資助 SPONSORED BY:

ENVIRONMENTAL CAMPAIGN COMMITTEE
環境運動委員會

什麼是 浮游生物?
WHAT IS PLANKTON?

「浮游生物」一詞是源自希臘文中的「*PLANKTOS*」，解作「流浪者」或「漂泊者」。

THE TERM "PLANKTON" IS DERIVED FROM THE GREEK WORD " *PLANKTOS* ", WHICH MEANS "DRIFTER" OR "WANDERER".

浮游生物是指一些在水中生活的生物，而缺乏有效的移動能力，即是不能夠抵抗水流，只能隨水流一直漂浮。

PLANKTON ARE THE ORGANISMS THAT CANNOT SWIM DIRECTLY AGAINST A WATER CURRENT.

浮游生物可以根據該生物能否進行光合作用的特性，而再分類為「浮游植物」和「浮游動物」。

PLANKTON CAN BE FURTHER CLASSIFIED AS "PHYTOPLANKTON" AND "ZOOPLANKTON", BASED ON WHETHER THEY ARE CAPABLE OF PHOTOSYNTHESIS.

資助 SPONSORED BY:

ENVIRONMENTAL CAMPAIGN COMMITTEE
環境運動委員會

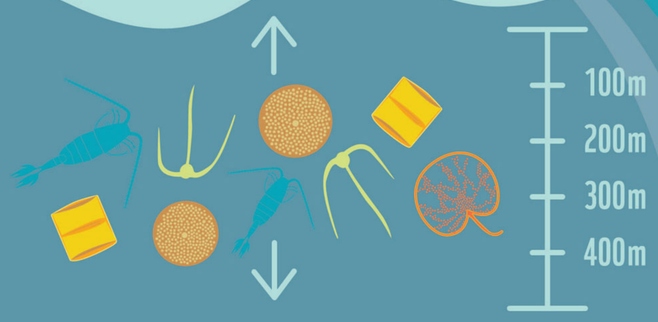
WWF

神奇的浮游生物
FUN FACTS OF PLANKTON

THE PHOTOSYNTHETIC ACTIVITIES OF PHYTOPLANKTON
浮游植物的光合作用

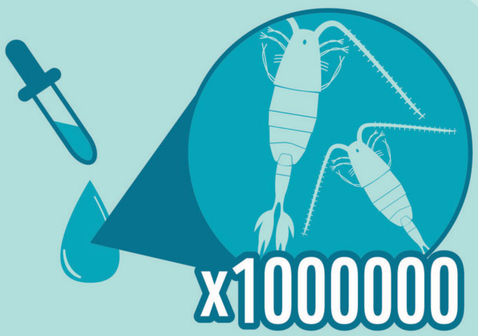
在我們吸入的氧氣中，超過50%是由浮游植物透過進行光合作用來製造的！

MORE THAN HALF OF THE OXYGEN WE BREATHE ON EARTH IS CREATED THROUGH THE PHOTOSYNTHETIC ACTIVITIES OF PHYTOPLANKTON!



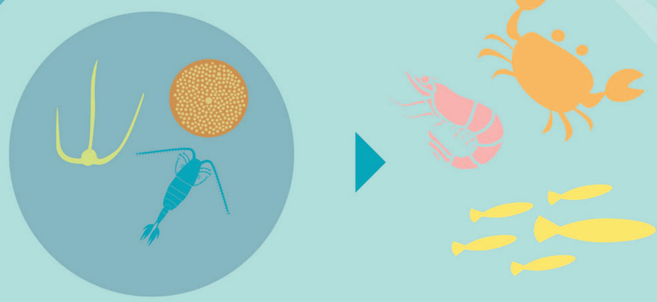
有些浮游生物可於一天內在海洋裡上下移動達數百米，以減少被捕食者進食的機會。

SOME PLANKTON CAN MOVE UP AND DOWN SEVERAL HUNDRED METERS A DAY IN THE WATER COLUMN TO REDUCE THEIR CHANCES OF BEING EATEN BY PREDATORS.



一滴海水就可能藏有多達一百萬隻浮游生物個體。

THERE CAN BE UP TO A MILLION SINGLE-CELLED PLANKTON IN A SINGLE DROP OF SEAWATER.

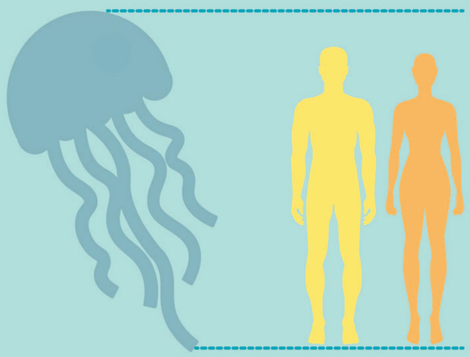


大部份常見的海鮮如魚、蟹、蝦、龍蝦、蠔和海膽等，牠們在幼體的時候也經歷過浮游生物階段。

MOST OF THE COMMON SEAFOOD, LIKE FISH, CRABS, SHRIMPS, OYSTERS AND SEA URCHINS, ALL GO THROUGH A PLANKTONIC STAGE WHEN THEY ARE YOUNG .

