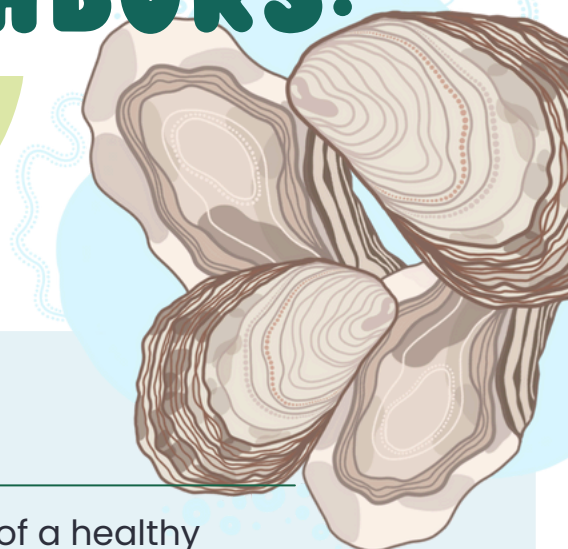


# KNOW YOUR NEIGHBORS:

CONSERVATION CONNECTIONS ~ NOV 2025

## THE OYSTER



### Coastal Superheroes

- Oysters are **bivalve mollusks** that are integral parts of a healthy ecosystem
- Their ability to filter feed removes pollutants from water, regulates water chemistry, and improves light penetration for marine plants to produce oxygen
- Their natural inclination to congregate in clusters helps create a reef-like habitat to support other species and protect coastlines from erosion and storms

### What does bivalve mean?

- Bivalve mollusks (e.g., clams, oysters, mussels, scallops) have a two-part hinged shell that contains a soft-bodied invertebrate



- Breathe and gather food through their gills
  - Some have a retractable "foot" to help them move or burrow
- They can secrete calcium carbonate to make their own shell as they grow

<https://oceanservice.noaa.gov/facts/bivalve.html>



### Species found around the world

#### Bermuda:

- Flat Tree Oyster
- Atlantic Winged Oyster
- Scaly Pearl Oyster
- Atlantic Pearl Oyster

#### Hawaii:

- Hawaiian Oyster
- Black-lip Oyster

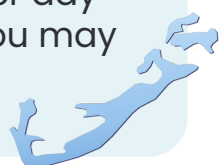
### Mind Your Own Byssus

- **Byssus** are fibrous threads that are secreted by different species of oyster to help anchor them to their preferred habitat
- Oyster larvae like to be permanently attached to a surface; this grouping is called a **spat**
- Spats can be planted in coastal marine areas to help facilitate the filtering of sediment and harmful natural or artificial elements in the water



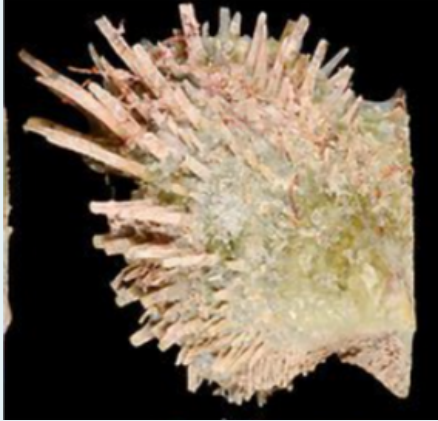
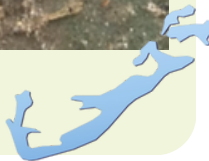
### Atlantic Winged Oyster

- Size: 5-7cm (2-3 inches) in length on average
- Habitat: Shallow to moderately deep waters, on gorgonian corals, use a bundle of fibers (byssus) to attach to sea whips
- Also found along the Atlantic Coast
- Eats: planktonic algae and organic matter
- Can filter 113-190L (30-50 gallons) of water per day
- Not closely related to the species of oyster you may see in a restaurant.



## Flat Tree Oyster

- Size: length is 8-10cm (3-4 inches) when fully grown
- Habitat: clustered in mangrove roots, oyster reefs, docks, pilings with byssal threads, proteinaceous ropes, and other places with high sedimentation
- Can filter 190L (50 gallons) of water per day



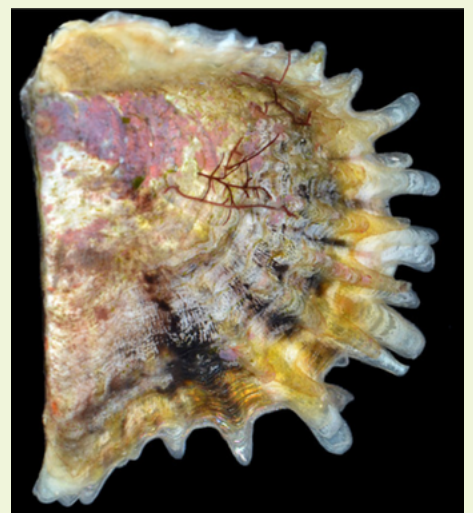
## Scaly Pearl Oyster

- Size: average of 2cm (1 inch) or less in length
- Easily identified by its "long, overlapping projections" on shell
- Also found in the Bahamas and the Caribbean



## Atlantic Pearl Oyster

- Size: average of 5cm (2 inches) long
- Habitat: shallow to 75ft deep, likes to attach to hard surfaces offshore
- Much larger than its non-Atlantic cousin (reaching lengths of 30cm or a foot!), the Silver-lip Pearl Oyster, known for producing ideal pearls
- Can filter over 1,000L (several hundreds of gallons) of water per day



## Hawaiian Oyster

- Size: 5cm (2 inches)
- Habitat: Hard surfaces in shallow areas (rocks, shells, pilings) using byssal threads, calm, shallow, brackish or salt water
- Can filter 75-170L (20-45 gallons) of water per day, depending on size



## Black-lip Oyster

- Size: 20-25cm (8-9 inches) long
- Habitat: rocky shores, reefs, calmer, high salinity lagoons
- Commonly used in marine restoration projects; attach using byssal threads
- Produces the well-known Tahitian black pearl
- This species was overfished in the 1920s (it is estimated that in two years 150,000 were harvested), leaving less than 500. They have not yet made a full recovery. It is now illegal to take them in Hawaii
- Can filter 1,857L (491 gallons) of water per day



## Conservation Efforts Near You!



[Bermuda Ocean Prosperity Programme](#)

[Waterstart Shellfish Restoration Project \(Instagram and Facebook\)](#)

[University of Hawaii Native Hawaiian Oyster Project](#)

[Oyster Restoration and Pohakea Watershed Project](#)

