

# Close-up with whales

It is one of bluewater sailors' biggest fears, but how likely is it that you will hit a whale? Daria Blackwell investigates the facts of whale encounters

Our first encounter with whales came while crossing Stellwagen Bank, a vast marine sanctuary off Cape Cod when we came upon a pod of Northern Right Whales (*Eubalena glacialis*). First, we sighted a rock where there should have been deep water. After checking the charts and keeping a close eye through binoculars, we realised it was a whale, being groomed by a flock of birds. It rolled and dived to show off its fluke.


Shortly afterwards, a second one appeared, then two more, and another five, until we were surrounded by scores of these leviathans.

As they came closer to get a better look at us with those all-knowing eyes, our first thoughts drifted to the infamous line from *Jaws*: 'We're gonna need a bigger boat.'

They were about the same length as *Aleria* (57ft). Soon we realised they were just curious and we ghosted along holding a steady course as we checked each other out.

We were under full sail in light wind with no engine. We worried about them surfacing beneath us and kept a close watch, steering cautiously away from any ahead of us and avoiding coming between a mother and her calf.

Suddenly the air filled with whale song. Not just one, but a cacophony of voices that seemed to be amplified by *Aleria's* hull acting like a stethoscope. There were long wails, short burps, moans, groans and high-pitched squeals. It sounded surreal and we succumbed to the sheer joy of it. All fear was gone, replaced with wonder.

Then they were gone. The whale song receded and the whales disappeared from view. We mourned 

Skip Novak watches a humpback whale swim under the bow of *Pelagic* off Antarctica



▲ Above: these photos were posted online by James Dagmore, showing the yacht *Intrepid* being seriously damaged by a whale off Cape Town.  
▶ Right: a fin whale diving below *Aleria* en route to the Azores



A Blackwell

WHALE STRIKES ON RACING YACHTS

- Among four reports of collisions during the OSTAR (one in 1964, two in 1988, and one in 1996), one involved Ellen MacArthur's *Kingfisher* in which the dead whale was found wrapped around the keel.
- David Selling's *Hyccup* sank as a result of a collision in 1988. In the second of two reports from Whitbread races in 1989 and 1998, Knut Frostad said: "It was like being in a car crash."
- In the Artemis Transat solo race in 2008, several vessels reported striking whales, although one was possibly a whale shark. Two of the strikes were catastrophic for the vessels.
- In the Portimão Global Ocean Race in 2008, two 40ft yachts reported striking whales. Neither vessel suffered significant damage.

■ In 2008, two IMOCA 60s in the Vendée Globe struck whales; both lost their keels, but were able to continue on to safe harbour.

■ *Delta Lloyd* and *Ericsson 3* both hit whales during the 2008-2009 Volvo Ocean Race, with minor damage. There were four other reports during previous races in which boats were damaged, rudders being particularly vulnerable.

■ In 2009 the 40ft *J/120 J/World* was sailing in the Baja Ha-Ha Cruising Rally from California to Mexico at about nine knots when a crewmember spotted a humpback whale (*Megoptera novaeangliae*) 60m to port. A second whale was spotted to starboard. Another two whales were seen 15m ahead, but before any diversionary action could be taken, *J/World* struck a whale with the keel. It felt as though the vessel had run aground. Her propeller hit the animal and blood was seen.

The owner believed the whale then struck the vessel with its tail, jamming the rudder post up and aft, holing the transom. The vessel sank within 45 minutes. The crew took to the liferaft and were rescued by the USCG. There is no information about the whale.

their passing, but felt blessed to have met them. Alex described the experience as "prehistoric otherworldly". We had been so dumbfounded that we forgot to take pictures.

**Ships and whales**

Ask bluewater sailors about their biggest fears and near the top of the list is likely to be striking a whale. So what is the likelihood of a chance encounter with a whale? The probability appears to be increasing as protected whale species increase in numbers. Fortunately, several lessons can be applied to reduce the risks.

