

Underwater forests we need to protect

Real underwater forests, the meadows of *Posidonia* (*Posidonia oceanica*), provide habitat, breeding and nursery grounds for many species. Moreover, they are important food source. Their exceptional importance is in maintaining coastal equilibrium by stabilizing the sea bottom, reducing beach erosion and producing up to 14 liters of oxygen per square meter per day.

Posidonia is a flowering plant, not an alga (algae do not have flowers and fruit). It grows very slowly (1 cm / year) and is endemic to the Mediterranean Sea. It is very fragile and endangered. For these reasons, it is a **legally protected species**.

The role of *Posidonia* meadows in maintaining the balance of the marine environment is immeasurable. Therefore they are classified as a priority habitat within European ecological network Natura 2000.

Anchoring in *Posidonia* meadows is NOT SAFE!

Anchoring has a strong negative impact on the *Posidonia* meadows. It tears the *Posidonia* roots and stems at an average of 34 bundles of rhizomes per anchor (where each rhizome has about 5 leaves). The regeneration of the meadows is too slow to compensate for this damage.

In addition, mooring in *Posidonia* meadows is inefficient and unsafe! At the smallest traction, the anchor tears the shoots and at the same time slips on the *Posidonia* leaves thus causing the damage to the meadows. Therefore please choose sandy areas for mooring (The anchor size has to suit the size of the boat).

Practices we have to acquire

Improper anchoring, discharged bilge water, littering, noise, speed boats and various human activities is very harmful to the natural environment. It is necessary that each individual takes responsibility for their actions in order to prevent irreparable damage.

- When anchoring, use techniques and materials that reduce the negative impact.
- Equip the vessel with a system for retention of bilge water.
- Respect the fishing regulations.
- Dispose waste in ports and not in the sea.

“
Avoid anchoring
in seagrass
”

Respect the
Amazon of the
Mediterranean

Author: Katarina Ivanštin Kardum

This project
is funded by
European Union



Cross-Border
Programme
Croatia - Montenegro



This project
is co-funded by
Republic of Croatia
Office for Cooperation
with NGOs

This flyer has been produced with the assistance of the European Union and Government of the Republic of Croatia Office for Cooperation with NGOs. The content of this flyer is the sole responsibility of the Association Sunce and can in no way be taken to reflect the views of the European Union.

