

fishes



I ~~marvel~~
wonder

how the fishes

live in the sea



Fishes have graced the earth fifty times longer than we humans did, before they even left the water.

The point tailed ocean sunfish evolves from an egg up to 3m length. The female carries over 300 millions of those in her ovaries, which are at first not even as big as this letter "o". They are the largest of all bony fishes. Their name is inspired by their enjoyment of sunbathing, their sides turned upwards, relaxing on the water's surface.



When we are talking about *fish*, we refer to almost 60% of all known species on earth with a backbone, namely *vertebrates*. They are divided in two main groups, the bony and the cartilaginous fishes.





All fishes have the same bodily systems as land animals: skeletal, muscular, nervous, cardiovascular, respiratory, sensory, digestive, reproductive, endocrine and excretory systems.

"Calm down, my dear, I'll rub your fins"

Caresses of the cleaner shrimp are stress relievers for some gobies who like to form partnerships with other marine animals and organisms.





A fishes' face is one of her/his/their notoriously weak features. Little more can be said other than that the facial features are in proper order. If they could smile or frown, they would receive a great deal more sympathy than they do now.



A Southern Bluefin Tuna likes to enjoy sunbathing close to the coastal water's surface. Pleasure evolved to reward useful behaviours, therefore the sun's warmth must be a good feeling for them.



To know pleasure is to know pain.

In order to procreate, a tuna needs to be about 8 years old. Most of the individuals do not survive until this age. While southern bluefin is critically endangered, also northern, pacific and atlantic tunas' populations have decreased by about 90% since the 1960's.



In a joint study published in 2015, the World Wildlife Fund, an organisation for endangered species conservation, concluded a decrease of 50% of the whole fish population worldwide. The data they used was taken between between 1970 and 2012.



alle visjes
tellen in de zee

all fishes count
in the sea



CERTIFICAAT: MML-RF-0465
Verantwoordelijk gevangen
Economisch duurzaam

Adriaan
TH
V.O.F. A.P. Baaij en Zn.
Vangsten

Soort	Kilogram	Datum aanvoer	Kisten
DISCARD			

Some flatfishes communicate with their fins, either to predators or to each other. They are also sensitive to sounds lower than 1 Hz, which makes them vulnerable to human generated underwater noises.

Other fishes like to sing in choirs at dawn, making sounds with a volume up to 35dB, similar to a bird's song (50dB).



Flounders and related flatfishes like turbot, soles, halibuts, dabs & plaices have a fancy survival strategy: Ocular eye migration. They have binocular vision and can swivel their eyes independently! Hidden beneath the sand, they can look everywhere while waiting for the next small fish to come by. They are masters of pigment manipulation, melting chameleon-like into the background.



The wrasses are a group of 500 different species. Here you see a female asian sheephead wrasse. Although the phenomenon of sex change is rare, among other vertebrates, it affects about 10% of all the fish families. Asian sheephead wrasses are female to male, but with others the transition is more complex. The male can be seen on the cover of this book.



A dogfish shark needs about 35 years to be able to get pregnant. Due to that, some sharks have the least potential of reproduction. Also shark finning, cutting off the fins and discarding the shark bodies on sea is, besides the torture and the slow death, extinguishing the species in a rapid pace and destabilizing the marine ecosystem.

Before the 20th century industrial fishing took hold, the seas of Europe were full with life. Nowadays, the north sea is being ploughed 3 - 10 times a year, depending on area. To get fishes out of their living space via dragging huge nets over the ocean sea bed is comparable to catching bumblebees with diggers.





