

Chapter 1 : Does Military Sonar Kill Marine Wildlife? - Scientific American

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Some are monstrous and fearsome when provoked, and all of them majestically beautiful. These ocean mammals continue to surprise us with their intelligent, nearly human behavior. Many are long-lived and have seemingly unlimited memories. They traverse all of the great oceans, some in pods of hundreds, others alone, in pairs, or in small groups. Varied in size, as well as in personality, whales and other cetaceans have many of their own separate communities in the ocean. Here are 10 memorable stories involving these seafaring cetaceans. Humpback whales in the North Atlantic typically migrate between the Bahamas and anywhere from Newfoundland to Greenland or even as far as Norway. Scientists were able to identify Ibis by her individual flukes, which have markings that are equivalent to fingerprints in humans. Migratory routes are recorded by sightings of whales based on this principle. Ibis was a favorite of whale enthusiasts, and scientists had been tracking her since 1970. Then, in 1999, near-tragedy struck. In early October, Ibis was spotted entangled in a huge fishing net used to catch cod and haddock. For nearly two months, Ibis struggled with the fishing net, slowly losing strength. At one point, it was feared that she had drowned, since she seemed to be struggling to reach the surface of the ocean as time progressed. Finally, around Thanksgiving, Ibis was spotted with another humpback that appeared to be trying to assist her. Rescuers were finally able to get close to Ibis, tying floats to the tangled netting to keep her from diving so they could finally cut the netting off. The freeing of Ibis marked the first recorded rescue of a free-swimming whale, and the volunteer group that accomplished the feat would go on to become the Marine Animal Entanglement Response MAER team, which has since saved over 100 whales and other cetaceans in similar manners. Dawn is pictured above. The whales also had wounds that appeared to be from boat propellers. Spectators and volunteers followed the whales up and down the river, coaxing them back in the direction of the San Francisco Bay area. The drugs were injected with a 0. An expert from the Hawaii Humpback Whale National Marine Sanctuary suggested using fire hoses to pressure the whales back downstream. After 18 days, with their skin conditions deteriorating because of prolonged exposure to fresh water, the pair finally reversed course. While there have been other confirmed white humpback sightings, what separates Migaloo from the others is that he is completely white. Other white whales have had black spots or other dark markings that offset their pale color, but Migaloo has none of these patterns. Interestingly, scientists do not believe Migaloo to be an albino, since albinos in mammals and most other species have red eyes. Migaloo has the normal, brown eyes of the average humpback. It also seems that there might be another Migaloo roaming the coastal waters of Australia. A white, baby humpback was spotted near the Great Barrier Reef in 2006, although no one has been able to get Migaloo to agree to a paternity test to determine if this white offspring is his. In what is today known as Twofold Bay on the coast of Eden, killer whales would herd whale pods to Aboriginal whalers. From 1800, European settlers took over, harpooning the whales and leaving the carcasses for the killer whales to eat the tongues, after which the killer whales would leave the remaining carcass for the whalers. Old Tom was the most famous of these killer whales. Old Tom and other orcas would notify whalers at a particular location near the mouth of the Kiah River, thrash their tails, breach, and otherwise make a lot of noise to notify whalers of nearby or approaching pods. Old Tom had a personality of his own, sometimes hanging on to dead carcasses with his pectoral fins to be pulled along by whalers. Sometimes, Old Tom would do the dragging. Unfortunately, as humans often do, in the early 1900s, whalers presumably not the native whalers became greedy and began breaking the Law of the Tongue, dragging dead whales away without allowing the orcas to take the tongues as payment. In one instance, Old Tom struggled with a whaler in a game of tug-of-war with a carcass, which Old Tom lost, losing some of his front teeth in the confrontation. When Old Tom was found floating in a local cove, he was measured at 7 meters 22 ft long, a short length for a killer whale. Old Tom was estimated to be at least 70-90 years old, possibly 80-90 years, when he died. When Luna was born, he and his mother were isolated from their pod. This was an oddity, because killer whales are typically protective of mothers and newborn calves. Luna ended up separating from

