

# Concept 2: Habitat forming species

Some species don't just survive in their environment—they shape it. These are called habitat-forming species.

*Fucus vesiculosus* (bladderwrack) is one of them, found along rocky shores of the Baltic Sea, this brown seaweed creates underwater forests that shelter fish, invertebrates, and algae.

During marine heatwaves, *Fucus* itself can suffer from heat stress, especially in shallow waters. But when healthy, it can buffer temperature extremes by shading the seafloor and slowing water movement. This creates cooler microhabitats that may help other species survive the heat.

However, if heatwaves become too intense or frequent, even these ecosystem engineers may struggle—putting entire communities at risk.

Warmer waters often lead to blooms of green algae like *Ulva* and *Cladophora*, or brown algae like *Pylaiella* which can smother *Fucus*, blocking light and reducing its ability to photosynthesize and grow.

