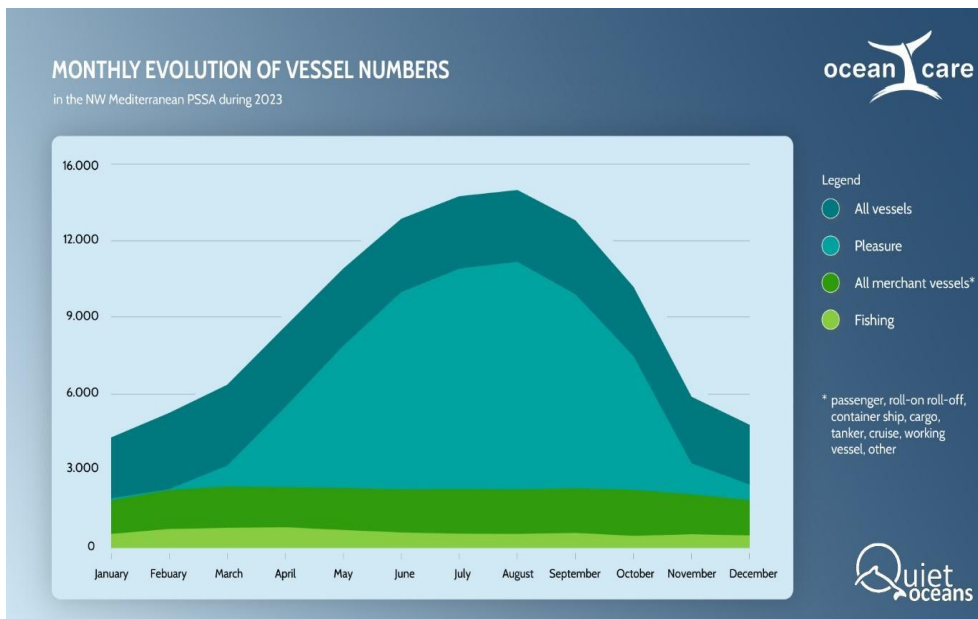
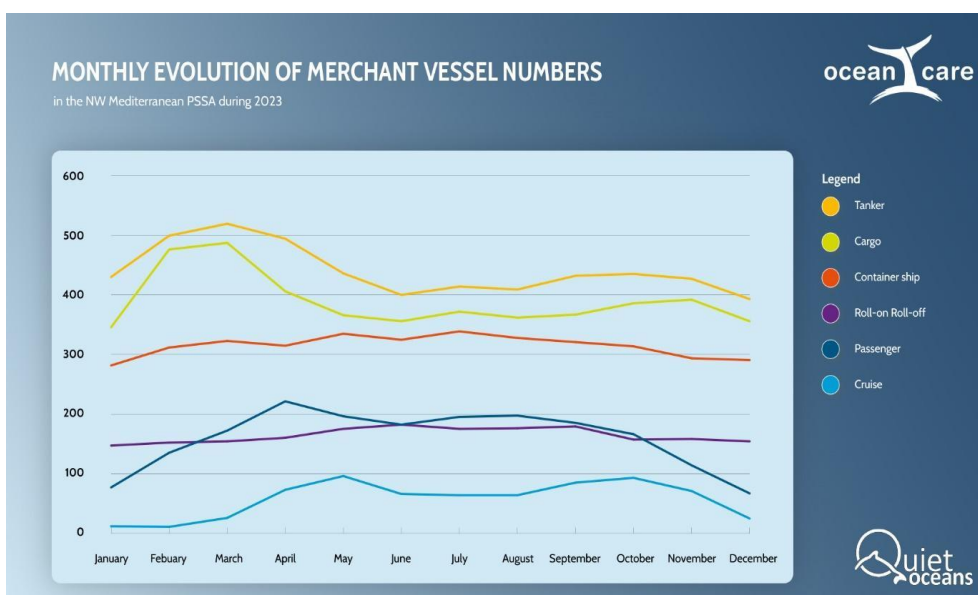


Infographs: Analysis of maritime traffic in the North-Western Mediterranean Sea for 2023

Infographs can be [downloaded here](#).

