

## **New perspectives on marine biodiversity**

### **Abstract**

Marine and terrestrial ecosystems are so fundamentally different in some aspects that many of the issues concerning biodiversity cannot be interpreted using a single theory of common application to all ecosystems. Their limitation is evident when it comes to highly biodiverse and interconnected marine ecosystems such as coral reefs. Trophic links are a major factor, but space, breeding, shelter from predators, environmental cues, behavior ingrained in genotypes, genetic variability, mutations, and connectivity of marine critical habitats are also important. The importance of the connectivity of habitats such as coral reefs, seagrasses, and mangrove in biodiversity preservation should be recognized. Migratory species require corridors for gene flow and that influences diversity. The existing theories do not address the biodiversity issues related to life in the abyssal plains and deep sea trenches and the challenge posed by climate change. An accurate understanding of marine biodiversity requires comprehensive knowledge of ecological interrelationships and new perspectives that reflect the reality of global environmental change.