The Tasmanian Danish Seine Fishery

A visual example of a Danish seine targeting southern school whiting
A Tasmanian Danish seine operation

The Danish seine fishery

Danish seine vessels have been operating in Tasmania since the mid 1930’s and the method used today is largely unchanged from the original. Two species of fish are targeted, tiger flathead (*Neoplatycephalus richardsoni*) and southern school whiting (*Sillago flindersi*). All catch is landed whole.

Danish seine vessels in Tasmania typically operate close shore (although outside of the one nautical mile limit) on flat sandy bottom. Water depths fished are approximately between 10 to 90 metres. A Danish seine operation is described in the following photographs and the fishing vessel is targeting whiting in Frederick Henry Bay.

Danish seine fishing gear is very light and does not plough into the sea floor, but rather skips over the substrate, scaring and herding the fish into the net. Due to the light nature of the fishing gear, reefs are avoided by the operators.

In general catch sizes are small, so there is minimal damage to the catch. The fish can be iced down quickly and the landed product is of a high quality. There is generally very little bycatch associated with this type of fishing.

Visual example of a Danish seine targeting school whiting

1. Leave dhan pole and Buoy and steam away fast, paying out the warp from the port side
2. When port side warp is almost out, then the net goes in the water

3. The net is now in the water... and getting ready to attach to starboard side warp
4. Steaming away from net paying out starboard side warp...

5. The target (i.e., the dhan pole and buoy)!!
6. Picking up the dhan pole and buoy then both warps are resecured to the vessel.

7. Now we are steaming... the net is towed along the bottom for a short time and the vessel is steaming slowly to close the net. This type of gear is very light and does not plough into the bottom, but rather skips over the substrate, scaring and herding the fish into the net.
8. Drawing in the net. The warps are winched in simultaneously, resulting in the net being drawn to the vessel with the catch guided to the codend.

9. Note the briddles separating the footline from the headline (small light gear)
10. Close up of the ‘wing’ mesh

11. Hauling the net.
12. A small catch of whiting in the codend.

13. Catch is mainly whiting... approximately 200 kilograms. The whole operation takes about 1-1½ hours.
14. The whiting catch. Note that there is very little bycatch.

The catch is iced down quickly to ensure a quality product. As this operation day fishes, the bulk of the whiting catch is usually shipped to the Melbourne fish market within 12 hours. A small amount of whiting catch is sold in Tasmania. All flathead landed from this operation are sold directly to local markets.

Danish seine fishing gear – codend mesh size

A whiting codend must have a mesh size of not less than 42 millimetres calculated over a length of not more than 400 meshes. A whiting codend can only be used in two areas in State waters, one on the north west coast and one in Storm Bay (shaded blue in Figures 1 and 3).

When targeting other species, such as tiger flathead, the codend must have a minimum mesh size of 70 millimetres, although this particular operator uses a minimum mesh size of 90 millimetres to reduce the catch of undersize fish and target a more marketable size than the size limit.

Areas of the Danish seine fishery

A Danish seine is restricted for use in certain areas and must not be used within one nautical mile of any part of the coast of Tasmania except IIs des Phoques (also known as White Rock). Figures 1 to 3 illustrate the areas where the use of Danish seine fishing gear is permitted.

A whiting codend—as illustrated in the above fishing operation—is only permitted for use in certain Tasmanian waters. These areas are shaded in blue in Figures 1 and 3. There is only one operator endorsed to use a whiting codend in the Derwent River and Frederick Henry Bay (refer Figure 1 for area).
The Danish seine prohibited areas in these illustrations are shown as the areas shaded in red (including the one nautical mile limit). The unshaded area is the Tasmanian Coastal Waters boundary and Danish seine is permitted here.

**Figure 1:** The Tasmanian Danish seine fishery map for the south east. The area highlighted in blue is where a whiting codend is permitted to be used. The green area is where an operator that has an endorsement to use a whiting codend in part of the Derwent and Frederick Henry Bay. The area in Storm Bay, shaded in purple, is the only area a limited trawl licence is permitted to operate. The area shaded in red is the one nautical mile limit (and includes the D’Entrecasteaux Channel) and Danish seine fishing gear cannot be used in these areas.

**Figure 2:** The Tasmanian Danish seine fishery map for the east coast. The area shaded in red is the one nautical mile limit (and includes the Mercury Passage Great Oyster Bay) and Danish seine is prohibited in this area. The eastern side of Ilse des Phoques (White Rock) is the only area excepted from the one nautical mile limit.
Figure 3: The Tasmanian Danish seine fishery map for the north coast. An operator that holds a whiting codend endorsement is permitted to use a whiting codend in the area shaded in blue. The area shaded in red is the one nautical mile limit (and includes Anderson Bay) and the use of Danish seine is prohibited in this area.

There is one Danish seine licence holder that is endorsed to use a whiting codend in the Derwent River and Frederick Henry Bay (refer to Figure 1). This licence holder is permitted to fish in these areas on weekdays only.

All photos and some text were provided courtesy of OceanWatch Australia Ltd. Maps provided by the Wild Fisheries Management Branch, DPIFWE.