his mother and pod , one of only two documented incidents of an orca calf separating from its family unit and surviving at such a young age. It was speculated he might have been shunned by his mother and later by his pod, although no one knows why. Luna became something of a cautionary tale, similar to the standard rule in national parks that warn against feeding bears. He was popular with tourists , performing tricks, leaping in the air, and then getting close enough to boats for people to stroke his tongue. Unfortunately, Luna could never distinguish between tourist boats and other fishing or industrial vessels. The Canadian Department of Fisheries and Oceans had planned to capture Luna and reintroduce him to his pod, but local native Canadians prevented this, believing Luna to be the spirit of a recently deceased tribal chief. This turned out to be worse for Luna; he finally got too close to the wrong boat and was killed by a propeller. Springer was then successfully reintroduced to her pod in July She was tentative at first, but after a few weeks, she was completely accepted by her pod. Scientists were able to determine her original family by distinctive skin patterns and vocal dialects of communication. Even more gratifying, 11 years later, Springer had mated and given birth to her own calf, making her return to the wild a complete success, proving that once in a while, we humans do get it right. In nursing him back to health, it was discovered that in addition to being a small dolphin at 2 meters 6. It was speculated that his mother left him to fend for himself at the age of two and half, which is the typical weaning stage for most dolphins. Because of his impairment, Sassafras probably got lost immediately and could not fend for himself. Sassafras was one of almost Gulf Coast mammals to be stranded along the coast beginning in He was originally intended to be rehabilitated and released back into the wild, until they learned about his lack of sonar. Sassafras was born around the same time as the BP oil spill in , and specialists wondered if the spill played a role in making him deaf. Sassafras was eventually relocated to the Institute for Marine Mammal Studies in Mississippi, where his personality as a show-off became apparent. His story brought attention to the broader issue of mass dolphin die-offs in the Gulf of Mexico that began that same year. While most would like to point to the oil spill as the major contributor , there were other factors, including cold weather and larger-than-normal cold water runoff from melting snow. The oil spill was still a factor, though. In , the whaling ship Essex, captained by George Pollard, was attacked and sunk by a gigantic sperm whale. The whale, which survivors claimed was around 26 meters 85 ft in length, rammed the Essex twice, causing the crew of 20 to abandon ship in three lifeboats. Pollard wanted to head toward the closest landâ€”the Marquesas or the Society Islandsâ€”but his crew convinced him to try for South America instead, since they had heard the islanders were cannibals. That turned out to be a cruelly ironic decision, since the starving crew soon turned to cannibalism themselves. Ultimately, only eight members of the crew would survive. An even more direct inspiration was a white sperm whale known as Mocha Dick that became infamous for smashing whaling boats and killing sailors in the waters off Chile, sometimes in defense of dead or dying whales. The white whale was known for his cunning, once even seeming to play dead in order to lure boats close to him, before roaring to life and attacking. When one whaler swore to kill him, Mocha Dick smashed three of his boats and forced him to retreat. His rampage continued until he was finally killed in , with 19 harpoons sticking out of him. By that point, Mocha Dick had killed at least 30 men over the course of battles. Living in the Amazon and Orinoco River basins, it is one of only three freshwater dolphin species in the world. Pinky, however, is not a member of any of these endangered species. Pinky is a saltwater bottlenose dolphin that was discovered in Lake Calcasieu, a saltwater lake estuary in Louisiana, in Because of genetic albinism, Pinky lacks pigment in his skin and eyes, making him appear pink. While not the first albino dolphin documented in the wild, what is peculiar is that two other known albino dolphins were spotted in and around the Gulf Coast. However, the average marine biologist knows that the porpoise has a short nose and spade-shaped teeth , in addition to being a bit thicker around the middle and not as long. Dolphins are bigger and known for having longer noses and cone-shaped teeth. Mini-Moby is a porpoise, one of only two known Pacific harbor porpoises that is completely white. What makes Mini-Moby interesting is his family history. Pacific harbor porpoises disappeared from the San Francisco Bay area for over 65 years. People who grew up near the Bay before the s might have seen and heard the snorting noises of harbor porpoises playing and hunting. Then, in the early s, the US Navy extended a steel net across the mouth of the San Francisco Bay to prevent Axis submarines from entering. Unfortunately, that also prevented the Pacific harbor porpoises from entering as well. When World

War II ended, the steel net was removed, but the Bay had become so toxic with collected waste, and commercial fishing had done so much damage, that the porpoises did not return. But, years of conservation efforts have begun to pay off. In , harbor porpoises were again seen in large numbers in the Bay area, and it has become or perhaps returned to being a natural breeding ground for these smaller, shorter cousins of the dolphin. Peter is an amateur writer, Internet investigator, and humorist by night who pretends to be a husband, father, and salesman during daylight hours.

