



An Expanded View of the North Pacific Gray Whales and their Migration

Continuing Education (Brown Bag Lunch)

09/24/2026

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Los Serenos de Point Vicente

Overview

Presentation motivated by Deb & Martin Lopez' visit to Oregon coast in June 2026

- **North Pacific Gray Whale Populations**
- **Pacific Coast Feeding Group (PCFG)**
- **PCFG Residents at Depoe Bay, Oregon**
- **Special Interest: "Sounders" Pitstop**



*PCFG gray whale off Oregon coast
Photo by M.Lopez*

North Pacific Gray Whale Populations



Composite image from NOAA Fisheries

Three populations differ primarily in summer feeding locations and seasonal migration routes

- **Western North Pacific (WNP) Population**
 - Feeds off east coast of Russia
 - Some join southern migration to Baja, Mexico
 - Others migrate to Japan, Korea, and China
- **Eastern North Pacific (ENP) Population**
 - Feeds in Arctic waters around Alaska
 - Breeds along Baja, Mexico
- **Pacific Coast Feeding Group (PCFG) Population**
 - Feeds along Pacific Northwest
 - Breeds along Baja, Mexico

North Pacific Gray Whale Research & Conservation

National Oceanic & Atmospheric
Administration (NOAA) Fisheries Videos,
2012, Duration ~13 min

- **Part 1, Born to Migrate (4:36)**

<https://videos.fisheries.noaa.gov/detail/videos/west-coast-region/video/4049561822001/gray-whale-research-part-1:-born-to-migrate?autoStart=true&page=4>

- **Part 2, From the Brink of Extinction to Recovery (3:55)**

<https://videos.fisheries.noaa.gov/detail/videos/west-coast-region/video/4049517529001/gray-whale-research-part-2:-from-the-brink-of-extinction-to-recovery?page=4>

- **Part 3, The Rigors of Research (4:07)**

<https://videos.fisheries.noaa.gov/detail/videos/west-coast-region/video/4049585946001/gray-whale-research-part-3:-the-rigors-of-research?page=4>



Image from NOAA Fisheries

Western North Pacific Population

- Feed off Sakhalin Island and southern Kamchatka, Russia, primarily on amphipods
- Portion of population migrates east across Pacific and south along west coast of North America to Mexico; another portion migrates southwest to Japan, Korea, and China
- Listed as endangered under Endangered Species Act; less than 300 gray whales estimated in 2025 (compare >15,000 in Eastern North Pacific)
- Fun Fact: Female gray whale named Varvara completed longest recorded

migration of any mammal; swam 22,511 km (~14,000 miles) from Sakhalin Island, Russia, to Cabo San Lucas, Baja, Mexico, and back in 172 days during 2011-2012