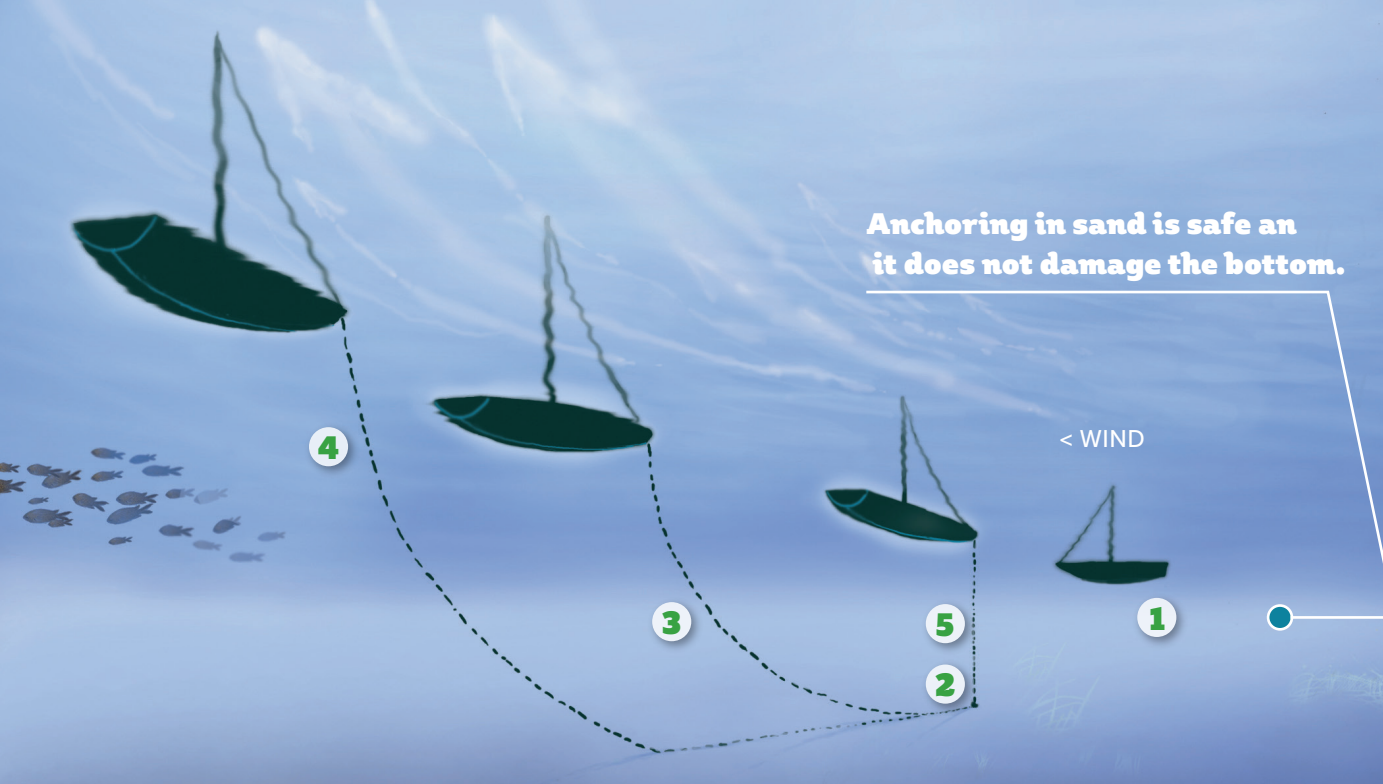
Flyer has been produced within the project „Cross Border Marine Nature 2000 Mapping, Monitoring and Management – 4M” (IPA Cross - Border Programme Croatia - Montenegro 2007 - 2013). The project is managed by The Delegation of the European Union in Montenegro and Agency for Regional Development of the Republic of Croatia, and it is conducted by Association Sunce in cooperation with Public institution for management of protected areas in Dubrovnik-Neretva County, Green Home and Environmental Protection Agency of Montenegro.

sunce

PRIOBA DUBROVAČKO-NERETVANSKA
DUBROVNIK-NERETVA COUNTY NATURE

GREEN HOME
act green





5 steps to a correct anchoring

- 1 Approach the anchoring place facing the wind and identify a clear bottom zone (sand bottom). Avoid anchoring in Posidonia meadows.
- 2 Throw the anchor when the boat is stopped. The anchor size has to suit the size of the boat.
- 3 Release the anchor chain (at a length 3 times the water depth) while the boat is slowly going backwards.
- 4 Wait until the bow turns into the direction of the wind and check if the mooring holds.
- 5 Upon leaving, move the boat to the position directly above the anchor and then pull up the anchor.

On rocky bottom there is a higher possibility of the anchor getting stuck.

On rocky and coralligenous bottom, chain and anchor destroy species that live there.

In Posidonia seagrass meadows (dark bottom), anchors do not hold but damage the plants.

Caulerpa

- invasive algae that threaten Mediterranean biodiversity

The *Caulerpa taxifolia* and *Caulerpa cylindracea* are invasive tropical algae. They represent a significant threat to marine ecosystems because of their fast growth and absence of animals which feed on them. An anchor thrown in an area invaded by *Caulerpa taxifolia* and *Caulerpa cylindracea* disperses dozens of cuttings which increase their spread. Avoid anchoring where these algae grow.

If you find fragments of *Caulerpa* on the chain or anchor dispose it in a trash can. Do not return it to the sea!

