



# Myths, Mermaids and Marine Mammals of the South China Sea













# Dugong

**Philippines** bad luck, bone talismans protect against evil

**China/Malaysia** revered and will not be intentionally killed

**Indonesia** reincarnation of woman and are also revered

**Thailand** powerful love the opposite sex tears are powerful aphrodisiac, potions; eating meat attracts

**Biblically** Ark of the Covenant protected by dugong skin







**Vietnam**

**Whale Temples; burial and display, annual festival.**

**Hong Kong and Fujian**

**Tin Hau temples**





## Hong Kong and Fujian



**Small Gods:** occurring in bays adjacent to Tin Hau temples





***“Fisherman I knew in Hong Kong believed petty creatures like barnacles were too small to bother with (except in times of famine) and avoided sawfish, sturgeons, whales and porpoises because these were “divine fish”, tabooed by the gods. But elsewhere in China all of these have been used.”***

**(Anderson 1988:172)**







China



**Baiji: young woman forced to throw herself into the Yangtze to escape from her evil step-father.**

**Finless porpoise: evil step-father and disliked**





## China

Whales first mentioned in literature 179BC

1600; two types of sea creatures, whales and mermaids

seasonal visitors which used the area as a calving ground, resident species were dangerous and capsized boats except pink dolphins, protect fishing boats by riding on their bows

Tai O, reference to a 'maid' living in village as a human





**WHALING STARTED MORE THAN 1000 YEARS AGO**

**WHALE PARTS HAD A MULTITUDE OF USES**

**OIL;** soap, shampoo, detergent, lipstick, margarine, cooking fat, ice cream, crayons, paints, polish, linoleum, lubricants, glycerine, candles

**SPERMACETI;** candles, high grade lubricant, medicinal

**BALEEN;** ornate handles, shoe laces, umbrella ribs, brushes, watch springs, fans, fishing rods, tea trays, corset ribs, skirt hoops, curls in wigs

**BONES AND TEETH;** chairs, building material, carved objects, such as chess pieces, cufflinks, necklaces, 'scrimshaw'

**SKIN;** bootlaces, hand bags, shoes, boats

**MEAT;** Japan, Norway, Iceland, Korea, China, Taiwan, Indonesia, Inuit Canada, Greenland

**AMBERGRIS:** formed in lower intestine, occasionally occurs free floating. "Worth its weight in gold" medicine, aphrodisiac, perfume, cosmetics







# Traditional Chinese Medicine

| Species               | Derivative   | Use   |
|-----------------------|--|---|
| Baleen whales         | liver, bone, pancreas, oil                                   | A variety of inflammatory and intestinal disease  |
| Sperm whales          | Ambergris, liver, bone, spermaceti                           | Ulcerated skin, aiding blood flow, coughs and phlegm, abdominal pain, eyesight.   |
| Dolphins and porpoise | fat, oil, muscle, liver, pancreas                            | Inflammation, as an analgesic, sores, boils, burns, scalding, eyesight, anaemia   |
| Baiji                 | oil, fat   | Coughs, toxicity, fever, burns.   |
| Dugongs               | oil  | Stemming blood flow   |
| Seals                 | kidney, oil, sexual organs                                   | Aphrodisiac, colic, increase or reduce appetite, tumours, convulsions, depression, improve complexion                                 |
| Otters                | bone/marrow, muscle, liver, bile, Kidney, feet, skin and fur | Aphrodisiac, fevers, dry skin, haemorrhoids, eyesight, nervousness, antenatal tonic, removes scars, incessant vomiting, tuberculosis. |











WHALES, DOLPHINS AND PORPOISE ALL  
BELONG TO THE ANIMAL GROUP KNOWN AS

## 'CETACEANS'

ALL CETACEANS ARE MAMMALS, JUST LIKE US!

- THEY BREATHE AIR DIRECTLY INTO THEIR LUNGS
- THEY HAVE HAIR (AT SOME POINT)
- THEY ARE WARM-BLOODED
- THEY GIVE BIRTH TO LIVE YOUNG
- THEY NURSE THEIR YOUNG