Varvara (Southbound; Northbound), Whale 2, Whale 3

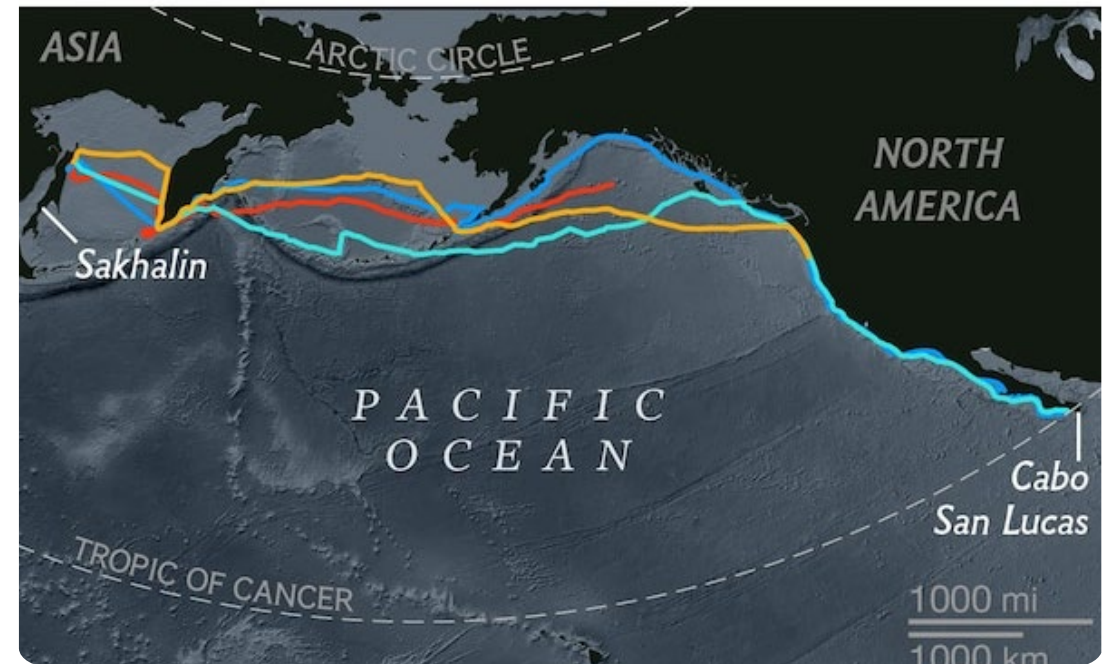
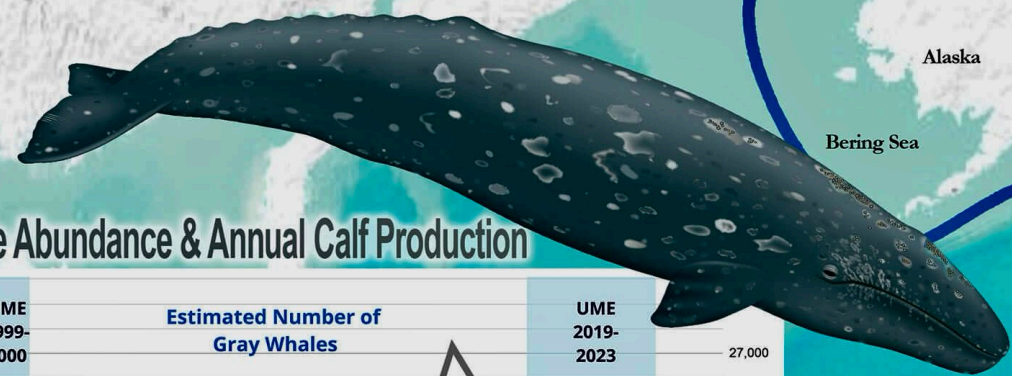
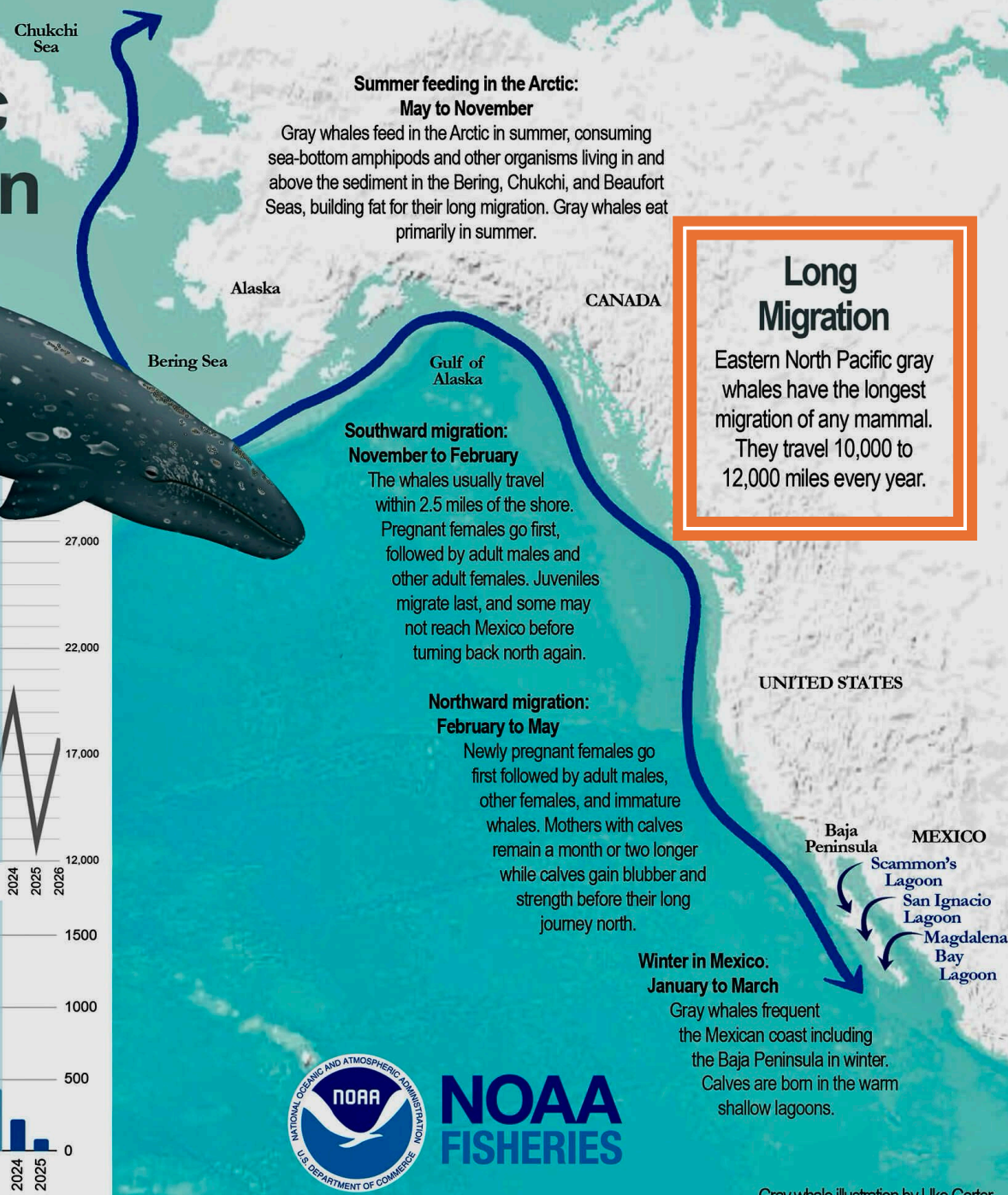