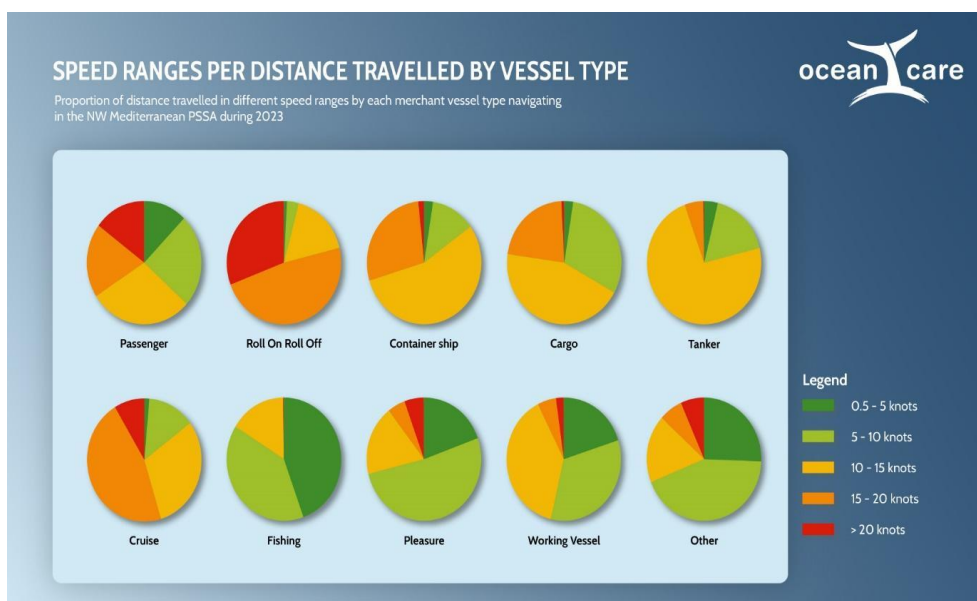


The number of merchant ships and fishing vessels remains relatively constant throughout the year. However, there is a significant increase in recreational vessels from May to October, which further aggravates the risk of collisions (and other impacts, such as emissions) with cetaceans during that period of the year.



Passenger vessels, including cruise ships, and roll-on-roll-off vessels (Ro-Ro ferries) are the ship types with the smallest number of vessels, compared to the main categories of freight vessels (cargo tanker and container ship). Despite this, Ro-Ro ferries travel a total annual distance that is several times greater than that of any of the other types of ships.

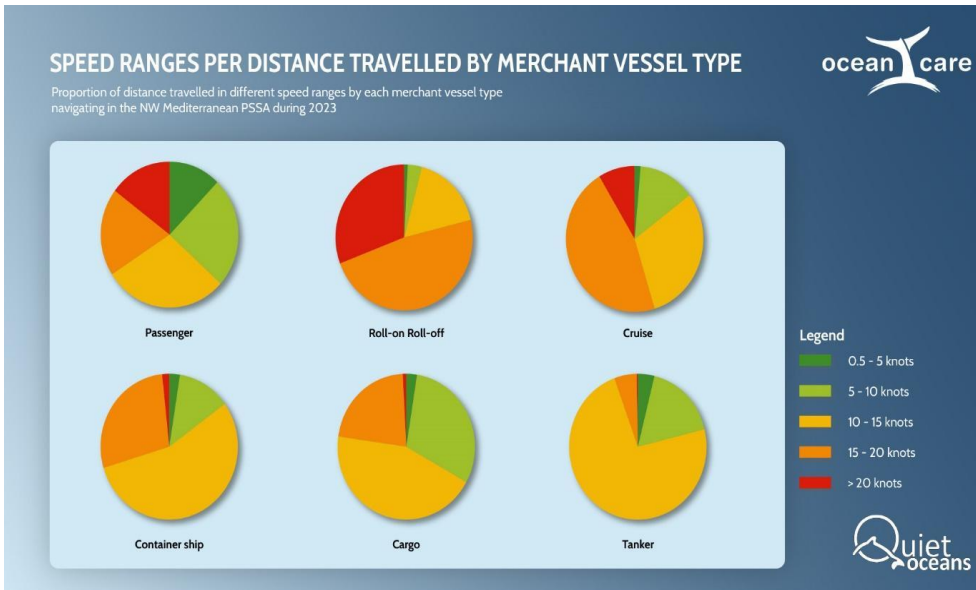
In the case of tankers and cargo ships, their quantity reaches its maximum in the winter months (especially February and March) while the number of passenger transport ships and cruise ships experiences a clear increase from the beginning of spring and experience a sharp decline at the end of the tourist season, starting in October.