HIND LIMBS DISAPPEAR

35 mya

PAKICETUS

46 mya

SLENDER-BODIED, RETURNS TO WATER

53 mya

A HOOFED, WOLF-LIKE MAMMAL

160 mya

HUMANS AND CETACEANS - COMMON ANCESTOR

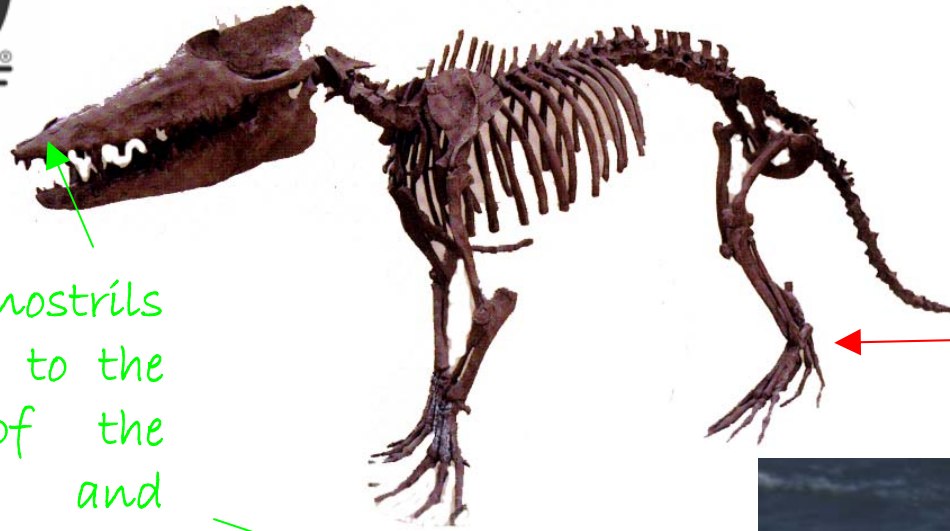
300 mya







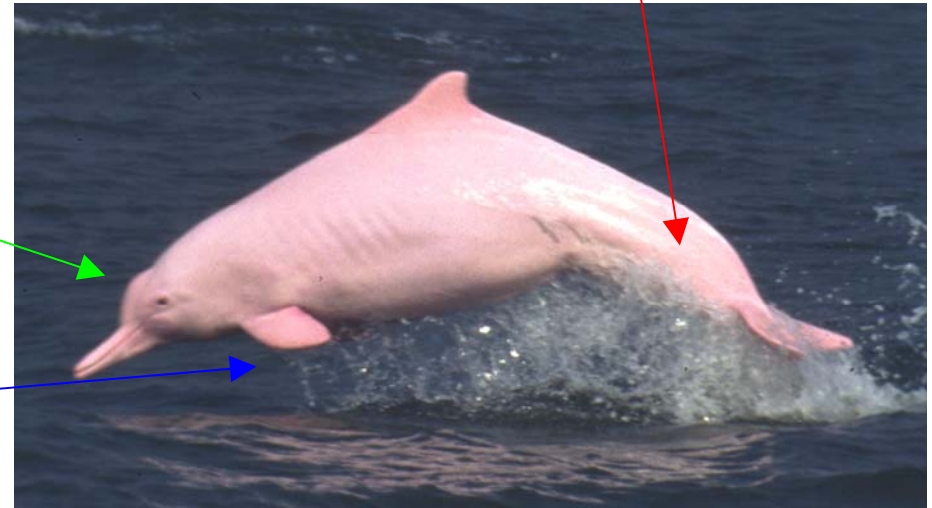
# ADAPTATION

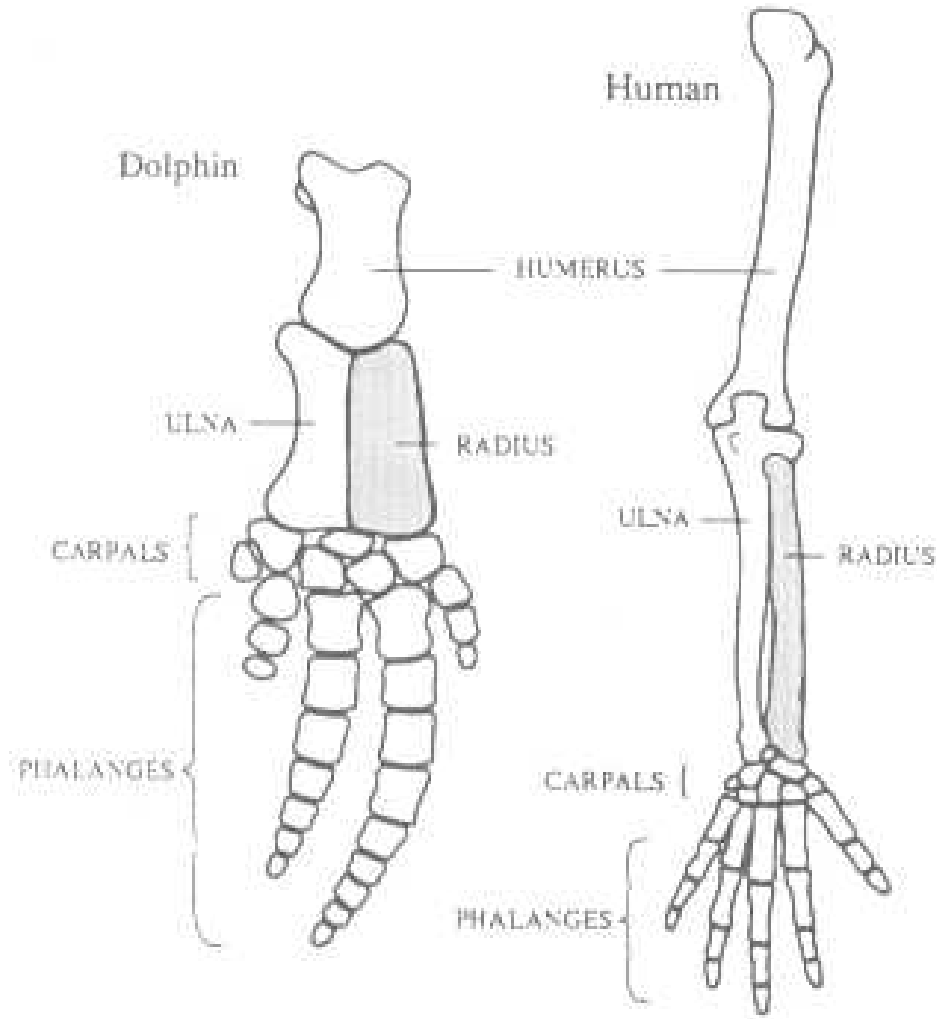


Their nostrils moved to the top of the head and became 'blowholes'

The front legs became paddle-like 'pectoral fins' which help the dolphin keep balanced and allow it to steer in various directions.