The first I heard about a sailing boat encountering a whale mid-ocean was when the 49ft sloop *Peningo* collided with one 700 miles from the Azores while en route from the US to the America's Cup Jubilee in the UK. The skipper called their story *Struck by a Whale*, but it is more likely that it was the vessel that struck a sleeping whale. The whale was severely injured and the yacht was disabled with rudder damage. Fortunately, *Peningo* remained afloat until a rescue ship arrived. The whale may not have done so well.

Back in 1820 the Nantucket whaling ship, *Essex*, was sunk by a sperm whale (*Physeter catodon*) in the South Pacific – Herman Melville based *Moby-Dick* on the story. As told by the crew who survived, the whale struck the ship with its head while the light boats were hunting. The whale smashed through the bulkhead and water was streaming in.

The whale was apparently injured, twisting in convulsions some distance away. Suddenly, the animal raced toward the ship again, its head high above the water like a battering ram. It stove in the port side of the ship. The *Essex*

sank and the crew were left thousands of miles from land in three light boats. The sperm whale, at 60ft in length and weighing 50 tons, is the largest toothed animal alive.

During a passage from the Canaries to the Caribbean, a 35ft boat in our SSB net reported being attacked by a whale. While under sail in light wind, they sighted several whales, one of which turned toward their boat and rammed it head on. It circled and came back at them repeatedly.

They were terrified that it might hole the vessel, but it suddenly swam away. They identified it as a false killer whale (*Pseudorca crassidens*). The net controller asked what colour their hull was, as a crewmember suggested that whales attack boats with red bottoms. Interestingly, they had just repainted their bottom red.

Multiple reports of vessels colliding with whales include two British yachts lost in the 1970s. Dougal Robertson set sail in 1971 aboard *Lucette*, a 43ft wooden schooner, with his wife and four children. On 15 June 1972 she was holed by a pod of killer whales (*Orcinus orca*) and sank 200 miles west of the Galapagos. The family escaped to an inflatable liferaft and a dinghy, and were rescued after 38 days by a fishing trawler. Afterwards Robertson wrote the classics *Survive the Savage Sea* and *Sea Survival: A Manual*.

The Baileys were transiting from Panama to the Galapagos when, on 4 March 1973, 31ft *Auralyn* was struck by a whale and holed. The crew drifted 1,500 miles in an inflatable liferaft before being rescued. The account of their ordeal is entitled *117 Days Adrift*.

In June 2009, a British couple sailing their 47ft yacht near the British Virgin Islands struck a whale in the early

morning, holing the hull. They abandoned ship and awaited rescue. There is no information on injuries to the whale.

Anecdotal reports on blogs include one of a boat being attacked by a sperm whale about 150nm off the Great Barrier Reef. 'Paul J' posted a photo of the bottom of his metal boat – painted red – dented by the whale's head. In the same thread, two other sailors noted encounters with pilot whales around their red-bottomed boats, but no attacks.

**Can whales see colour?**

It has been advised not to paint a boat's bottom white, black, grey or blue to avoid appearing like the belly of a competing whale. But what about red? Some experts profess that whales cannot see colour as they do not have short wavelength cones in their eyes. However, a study published in 2002 suggests that cetaceans do indeed discern colour, but in a different way from humans.

Dr Jeffery Fasick, assistant professor of biological sciences at Kean University in New Jersey who has researched marine mammal eyes, agrees. Whales have only one 'cone' and one 'rod', both of which are sensitive to light in the blue/green range. "They match their cones and rods to the colour of the water. To them, everything is bright," he says. "This means that anything that looks blue or green to the human eye is invisible to whales. The one colour that whales can see as a dark shape in their bright, watery environment is red. Copepods, the main food source for right whales, are red, allowing them to see the group as a dark mass."

One certain trend is that more collisions are being recorded as boats get faster. In 2008, Elaine Bunting



▲ Above: illustration from the Russell Purrington Panorama shows the whaler *Essex* being attacked by a sperm whale. The story was the basis of *Moby-Dick*



▲ Above: dent in the steel hull of a yacht reportedly made by a sperm whale that attacked the vessel

Paul J

# WHALES



A Blackwell

◀ **Left: Northern right whales feeding on Stellwagen Bank, with birds in attendance**

reported on a transatlantic race in which a large number of IMOCA 60s collided with whales, and collisions have been reported in the Volvo Ocean Race (see panel, page 53).