Image from www.nationalgeographic.com

Eastern North Pacific Gray Whale Population



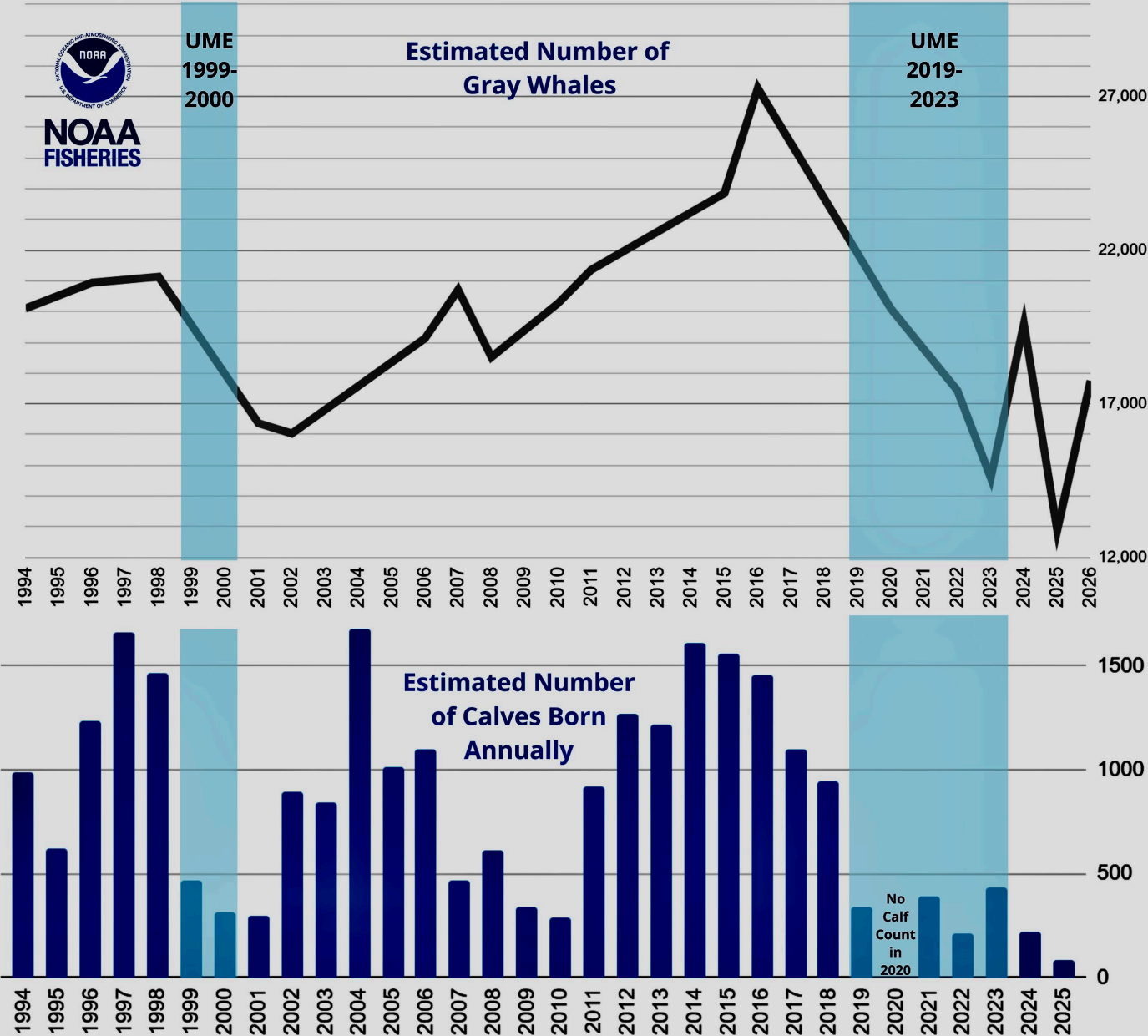
Gray Whale Abundance & Annual Calf Production