The back legs disappeared and the tail grew longer and stronger. A dolphin uses its tail to propel itself through the water.





# 海的巨人與精靈

認識牠 · 愛護牠 · 幫助牠

座頭鯨  
Inaccessible origin  
Cetacea Inaccessibilis



座頭鯨  
Grey whale  
Eschscholtz whale



小鬚鯨  
Minke whale  
Balaenoptera acronotus

露脊鯨類 (小鬚)  
Fishes species  
Nipponensis phocaenoides



小鬚鯨  
Bryde's whale  
Balaenoptera edeni



小鬚鯨  
Fin whale  
Balaenoptera physalus



小鬚鯨  
Sei whale  
Balaenoptera borealis



藍鯨  
Blue whale  
Balaenoptera musculus



小鬚鯨  
Humpback whale  
Megaptera novaeangliae



糙齒海豚  
Rough-toothed dolphin  
Steno bredanensis



太平洋海狗 (小齒) 海豚  
Pacific hump-backed dolphin  
Steno bredanensis



普通鯨  
Common dolphin  
Delphinus delphis



長鬚普通鯨  
Long-maned common dolphin  
Delphinus capensis



弗氏海豚  
Fraser's dolphin  
Lagenorhynchus australis



太平洋斑點鯨  
Pacific spotted dolphin  
Stenella attenuata



條紋鯨  
Striped dolphin  
Stenella coarctata



旋齒鯨  
Spinner dolphin  
Stenella longirostris



小鬚鯨  
Sperm whale  
Kogia breviceps



小鬚鯨  
Dwarf sperm whale  
Kogia sima



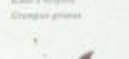
短鬚鯨類  
Short-finned pilot whale  
Globicephala macrorhynchus



圓背鯨  
Melon-headed whale  
Pseudorca crassipetris



短鬚鯨 (亞種)  
Pilot whale  
Globicephala media



短鬚鯨  
Melon-headed whale  
Pseudorca crassipetris



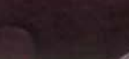
旋齒鯨  
Spinner dolphin  
Stenella longirostris



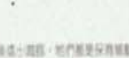
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Spinner dolphin  
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旋齒鯨  
Spinner dolphin  
Stenella longirostris



旋齒鯨  
Spinner dolphin  
Stenella longirostris



旋齒鯨  
Spinner dolphin  
Stenella longirostris



旋齒鯨  
Spinner dolphin  
Stenella longirostris



鯨  
Killer whale  
Orcinus orca



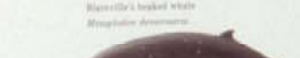
小鬚鯨  
Pygmy killer whale  
Feresa attenuata



假鯨  
False killer whale  
Pseudorca crassipetris



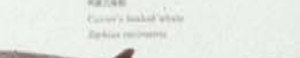
小鬚鯨  
Humpback whale  
Megaptera novaeangliae



小鬚鯨  
Humpback whale  
Megaptera novaeangliae



小鬚鯨  
Humpback whale  
Megaptera novaeangliae



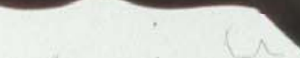
小鬚鯨  
Humpback whale  
Megaptera novaeangliae



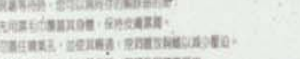
小鬚鯨  
Humpback whale  
Megaptera novaeangliae



小鬚鯨  
Humpback whale  
Megaptera novaeangliae



小鬚鯨  
Humpback whale  
Megaptera novaeangliae



小鬚鯨  
Humpback whale  
Megaptera novaeangliae

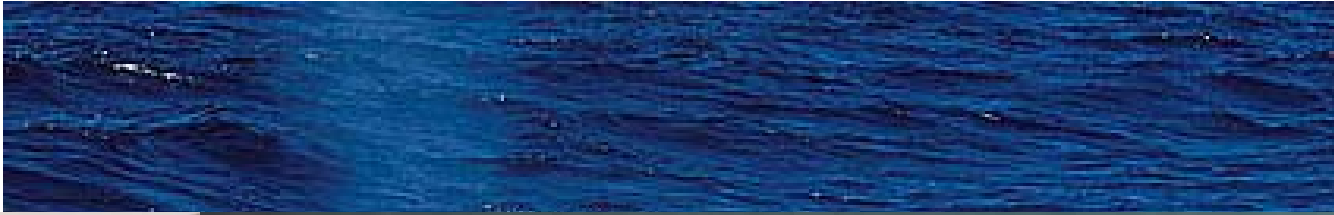


小鬚鯨  
Humpback whale  
Megaptera novaeangliae

◎如果能在海邊發現了死亡的大鯨屍體，牠們應受保護並就地  
不屬於私人所有，請立即與相關單位及下列人士連絡：  
1. 當地警察派出所  
2. 台灣行政院保育單位  
3. 台大動物系 國際古生物研究所  
TEL: 02-36813311, FAX: 02-3689902  
地址: 台北市板橋區大觀路52號, 521號室, 台大動物系 樓521