Chapter 2 : petition: HELP SAVE DOLPHINS AND WHALES, ALSO AT calendrierdelascience.com

A specific part of this threat is the danger posed to whales, dolphins and porpoises, as they can suffer or even die after swallowing or becoming entangled in this man-made debris. Talking points Marine debris is a little-known and little-investigated threat to cetaceans.

Then she slowed down too, and I thought, this is kind of cool. Our eyes were maybe 2m apart, and in the water that feels very close. By the time he was on to his Masters degree he was making ends meet by working at the BBC as a researcher. A producer who also happened to be an instructor at the university dive-club pointed out that BSAC was offering a discount on training, and he enrolled. Patrick, who is now 32, continued working in TV? In some online episodes he had written and presented to accompany the David Attenborough series Madagascar caught the eye of the right producers, and he became a frontman. But apart from specials on archerfish and octopuses, these mostly seemed to be about animals living above the waterline. Last of the Giants, which airs on Sky in mid-June. But it meant diving at last, and Patrick grasped the opportunity with both hands. I lifted it out and there was a massive hole in the sole. It had been an ex-show suit and glued to a stand, and whoever took it off forgot to reseal it. So it got sent off to be repaired and I used a standard 7mil. I got used to the Guardian full-face mask and we got some great footage of a great white right next to the cage. My reactions are priceless – a lot of f-ing and blinding which they had to bleep out. I wanted my presence to mirror that of the animals. Still, hotshot instructor Emma Farrell of Go Freediving seems to have worked wonders in the limited time. Full saturation, no stress. You can get a sense of what your body can do but you have to read the animal as well. Go with the flow and if you can go deep, go deep. I think there were three or four times we got to about m. It took me a few days to get over the experience, actually.

Chapter 3 : Dolphins and Whales In Mythology Part One of a Multidisciplinary Unit

Man needs something to shake him to his roots, to impress him deeply with the fact that he does not own the earth. This something, which might give man the humility he needs, could be a greater knowledge of the other large-brained animals."

Today, however, the relationship is evolving to be one where more and more people want to see whales and dolphins protected. Talking points Whales and dolphins have been held in the highest of esteem by mankind for millennia Humans and whales and dolphins can live in harmony Some people still regard them only as a resource Whaling before the ban Long before electricity was first harnessed, before the industrial revolution changed everything, and even before agriculture was fully developed, mankind turned to the animal kingdom to find ways of surviving. Unfortunately for many of those other species, we became rather good at it. Because of their immense size, whales were among the many creatures of this planet to be harvested for human sustenance. Coastal communities, many of them in cold regions, became expert in stripping the mighty mammals of their meat, their oils, and their fat, all used to provide food or heat. As the centuries passed, whaling became better organised and even more successful, and by the 20th century, demand was such that some species were heading for extinction. Perversely, even though mankind no longer needed the food and fuel that the whales provided thanks to a host of alternative food and heat sources, the whaling continued. Alongside these increasingly redundant reasons for whaling had arisen a number of, sometimes literally, cosmetic industries, too. Ambergris, made from secretions within sperm whale intestines, was harvested as a fixative for perfumes. The tusks of narwhals had become highly prized alternatives to elephant ivory. By the s, it was estimated that at least 50, whales were being slaughtered ever year, an unsustainable level. By the s, the whaling industry was showing no signs of being brought to order, and so there was only one solution left: This was brought into force in Whaling after the ban Never underestimate the force of popular opinion. In the s, a growing international sense that whaling was not just depleting numbers of these mighty animals in the seas, but was actually morally wrong, began to take shape. By , the International Whaling Commission IWC voted to implement a moratorium on the practice, and this ban came to pass four years later. Some countries were, however, able to exploit loopholes in the original ban, by claiming they were hunting under the guise of scientific permits or because they rejected the ban outright. The initial thinking was that commercial whaling was far outstripping the number of whales that remained, and that the pause would allow populations of whales to rebuild once more. As the years passed, however, more and more nations, and their peoples, began to feel that whaling had become unacceptable, no matter how many whales there might be. The governments of some nations opposed the ban, Japan perhaps the most significant among them. Yet, tragically, mankind has found many other ways to destroy them, some through negligence, others deliberate. Of them all, drive hunts could be considered the most sinister. This is a practice conducted mainly in Japan whereby dolphins are herded by boats into a bay or onto a beach. In their fear and confusion, the dolphins frequently damage themselves, while the hunters simply gather round and slaughter them for their meat or take them to sell to the captivity industry. Other threats are not necessarily as deliberate as drive hunts, but can be just as damaging and distressing for whales and dolphins. Bycatch, for example, is the term used to describe the entanglement of the mammals in large fishing nets, which leads to distress, injury, and frequently death from suffocation or drowning. Excessive fishing could also destroy the natural food sources of many whales and dolphins, forcing them away from usual habitats to avoid starvation. Many whales and dolphins rely heavily on sonar, emitting calls beneath the surface which, when they bounce back, help them to locate predators, prey, and migratory routes. The human use of sonar, as well as other underwater sounds, can confuse whales and dolphins, sending them off into alien waters. Whales and dolphins in culture Whales and dolphins have been held in the highest of esteem by mankind for millennia. Dolphins often appear in Greek mythology, almost always helping lost heroes back to shore. They were sacred to some of the gods, and in some cases, were gods or supernatural beings themselves. The Ganges River dolphin, for example, heralded the descent of Ganga from heaven, while the Amazon river dolphins were believed to be shapeshifters. The great whales were once even more