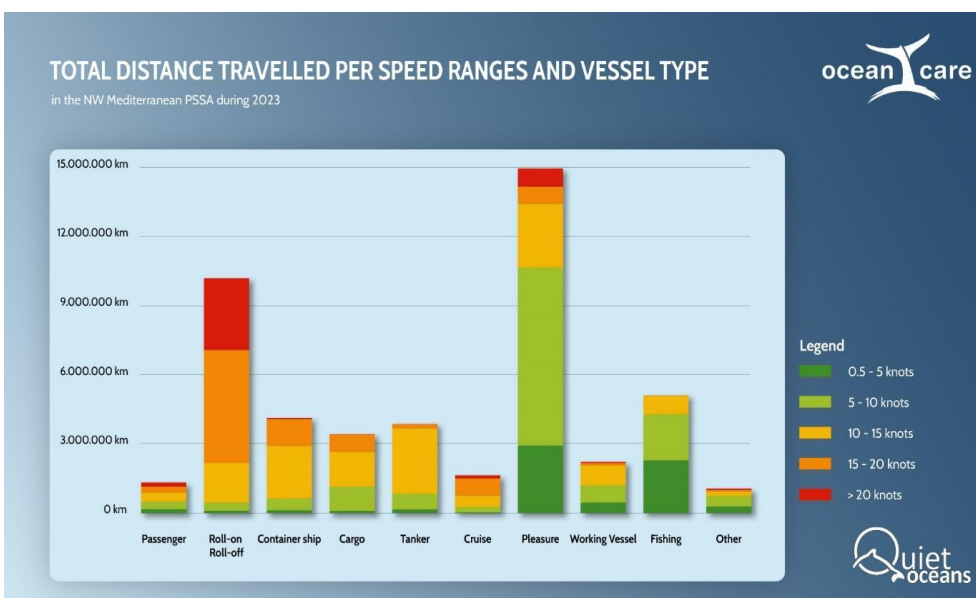
In the northwestern Mediterranean's Particularly Sensitive Sea Area (PSSA), the vessels that consistently maintain the highest speeds throughout their journeys are “passenger only transport” ships and “Roll-on roll-off” vessels. The latter category encompasses both roll-on roll-off passenger ferries and cargo ships specifically designed to carry wheeled cargo. Hence, all categories of passenger ferries and additionally cruise ships navigate at the highest speed in the region, covering a significant portion of the distance at speeds exceeding 20 knots. This is particularly evident in the case of Ro-Ro vessels, as illustrated in the graph.

The main types of cargo vessels (container ships, cargo ships and tankers) also travel most of their journey at more than 10 knots. However, the majority of their distance covered falls within the range of 10 to 15 knots, which is particularly emphasised in the case of tankers.

The graph further shows that the majority of the distance travelled by fishing vessels and pleasure craft is done at speeds below 10 knots. However, within the pleasure craft category, somewhat more than a quarter of the distance travelled is at speeds above 10 knots, with a significant portion sailing at speeds above 20 knots.