◎如果動物未死，一律均存，請勿任意移動，並以連絡相關單位人士。  
古屍體等物時，儘可能保存其屍體，切勿將其移動。  
◎切勿將屍體丟棄，切勿將其搬運，切勿將其搬運。  
◎切勿將其搬運，切勿將其搬運，切勿將其搬運。  
◎請勿：任何商業用途，企劃：台灣大學動物系，執行：中華民族海濱資源發展  
◎聯繫：Peter S. Fokens ☎ 84923308





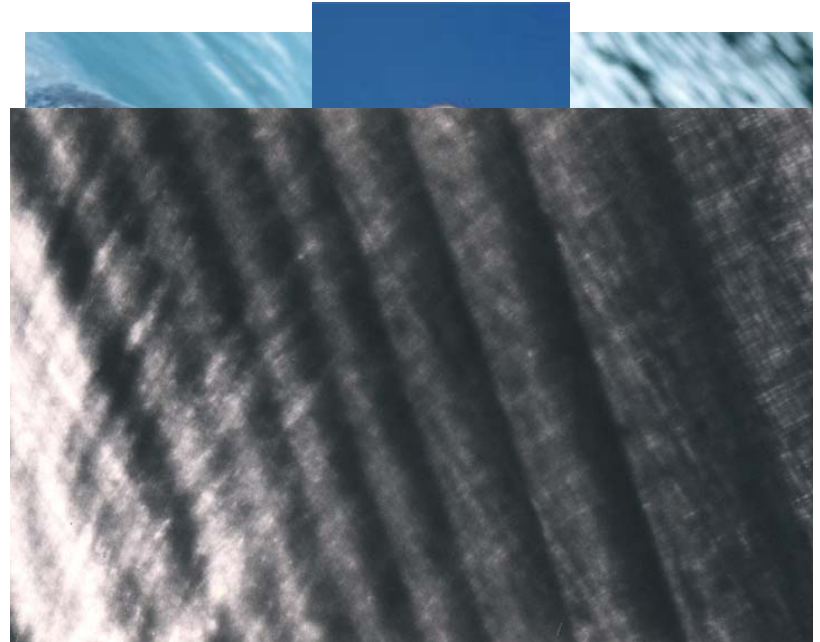


# CETACEA

## MYSTICETES: BALEEN WHALES



## ODONTOCETES: TOOTHED WHALES

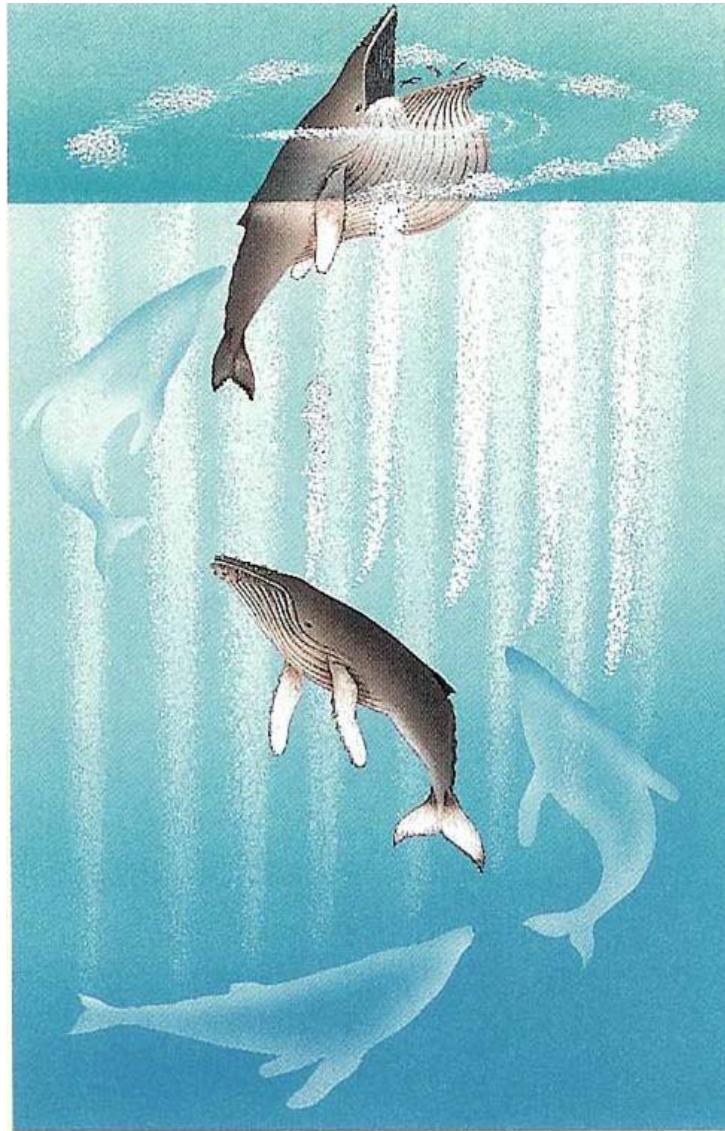




BALEEN WHALES EAT TONNES OF SMALL SHRIMP-LIKE SEA ANIMALS, CALLED **KRILL**, WHICH THEY FILTER THROUGH THEIR BALEEN PLATES. WHALES EAT THOUSANDS OF KRILL IN ONE M



