Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

CODE: 8240

NAME: Limestone pavements

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.2 Distribution Method	Estimate based on expert opinion with no or minimal sampling (1)
1.1.3 Year or period	2005-2012
1.1.4 Additional map	No
1.1.5 Range Map	Yes

2. Biogeographical Or Marine Level

2.1 Biogeographical Region

Mediterranean (MED)

2.2 Published

The present Habitat assessment (fields 0.1-3.1) has been compiled by Pierangela Angelini (ISPRA). Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi, Liliana Zivkovic and Giovanni Spampinato(SBI), Pietro Massimiliano Bianco and Pierangela Angelini (ISPRA, field 2.7.1).

"Biondi E, Blasi C, Burrascano S, Casavecchia S, Copiz R, Del Vico E, Galdenzi D, Gigante D, Lasen C, Spampinato G, Venanzoni R, Zivkovic L (2009a) Italian interpretation Manual of the habitats (92/43/EEC Directive). Ministero dell'Ambiente e della Tutela del Territorio e del Mare. http://vnr.unipg.it/habitat/Blasi et al., 2010. La Vegetazione d'Italia con Carta delle Serie di Vegetazione in scala 1:500000. Palombi ed., Casella L., Agrillo E., Bianco P.M., Cardillo A., Carbone M., Cattena C., Laureti L., Lugari A., Spada F., 2008. Carta degli habitat della Regione Lazio per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Università degli Studi di Roma "La Sapienza" - Regione LazioISPRA, 2011. Dati del sistema informativo di Carta della Natura alla scala 1:50.000.ISPRA, Corine land cover 2006 IV livello. Dati della Rete del sistema Informativo Nazionale Ambientale - SINAnetISPRA, 2005. Dati del sistema informativo di Carta della Natura alla scala 1:50.000."

Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

2.3 Range of the habitat type in the biogeographical region or marine region

2.3.1 Surface area - Range (km²)	11300	
2.3.2 Range method used	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	stable (0)	
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 (km²)	
	operator	approximately equal to (≈)
	unkown	No
	method	
2.3.10 Reason for change	genuine change	No
	improved knowledge	Yes
	different method	Yes

2.4 Area covered by Habitat

2.4.1 Surface area (km²)	31,01		
2.4.2 Year or period	2005-2012		
2.4.3 Method used	Estimate based on expert opinion with no or minimal sampling (1)		
2.4.4 Short-term trend period	2001-2012		
2.4.5 Short-term trend direction	stable (0)		
2.4.6 Short-term trend magnitude	min	max	confidence interval
2.4.7 Short term trend method used	Estimate based on expert opinion with no or minimal sampling (1)		
2.4.8 Long-term trend period			
2.4.9 Long-term trend direction	N/A		
2.4.10 Long-term trend magnitude	min	max	confidence interval
2.4.11 Long term trend method used	N/A		
2.4.12 Favourable reference area	area (km)		
	operator	approximately equal to (≈)	
	unknown	No	
	method		
2.4.13 Reason for change	Improved knowledge/more accurate dataUse of different method		

2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
Mining and quarrying (C01)	high importance (H)	N/A
Trampling, overuse (G05.01)	low importance (L)	N/A
mountaineering, rock climbing, speleology (G01.04)	low importance (L)	N/A
skiing complex (G02.02)	medium importance (M)	N/A
avalanche (L04)	low importance (L)	N/A
skiing, off-piste (G01.06)	low importance (L)	N/A

Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

2.5.1 Method used – pressures	Estimate based on partial data with some extrapolation and/or modelling(2)

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
Mining and quarrying (C01)	high importance (H)	N/A
Trampling, overuse (G05.01)	low importance (L)	N/A
mountaineering, rock climbing, speleology (G01.04)	low importance (L)	N/A
skiing complex (G02.02)	medium importance (M)	N/A
avalanche (L04)	low importance (L)	N/A
skiing, off-piste (G01.06)	low importance (L)	N/A