Longest routine migration of any mammal, 10K to 12K miles round trip

- May to Nov, Arctic Feeding
- Nov to Feb, Southward Migration
- Jan to Mar, Calving Season
- Feb to May, Northward Migration

Gray Whale Abundance and Annual Calf Production



ENP Population Update (2025/2026)

Removed from endangered species list in 1994; peaked to ~27,000 in 2016

Unusual Mortality Event (UME) 2019-2023 associated with ecosystem changes in Arctic and sub-Arctic feeding areas reducing food supply and causing malnutrition

Since 2023, estimates fluctuated with low of 11,700 to 14,200 in 2024/2025 before increasing to between 15,930 and 20,530 in 2025/2026, exceeding expectations

While recent increase encouraging, low calf production raises concerns over continuing ecosystem changes impacting population resilience

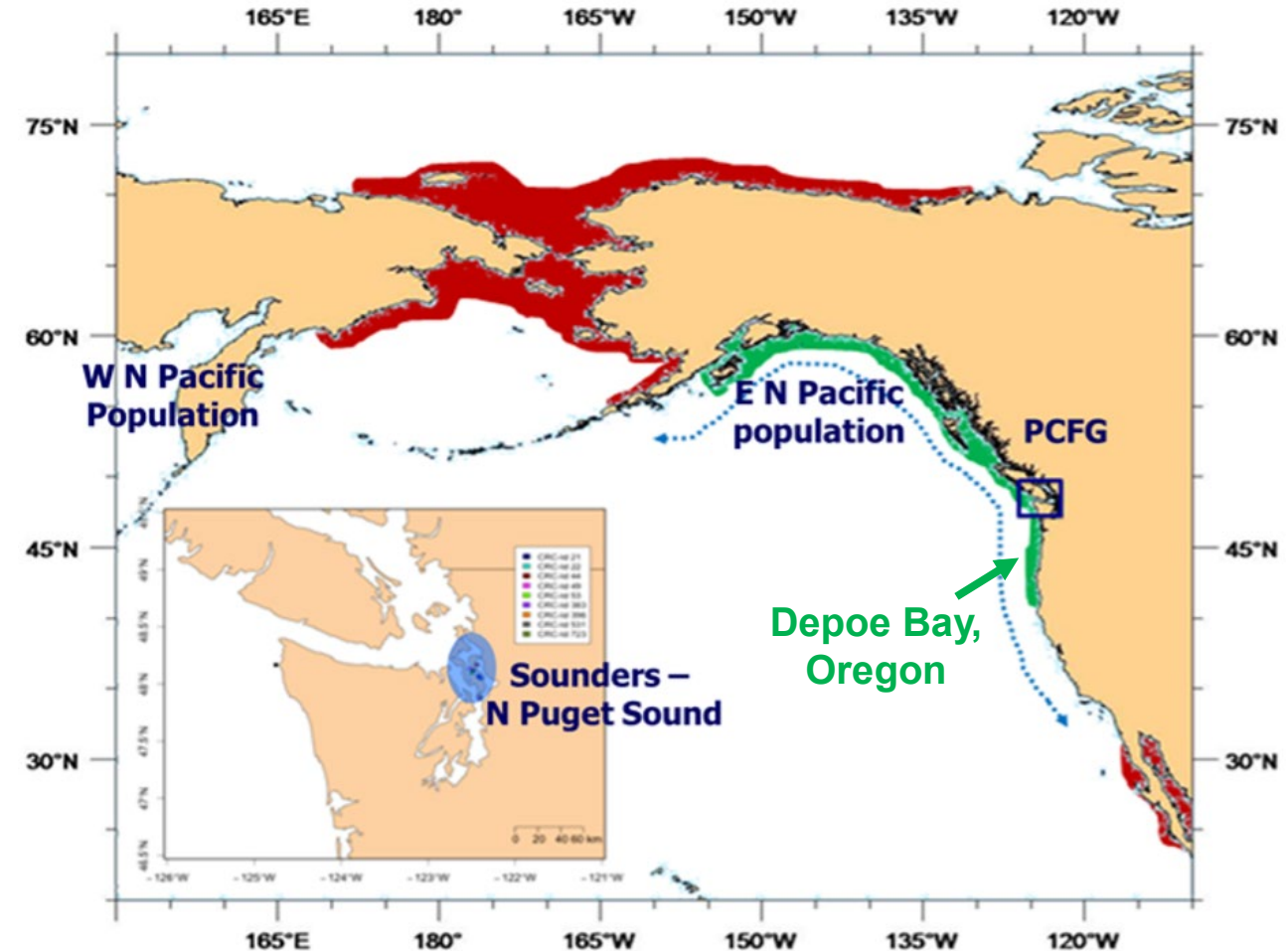
Pacific Coast Feeding Group (PCFG)

