Name of species:

Habitat:

Adaptations (How does it manage to survive on the coast):

Coastal Adaptations

Plants and animals that live on the coast need to be able to survive in difficult conditions.

Some of them are:

Living in salty water

Being covered / uncovered by the tide (drying out)

Being able to hide /escape from predators

Finding food

Staying in a safe place as the tide and water move.

Your Name:

Turnstones

- Feeds on insects, molluscs and crustaceans hiding under stones and seaweed.
- Can be seen in groups foraging on rocky and sandy shores of the New Forest.

Turnstones

Red seaweed

- Seaweeds do not have roots like terrestrial plants, but have ‘holdfasts’ instead to attach themselves to rocks.
- Red seaweeds contain a pigment that allow them to absorb light in low light conditions and can therefore be found lower down the shore.


Red seaweed

Little egret

- Originally from the Mediterranean region, can now be found breeding on the south coast of the UK.
- Uses it's spear-like beak to feed on fish.


Little egret

Snakelocks anemone

- Plant-like but actually an animal attached to rocks.
- Has a symbiotic relationship with an algae which requires light to photosynthesis, and so usually found in shallow waters.
- Prefers warmer, sunlit waters.


Snakelocks anemone

Purple topshell

- Typically a southern warm water species.
- Ranges across the shore from the upper to lower.
- Lives inside a single, spiral shell made from calcium carbonate, which helps protects it from predation.

Purple topshell

Shore crab

- Lives in the sea and on the shore, and can survive in temperatures from 0 - 30°C.
- Carnivorous - likes to eat anything alive or dead including sea shells and fish.
- Has an exoskeleton and so has to moult in order to grow - during moulting it has a soft body.