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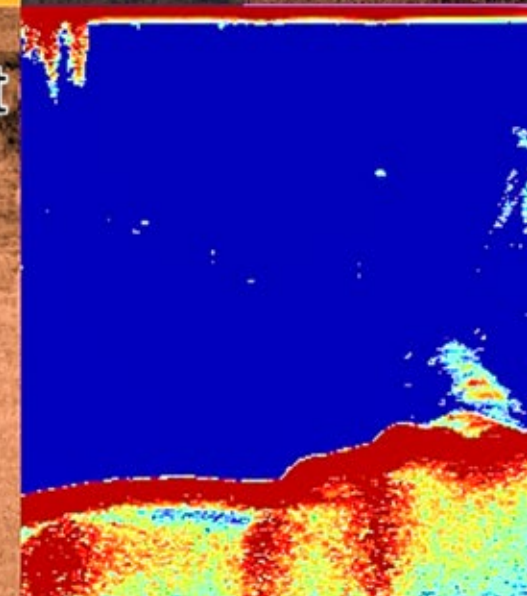
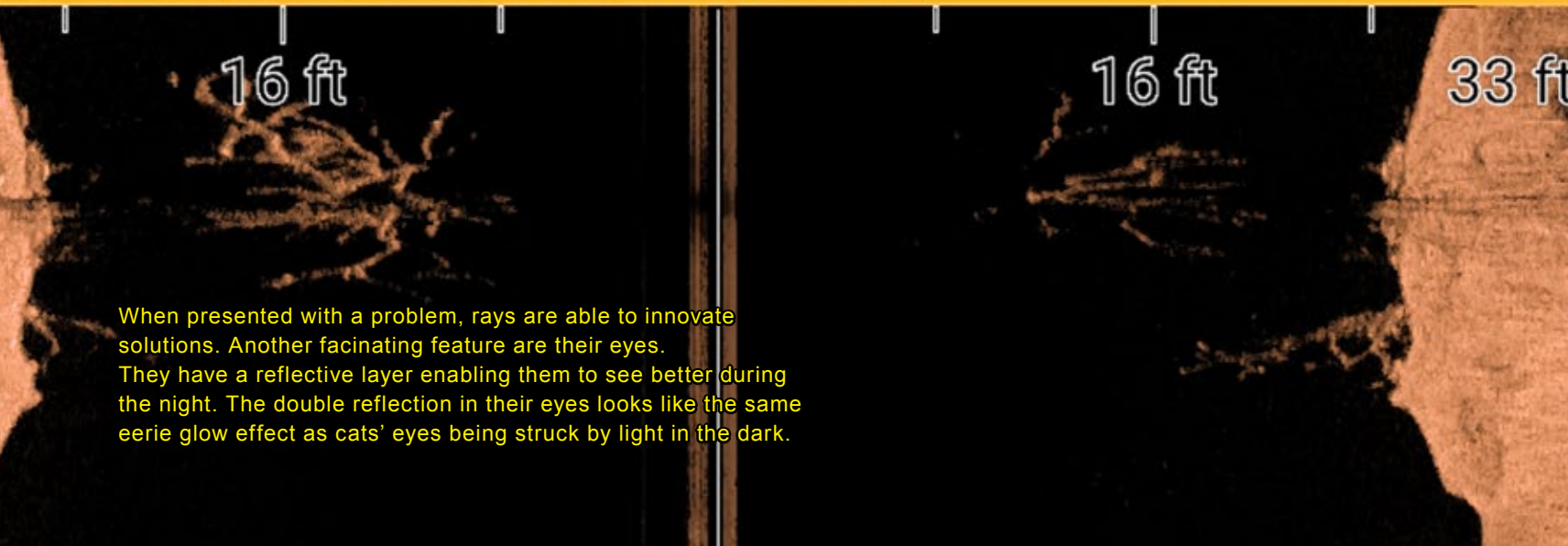
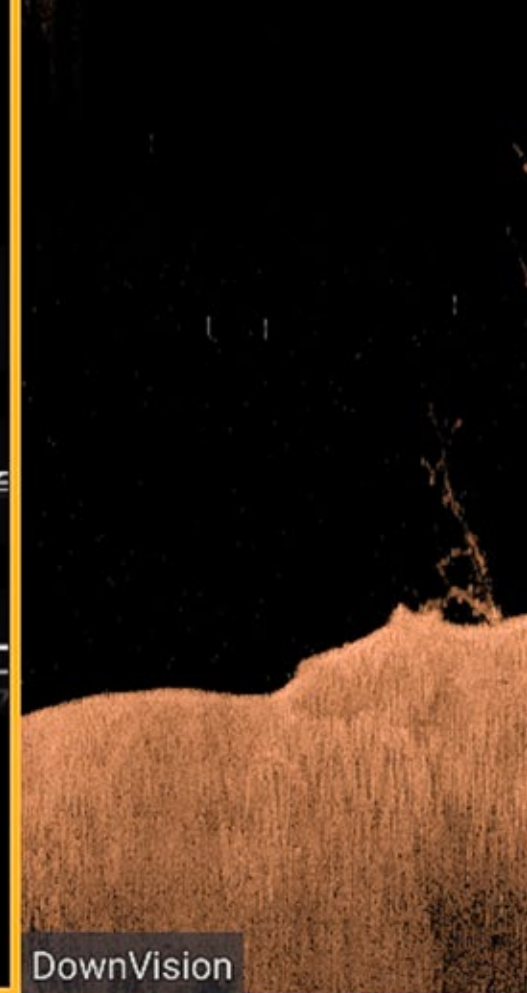
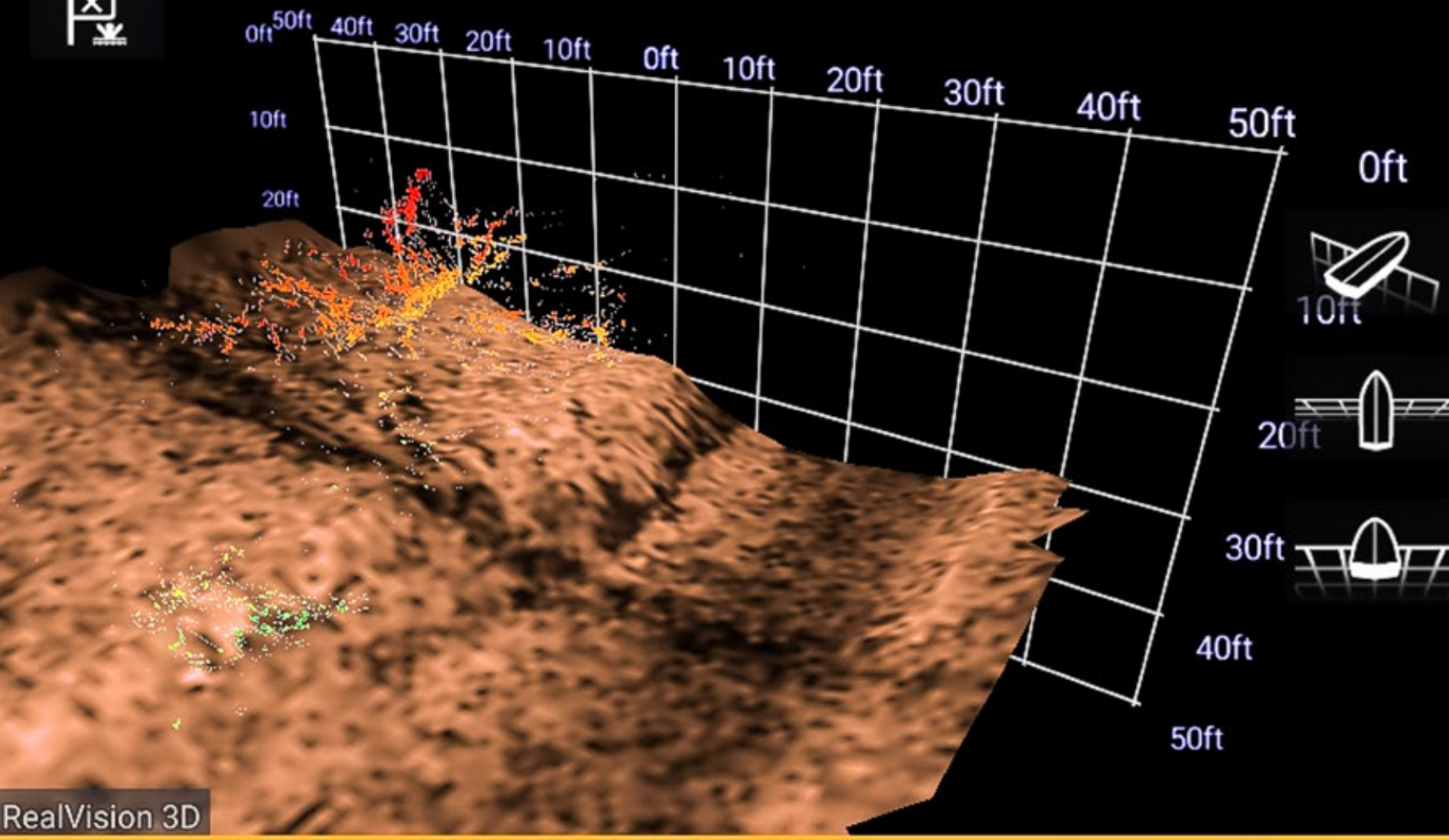
New research has revealed that 72% of the people are unaware that some fishes are as close to extinction as the white rhino.



