Pacific oyster

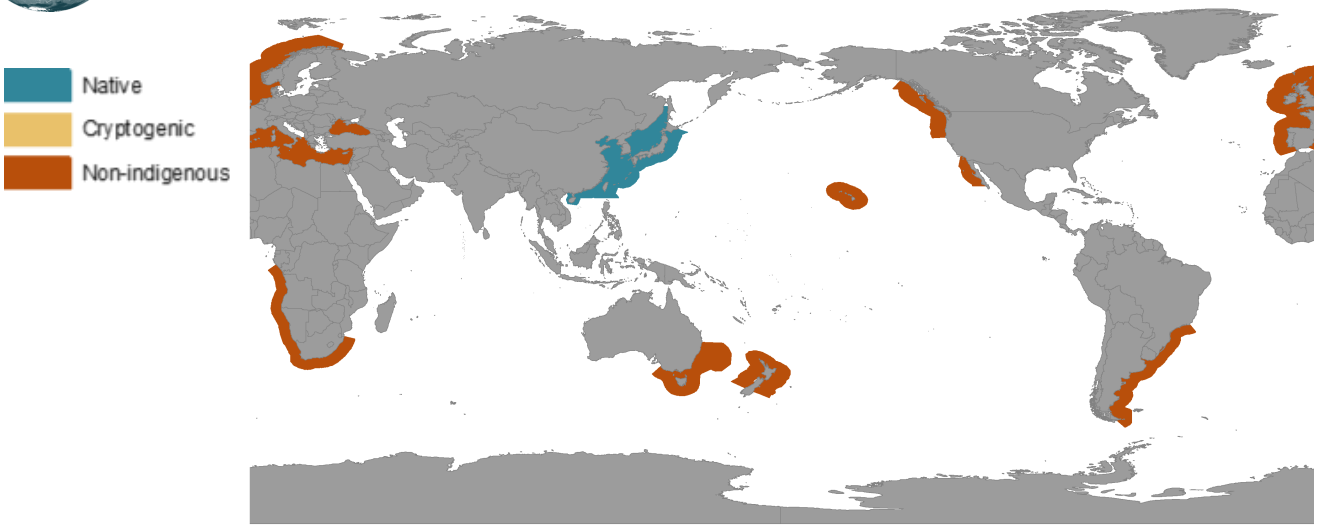
Magallana gigas (Thunberg, 1793)

KEY FEATURES

- Oyster with an elongated, rough shell that can reach 20–30 cm long
- Although highly variable, the two valves are solid but unequal in size and shape; one valve is usually cemented to a hard substrate
- Left valve is slightly convex, right valve is deep and cup-shaped
- Shells are sculpted with large, irregular, rounded radial folds; radial ribs are present on both shells
- Usually whitish with purple streaks and spots, inner side is white, adductor muscle scar is kidney-shaped
- Filter-feeder with a diet of organic and inorganic matter, has a wide tolerance of salinity and temperature

PATHWAY

✓ ballast water ✓ biofouling ✓ aquaculture transfer



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TUVALU

IMPACTS

Environmental impacts

Changes habitats and displaces native species by competing for food and space. Has been recorded to transfer parasites, diseases, and other pest species such as the macrophyte alga *Sargassum muticum* and shell borers such as *Polydora* spp. to the local fauna. Hybridisation with local species has also been recorded

Human health impacts

Shellfish poisoning can occur when concentrations of metals or biotoxins are high enough

Social & cultural impacts

Wild populations establish and become a source of income to locals but may displace native species, requiring consideration to be given to the conservation of protected habitats and the socioeconomics of fishing communities who make a living from this oyster

Economic impacts

In many introduced locations, this species has a positive economic impact as it is part of a successful shellfish industry. In Australia, it has an adverse effect on the native Sydney rock oyster and has caused a collapse of that fishery

ADDITIONAL DETAILS

- High reproductive output and changes sex during its life, usually spawning first as a male and subsequently as a female
- Larvae develop for 2–3 weeks prior to metamorphosis and settlement

DISTRIBUTION

NOT PRESENT IN TUVALU

Native range Japan, Korea, and Southeast Asia

Non-indigenous range Australia, New Zealand, northeastern Pacific, UK, France, South Africa, and Argentina

CREDITS AND REFERENCES (click reference for more information)

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References Nehring (2011), Miosesec et al. (2009), CIESM (2000)

SPREP Secretariat of the Pacific Regional Environment Programme

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Pacific Invasive Species BATTLER

UN environment programme