Shore crab

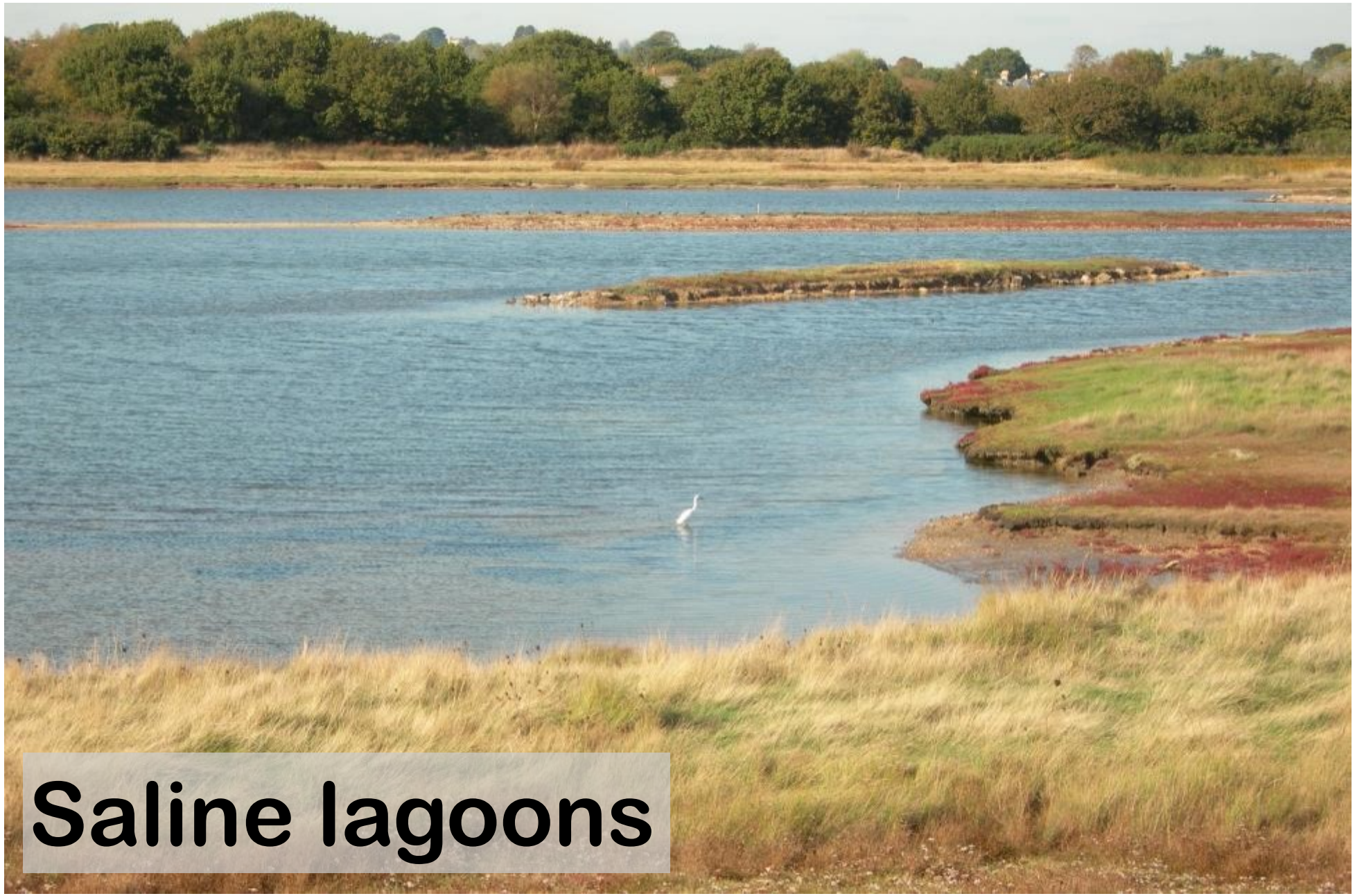
Yellow-horned poppy

- A rare species found only on sheltered, shingle beaches.
- Has tough, waxy leaves to avoid drying out.
- Every year the above ground parts of the plant die back and the underground parts are left to survive every winter - all that remains visible is a small rosette.
- Can tolerate salt spray, but not lots of covering from salt water.

Yellow-horned poppy

Saline lagoons

- Exist in shallow ditches behind the Lymington-Keyhaven sea wall.
- Salinity in the lagoons vary between fresh water and sea water, and forms a specialised habitat.
- The lagoons support its own distinctive plants and animals, some of which are only found in this environment.


Saline lagoons

Redshank

- Feeds on insects, molluscs and crustaceans.
- Breed on heathland in the New Forest.
- Young have soft beaks and feed on the edge of pools on the heath.


Redshank

Offshore saltmarsh

- Made up of plants and grasses growing on mudflats.
- The specialised plants survive on the coastal fringe and can tolerate salt spray, and some covering from salt water.
- Exposed mudflat are vulnerable to erosion from waves.
- The marshes of Lymington-Keyhaven Nature Reserve are backed by a seawall.


Offshore saltmarsh

Solitary mining bee

- Live in burrows on soft cliffs.
- They need warm, sunny exposures and get shaded out when cliffs get over grown by scrub.
- More erosion will create more habitats for the bees.


Solitary mining bee

Glasswort

- Common plant found only on the fringe of saltmarshes.
- Would be threatened by storms and erosion of the marsh.
- Can tolerate salt spray, and some covering from salt water.


Glasswort

Barnacles

- Attach themselves permanently to a hard surface in shallow and tidal waters.
- Feed by drawing in plankton and small particles in the water using their hairy legs.
- Lives inside calcium carbonate plates of shell, which they can close to stop water loss and protect against predation.

Barnacles

Tortoiseshell limpet

- Found around the UK coast, but not south beyond the Humber (east coast) or Liverpool (west).
- Found on the lower shore attached to hard surfaces, and forage on algae when covered by the tide.

Tortoiseshell limpet

Photo: Nova Mieszkowska/MarClim. http://www.marlin.ac.uk/shore_thing/creature/April2007.htm

