

028 Strengthening the knowledge and protection of oceanic mesophotic ecosystems

RECALLING that marine biodiversity is a fundamental pillar of the health of ocean ecosystems and of the well-being of human societies;

RECOGNISING that the mesophotic zone (also known as the circalittoral zone), located between approximately 30 and 200 metres below the surface, and benefiting from moderate light levels, plays a strategic role in the conservation of marine biodiversity;

CONSIDERING that this zone is mainly located in waters under national jurisdiction;

EMPHASISING the biological richness, structural complexity and the high endemism rate of mesophotic ecosystems, as well as their critical role in the vertical connectivity of marine ecosystems (nutrient exchange, migration of species), ensuring the functionality of coastal and deep-sea habitats;

NOTING that these ecosystems are particularly vulnerable to anthropogenic pressures, such as fishing, extractive activities, pollution and ocean warming – as well as to natural hazards such as extreme weather events and diseases;

NOTING that scientific research increasingly highlights the ecological importance of the mesophotic zone as a potential refuge for coastal biodiversity in the face of the impacts of climate change, thus emphasising the need to preserve the ecological connectivity of ecosystems;

CONCERNED about the lack of knowledge about these ecosystems, largely due to the technical challenges involved in exploring them, although recent scientific advances offer new perspectives;

CONSIDERING that the mesophotic zone remains largely absent from marine conservation policies and strategies, both nationally and internationally; and

CONCERNED about the persistent obstacles hindering the establishment, expansion and strengthening of marine protection tools – particularly marine protected areas – that effectively include this zone in global conservation efforts;

The IUCN World Conservation Congress 2025, at its session in Abu Dhabi, United Arab Emirates:

1. CALLS ON the Director General to:

- a. promote the systematic integration of the mesophotic zone into marine conservation policies, by recognising its essential role in the resilience of ecosystems in the face of climate change;
- b. support the inclusion of mesophotic ecosystems in international negotiations and forums on ocean conservation; and devoted to marine conservation; and
- c. encourage IUCN Member States to implement robust protection measures, including the establishment of marine protected areas, to protect the ecological integrity of mesophotic ecosystems (biodiversity, structure, functions, abundance and distribution); and

2. CALLS ON IUCN State Members to:

- a. integrate the mesophotic zone explicitly into their marine conservation management policies, strategies and tools;
- b. strengthen scientific research on those ecosystems in order to fill knowledge gaps, particularly regarding their geographical distribution, ecological functioning and sensitivity to pressures;
- c. apply the precautionary principle in the assessment and regulation of activities likely to have an impact on the mesophotic zone; and

d. promote interdisciplinary cooperation between scientists, managers, public decision-makers and relevant stakeholders to develop effective and appropriate conservation strategies.