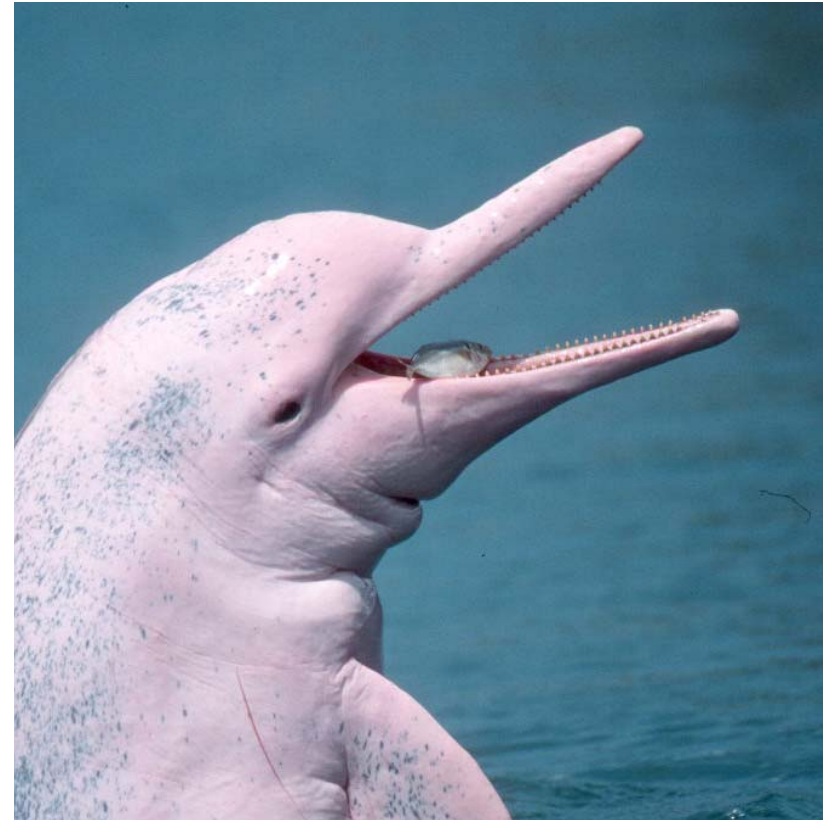




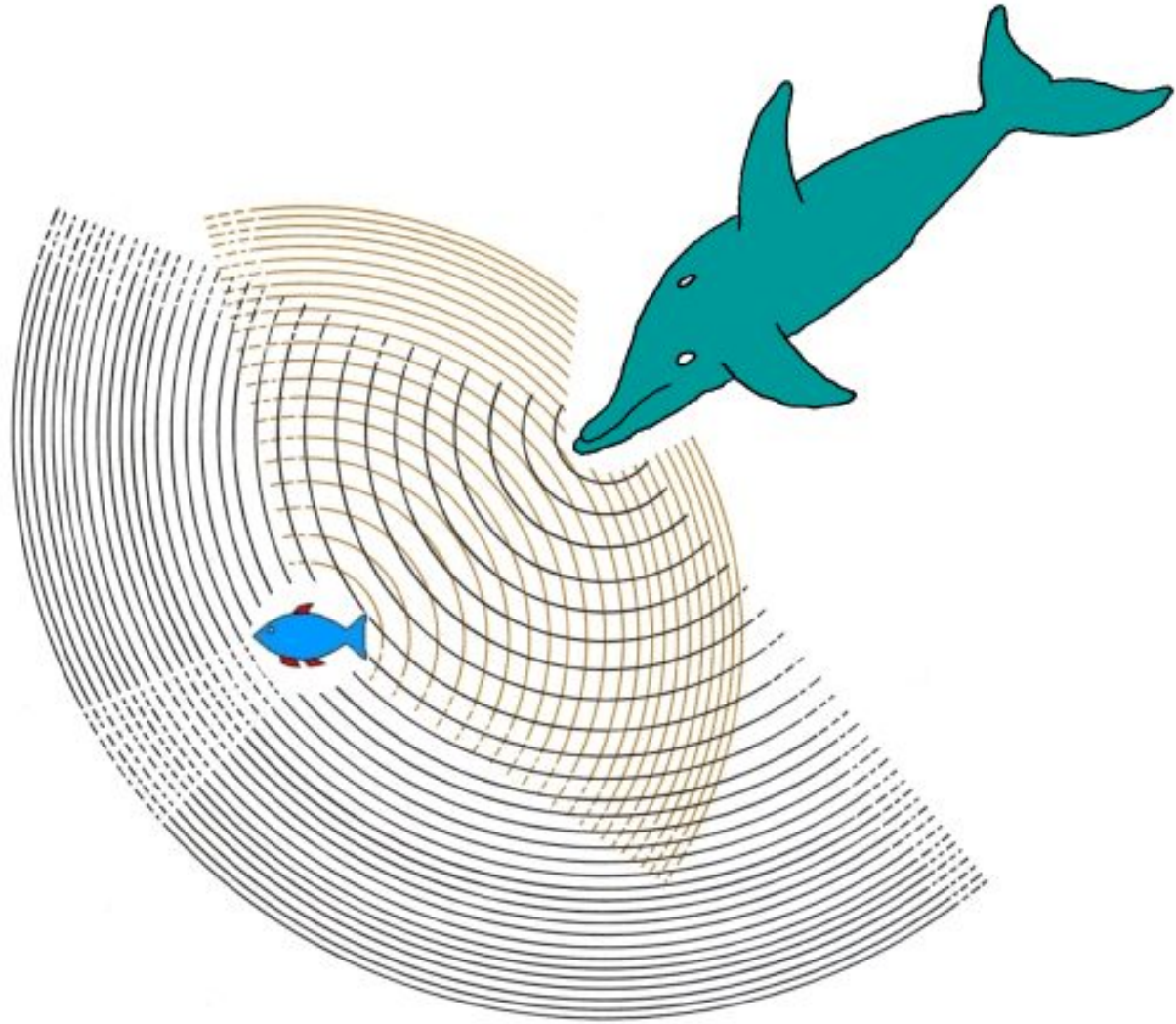


**DOLPHINS EAT FISH,  
SQUID AND EVEN SMALL  
CRABS AND PRAWNS!**

**DOLPHINS EAT FISH ONE  
BY ONE AND MUST  
SWALLOW THEM HEAD  
FIRST, SO FISH FINS AND  
SPINES DON'T GET  
STUCK IN THE DOLPHINS  
THROAT.**



