

Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

0.1 Member State	IT
0.2.1 Species code	1001
0.2.2 Species name	Corallium rubrum
0.2.3 Alternative species scientific name	N/A
0.2.4 Common name	Corallo rosso

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.1a Sensitive species	No
1.1.2 Method used - map	Estimate based on expert opinion with no or minimal sampling (1)
1.1.3 Year or period	2001-2012
1.1.4 Additional map	No
1.1.5 Range map	Yes

2. Biogeographical Or Marine Level

2.1 Biogeographical Region

2.2 Published sources

Marine Mediterranean (MMED)

The present species assessment (fields 0.1-2.9) has been compiled by Anna Alonzi, Piero Genovesi, Francesca Ronchi (ISPRA). Information and data have been extracted from MSFD Supporting document on the Initial Assessment on Benthic Species, including methodology, data used and results (ISPRA, 2013). Expert judgements have been provided by Leonardo Tunesi (ISPRA).

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Bramanti L, Rossi S, Tsounis G, Gili JM, Santangelo G, 2007 - Recruitment and early survival of red coral on settlement plates: some clues for demography and restoration. *Hydrobiologia* 580:219–224

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Cannas R., Caocci F., Follesa M.C., Grazioli E., Pedoni C., Pesci P., Sacco F., Cau A. 2010. Multidisciplinary data on the status of red coral (*Corallium rubrum*) resource in Sardinian Seas (Central Western Mediterranean). In: Bussoletti, E., Cottingham D., Bruckner A., Roberts G. Sandulli R. (eds): *Proceedings of the International Workshop on Red Coral Science, Management, and Trade: Lessons from the Mediterranean*. NOAA Technical Memorandum CRCP-13, Silver Spring, MD. pp.40-57.

Chintiroglou H., Dounas C., Koukouras Ath., 1989 - The Presence of *Corallium rubrum* (Linnaeus, 1758) in the Eastern Mediterranean Sea. *Mitteilungen aus dem Museum für Naturkunde in Berlin. Zoologisches Museum und Institut für Spezielle Zoologie (Berlin)*, 65 (1): 145-149. DOI: 10.1002/mmzn.19890650106

Costantini, F., Taviani, M., Remia, A., Pintus, E., Schembri, P. J. and Abbiati, M., 2010 - Deep-water *Corallium rubrum* (L., 1758) from the Mediterranean Sea: preliminary genetic characterisation. *Marine Ecology*, 31: 261–269. doi: 10.1111/j.1439-0485.2009.00333.

Costantini F., Rossi S., Pintus E., Cerrano C., Gili J. M., Abbiati, M., 2011 - Low connectivity and declining genetic variability along a depth gradient in *Corallium*

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rubrum populations. Coral reefs 30: 991-1003
 Marchetti R., 1965 - Ricerche sul corallo rosso della costa ligure e Toscana. Distribuzione geografica. Rend Ist Lomb ci Lett B99:255-278.
 Regione Autonoma della Sardegna - Assessorato Difesa Ambiente , 2012 - "Servizio di monitoraggio dello stato di conservazione degli habitat e delle specie di importanza comunitaria presenti nei siti della Rete Natura 2000 in Sardegna – Linea 4. Redazione del Rapporto sullo stato di conservazione degli habitat e delle specie ".
 Santangelo G, Abbiati M, 2001 - Red coral: conservation and management of an over-exploited Mediterranean species. Aquatic Conserv Mar Freshw Ecosyst 11:253–259
 Santangelo G., Bramanti L., Iannelli M., 2007 - Population dynamics and conservation biology of the over-exploited Mediterranean red coral. J teor Biol, 244: 416-423.
 Santangelo G., Bramanti L., 2010 - Quantifying the decline in Corallium rubrum populations. Mar Ecol Prog Ser, 418: 295-297.

