>H. krempfi</i> (Chabanaud, 1923)	++	NE
	39	gra-ben-lai-suea	Longnose marble whip ray	<i>H. oxyrhynchus</i> (Sauvage, 1878)	++	EN
	40	gra-ben-bua	Round whip ray	<i>H. pastinacoides</i> (Bleeker, 1852)	+	VU
	41	gra-ben-kao	White-edge freshwater whip ray	<i>H. signifer</i> Compagno & Roberts, 1982	++	EN
	42	gra-ben-jud-dam	Black-spotted whipray	<i>H. toshi</i> Whitley, 1939	+	LC
43	gra-ben-ja-muk-kao	Whitenose whip ray	<i>H. uarnacoides</i> (Bleeker, 1852)	++	VU	
44	gra-ben-lai-suea	Reticulate whip ray	<i>H. uarnak</i> (Forsskal, 1775)	++	VU	
45	gra-ben-lai-suea	Leopard whip ray	<i>H. undulata</i> (Bleeker, 1852)	++	VU	

Family	No.	Thai name	English common name	Scientific name	Status	IUCN Redlist
7) Dasyatidae	46	gra-ben-tuk-la	Dwarf whip ray	<i>H. walga</i> (Muller & Henle, 1841)	+++	NT
	47	gra-ben-ja-muk-to	Bluespotted stingray	<i>Neotrygon kuhlii</i> (Müller & Henle, 1841)	+++	DD
	48	gra-ben-pic-lai	Peppered maskray	<i>N. cf. picta</i> Last & White, 2008	+	LC
	49	gra-ben-thong	Cowtail stingray	<i>Pastinachus atrus</i> (Macleay, 1883)	+	NE
	50	gra-ben-thong	Cowtail stingray	<i>P. sephen</i> (Forsskal, 1775)	++	DD
	51	gra-ben-dam	Pelagic stingray	<i>Pteroplatytrygon violacea</i> (Bonaparte, 1832)	+	LC
	52	gra-ben-tong	Ribbontail stingray	<i>Taeniura lymma</i> (Forsskal, 1775)	++	NT
	53	gra-ben-tok-ka	Round ribbontail ray	<i>T. meyeri</i> Muller and Henle, 1841	+	VU
	54	gra-ben-bi-ka-nun	Porcupine ray	<i>Urogymnus asperrimus</i> (Bloch & Schneider, 1801)	+	VU
	8) Gymnuridae	55	gra-ben-phi-suea	Japanese butterflyray	<i>Gymnura japonica</i> (Temminck & Schlegel, 1850)	++
	56	gra-ben-phi-suea	Smooth butterfly ray	<i>G. micrura</i> (Bloch & Schneider, 1801)	++	DD
	57	gra-ben-phi-suea-hang-yaw	Longtail butterfly ray	<i>G. poecilura</i> (Shaw, 1804)	++	NT
	58	gra-ben-phi-suea	Tentacled butterfly ray	<i>G. tentaculata</i> (Muller & Henle, 1841)	-	DD
	59	gra-ben-phi-suea-hang-lai	Zonetail butterfly ray	<i>G. zonura</i> (Bleeker, 1852)	++	VU
9) Myliobatidae	60	gra-ben-khan-khaw	Spotted eagle ray	<i>Aetobatus narinari</i> (Euphrasen, 1790)	++	NT
	61	gra-ben-nok-pik-laem	Ocellated eagle ray	<i>A. ocellatus</i> (Kuhl, 1823)	++	NE
	62	gra-ben-nok-jud-kao	Mottled eagle ray	<i>Aetomylaeus maculatus</i> (Gray, 1834)	+	EN
	63	gra-ben-nok	Ocellate eagle ray	<i>A. milvus</i> (Muller & Henle, 1841)	-	NE
	64	gra-ben-nok-bang	Banded eagle ray	<i>A. nichoffi</i> (Bloch & Schneider, 1801)	+	VU
65	gra-ben-nok	Ornate eagle ray	<i>A. vespertilio</i> (Bleeker, 1852)	+	EN	
	10) Rhinopteridae	66	gra-ben-ja-muk-wua	Flapnose ray	<i>Rhinoptera javanica</i> Muller & Henle, 1841	+
67	gra-ben-ja-muk-wua	Indian cow-nose ray	<i>R. sewelli</i> Misra, 1946	-	-	
11) Mobulidae	68	gra-ben-ra-hu-khao-yaw	Longhorned mobula	<i>Mobula eregoodootenkee</i> (Bleeker, 1859)	+	NT
	69	gra-ben-ra-hu-hang-naum	Spinetail devil ray	<i>M. japonica</i> (Muller & Henle, 1841)	+	NT
	70	gra-ben-ra-hu-krib-san	Shortfin devil ray	<i>M. kuhlii</i> (Muller & Henle, 1841)	+	DD
	71	gra-ben-ra-hu	Smoothtail devil ray	<i>M. thurstoni</i> (Lloyd, 1908)	+	NT
Status of sharks and rays by survey at fishing ports			IUCN Redlist			
+++	dominant					
++	normal					
+	rare					
-	only recorded					
		EX - Extinction	DD - Data Deficient			
		EW - Extinct in the Wild	NE - Not Evaluated			
		CR - Critically endangered species				
		EN - Endangered species				
		VU - Vulnerable species				
		NT - Near Threatened				
		LC - Least Concern				