mysterious, rarely encountered by early humans. Some cultures, such as in Ghana and Vietnam, have associated whales with divinity, holding ceremonies for them when they beach. Yet with admiration can often come a desire to destroy, with dire repercussions. An Icelandic myth tells of a man who killed a fin whale, and who as punishment was not to revisit the sea for 20 years. With one year left to go, he broke the ban and returned to the waters, whereupon he was instantly killed by a whale. In more modern times, the famous American novel *Moby-Dick* explores similar psychological traits of obsession and the self-destruction that this lack of wisdom brings about. Destroy a whale or dolphin, and you will destroy yourself, is the subtext. By the second half of the 20th century, the animals had become quasi-spiritual symbols once more in western new age culture, while films ranging from *Free Willy* to *Whale Rider* and *Big Miracle* had them representing our own inner desires for freedom and self-expression. Whales and dolphins, even today, are seen as seagoing expressions of our own loves and fears. Their role in human culture shows just how strongly we feel associated with them. Sign up for email updates [Adopt a whale](#).

Chapter 4 : THE WHALE and THE WILDLIFE MAN

Please support the work of the Sea Watch Foundation by making a donation to help study and protect whales, dolphins and porpoises in UK waters. If you can't find what you are looking for, log on to my original, sister, site calendrierdelascience.com but please come back soon.

Unfortunately, they have some horrible side effects. The only reason they intentionally beach themselves is to die. The US Navy, when confronted with undeniable proof linking military sonar to mass beachings, finally admitted that they knew about the problem and are trying to keep testing to a minimum. We might not be able to get them never to use a defensive version that would protect a ship or submarine when a sound-seeking torpedo is fired at it, but we should be able to restrict testing to specific areas. A scientist broke the sonar weapon story by videotaping full grown orcas porpoising for their lives directly away from a Navy destroyer 3 miles offshore I saw that video years ago, but have been unable to find it online. To have called them frantic would have been an understatement. As of this writing in , the great white shark population, e. Even if they do manage to tag most of the man-eating sharks, how long before beach closings cut into your vacations? Of course, the oceans have warmed since then, causing some species to migrate farther north, but Global Warming is denied almost exclusively by get-richers like President Donald Trump. Michael was the first to make landfall as a category 4 on the Florida panhandle since they began keeping hurricane records in , and it remained a CAT 4 almost all the way through the panhandle. With all the seals on Cape Cod, how long before the number of great white attacks on New Englanders rival Australian waters? What sense does it make, for example, to hunt a species to extinction? A California judge temporarily put a stop to the testing, but it resumed after the US Supreme Court overturned that decision. The Navy was required to limit the decibel level when sea mammals are within 1. Allegedly, other efforts have been put into obscuring the facts by the Military Industrial Complex. They also closed the site to further comments, so just dismiss it completely. In another regard, they might not need to obscure the facts or they might already be doing so, depending on your point-of-view. There are marine biologists and a few videos including one shot by two boys " the Navy allegedly failed to fully secure the affected beach when testing nearby who support these claims, but it has yet to become generally-accepted scientific fact. Why not help us help them? At the very least, you could sign a petition click below on Pierce Brosnan. You can write your elected officials at www. Demand that the Navy divulge all the reasons behind their "we-have-no-choice" assertions so all the facts can be on the table for public and legislative debate. This cause needs more than just petitions, signs, and email, however, so if you have what it takes to champion it, please do so. That 33 million includes more than 5 million instances of temporary hearing loss, more than 15, instances of permanent hearing loss, almost 9, lung injuries, and more than 1, deaths from the use of sonar and explosives over the five-year period. Probably all marine life is very intent on listening for and analyzing threats.