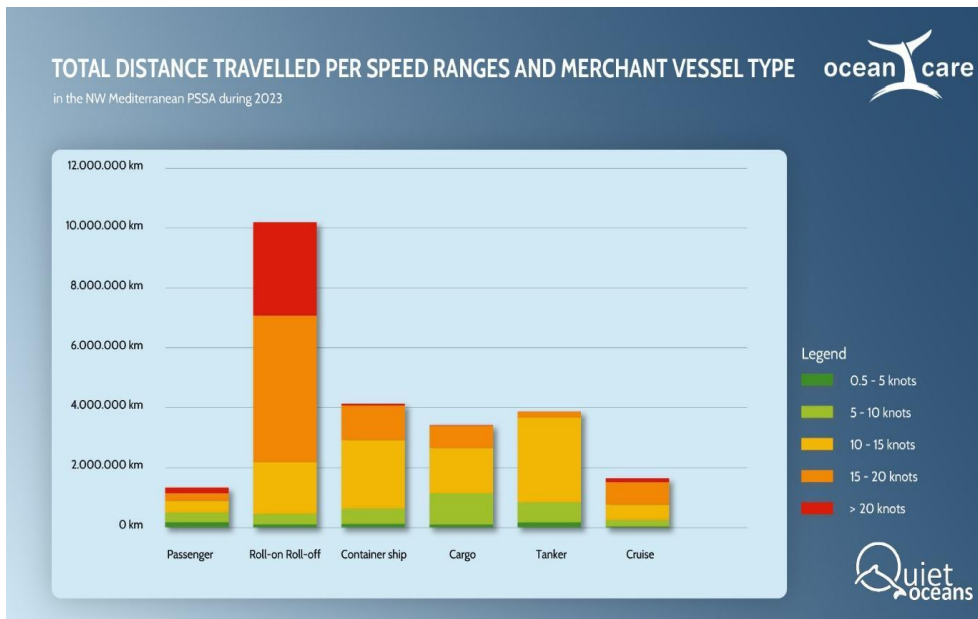
The graph illustrates the speed at which the six main types of merchant vessels travel. It shows that all of them cover the majority of their distances at speeds exceeding 10 knots, with roll-on/roll-off and cruise ships exceeding 15 knots. It is noteworthy that the best available scientific evidence indicates that the likelihood of a collision causing a fatal impact on a whale is extremely minimal if the speed of the vessel remains below 10 knots.



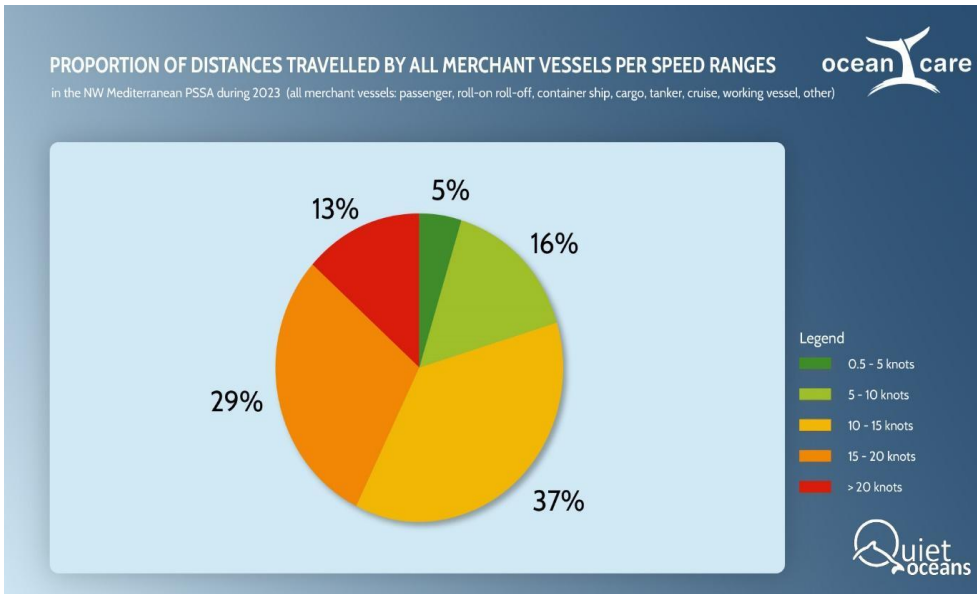
Pleasure boats travel a considerable distance in the area, since their activity as well as their number increases considerably in the months of milder weather. Although the majority of this distance is travelled at less than 10 knots, a significant number of kilometres are covered at higher speeds, sometimes well in excess of 20 knots.

On the other hand, although fishing boats cover a considerable distance in the area, they travel the majority of their journey at speeds below 10 knots.

It is concerning to observe that Ro-Ro vessels, the second longest-travelling type of ship in the PSSA of the western Mediterranean, spend the majority of their journey at speeds exceeding 10 knots. This means that they are far away from the safest speed range for whales (10-12 knots), as recommended by ACCOBAMS resolutions based on scientific knowledge.