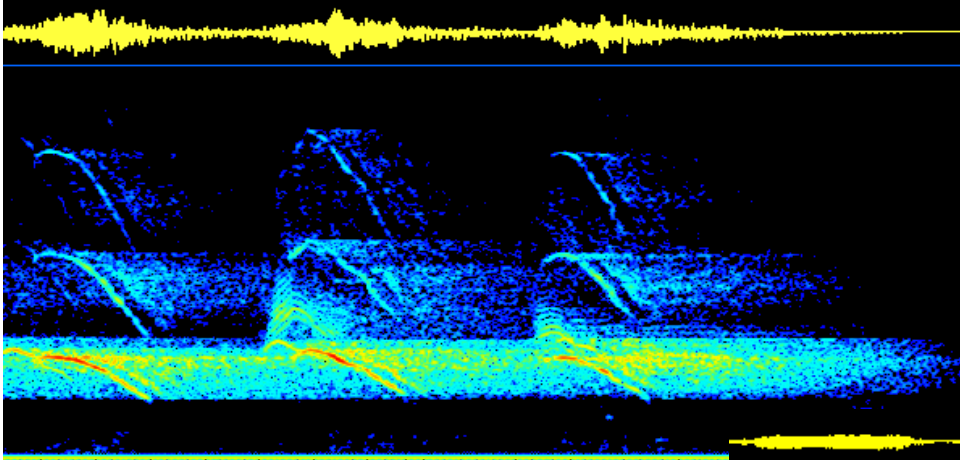








# SOUND IS ALSO USED FOR COMMUNICATION



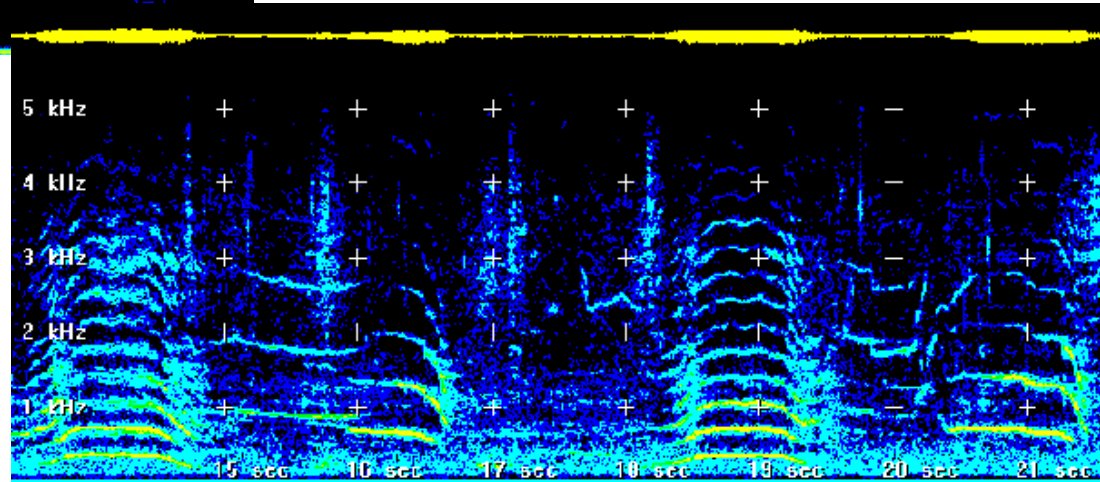
ECHOLOCATE



WHISTLE



SONG







# CETACEAN SENSES

**SOUND; FEED, NAVIGATE AND COMMUNICATE**

**TOUCH; COMMUNICATE**

**SIGHT ?**

**TASTE ?**

**SMELL ?**

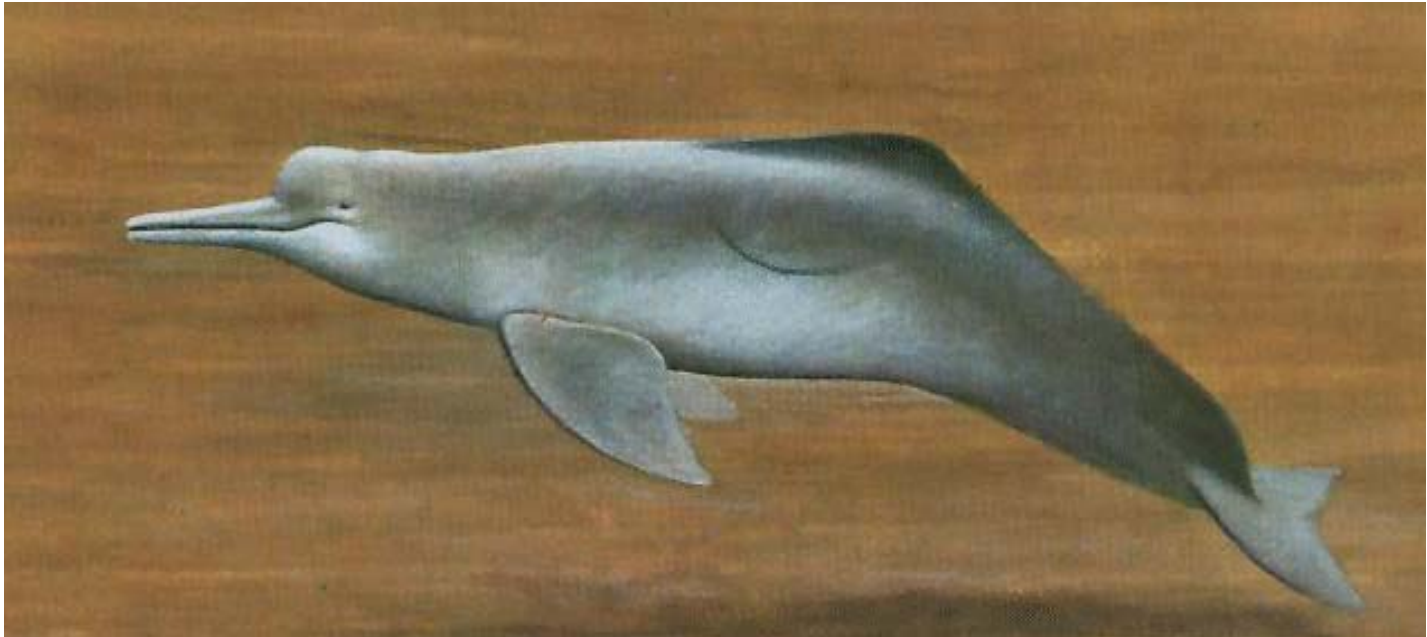






## SIGHT

**SOUND TRAVELS MUCH BETTER THAN LIGHT UNDERWATER, HOWEVER, MOST CETACEANS HAVE EXCELLENT EYESIGHT**





**TASTE: DOLPHINS DO POSSESS TASTE BUDS, SIMILAR IN STRUCTURE TO THOSE FOUND ON HUMANS TONGUES!**

**SMELL: WHEN THE DOLPHINS NASAL PASSAGES DEVELOPED INTO BLOWHOLES, THERE WAS NO NEED TO KEEP A SENSE OF SMELL.**





**More than 32 species  
of Marine Mammals  
are recorded from  
Hong Kong and  
adjacent South China  
Sea waters.**







Common names  
Scientific name  
Global Distribution  
Appearance

Spinner dolphin  
*Stenella longirostris*  
Tropical and subtropical waters worldwide  
1.3 – 2.1 m in length and 45 – 75kg in weight  
Performs high spinning leaps, is long and slender with a dorsal fin which has an almost vertical leading edge. Rare 'dwarf' form.





Common names

Scientific name

Global Distribution

Appearance

Indo-Pacific bottlenose dolphin

*Tursiops aduncus*

Isolated populations in tropical seas

1.9 – 3.9 m in length and 150 – 650kg in weight

Subdued gray colouring with dark dorsal cape,  
prominent fin.