Chapter 5 : Man-made marine debris - WDC

With the rare exceptions of huge undersea earthquakes and man-made explosions, mass whale and dolphin beachings (suicides) are caused by new sonar weapons that both the US & GB navies, for example, are developing.

In captivity, a bottlenose and a rough-toothed dolphin produced hybrid offspring. The wolphin is a fertile hybrid. Two wolphins currently live at the Sea Life Park in Hawaii ; the first was born in from a male false killer whale and a female bottlenose. Wolphins have also been observed in the wild. They are related to the Indohyus , an extinct chevrotain-like ungulate, from which they split approximately 48 million years ago. These ancient whales are the predecessors of modern whales, stretching back to their first ancestor that spent their lives near rarely in the water. Likewise, the archaeocetes can be anywhere from near fully terrestrial, to semi-aquatic to fully aquatic, but what defines an archaeocete is the presence of visible legs or asymmetrical teeth. Major anatomical changes include the hearing set-up that channeled vibrations from the jaw to the earbone which occurred with Ambulocetus 49 million years ago, a streamlining of the body and the growth of flukes on the tail which occurred around 43 million years ago with Protocetus , the migration of the nasal openings toward the top of the cranium and the modification of the forelimbs into flippers which occurred with Basilosaurus 35 million years ago, and the shrinking and eventual disappearance of the hind limbs which took place with the first odontocetes and mysticetes 34 million years ago. In October , an unusual bottlenose dolphin was captured in Japan ; it had small fins on each side of its genital slit, which scientists believe to be an unusually pronounced development of these vestigial hind limbs. Dolphin skulls have small eye orbits, long snouts, and eyes placed on the sides of its head. Dolphins range in size from the 1. Overall, however, they tend to be dwarfed by other Cetartiodactyls. Several species have female-biased sexual dimorphism, with the females being larger than the males. These conical teeth are used to catch swift prey such as fish, squid or large mammals, such as seal. Dolphins have rather small, unidentifiable spouts. This blubber can help with buoyancy, protection to some extent as predators would have a hard time getting through a thick layer of fat, and energy for leaner times; the primary usage for blubber is insulation from the harsh climate. Calves, generally, are born with a thin layer of blubber, which develops at different paces depending on the habitat. They have fundic and pyloric chambers. Males have two slits, one concealing the dolphin penis and one further behind for the anus. Although dolphins do not possess external hind limbs, some possess discrete rudimentary appendages, which may contain feet and digits. Dolphins are fast swimmers in comparison to seals which typically cruise at 9â€”28 kilometres per hour 5. The fusing of the neck vertebrae, while increasing stability when swimming at high speeds, decreases flexibility, which means they are unable to turn their heads. Some species log out of the water, which may allow them to travel faster. Their skeletal anatomy allows them to be fast swimmers. All species have a dorsal fin to prevent themselves from involuntarily spinning in the water. In addition to their streamlined bodies, some can slow their heart rate to conserve oxygen. Some can also re-route blood from tissue tolerant of water pressure to the heart, brain and other organs. Their hemoglobin and myoglobin store oxygen in body tissues and they have twice the concentration of myoglobin than hemoglobin. In dolphins, and other marine mammals, there is no great difference between the outer and inner environments. Instead of sound passing through the outer ear to the middle ear, dolphins receive sound through the throat, from which it passes through a low-impedance fat-filled cavity to the inner ear. The dolphin ear is acoustically isolated from the skull by air-filled sinus pockets, which allow for greater directional hearing underwater. This melon consists of fat, and the skull of any such creature containing a melon will have a large depression. This allows dolphins to produce biosonar for orientation. As well as this, the eyes of a dolphin are placed on the sides of its head, so their vision consists of two fields, rather than a binocular view like humans have. When dolphins surface, their lens and cornea correct the nearsightedness that results from the refraction of light; they contain both rod and cone cells, meaning they can see in both dim and bright light, but they have far more rod cells than they do cone cells. Dolphins do, however, lack short wavelength sensitive visual pigments in their cone cells indicating a more limited capacity for color vision than most mammals. They also have glands on the eyelids and outer corneal layer that act as protection for the

