

#### **Marine Conservation Zones**

Young Marine Champion Training module



#### What are MCZ's?

- A Marine Conservation Zone (MCZ) is a type of Marine Protected Area (MPA) in England, Wales and Northern Ireland. Scotland refers to them as MPA's.
- These areas protect the seabed and marine organisms living there by preventing or limiting environmentally damaging activities e.g. certain methods of commercial fishing such as dredging and demersal (bottom) trawling, as well as certain recreational activities.
- They are usually put in place around known threatened or vulnerable marine habitats or species.

### Why are MCZ's needed?

- Our sea's health, it's ecosystems and species are in decline due to a number of growing threats i.e Climate change, damaging fishing practices and pollution.
- Some species and habitats are more vulnerable than others to these increasing pressures. These protection zones try to reduce these pressures and keep them safe from further harm and can even aid in their recovery.

# The Purpose and Importance of MCZ's

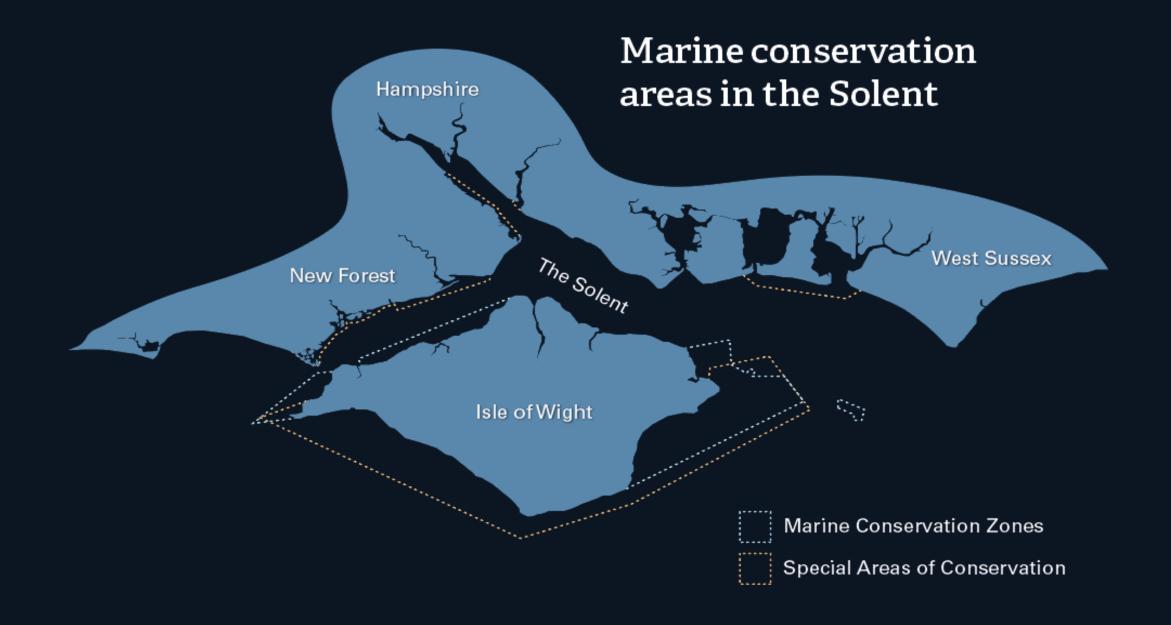
- MCZ'S are the marine equivalent of national parks and reserves on land
- They safeguard and protect species, habitats and biodiversity as a whole from detrimental and damaging activities.
- They support <u>Blue Carbon habitats</u>. (Blue carbon storage the absorption and storage of carbon by specialized habitats. This means they naturally reduce carbon in our atmosphere and are essential for our fight against climate change.) click on the link for more in depth understanding.

## What do they protect?

- MCZ's and Marine Protected Areas are meant to protect a variety of Species and habitats such as;
- Cromer Shoal Chalk Beds the longest chalk reef in Europe and potentially the World and where a unique purple sponge the 'Parpal Dumplin' was discovered in 2011!
- Dogger Bank the largest Sandbank in UK marine environment, and vital to the North Sea ecosystem; used to support an array of megafauna including <u>Turbot</u>, <u>Halibut</u>, <u>Flapper</u> <u>Skate</u> and <u>Blue Skate</u> some of which are listed on the <u>IUCN Red List</u>.

### Where are these MCZ's?

- There are currently 91 established MCZ's in the UK. They cover 38% of the UK's inshore and offshore waters (JNCC statistics).
- We have 3 MCZ's within the Solent's waters Bembridge ledges, Yarmouth to cowes, and the Needles.



