



Japanese kelp



Photo: CSIRO



Frilly growth near base

Photo: John A Lewis



Midrib

Photo: John A Lewis

Non-native to Australian **waters**, the Japanese kelp, *Undaria pinnatifida*, is an invasive seaweed that poses a serious threat to Western Australia's aquatic environment. This kelp is currently **NOT** established in WA but can be spread by recreational, commercial and fishing vessels amongst vessel biofouling, contaminated water and equipment. If you see this pest please call the **FishWatch 24 hour hotline on 1800 815 507.**

Key features

- Mature plants commonly grow to 0.5 – 1 m, but can be up to 3 m long.
- Green/brown with a prominent mid-rib.
- When sexually mature, plants may have a frilly growth near the base of the stalk.
- Leaves stop short of base.

- Heavily fouls aquaculture equipment and marine structures such as mussel lines, fish cages and vessel hulls.

Where to find it?

- Hard and disturbed surfaces, structures, vessel hulls and aquaculture equipment.
- Prefers sheltered reef or rocky areas.
- Found in cool temperate coastal waters from lower intertidal areas to depths of 20 m.
- Already found in Tasmania, Victoria and NZ.

Similar NATIVE species

Common kelp - *Ecklonia radiata*



Photo John Huisman

Don't confuse this with the Japanese kelp.

- No midrib or frilly base.
- Often has spines and brown fronds, and grows up to 2 m long.

What you can do

Keep an eye out for new and unusual species in your area.

If you think you have found or seen Japanese kelp:

1. **Photograph it** – from different angles, using a scale or ruler and photos of the location where you found it
2. **Record it** - Make a note of when and where you found or saw it including GPS readings if possible.
3. **Collect it** – collect a sample in a plastic bag and refrigerate it but *do not freeze it*.
4. **Report it** – contact the **FishWatch 24 hour hotline on 1800 815 507.**

Impacts

- Grows rapidly, forms dense forests, and can exclude native seaweed species, out-competing them for space and light, and changing conditions for other native species.



Further information:

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You can help stop this pest from spreading

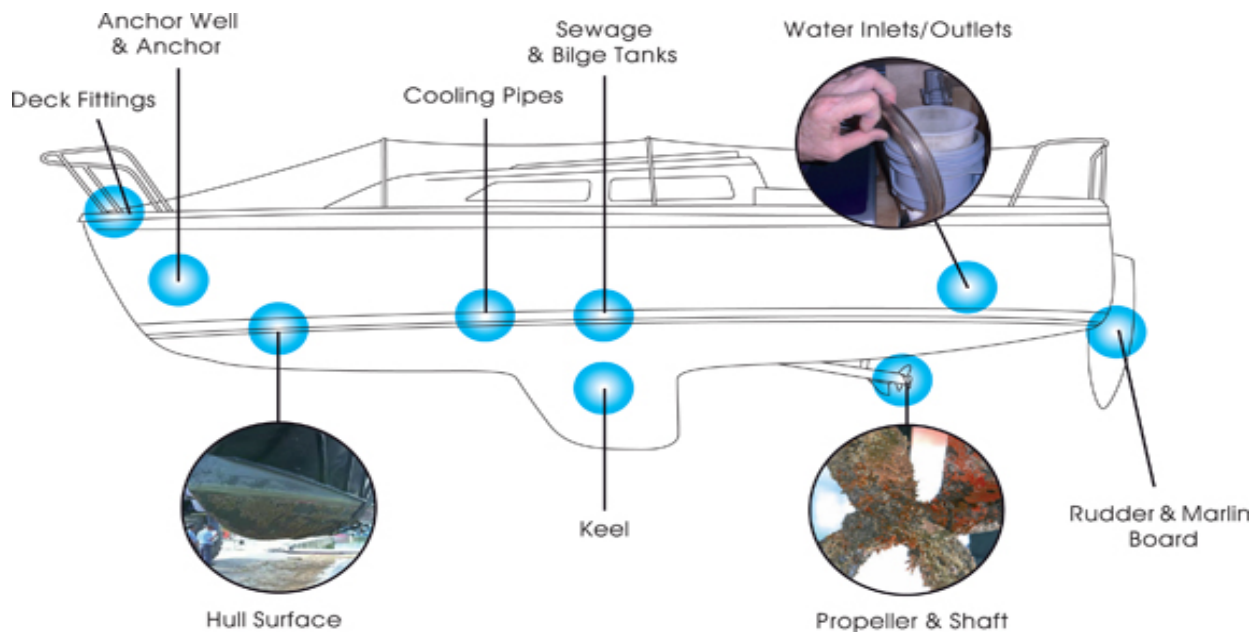
Check your vessel is clean by regularly inspecting the hull and dislodging all seaweed and other debris.

Levels of biofouling on your vessel should be kept to a minimum (slime layer only), particularly on unpainted areas. This will reduce fuel costs and increase performance. Also pump out all seawater before travel, or in deep water far away from land.

Environmentally-friendly methods should be used to keep the hull clean – keep it out of the water, tarp it when not in use, or clean it at a slipway, dry dock or on land. Don't clean the hull in the water, on the beach or at the boat ramp where pests and contaminants can get back into the water, without first checking with the relevant authorities.

Antifouling paint should be renewed regularly in accordance with the manufacturer's directions and should be suitable for your vessel's intended activity.

Never travel into or out of WA without first taking these steps, and keeping records of them and your voyage history in case of queries. If you are travelling within the State, it is also recommended you take these steps.



Pay particular attention to the above niche areas on a recreational vessel where biofouling can accumulate.



Photo: Department of Sustainability and Environment

Taking these actions is particularly important for **recreational** (see picture left), **commercial** and **fishing vessels** coming from interstate where this pest species is found.

Vessel skippers carrying this species could be in breach of the *Fish Resources Management Act 1994* and regulations made under that Act and are urged to ensure their vessels are clean before they leave for Western Australia.