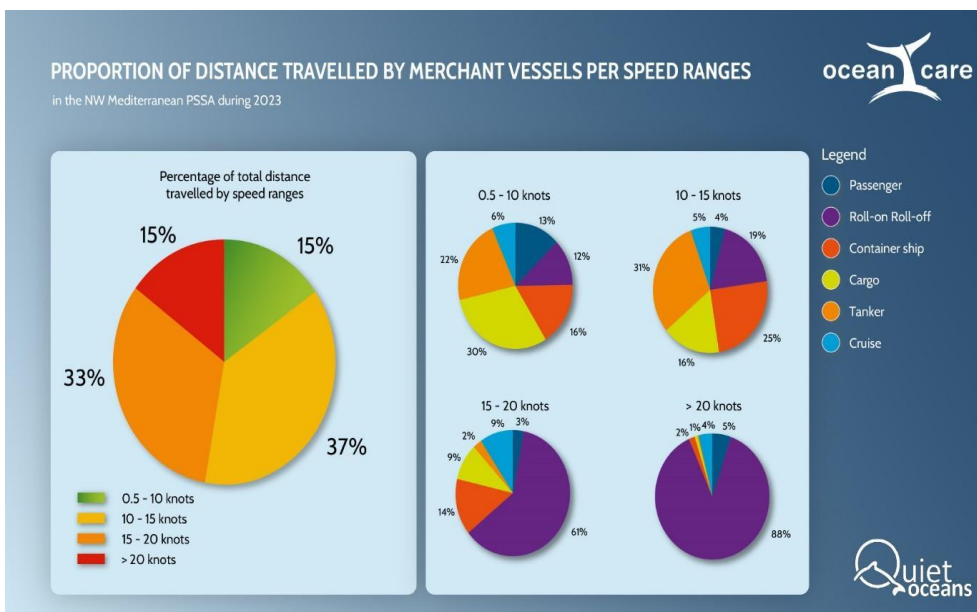


Container ships, cargo vessels, and tankers traverse most of their travelled distance at velocities ranging from 10 to 15 knots. For these particular vessel types, reducing their speeds to 10 knots, to minimise as much as possible the risk of collisions with lethal effects for the whales, would not imply a substantial modification of their activity. This would also make it possible to mitigate its adverse effects on marine biodiversity, also in terms of underwater noise and emissions of greenhouse gases and atmospheric pollutants. Roll-on roll-off vessels not only account for the total majority of distance covered in the area, but also travel most of the time at speeds exceeding 15 and even 20 knots.



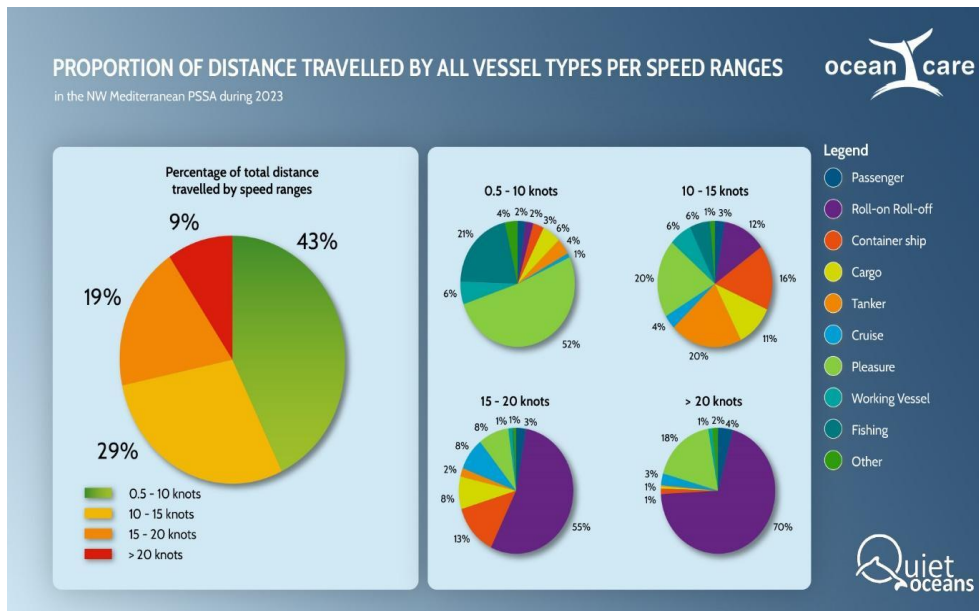
Merchant ships travelling at speeds exceeding 10 knots account for 79% of the total distance travelled by these ships in the NW Mediterranean PSSA during 2023. The majority of the distance covered (37%) occurs within the speed range of 10-15 knots, making it quite feasible to minimise its impact on marine life by just dropping a few knots.