#### Bembridge MCZ

Bembridge MCZ; offers an array of habitats for a diverse number of species including stalked jellyfish, seahorses and many commercially valuable species.



#### Bembridge MCZ

Habitats – Seagrass; found in shallow coastal waters and often referred to as ecosystem engineers forming unique habitats and biodiversity hotspots!!! Seagrasses slow down water flow stabilising and oxygenating sediment providing and ideal haven for various juvenile fish, crabs, sea snails as well as shelter for less mobile swimmer pipefish and seahorses. While also being a vital food source for primary consumers seagrass also filters pollutants and offer protection from coastal erosion. Maerl Beds; this pink stony algae provides the foundation for a diverse living reef, maerl is a living gravel like algae and support a diverse number of burrowing species especially bivalves and invertebrates, typically found in open coastal areas and tide swept channels.



### Yarmouth – Cowes MCZ

- This MCZ hosts a diverse array of habitats supporting a variety of species! supporting various different species!
- Habitats at Bouldnor there is a 9 metre underwater peat cliff dating back 8,000 years from before the Solent flooded and is therefore of great archaeological significance, and a great potential source of blue carbon possibly equal to its terrestrial counterpart.



### Yarmouth – Cowes MCZ

- Newtown Creek supports one of the few estuarine rocky habitats in our region this unique habitat hosts species especially adapted to constantly changing salinity levels.
- Along the coast at Thorness, seaweed covered limestone intermingled with soft clay ledges provides a haven for more fragile inhabitants such as porcelain crabs, as well as a number of sea squirts sponges and burrowing species.





#### The Needles MCZ

- This MCZ covers Alum, Totland and Colwell bay which often favourites for holiday makers and locals alike.
- Habitats Around Alum bay and the Needles Chalk reefs with deep gullies and rich in seaweeds is the primary habitat, the main concern here is these reefs once they're gone will never recover as they can thousands if not millions of years to form!



### The Needles MCZ

- Further along at Totland and Colwell we find a sandy shore with seagrass meadows where like Bembridge there is the possibility of finding stalked jellyfish as well the rare peacock's tail seaweed.
- This particular MCZ also support numerous species of foraging seabirds, including familiar cormorants and black- headed gulls.



# Other Potential Sites around Hampshire and the Isle of Wight

• Two other sites were put forward for protection but were sadly unsuccessful in receiving protective status.

 Fareham Creek – which boasts saltmarshes and muddy gravel which supports a variety of fish and mollusc species including the dwindling native oyster.

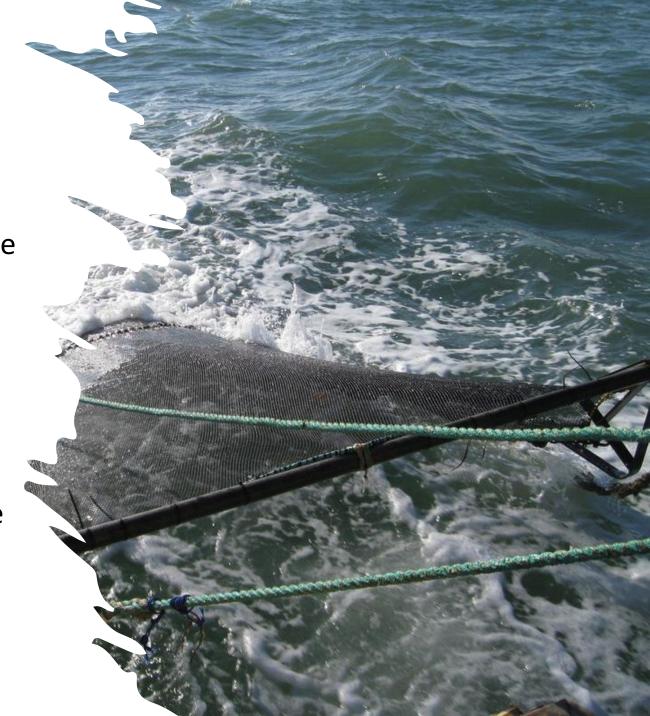
 Norris to Ryde – hosts one of the largest seagrass meadows in the South – east providing a valuable nursery for many different species, and the sub-tidal muddy areas are a viable hotspot for the Mantis Shrimp.





