



Activities to understand the life cycles and impacts of our activities on seals, cetaceans, basking sharks and seabirds.



Learning experience



Topic

Fauna



30 min

(especially water sports environments)



Participants

- understand the life cycles and impacts of our activities on seals, dolphins, basking sharks and seabirds
- understand the distances required to minimise disturbance
- are better informed about the fragility of marine ecosystems



Suitable for outdoor sport instructors and course participants



Practical sessions
Theoretical lessons



Outdoor F2F



Materials needed

No



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Preparation

Have the group gathered on the beach or an area of green space with at least 100m of free movement

Activity instruction

1. Seals

Highlight that there are 4 main species of seals in most European waters - the harbour seal (smaller dog like head), grey seal (larger flat head), Mediterranean monk seal (very rare) and the Baltic ringed seal (rare). There are also 6 species that are restricted to arctic waters.

Explain that seals

- need to haul out on to rocks and rest (not fully understood why but may be linked to digestion)
- react to being disturbed with heads raised and bobbing actions.
- are very short sighted in air (their focal length is for underwater) and get easily spooked by movement.
- can be easily injured and lacerated when disturbed from haul outs through their urgency to get back to the water.

Ask the participants to pace out the minimum distance under which disturbance of seals is likely. When everybody is placed at the distance they would assume as being adequate (nearly always they will stop at 50m) walk out the distance yourself (100m).

Also explain that different seals breed at different times of the year and have different habits:

1. Grey seals give birth in the autumn to pure white pups and these are left on the shore for long periods of time.
2. Harbour seals give birth in May / June and the pups are grey in colour and spend nearly all of their time in the water with the mother.
3. Mediterranean Monk seals give birth throughout the year (most in the autumn) and then to do so in caves and are very prone to disturbance.
4. Ringed seals in the Baltic breed on ice and this is threatened by climate change

Seals are quite intelligent and curious and will come quite close and even interact with kayakers and/or divers. An important principle is to let them come to you – do not approach them.



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Reflection and discussion

Ask the group if they have ever encountered a seal. How did they behave?

Learn to recognise signs of disturbance - seals upright and scanning you by moving heads from side to side, cascading rapidly into the water

How will what they have learned / discussed change any behaviours in the future?

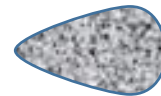
Activity instruction

2. Sea birds

Highlight that there are over 180 species of sea birds (including ducks) in marine environments in Europe. All of them face significant challenges with depleting fish stocks and food sources, toxins and micro plastics in the food chain and habitat changes. Many seabird species are now in sharp decline and their status is threatened

Many of the sea birds nest in extensive colonies on cliffs and sea stacks (rock pillars) with very narrow ledges. Nests are often just a loose collection of sea weed and twigs.

Using damp sand ask the group to make a "seabird" egg. Then make one yourself to show them that the eggs are very elliptical in shape and demonstrate how if knocked they roll in a circle and are less likely to come off the ledge.



Then highlight that young birds that still have "down" get very nervous about activity (sea kayakers or climbers) and can come off the ledge. The down is not waterproof and they can drown if they end up in the sea.

Reflection and discussion

Ask members to describe experiences they have had with large seabird colonies (sights, sounds and smells).

Discuss how we can ensure we minimise our impacts especially during nesting and breeding season by ensuring that we avoid certain areas, that we keep further offshore, that we learn to "read" signs of wildlife disturbance (such as flapping birds across the surface to distract us from young / nests).



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How will what they have learned / discussed change any behaviours in the future in terms of both direct impacts but also their indirect effects such as reducing risks of microplastics etc.

Activity instruction

3. Cetaceans and basking sharks

There are 36 species of whales, dolphins, and porpoises — collectively known as cetaceans in Europe's seas.

Most non-motorised and small-scale craft have minimal impact on such animals as they can move with ease away from human powered craft. Sailing boats, especially cruisers can have a greater impact.

Cetaceans are highly intelligent, very social and often quite curious and will come quite close and even interact with kayakers, divers, surfers and sailing craft. An important principle is to let them come to you – do not approach them.

On the sand draw a dolphin and ask participants to create a "small boat" from a piece of driftwood or marine litter (take this away when done). Then ask them to put the boat in a suitable position to approach the cetacean.

The ideal position is about 45° behind the animal(s). They will know of your presence. Then draw rings around the dolphin and mark them at 100, 200 and 300m. Again ask participants what these should mean for them. At 300m your speed should be below 6 knots and you should not approach closer than 100m.

Signs of disturbance include tail slapping or sudden changes in direction by the group.

Ensure that you do not "hem" them into a bay.

Never get between a mother or adult and calves.

Do not linger with them for more than 15 minutes.

Two large boats (Sailing yachts) are a max – move on if other boats appear. Similarly one group of kayakers / paddle boarders is enough, move on if another group arrives



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Reflection and discussion

Ask members to describe experiences they have had with cetaceans including how it made them feel.

How will what they have learned / discussed change any behaviours in the future in terms of direct impacts by not harassing cetaceans but also indirect impacts in terms of changing what we eat to only eat sustainable fish and not the food of cetaceans and also to reduce plastics and especially micro plastics in the ocean.

The same activity can also be applied to basking sharks. However, there is a greater risk to small craft from basking sharks as they are not as intelligent as cetaceans and may inadvertently bump into your craft especially when feeding as they can be in a feeding stupor! They also are known to breach and may not be discerning about their landing!!

Activity instruction

4. Shore Life

Shore life includes the shelled animals and also smaller species that inhabit rock pools and under seaweed.

There are 4 main groups of animals on the shore that are categorised in accordance to how they feed:

- Carnivores
- Herbivores
- Scavengers
- Filter feeders

Many of the animals resemble something from science fiction in the way they feed. For example, a starfish "vomits" up its stomach and puts it inside another animal's shell – thereby digesting it. Barnacles lie on their backs and kick microscopic food into their mouths using their legs (which are called cilia).

Dog whelks use their tongue (called a radula) to drill into another shell. They spit enzymes in which dissolves the animal inside and then suck it out!!



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In order to make this activity more interactive, a series of cards could be provided with a picture of the animal on one side and on the back how they feed. Each group member would have to act one of these out and the others have to guess which animal it is.



Potential Variations

Can be adopted for another sport and environment.



Background knowledge

There is excellent information available on the websites below:

<https://www.wisescheme.org/>

<https://water.europa.eu/marine/state-of-europe-seas>

<https://www.mcsuk.org/ocean-emergency/sustainable-seafood/the-good-fish-guide/>



Key words

#fauna
#marine sports
#water sports



Source

Wise scheme
<https://www.wisescheme.org/>



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