

Make your own Orca Rangefinder

A tool for determining distance on the water and giving whales space



A laser or paper rangefinder can come in handy when boating in orca habitat. It's a simple tool for telling distance from orcas and ensuring you are following the 1,000 yard setback from Southern Resident orcas mandated by <u>RCW</u> <u>77.15.740</u>. If you don't have a laser rangefinder, WDFW and partner organizations distribute "Orca Rangefinder" cards at boating events around the state, and you can also create your own at home!

Option 1: Instructions for creating your own orca rangefinder

- 1. Gather your supplies:
 - A business card, index card, blank name tag sticker, or similar item you can write on

Consider: What format will be most handy for you? A business card in your wallet? A keychain? A magnet? A sticker on your water bottle? Get creative!

- A ruler with millimeter marks on it
- A fine tip marker or pen
- 2. Using the below dimensions, create to-scale representations of a male orca at 1,000 yards and a female and male orca at 400 yards.
 - You can draw orcas or simply use an oval for the body length and a vertical line to represent the dorsal fin height.
- 3. Add notes to remind you how to use your rangefinder.



Your DIY rangefinder might look like this.

Option 2: Instructions for printing a rangefinder at home

- 1. Print the next page on an 8.5x11" piece of paper. Ensure scaling is set to "none" or "actual size."
- 2. Double-check your card. Ensure the orca icons on the card match the dimensions in the table below.
- 3. Cut out, laminate, etc. to your preference!

Three orca references	Sample	Oval- represents orca body length	Line extending from top of oval- represents dorsal fin height	 Shorthand instructions Hold this at arm's length. Compare the orca to your drawing. If the real-life orca appears bigger: 	
Male orca at 1,000 yards	,000 yards	Roughly 4 ½ mm (4.4 mm) 🗕	Just over 1 mm (1.1 mm) 🗕	Move away slowly < 7 knots	
Male orca at 400 yards	-	Just shy of 11 mm (10.8 mm)	Between 2 ½ - 3mm (2.7 mm)	Stop: disengage transmission, wait until the orca moves away	
Female orca at 400 yards	Q 400 yards	Just shy of 9 mm (8.9 mm)	Roughly 1 ½ mm (1.4 mm)	Stop: disengage transmission, wait until the orca moves away	

DIY Orca Rangefinder - Specifications Table

Thank you for helping endangered Southern Resident killer whales by staying at least 1,000 yards away.

Visit <u>wdfw.wa.gov/orca</u> for more information and resources.

Request this information in an alternative format or language at <u>wdfw.wa.gov/accessibility/requests-accommodation</u>, 833-885-1012, TTY (711), or <u>CivilRightsTeam@dfw.wa.gov</u>.





Using your Rangefinder

- 1. Bring your rangefinder along when boating in orca habitat or store it on your vessel.
- When you see an orca, assume it's a Southern Resident orca (Southern Resident killer whale, SRKW) unless you're sure it isn't.
- 3. Hold your rangefinder at arm's length and compare the size of the orca representations on the card to the orca you see.

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If the orca you see appears to be	That means	Why it matters	What to do	What the law says
bigger than the 1,000-yard orca on the card	You're within 1,000 yards of the whale—too close	Underwater noise from vessels reduces endangered orcas' ability to communicate and forage. Closer and faster is worse, but studies show that even vessels going very slow (1- 2 knots) within greater distances (1640 yards) hurt the ability of SRKW to survive and thrive.	Move away slowly, avoiding the path of the whales, until you're 1,000 yards or more away.	Vessels must stay at least 1,000 yards from SRKW. Within 1,000 yards, vessels must adhere to a 7- knot speed limit. See RCW 77.15.740
bigger than one or both 400-yard orca(s) on the card	You're within 400 yards of the whale— dangerously close	Noise and disturbance from vessels within 400 yards drastically reduce SRKW prey tracking and capture, and female SRKW are likely to give up on foraging. Collisions with vessels are a risk as whales dive and pop up unexpectedly.	Stop. Disengage the transmission, luff sails, group up and stop paddling until the whales are at least 400 yards away. Then, slowly move away to 1,000 yards.	Motorized vessels must immediately disengage the transmission (if safe to do so) within 400 yards of SRKW. See RCW 77.15.740

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