# What's holding these protections back from making a big impact?

- Unfortunately at the present, many MCZ's are protected only on paper.
- With a devastating 98% of offshore seabed protected areas still experiencing bottom trawling – (analysis of fishing vessel tracking data from <u>Global Fishing Watch</u> (GFW), by <u>Oceana</u>, a conservation NGO)
- Carbon previously stored in the seabed (Blue Carbon), is released as a result of bottom trawling!
- Lack proper patrol and management of MCZ's.



# What needs to improved?

The Government needs to introduce proper monitoring, enforcement, regulation and controls for MCZ's to be meaningful.

Ban bottom trawling in MCZ'S, allowing habitats and species to recover, as well as maintain Carbon Storage!

There is now evidence that action is now being taken though will the government keep it up? Is Brexit a help in this regard?

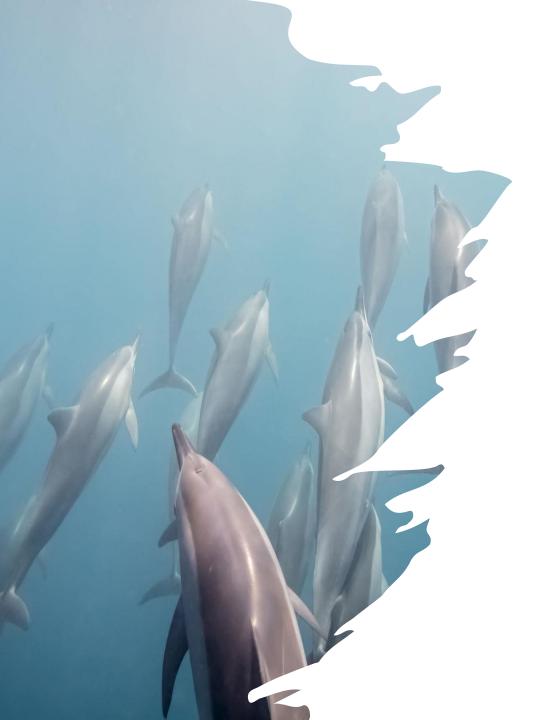
## What is improving?

The Government thus far have accepted that current/original plans for MCZ's were insufficient and merely lines on a map rather than the protection that was envisioned.

A review in June 2020 suggested the future implementation of Highly Protected Marine Areas, in which highly destructive or extractive activities would be banned.

Incredible public support for the ban of dredging and trawling!

In February this year the Marine Management Organisation announced demersal trawling would be banned at Dogger Bank and South Dorset MCZ's.



#### How can we all help?

- Protecting the marine environment can be a daunting task but there are many way you can help;
- Take part in Citizen Science projects this data can potentially be used as evidence to improve and even introduce protections if a particular species/ marine flora is identified such as seagrass.
- Report sighting of whales, dolphins and porpoises to <u>Sea Watch Foundation</u> » <u>Submit a sighting</u> <u>online</u> or report sightings of basking sharks, turtles and jellyfish to the <u>Wildlife sightings | What you</u> <u>can do | Marine Conservation Society (mcsuk.org)</u> which can be used similarly to shoresearch data.

• Encourage others to do the same ©

#### **Success Stories**

- The most well known success story of an MPA in the UK is Lundy Island England's First Marine Conservation Zone; studies have shown that lobster within the MCZ have grown substantially larger than those outside of the area, and therefore of greater economic value.
- Also as the population grows there has been evidence of 'spill over' with the larger individuals moving outside of the MCZ into non-protected seas to the benefit of local fisheries.
- Admittedly this is only one example, but it does illustrate the value of MCZ's if given a proper chance.

## References & Further Reading

- <u>IUCN Red List of Threatened Species</u>
- Bottom trawling ban for key UK fishing sites -BBC News
- Marine Conservation Zones
  Britishseafishing.co.uk
- <u>UK protected seas | Ocean emergency |</u>
  <u>Marine Conservation Society (mcsuk.org)</u>
- Why Marine Protected Areas are important | Ocean emergency | Marine Conservation Society (mcsuk.org)
- Cromer Shoal Chalk Beds | Ocean emergency
  Marine Conservation Society (mcsuk.org)
- MarLIN The Marine Life Information Network - Maerl beds

# References From the Wildlife Trusts

- Solent Seagrass Project | Hampshire and Isle of Wight Wildlife Trust (hiwwt.org.uk)
- Sea grass solutions | The Wildlife Trusts
- Marine Conservation Zones | Hampshire and Isle of Wight Wildlife Trust (hiwwt.org.uk)
- Marine Protected Areas | The Wildlife Trusts
- Outstanding ocean sediments | The Wildlife
  Trusts