- ~230 Eastern North Pacific gray whales do not travel to Arctic waters for summer feeding
- Instead, feed along Pacific coast of North America from northern California to northern British Columbia, Canada

Red = feeding areas of Eastern North Pacific (ENP) Population

Green = feeding range of Pacific Coast Feeding Group (PCFG)

Blue = feeding areas for Sounders gray whales



Original image from www.eopugetsound.org

PCFG Residents at Depoe Bay, Oregon

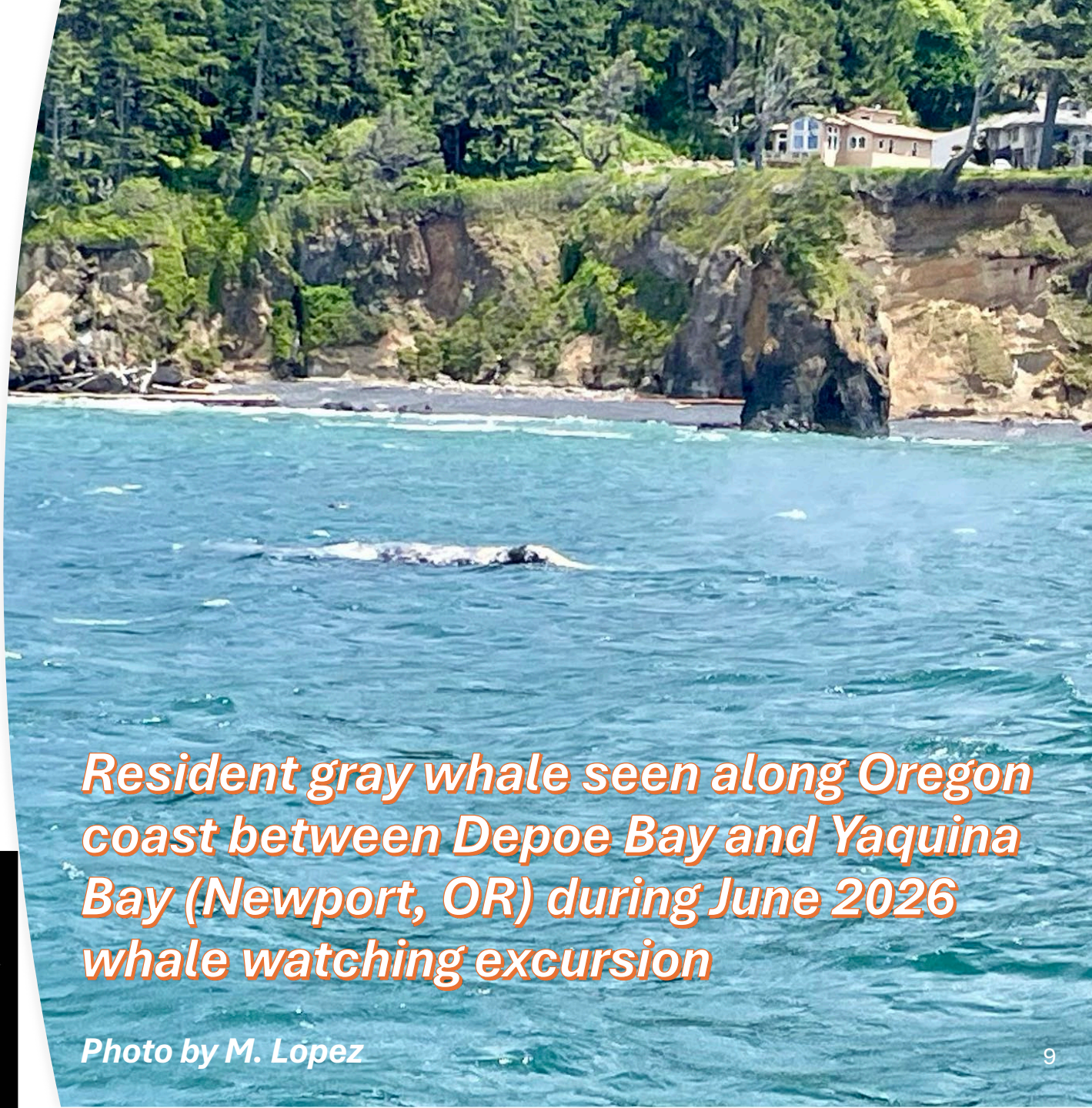
- Depoe Bay, known as whale watching capital of Oregon coast, has its own gray whale summer residents
- ~60 resident gray whales seen repeatedly every year
- Altered diet, feed on mysid shrimp instead of Arctic amphipods