2.6.1 Method used – threats	Estimate based on expert opinion with no or minimal sampling(1)

2.7 Complementary Information

2.7.1 Species
Dryas octopetala
Ctenidium molluscum
Grimmia pulvinata
Neckera complanata
Tortella tortuosa
Festuca spp.
Allium spp.
Asplenium spp.
Bromus spp.
Athamanta cretensis
Linaria spp.
Dryopteris villarii
Minuartia verna
Polystichum lonchitis
Sesleria juncifolia (=Sesleria tenuifolia, Sesleria pennina)
Primula auricula
Saxifraga spp.
Sedum spp.
Sempervivum spp.
Silene saxifraga

2.7.2 Species method used	Selected by ISPRA's expert from bibliographical and field research
2.7.3 Justification of % - thresholds for trends	
2.7.4 Structure and functions - methods used	Estimate based on expert opinion with no or minimal sampling(1)
2.7.5 Other relevant information	

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

2.8.1 Range	assessment	Favourable(FV)
	qualifiers	N/A
2.8.2 Area	assessment	Favourable(FV)
	qualifiers	N/A
2.8.3 Specific structures and functions (incl Species)	assessment	Favourable(FV)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Favourable(FV)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Favourable(FV)	
2.8.5 Overall trend in Conservation Status	N/A	

3. Natura 2000 coverage conservation measures - Annex I habitat types on biogeographical level

3.1 Area covered by habitat

3.1.1 Surface area (km²)	min	31,0149	max	31,0149
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)			
3.1.3. Trend of surface area	N/A			

3.2 Conversation Measures

2.1 Biogeographical Region	**Continental (CON)**
2.2 Published	The present Habitat assessment (fields 0.1-3.1) has been compiled by Pierangela Angelini (ISPRA). Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi and Liliana Zivkovic(SBI), Pietro Massimiliano Bianco and Pierangela Angelini (ISPRA, field 2.7.1). Biondi E, Blasi C, Burrascano S, Casavecchia S, Copiz R, Del Vico E, Galdenzi D, Gigante D, Lasen C, Spampinato G, Venanzoni R, Zivkovic L (2009a) Italian interpretation Manual of the habitats (92/43/EEC Directive). Ministero dell'Ambiente e della Tutela del Territorio e del Mare. http://vnr.unipg.it/habitat/ Blasi et al., 2010. La Vegetazione d'Italia con Carta delle Serie di Vegetazione in

scala 1:500000. Palombi ed., Brentan D., Burbello A., Avanzi E., Gasparini S., Laureti L., Bianco P.M., 2008. Carta degli habitat della regione Veneto per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Arpa Veneto. http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura
Casella L., Agrillo E., Bianco P.M., Cardillo A., Carbone M., Cattena C., Laureti L., Lugari A., Spada F., 2008. Carta degli habitat della Regione Lazio per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Università degli Studi di Roma “La Sapienza” - Regione Lazio
ISPRA, 2011. Dati del sistema informativo di Carta della Natura alla scala 1:50.000.
ISPRA, Corine land cover 2006 IV livello. Dati della Rete del sistema Informativo Nazionale Ambientale - SINAnet
Oriolo G., Dragan M., Fernetti M., Francescato C., Tomasella M., Giorgi R. 2007. Carta degli habitat della regione Friuli Venezia Giulia per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA-Regione Friuli Venezia Giulia. http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura"
POLDINI L., ORIOLO G., VIDALI M., TOMASELLA M., STOCH F. & OREL G., 2006. Manuale degli habitat del Friuli Venezia Giulia. Strumento a supporto della valutazione d’impatto ambientale (VIA), ambientale strategica (VAS) e d’incidenza ecologica (VIEc). Region. Autonoma Friuli Venezia Giulia – Direz. Centrale ambiente e lavori pubblici – Servizio Valutazione Impatto Ambientale, Univ. Studi Trieste – Dipart. Biologia
http://www.indicatoriambientali.regione.fvg.it/Sira/template.jsp?dir=/rafvg/cms/sira/webgiscartanatura/habitat/index.html
Oriolo G., Tomasella M., Francescato C., 2009 - Cartografia degli habitat e monitoraggio specie floristiche dei siti Natura 2000 SIC IT3340006 "Carso triestino e goriziano" e ZPS IT3341002 "Aree carsiche della Venezia Giulia" - Fase III.