Atlantic cod

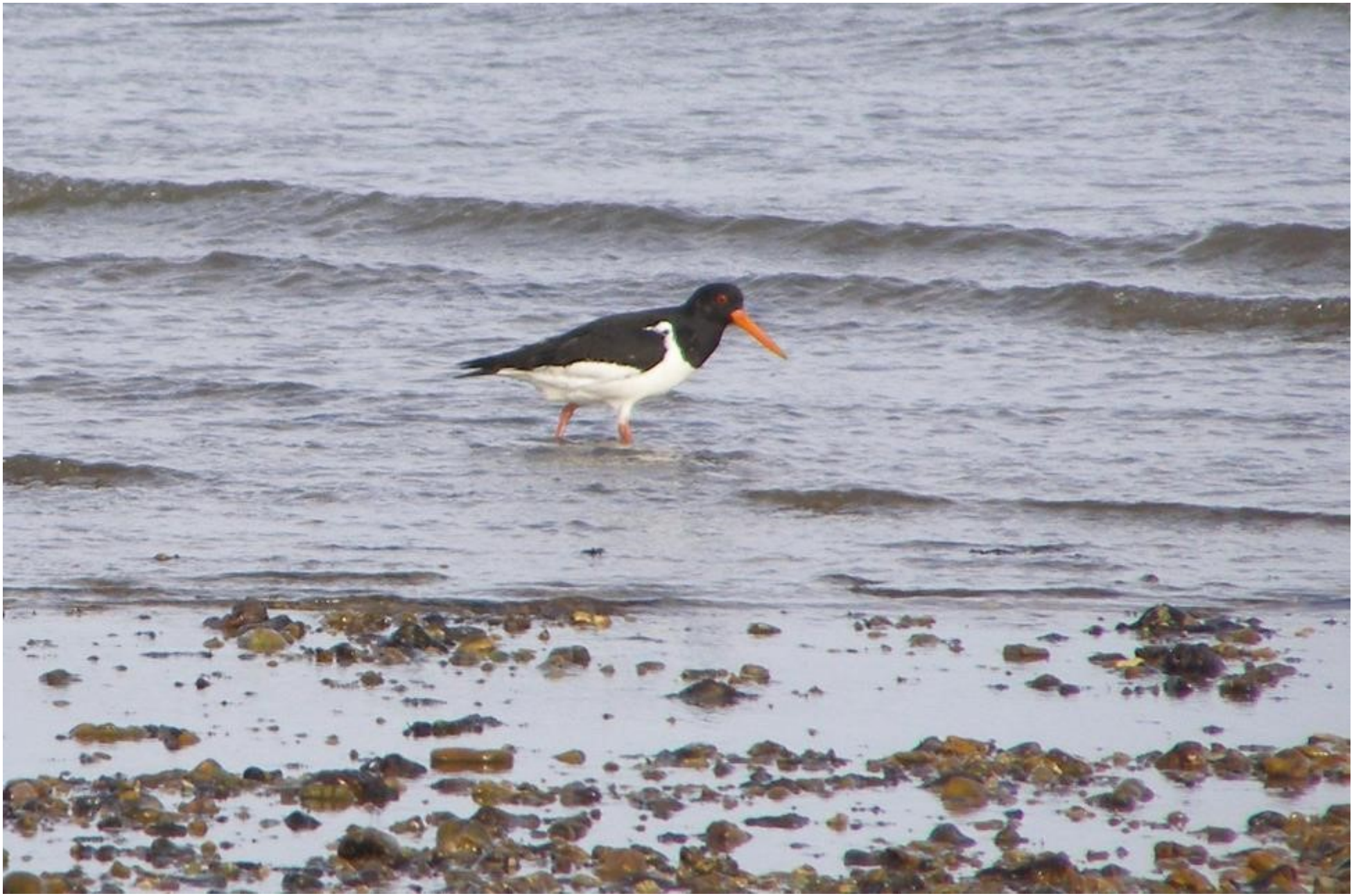
- Breeds in very cold water during late winter / early spring, when the sea temperature is at its lowest.
- Fish may find it harder to breathe if oxygen becomes difficult to extract in acidic waters.
- Fully marine species living in the sea.

Atlantic cod

Photo: Wikimedia public domain. http://commons.wikimedia.org/wiki/File:Atlantic_cod.jpg

Oystercatcher

- Uses its long, strong beak to feed on cockles and mussels on the shore.
- Nests in scrapes on the ground often close to the sea edge, such as on the offshore marshes or shingle banks.



Green seaweed

- Large surface area of the fronds for maximum sunlight - photosynthesise effectively.
- Tough fronds - help prevent water loss through transpiration – important at low tide.