Of 11 species known to be hit by ships, fin whales (*Balaenoptera physalus*) are struck most frequently and right, humpback, sperm and grey whales are hit commonly. The most lethal or severe injuries are caused by ships travelling 14 knots or faster. Today, collisions occur most often with high-speed ferries and racing yachts.

In 2011, Fabian Ritter, collaborating with noonsite.com, published a study that constituted the first attempt to assess collisions involving sailing vessels and whales on a global scale. A total of 111 collisions and 57 near-misses were identified between 1966 and 2010, the majority of which (75 per cent) were reported between 2002 and 2010.

Ritter recommended three courses of action to protect ships and whales: 1) a reduction in speed, 2) dedicated observers, and 3) the shift of routes. He also recommended publicising the International Whaling Commission (IWC) Ship Strike Data Base and encouraging sailors to report their encounters so that data can be collected and analysed.

Sound has been used to attempt to deter whales from crossing paths with boats. One study documented that harmonics may actually attract whales, so running your engine may not be a good way to ward them off. In the *Oyster* magazine, Pantaenius Yacht Insurance reported research they carried out following the loss of a catamaran after it hit a dormant whale in 1991. The advice offered was to keep depth sounders on during ocean passages as whales can hear the pulse emitted by transducers.

The International Maritime Organization (IMO) is planning a detailed guidance for the maritime industry, including cruising and racing yachts. In advance of the guidance, the Belgian Ministry of Environment has released advice about how to reduce the risk of collision with whales:

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- Plan passages to avoid whale high-density areas
- Keep a close watch, reduce speed and alter course for direct avoidance
- Report incidents to the Ship Strike Data Base of the International Whaling Commission (IWC)
- Heed restrictions and seek advice from the IMO and national authorities
- Contribute to scientific research by reporting sightings and encounters

The IWC database contains 1,076 collision reports between 1877 and 2010, though IWC is quick to note that they are for the most part uncorroborated. The majority of whale fatalities occur off the east coast of North America and in the Mediterranean as a result of collision with large vessels.

What happens to the vessels involved in collisions with whales seems mild in comparison. Few ships have been reported holed, disabled or sunk. It seems – at least from our viewpoint – that the benefits to cruising sailors of being out there outweigh the risks of collision, at least with whales.

## Occasional glimpses

Since our first encounter with whales we have had a number of others during our years of cruising – we were escorted by a lone killer whale (*Orcinus orca*) out of St Margaret's Bay, Nova Scotia; had a visit by a pod of resident pilot whales (*Globicephala macrorhynchus*) while in transit from Tenerife to La Gomera in the Canary Islands; and had numerous sightings when crossing the Atlantic from the Caribbean to the Azores.

It was on the latter occasion that we learned the value of a flat sea for sightings and just how many of these creatures are en route in this area at any given time. No wonder the Azores were so prominent on the whaling scene.

We saw sperm whales (*Physeter catodon*) and fin whales (*Balaenoptera physalus*), mothers with calves often very close by. One pod swam along in our bow wave like dolphins except they were 60ft fin whales. When they dived below us, we wondered where they'd come back up. They blew air right beside us that carried the scent of bountiful fisheries. They stared at us with those penetrating gazes.

In all these encounters, we have never truly felt threatened – concerned about proximity, but not threatened. Our bottom is green. Our hull is white. We rarely use the engine even in light air and we always keep a close watch. We are respectful of the distance between us. We are respectful of their intelligence and their place on this oceanic Earth. I think they knew all that.

## REPORTING STRIKES AND SIGHTINGS

The International Whaling Commission maintains a ship strikes reporting database (<http://iwc.int/ship-strikes>). There is no single global co-ordinating body for overall cetacean data collection as yet, but there are regional research groups, such as the IWDG and Sea Watch Foundation in the north-east Atlantic, which actively solicits whale sightings from yachts transiting offshore ([www.seawatchfoundation.org.uk](http://www.seawatchfoundation.org.uk))

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