

Summary

Amongst marine mammals there are many predators, however only four species can be considered truly apex predators. Polar bears, killer whales, leopard seals and sperm whales all dominate their environments, moreover, killer whales and sperm whales hold their position at the top of trophic relationships globally. Apart from being generally abundant and being large in relation to their closely related species, these four predators share very little. They differ in social structure, foraging ecology, life histories and levels of intraspecific cooperation. Very few studies focus on what characteristics makes each one of them such a dominant predator. Considering how abundant these species and their prey are, there is not enough research exploring predatory and non-predatory interactions with other large mammalian predators of our oceans. Our understanding of trophic relationships, large predators' influence on species hierarchy and ecosystem balance is poor. Considering the influence human population has on the oceans and large marine predators, more future research should be focused on exploring the complex interspecific relationships.