Green seaweed

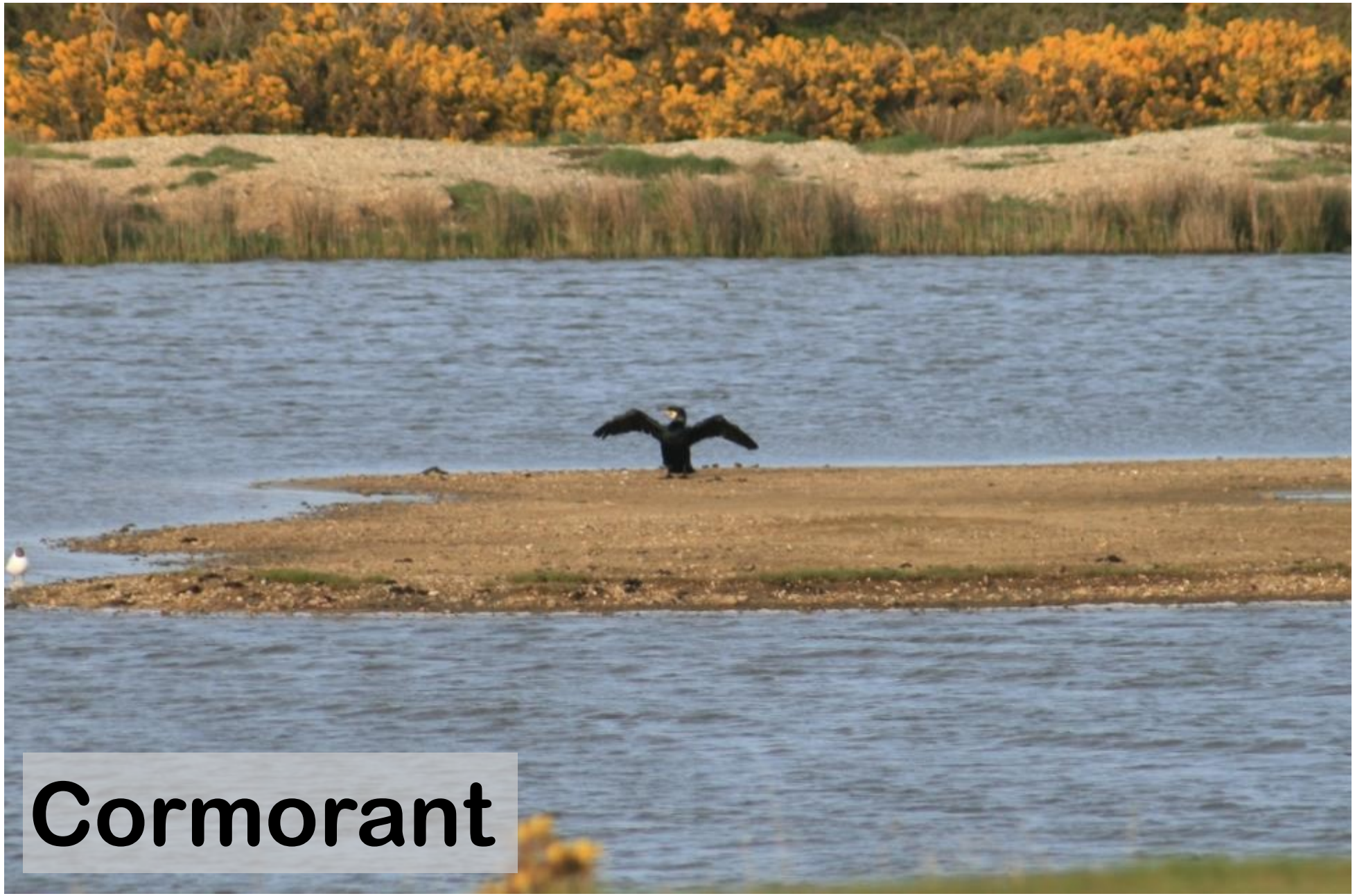
Brown seaweed

- Bladders help the frinds spread out and float for maximum sunlight
- Mucilaginous (slime) coating to reduces drying out at low tide


Brown seaweed

Cormorant

- Able to swim underwater for long distances at great speed (use webbed feet and wings for propulsion and tail as a rudder).
- Feathers less able to trap air making the bird less buoyant – so it can dive for food.
- Cormorants have to dry their wings by holding them out when standing.


Cormorant