Additionally, 42% of the distance is covered at speeds greater than 15 knots, with 13% of that time being at speeds greater than 20 knots. These speeds are significantly higher than the recommended safe speed range for whales, which is clearly not consistent with the conservation goal of maintaining endangered large whale populations.



Merely 15% of the distance travelled by the 6 main merchant vessel categories would be considered as “safe speeds” for marine biodiversity in terms of collision risks. As the speed range increases, roll-on roll-off vessels are revealed as the type of ship that presents a significant increase in the distance travelled

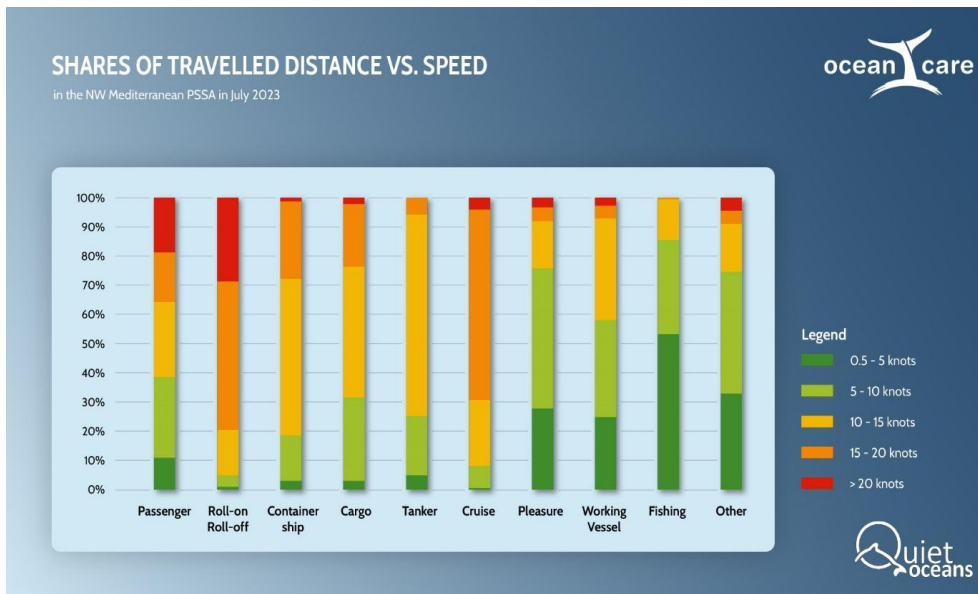
in the highest speed sections, being clearly the predominant one in the section speed of more than 20 knots.



When considering all types of boats together (represented at the left side of the graph), and despite the statistical effect that occurs when including pleasure boats and fishing vessels in the calculation which tend to travel at speeds below 10 knots for a significant portion of their journey, it is evident that 57% of the total distance navigated by all vessels in the PSSA in 2023 was travelled at speeds greater than 10 knots, which entails serious risks for fin whales and sperm whales.

The significant quantity of recreational boats is also evident in the substantial proportions of the overall distance travelled in each speed category, with Roll-on Roll-off vessels leading the way in terms of speed, followed by pleasure boats, accounting for the majority of the total distance travelled by all vessels in the area at the speed range above 20 knots.

The right part of the graph demonstrates the considerable share of pleasure boats that navigate in the PSSA all year round, as indicated by the substantial proportions of the total distance travelled by this type of vessel in each speed category. Roll-on Roll-off vessels, although much less numerous, cover the longest total distance among all types of boats in the speed range of 15 to 20 knots and over 20 knots.



Roll-on roll-off vessels have the smallest percentage of distance travelled at speeds below 10 knots, which are considered safe for marine biodiversity in terms of collisions. They are followed by cruise ships which travel most of their journey at speeds between 15-20 knots. The majority of fishing vessels travel at safe speeds for approximately 85% of their route, therefore a speed limit would have minimal influence on them.

For further information, please contact:

Carlos Bravo, Ocean Policy Expert at OceanCare, cbravovilla@oceancare.org