Mysid Shrimp ~0.2" – 1.0"



Amphipod ~0.2" – 0.8"



Resident gray whale seen along Oregon coast between Depoe Bay and Yaquina Bay (Newport, OR) during June 2026 whale watching excursion

Photo by M. Lopez



Research on Depoe Bay PCFG Residents by Marine Biologist Carrie Newell (*With her dogs Koda and previously Kida*)



Video clip from Jean-Michel Cousteau's Ocean Adventures: The Gray Whale Obstacle Course

2017, duration ~7+ min; start 03:54, stop 11:15

<https://youtu.be/SxpqmP-lH-s?t=232&is=yrgLEGCOd3worw6e>

Fun Fact: Depoe Bay's Most Famous Resident Gray Whale

- Scarback (a.k.a. Scarlett) seen off Depoe Bay almost every year since 1992
- Wound believed to be from exploding harpoon circa 1985-1986 before commercial whaling banned in 1986
- During migration, Scarback was seen off Point Vicente by American Cetacean Society gray whale census observers in 2017, 2019, 2020, and 2026

Scarback off Depoe Bay



©Carrie Newell

Scarback off Point Vicente



© Alisa Schulman-Janiger



Souder “Earhart” image from www.ourwildpugetsound.com



Ghost Shrimp ~1.5” - 4.5”



Amphipod ~0.2” – 0.8”

Fun Fact: Sounders Pitstop for Ghost Shrimp Appetizers

- ~12 ENP gray whales temporarily break off from main migratory route between Mexico and the Arctic to feed in North Puget Sound, Washington; hence named “Sounders”
- After 2-3 months of spring feeding on ghost shrimp, rejoin ENP migration for summer feeding on Arctic amphipods
- Female Souder “Earhart” seen nearly every spring since 1990, often with male “Shackleton”
- Risky shallow-water (~8 feet) feeding method in intertidal waters with potential for stranding

Peter Kragh video, 2026, duration 02:16

https://youtu.be/9loENZ1nkJc?is=Wz_nOr1g7FIYAYlD

Key Takeaways

- North Pacific gray whales are categorized into three general populations based primarily on their feeding locations: Western North Pacific (WNP), Eastern North Pacific (ENP), and Pacific Coast Feeding Group (PCFG)
- WNP feeds off east coast of Russia, primarily on amphipods
- ENP feeds in Arctic waters around Alaska, primarily on amphipods
- PCFG feeds along Pacific Northwest from northern California to northern British Columbia, primarily on mysid shrimp; ~60 PCFG resident gray whales return to Depoe Bay, Oregon, every year
- Special Interest ENP Subset: About a dozen Sounders temporarily feed on ghost shrimp in shallow intertidal waters of North Puget Sound, Washington, before rejoining ENP migration to Arctic