# 5 things you can do TO REDUCE THE RISK OF A WHALE STRIKE

#### 1 KNOW BEFORE YOU GO

Anticipate likely whale sightings by communicating with other mariners and subscribing to Whale Alert or other services. Find out about the seasonal movements and behavior of whales.

#### 2 PLAN YOUR PASSAGE

With advance planning, vessels may avoid whale concentrations with a minimal increase to passage time. If travel through whale aggregations cannot be avoided, plan to reduce speed in areas where whales are likely, especially if sighting conditions are poor.



#### 3 DISCUSS WHALE AVOIDANCE

Bridge teams that discuss in advance what actions to take when whales are sighted near the ship's path can save valuable time when these events occur. Conducting avoidance drills can also be helpful.

#### 4 KEEP A DEDICATED WATCH

Keep a consistent lookout, focusing on whales near the path of the ship. If you see one whale, keep looking, as there are likely more nearby! Specify the information needed (bearing, estimated distance, and direction of travel). Keeping critical distances in mind may help you avoid surprises at close range. For example, if ship speed is 18 knots, the **whale with the highest chance of surfacing** off your bow was 1.7 miles ahead on its previous surfacing (or 1.4 miles at 15 knots, both assuming a 5 to 6 minute dive time). Detecting

#### **5** MAKE MODEST ADJUSTMENTS

When a whale comes up in the path of the ship, determine its direction of travel and identify the best course of action. Steering behind the whale is often most effective. A small decrease in speed when you first see the whale can make the difference between a strike and a near miss.

whales at a greater distance opens up more options for avoiding a strike.

### BEHAVIORAL CUES YOU CAN USE to avoid whale strikes

Nobody wants to hit a whale. More whales and more vessels in Alaska waters are creating a safety risk for whales and people. Professional mariners play an important role in avoiding whale strikes.

**BLOWS** Usually at the surface for less than a minute, the whale's first and final blows are often the strongest and most visible. On the final blow, the whale raises its head higher out of the water before diving.

Strong blow! ... Faint blow ... Faint blow ... Strong blow ... Dive!



**DIVES** Whales tend to dive for the same amount of time for several dives in a row. Mother and calf pairs tend to dive for less than 6 minutes and are harder to see because the calf has faint blows. Along the shoreline, a whale's heading when it dives is a good predictor of the direction where it will come up next. In open water, the dive heading is not a reliable indicator of the location of the whale's next surfacing.

SPEED and other Humpback whales in Alaska travel slowly and change directions frequently. They may or may not lift their flukes to dive. They may also sleep motionless at the surface for an hour at a time. In areas where whales take advantage of headlands and tidal currents, they tend to be more abundant on the leeward side of the headland at peak current. The Chatham Strait lunge-feeding group tends to feed near shore during the day and disperse offshore at night and early morning.

#### HUMPBACK WHALES ARE THE SPECIES MOST COMMONLY STRUCK IN ALASKA.

WHALE BEHAVIOR	AVERAGE	TYPICAL	EXCEPTIONAL
SWIM SPEED	2.4 KNOTS	2 - 8	14
DIVE TIME	5.6 MINUTES	3.5 - 12	30+
# BREATHS	2 - 4	1 - 7	
TIME AT SURFACE	42 SECONDS	2 - 60	CONTINUOUS

## WHY DON'T WHALES ALWAYS AVOID SHIPS?

- Baleen whales have good hearing but no echolocation. Frequently they do avoid vessels, except silent ones.
- The ocean is a noisy place. Whales seem to 'tune out' repetitive background noise like the drone of an approaching vessel.
- Whales sometimes seem to have difficulty locating an approaching ship. They react to changes in sound, possibly as it allows them to better locate the source.
- At close range, whales rely on last-second avoidance. If a ship is going faster than a whale's top speed of about 14 knots, they are often unable to get out of the way.
- Whales make mistakes. Even healthy adult whales get hit.

Report collisions to NOAA 1-877-925-7773 or to the U.S. Coast Guard on VHF Channel 16.

Your report will help advance understanding of circumstances that contribute to whale strikes.

THANKS TO CONTRIBUTORS

0

alaskahumpbacks.

×××

ore

E

arn

Φ

NATIONAL PARK SERVICE NATIONAL MARINE FISHERIES SERVICE ALASKA WHALE FOUNDATION UNIVERSITY OF ALASKA SOUTHEAST, SITKA NATIONAL MARINE SANCTUARIES PROGRAM