Common name

Scientific name

Global Distribution

Appearance

Rough-toothed dolphin

*Steno bredanensis*

Deep tropical, sub-tropical and warm temperate waters world wide

2.1 – 2.6 m in length and 100 –150kg in weight.

A tall fin, a conical head with a long narrow beak and white lips.







Common name

Scientific name

Global Distribution

Appearance

Melon-headed whale

*Peponochephala electra*

Deep tropical and sub-tropical waters

2.1 – 2.7 m in length and 160kg in weight.

A torpedo shaped body with a slim pointed head, long sharply pointed flipper, a tall fin and, commonly, white lips.





Common names

Scientific name

Global Distribution

Appearance

Sperm Whale

*Physeter macrocephalus*

Deep waters either inshore or offshore

11 – 18m in length and 20 – 50 tons in weight

Dark body with large square head and small narrow lower jaw





# Dolphins have always lived in Hong Kong

又大風雨時有海怪披髮紅面  
乘魚而往來乘魚者亦魚謂  
之人魚

《廣東新語》

“The great white porpoise of the estuary of the Canton River”

English and Chinese references from the 1600's







# Hong Kong Pink Dolphins

*“vulnerable by virtue of their close proximity to man and his activities”*



**Local name:** Chinese White or Pink Dolphin

**Global name:** Indo-Pacific Humpback Dolphin

**Local Distribution:** Hong Kong western waters and River Delta

**Local Habitat Use:** The highly structured dolphin society  
shallow, rocky

prefers sheltered bays and reef areas.





# Finless Porpoise

*“vulnerable by virtue of their close proximity to man and his activities”*



**Local/Global name:**

**Black finless porpoise**

**Local Distribution:**

**Hong Kong southern and eastern waters**

**and adjacent Chinese offshore areas.**

**Local Habitat Use:**

**Population prefers exposed rocky coastline.**





## Hong Kong and Vicinity



**PINK DOLPHINS  
ARE FOUND IN  
HONG KONG  
WESTERN  
WATERS.**

**FINLESS PORPOISE  
OCCUR IN SOUTHERN  
AND EASTERN WATERS**







# Pink Dolphins?





**HONG KONG  
DOLPHINS ARE  
BORN GREY**



**DEVELOP SPOTS  
AND FRECKLES**



**AND FINALLY  
BECOME A  
STARTLING PINK**







**SOCIAL GROUPS: SEVERAL MOTHERS AND THEIR CALVES ARE OFTEN ENCOUNTERED IN LARGE GROUPS. CALVES ARE BORN THROUGHOUT THE YEAR BUT BIRTHS PEAK IN THE LATE SPRING**







# SOCIAL STRUCTURE: SPOTTED 'TEENAGERS' OCCUR IN LARGE GROUPS AND LOVE TO SOCIALISE























# Safe Conduct

If you go dolphin watching, make sure your operator is a 'dolphin friendly' one and follows the Dolphin Code of Conduct which helps prevent the harassment of dolphins from commercial dolphin watching companies.

- **No fast or direct approaches to a group of dolphins**
- **Do not approach dolphins that are with other boats**
- **NO WAKE SPEED**
- **Do not feed the dolphins**





**WWF is a global organisation that acts locally through a network of family offices.**

**WWF works to conserve nature:**

- action on the ground**
- advocacy work to establish policies**
- international campaigns to highlight and solve crucial environmental problems**





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**WWF**





|             |                  |
|-------------|------------------|
| CETACEANS:  | 300,000 per year |
| TURTLES:    | 250,000 per year |
| SHARKS:     | 100,000 per year |
| ALBATROSES: | 100,000 per year |





# World Wide Fund for Nature

The WWF strive to conserve species through research, education and advocacy. In Hong Kong, members of the public can participate in conservation activities by joining WWF. Annual marine conservation events include Reef Check and The Big Fish Count. WWF current campaign *Save Our Seas* is asking for the complete banning of trawling in Hong Kong waters, to both allow severely depleted fish stocks to recover (and the dolphins get more fish!) and to prevent habitat destruction from the physical process of trawling itself.

Recently, the Hong Kong and China WWF offices have joined forces to devise a comprehensive marine conservation strategy that spans the coast of the South China Sea. The need for organisations like WWF continues to grow as despite increased public and government awareness of environmental problems, the rapid development and burgeoning population of Asian countries often overlook the need to also develop conservation initiatives. If we do not safeguard our marine heritage, whales, dolphins and porpoise will disappear. Already we know that China will see the first extinction of a cetacean species. The Baiji number less than 50 and rapid development in addition to habitat fragmentation have depleted and segregated the population to such a degree that they can simply no longer find each other. The Hong Kong population of dolphins will suffer the same fate if we do not act now and safeguard our remaining few.

For further information on WWF and all its activities, locally and internationally, check out our websites.

For further information on local and regional whales dolphins and porpoise, contact WWF Dolphin Conservation Officer

Dr. Lindsay Porter  
lporter@wwf.org.hk

[www.wwf.org.hk](http://www.wwf.org.hk)

[www.panda.org](http://www.panda.org)