很多浮游生物死後會埋藏在海床，並慢慢形成地殼中的一些化石燃料。

SOME FOSSIL FUELS BURIED IN THE EARTH'S CRUST WERE CREATED BY THE DECOMPOSITION AND TRANSFORMATION OF THE DEAD BODIES OF ANCIENT PLANKTON SPECIES, SUCH AS OIL.



雖然絕大部分的浮游生物都是很微小，但有些浮游生物比人類還要大，例如水母。

ALTHOUGH MOST OF PLANKTON ARE SMALL IN SIZE, NOT ALL OF THEM ARE! SOME OF THEM CAN BE AS LONG AS A HUMAN BEING, AS SOME JELLYFISH CAN GROW UP TO 3 METERS IN LENGTH IN THEIR ADULT STAGE.

資助 SPONSORED BY:

環境及自然保育基金 ENVIRONMENT AND CONSERVATION FUND

ENVIRONMENTAL CAMPAIGN COMMITTEE 環境運動委員會

WWF

資助：

ENVIRONMENTAL CAMPAIGN COMMITTEE
環境運動委員會

人類活動對浮游生物和海洋生態系統的影響

WWF

海洋垃圾

- 塑膠垃圾分解成微型膠粒
- 浮游動物有機會在進食時攝入膠粒
- 其他海洋生物把該浮游生物及其體內的膠粒一拼吃掉
- 阻擋陽光
- 有機會造成珊瑚白化
- 塑膠有機會裹纏海洋生物

水質污染

- 水中含有過多營養（富營養作用）
- 排放未經處理的污水
- 有毒的藻華會阻塞魚鰓，導致魚類窒息
- 有利紅潮及藻華發生
- 晚間消耗海洋中的氧氣，導致海洋生物窒息

減少浮游生物和海洋生物的數量和多樣性

氣候變化

- 海洋鹽度和溶氧量改變
- 海洋酸化
- 影響海洋生物成長及發育
- 降低生存機會
- 減慢動物外殼的鈣化速度，令外殼變薄

棲息地減少

- 減少海洋生物居住和覓食的空間
- 具破壞性的捕魚方式
  如：底拖網和使用炸藥捕魚
- 填海、沿岸發展、挖泥

SPONSORED BY:

ENVIRONMENT AND CONSERVATION FUND 環境及自然保育基金

ENVIRONMENTAL CAMPAIGN COMMITTEE 環境運動委員會

IMPACTS OF HUMAN ACTIVITY ON PLANKTON AND MARINE ECOSYSTEMS

WWF

MARINE LITTER

- PLASTIC LITTER TURNS INTO PLASTIC PELLETS
- ZOOPLANKTON MAY INGEST THIS MICROPLASTIC
- FISH AND OTHER ORGANISMS MAY EAT PLANKTON CONTAINING MICROPLASTIC
- BLOCKS SUNLIGHT
- MAY CAUSE CORAL BLEACHING
- MARINE ANIMALS BECOME ENTANGLED IN PLASTIC LITTER

WATER POLLUTION

- UNTREATED SEWAGE DISCHARGE
- EXCESS NUTRIENTS IN THE WATER (EUTROPHICATION)
- FAVORABLE FOR HARMFUL ALGAL BLOOM
- HARMFUL ALGAE WILL BLOCK FISH GILLS AND CAUSE SUFFOCATION
- OXYGEN LEVELS IN THE OCEAN DURING NIGHT TIME, CAUSING SUFFOCATION OF MARINE LIFE

↓ ABUNDANCE & DIVERSITY OF PLANKTON AND OTHER MARINE LIFE

CLIMATE CHANGE

- OCEAN CHANGE IN SALINITY & OXYGEN LEVELS
- AFFECTS GROWTH AND DEVELOPMENT OF MARINE LIFE
- ↓ CHANCE OF SURVIVAL
- OCEAN ACIDIFICATION
- ↓ CALCIFICATION RESULTS IN THINNER SHELLS & WEAKER BONES

HABITAT LOSS

- ↓ SHELTER & FEEDING AREA
- DESTRUCTIVE FISHING METHODS
  - E..G. BOTTOM TRAWLING, DYNAMITE FISHING
- LAND RECLAMATION, COASTAL DEVELOPMENT, DREDGING