

What is already happening?

Asian club tunicate *Styela clava*

Poleward movement of this species has accelerated in the last decade in response to warming sea temperatures.

Regions:

Irish Waters and CP 2 regions 5 and 6

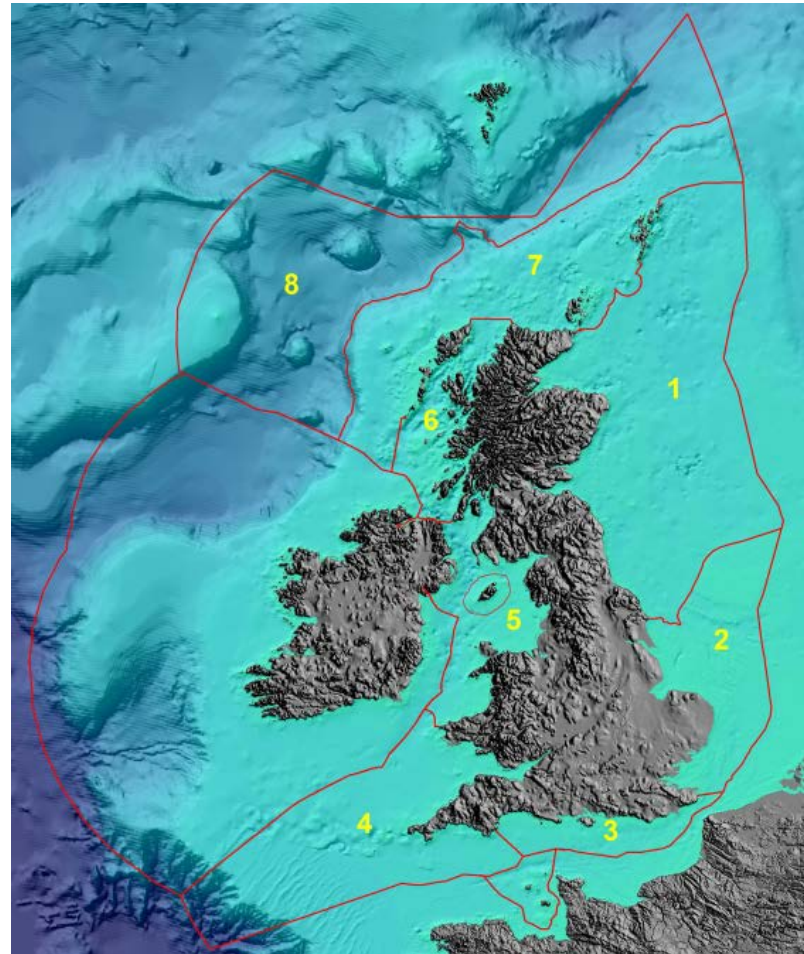


Chilean oyster *Ostrea chilensis*

Increased abundance and distribution in response to warming sea temperatures and high plankton productivity coinciding with breeding season

Regions:

CP 2 region 5



CP2 regions

1. Northern North Sea
2. Southern North Sea
3. Eastern English Channel
4. Western English Channel, Celtic Sea and South-West Approaches
5. Irish Sea and North Channel
6. Minches and Western Scotland
7. Scottish Continental Shelf
8. Atlantic North-West Approaches, Rockall Trough and Faroe-Shetland Channel

What could happen?

Pacific oyster *Crassostrea gigas*

Populations will continue to expand polewards and to increase in abundance in response to warming sea temperatures.

Regions:

Irish Waters and CP 2 regions 2,3, 4,5 and 6



Red Alga *Gracilaria vermiculophylla*

Increased abundance and dispersal of this species in response to predicted increases in intense rainfall .

Regions:

Irish Waters and CP 2 regions 5 and 6





The Asian club sea squirt (*Styela clava*) (Source: C. Beveridge, SAMS)



The red alga (*Gracilaria vermiculophylla*) at Dundrum Bay, Co. Down, covering a large area of the intertidal zone in July 2012 (Source: Charmaine Beer, NIEA).



The Pacific oyster (*Crassostrea gigas*) on marina pilings, Plymouth
(Source: D. Minchin, MOI)



The Chilean oyster (*Ostrea chilensis*) (Source:
Rotterdam Natural History Museum)

Ostrea chilensis
Chile, Los Lagos, Llanquihue, Puerto Montt
NMR 16583. Actual size 70 mm