2.3 Range

2.3.1 Surface area - Range (km ²)	490600
2.3.2 Method - Range surface area	Estimate based on expert opinion with no or minimal sampling (1)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	unknown (x)
2.3.5 Short-term trend magnitude	min max
2.3.6 Long-term trend period	
2.3.7 Long-term trend direction	N/A
2.3.8 Long-term trend magnitude	min max
2.3.9 Favourable reference range	area (km ²) operator approximately equal to (≈) unknown No method Expert judgement
2.3.10 Reason for change	Improved knowledge/more accurate dataUse of different method

2.4 Population

2.4.1 Population size (individuals or agreed exception)	Unit N/A min max
2.4.2 Population size (other than individuals)	Unit N/A min max
2.4.3 Additional information	Definition of locality Conversion method Problems
2.4.4 Year or period	
2.4.5 Method – population size	Absent data (0)
2.4.6 Short-term trend period	2001-2012
2.4.7 Short term trend direction	stable (0)
2.4.8 Short-term trend magnitude	min max confidence interval
2.4.9 Short-term trend method	Estimate based on expert opinion with no or minimal sampling (1)
2.4.10 Long-term trend period	
2.4.11 Long term trend direction	N/A

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2.4.12 Long-term trend magnitude	min	max	confidence interval
2.4.13 Long-term trend method	N/A		
2.4.14 Favourable reference population	number		
	operator	approximately equal to (\approx)	
	unknown	No	
	method	Expert Judgement	
2.4.15 Reason for change	Improved knowledge/more accurate data		

2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km ²)	
2.5.2 Year or period	
2.5.3 Method used - habitat	Absent data (0)
2.5.4 a) Quality of habitat	Good
2.5.4 b) Quality of habitat - method	Expert Judgement
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	stable (0)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A
2.5.9 Area of suitable habitat (km ²)	
2.5.10 Reason for change	Improved knowledge/more accurate data

2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
reduction or loss of specific habitat features (J03.01)	low importance (L)	N/A
scubadiving, snorkelling (G01.07)	medium importance (M)	N/A
Fishing and harvesting aquatic resources (F02)	high importance (H)	N/A
removal for collection purposes (F05.06)	medium importance (M)	N/A

2.6.1 Method used – pressures	mainly based on expert judgement and other data (2)
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2.7 Main Threats

Threat	ranking	pollution qualifier(s)
reduction or loss of specific habitat features (J03.01)	low importance (L)	N/A
scubadiving, snorkelling (G01.07)	medium importance (M)	N/A
Fishing and harvesting aquatic resources (F02)	high importance (H)	N/A
removal for collection purposes (F05.06)	medium importance (M)	N/A

2.7.1 Method used – threats	expert opinion (1)
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2.8 Complementary Information

2.8.1 Justification of % thresholds for trends
2.8.2 Other relevant Information

Red coral is one of the key ecosystem engineering species of coralligenous assemblages and semi-dark caves biocoenosis. However, its bathymetric distribution is wide ranging from 15 to 800 meter depth. Nowadays, in the shallow waters the distribution is aggregated, while in the deeper water the colonies show a patchy distribution. Under 120 m depth, colonies are, generally, solitary or sparse. The species is patchily distributed along all the Italian western coasts. Recently a study has shown the presence of red coral in different areas of the Eastern coast of Apulia. The bathymetric distribution ranged from 50 to 80 m

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depth, while the colony distribution is patchy . The rich banks once present in Liguria, Toscana, Sardinia, Campania, Calabria and Sicily, are in strong regression or depleted due to uncontrolled and indiscriminate harvesting, which has been perpetuated for several decades.

2.8.3 Trans-boundary assessment

2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment Favourable (FV) qualifiers N/A
2.9.2. Population	assessment Favourable (FV) qualifiers N/A
2.9.3. Habitat	assessment Favourable (FV) qualifiers N/A
2.9.4. Future prospects	assessment Unknown (XX) qualifiers N/A
2.9.5 Overall assessment of Conservation Status	Favourable (FV)
2.9.5 Overall trend in Conservation Status	N/A

3. Natura 2000 coverage and conservation measures - Annex II species

3.1 Population

3.1.1 Population Size	Unit	N/A	
	min		max
3.1.2 Method used	N/A		
3.1.3 Trend of population size within	N/A		

3.2 Conversation Measures

Notes

Species name: Corallium rubrum (1001) Region code: MMED

Field label	Note	User
2.3.1 Surface area - Range (km ²)	It is important to point out that only the surface area of the habitat that can actually host the species should be considered.	ISPRA_ AUNA



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