In a demand-supply-economy, demand is the fuel driving the engine of supply. Buying, supplying and dying are closer related than commonly perceived.

A small squid can solve a maze faster than a dog.





When presented with a problem, rays are able to innovate solutions. Another fascinating feature are their eyes. They have a reflective layer enabling them to see better during the night. The double reflection in their eyes looks like the same eerie glow effect as cats' eyes being struck by light in the dark.



All cartilaginous fishes have a sophisticated array of senses, including sight, hearing, vibration, smell, taste, temperature, touch and even electric response. Therefore they can monitor their environment really accurate.

Blue dotted stingrays warn their predators with their colors, whereas pipefishes advertise their cleaning services with it.





Some rays like to jump and land on their bellies with a big flap. There are various records of fishes somersaulting and leaping repeatedly, over floating turtles and objects - for no other clear reason than entertainment.

Feeling pleasure is not a trifling thing. It requires conscious experience. Manta rays for example love bubble massages!



The plural of *fish* reduces the incredible amount of under-water species like fishes, invertebrates, sea mammals and much more to a single mass of "resources". It is estimated that roughly 1,000,000 species lives in the sea.

They are not only other species, they are other nations.



The spiny dogfish swims in large schools. Most of the approx. 350 shark species are not longer than 61cm and pose no threat to humans.

When fish stocks got depleted in the early 1990s, fishermen needed to advertise dogfishes under a name that was deemed more "appetizing": *cape sharks*.

In the the next decades, there will be no more sharks.



According to monitoring in the North Sea, the thornback ray is close to extinction. Especially since the decline of cod and haddock fishes, the fishing vessels have trawled and almost eliminated bottom-dwellers like them while perpetually destroying the ocean seabed.



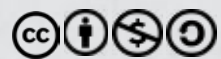
For almost every feat of learning that is being displayed by a land vertebrate (like a mammal or bird), we can find similar examples in fishes.

the sea needs
interpreters.

fishes

mx.sprout (they/them), 2019

xsproutcollectivex.noblogs.org



special thanks to
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Until all are free.