cornea. However, some have preferences between different kinds of fish, indicating some sort of attachment to taste. Furthermore, the difficulty and expense of experimental work with large aquatic animals has so far prevented some tests and limited sample size and rigor in others. Compared to many other species, however, dolphin behavior has been studied extensively, both in captivity and in the wild. See cetacean intelligence for more details. Socialization Dolphins surfing at Snapper Rocks , Queensland , Australia Dolphins are highly social animals, often living in pods of up to a dozen individuals, though pod sizes and structures vary greatly between species and locations. In places with a high abundance of food, pods can merge temporarily, forming a superpod; such groupings may exceed 1, dolphins. Membership in pods is not rigid; interchange is common. Dolphins can, however, establish strong social bonds; they will stay with injured or ill individuals, even helping them to breathe by bringing them to the surface if needed. The dolphin Moko in New Zealand has been observed guiding a female Pygmy Sperm Whale together with her calf out of shallow water where they had stranded several times. Dolphins communicate using a variety of clicks, whistle-like sounds and other vocalizations. Dolphins also use nonverbal communication by means of touch and posturing. In May , a discovery in Australia found Indo-Pacific bottlenose dolphins *Tursiops aduncus* teaching their young to use tools. They cover their snouts with sponges to protect them while foraging. This knowledge is mostly transferred by mothers to daughters, unlike simian primates, where knowledge is generally passed on to both sexes. Using sponges as mouth protection is a learned behavior. Dolphins engage in acts of aggression towards each other. The older a male dolphin is, the more likely his body is to be covered with bite scars. Male dolphins can get into disputes over companions and females. Acts of aggression can become so intense that targeted dolphins sometimes go into exile after losing a fight. Male bottlenose dolphins have been known to engage in infanticide. Dolphins have also been known to kill porpoises for reasons which are not fully understood, as porpoises generally do not share the same diet as dolphins and are therefore not competitors for food supplies. Possible explanations include misdirected infanticide, misdirected sexual aggression or play behaviour. Sexual encounters may be violent, with male dolphins sometimes showing aggressive behavior towards both females and other males.

Chapter 6 : About Whales - Whaleman Foundation

Manx Whale and Dolphin Watch (MWDW) has been at the forefront of marine mammal science on the Isle of Man since We work voluntarily year round to ensure the safeguarding of whales, dolphins, and porpoises (cetaceans) in Manx territorial waters through non-invasive research and public awareness efforts.

Chapter 7 : Half Day Whales & Dolphin Watching Trips From Lajes do Pico

Incidents of man being rescued by riding on a dolphin's back and of attracting dolphins and whales by music are well documented.(14) The themes in these myths may calendrieldelascience.com be the basis for the current popularity of cetaceans.

Chapter 8 : Awesome Ocean - Awesome Ocean

Humans and whales and dolphins have had a mixed relationship over the years, and our impact on their lives has been considerable. Today, however, the relationship is evolving to be one where more and more people want to see whales and dolphins protected.

Chapter 9 : Man & Marine Mammals - Dolphins In Ancient Mythology | A Whale Of A Business | FRONTLIN

The term "whales" here includes all cetaceans (whales, dolphins, and porpoises), which are a diverse group of animals ranging in size from just a few feet long to over feet long.