

Analysis on marine ecosystems in the ES-NHR area

3d Life-history traits of component species	Gorgonacea	Antipatharia (black coral)	Scleractinia (stony coral)	Alcyonacea	References
3d-i Slow growth rate	Slow as a general character of deepsea hard corals	Slow as a general character of deepsea hard corals	Slow as a general character of deepsea hard corals	Relatively fast as compared with hard corals	Rogers et al. (2007)
3d-ii Late age of maturity	No available information	No available information	No available information	No available information	
3d-iii Low or unpredictable recruitment	No available information	No available information	No available information	No available information	Rogers et al. (2007)
Related to 3b: Forms structural habitat?	Do not form a reef, however, provide structured habitat when densely aggregated	Do not form a reef, however, provide structured habitat when densely aggregated	Coldwater species (less than 10 species) form reefs		Roberts et al. (2006), Rogers et al. (2007)
Related to 3d-i: resiliency				A species of soft corals showed more resiliency than hard corals	Williams et al. (2008)

Watling (2005) http://www.mcabi.org/what/what_pdfs/Watling_2005.pdf

Williams et al. (2008) Recovery of seamount benthic habitats from bottom trawling? (WFC2008 Oral presentation)

Rogers et al. (2007) in Pitcher et al. Seamounts. Blackwell Pub.

Roberts et al. (2006) <http://www.sciencemag.org/cgi/content/abstract/312/5773/543>

Characteristics	SE-NHR	References
3a Uniqueness and rarity of ecosystems or habitats	Endemism in seamounts is generally high. Since SH-NHR is remote from other seamount areas of continental shelves, and extends from subtropical to subarctic, it is considered to accommodate an ecosystem as a whole or separate ecosystems at each seamounts.	Roberts et al. (2006), Rogers et al. (2007), SWG4/WP5/J1, SWG4/WP5/J2
3b Functional significance of habitat	SH-NHR is serving spawning grounds for North Pacific armorhead and splendid alfonsin as a whole or as individual seamounts.	SWG4/WP5/J1, SWG4/WP5/J2
3c Fragility of ecosystem	Bottom fisheries affect sea floor and benthos (particularly sessile animals), however, it is difficult to assess the impacts on fragility of ecosystems due to the lack of knowledge on structure and function of the ecosystem of SE-NHR.	Løkkeborg (2005), Watling (2005)

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Rogers et al. (2007) in Pitcher et al. Seamounts. Blackwell Pub.

Løkkeborg (2005) <http://www.mir.gdynia.pl/pliki/osrodek/czasop/FAO%20TP%20472.pdf>

Watling (2005) http://www.mcabi.org/what/what_pdfs/Watling_2005.pdf