2.3 Range of the habitat type in the biogeographical region or marine region

2.3.1 Surface area - Range (km²)	7100	
2.3.2 Range method used	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	stable (0)	
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 (km²)	
	operator	approximately equal to (≈)
	unkown	No
	method	
2.3.10 Reason for change	genuine change	No
	improved knowledge	Yes
	different method	Yes

2.4 Area covered by Habitat

Report on the main results of the surveillance under article 17 for annex I habitat types (Annex D)

2.4.1 Surface area (km²)	13,68		
2.4.2 Year or period	2005-2012		
2.4.3 Method used	Estimate based on expert opinion with no or minimal sampling (1)		
2.4.4 Short-term trend period	2001-2012		
2.4.5 Short-term trend direction	stable (0)		
2.4.6 Short-term trend magnitude	min	max	confidence interval
2.4.7 Short term trend method used	Estimate based on expert opinion with no or minimal sampling (1)		
2.4.8 Long-term trend period			
2.4.9 Long-term trend direction	N/A		
2.4.10 Long-term trend magnitude	min	max	confidence interval
2.4.11 Long term trend method used	N/A		
2.4.12 Favourable reference area	area (km)		
	operator	approximately equal to (≈)	
	unknown	No	
	method		
2.4.13 Reason for change	Improved knowledge/more accurate dataUse of different method		

2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
paths, tracks, cycling tracks (D01.01)	high importance (H)	N/A
mountaineering, rock climbing, speleology (G01.04)	medium importance (M)	N/A
Mining and quarrying (C01)	medium importance (M)	N/A
Improved access to site (D05)	medium importance (M)	N/A

2.5.1 Method used – pressures	Estimate based on partial data with some extrapolation and/or modelling(2)

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
paths, tracks, cycling tracks (D01.01)	high importance (H)	N/A
mountaineering, rock climbing, speleology (G01.04)	medium importance (M)	N/A
Mining and quarrying (C01)	medium importance (M)	N/A
Improved access to site (D05)	medium importance (M)	N/A

2.6.1 Method used – threats	Estimate based on expert opinion with no or minimal sampling(1)

2.7 Complementary Information

2.7.1 Species
Alyssum alyssoides
Saxifraga tridactylites
Sedum album
Sedum sexangulare

2.7.2 Species method used	Selected by ISPRA's expert from bibliographical and field research
2.7.3 Justification of % - thresholds for trends	
2.7.4 Structure and functions - methods used	Estimate based on expert opinion with no or minimal sampling(1)
2.7.5 Other relevant information	This habitat is known in the karst area as "grize"

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

2.8.1 Range	assessment	Favourable(FV)
	qualifiers	N/A
2.8.2 Area	assessment	Favourable(FV)
	qualifiers	N/A
2.8.3 Specific structures and functions (incl Species)	assessment	Favourable(FV)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Favourable(FV)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Favourable(FV)	
2.8.5 Overall trend in Conservation Status	N/A	

3. Natura 2000 coverage conservation measures - Annex I habitat types on biogeographical level

3.1 Area covered by habitat

3.1.1 Surface area (km²)	min	1,5976	max	1,5976
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)			
3.1.3. Trend of surface area	N/A			

3.2 Conversation Measures

2.1 Biogeographical Region	**Alpine (ALP)**
2.2 Published	The present Habitat assessment (fields 0.1-3.1) has been compiled by Pierangela Angelini (ISPRA). Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi, Liliana Zivkovic and Cesare Lasen(SBI), Pietro Massimiliano Bianco and Pierangela Angelini (ISPRA, field 2.7.1). "Brentan D., Burbello A., Avanzi E., Gasparini S., Laureti L., Bianco P.M., 2008. Carta degli habitat della regione Veneto per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Arpa Veneto. http://www.isprambiente.gov.it/site/it-

IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura Biondi E, Blasi C, Burrascano S, Casavecchia S, Copiz R, Del Vico E, Galdenzi D, Gigante D, Lasen C, Spampinato G, Venanzoni R, Zivkovic L (2009a) Italian interpretation Manual of the habitats (92/43/EEC Directive). Ministero dell'Ambiente e della Tutela del Territorio e del Mare. http://vnr.unipg.it/habitat/ Blasi et al., 2010. La Vegetazione d'Italia con Carta delle Serie di Vegetazione in scala 1:500000. Palombi ed., Casella L., Agrillo E., Bianco P.M., Cardillo A., Carbone M., Cattena C., Laureti L., Lugari A., Spada F., 2008. Carta degli habitat della Regione Lazio per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Università degli Studi di Roma "La Sapienza" - Regione Lazio ISPRA, 2011. Dati del sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA, Corine land cover 2006 IV livello. Dati della Rete del sistema Informativo Nazionale Ambientale - SINAnet Morra di Cella U., Cremonese E., Pari E., Siniscalco C., Amadei M., Angelini P., Cardillo A., 2008. Carta degli habitat della Regione Valle d'Aosta per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - ARPA Valle d'Aosta - Dipartimento Biologia Vegetale Università degli studi di Torino. http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura Oriolo G., Dragan M., Fernetti M., Francescato C., Tomasella M., Giorgi R. 2007. Carta degli habitat della regione Friuli Venezia Giulia per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA-Regione Friuli Venezia Giulia. http://www.isprambiente.gov.it/site/it-IT/Servizi_per_l%27Ambiente/Sistema_Carta_della_Natura"

2.3 Range of the habitat type in the biogeographical region or marine region

2.3.1 Surface area - Range (km²)	24300	
2.3.2 Range method used	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	stable (0)	
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 (km²)	
	operator	approximately equal to (≈)
	unkown	No
	method	
2.3.10 Reason for change	genuine change	No
	improved knowledge	Yes
	different method	Yes

2.4 Area covered by Habitat

2.4.1 Surface area (km²)	97,61		
2.4.2 Year or period	2005-2012		
2.4.3 Method used	Estimate based on expert opinion with no or minimal sampling (1)		
2.4.4 Short-term trend period	2001-2012		
2.4.5 Short-term trend direction	stable (0)		
2.4.6 Short-term trend magnitude	min	max	confidence interval

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2.4.7 Short term trend method used	Estimate based on expert opinion with no or minimal sampling (1)		
2.4.8 Long-term trend period			
2.4.9 Long-term trend direction	N/A		
2.4.10 Long-term trend magnitude	min	max	confidence interval
2.4.11 Long term trend method used	N/A		
2.4.12 Favourable reference area	area (km)		
	operator	approximately equal to (≈)	
	unknown	No	
	method		
2.4.13 Reason for change	Improved knowledge/more accurate dataUse of different method		

2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A
skiing complex (G02.02)	medium importance (M)	N/A
skiing, off-piste (G01.06)	medium importance (M)	N/A
mountaineering, rock climbing, speleology (G01.04)	medium importance (M)	N/A
collapse of terrain, landslide (L05)	medium importance (M)	N/A

2.5.1 Method used – pressures: Estimate based on partial data with some extrapolation and/or modelling(2)

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A
skiing complex (G02.02)	medium importance (M)	N/A
skiing, off-piste (G01.06)	medium importance (M)	N/A
mountaineering, rock climbing, speleology (G01.04)	medium importance (M)	N/A
collapse of terrain, landslide (L05)	medium importance (M)	N/A

2.6.1 Method used – threats: Estimate based on expert opinion with no or minimal sampling(1)

2.7 Complementary Information

2.7.1 Species
Tortella spp.
Grimmia spp.
Aconitum tauricum
Allium spp.
Arctostaphylos uva-ursi
Asplenium ruta-muraria
Asplenium viride
Carex spp.
Cystopteris fragilis

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Daphne alpina

Dryopteris villarii

Erica carnea

Linaria alpina

Polystichum lonchitis

Sempervivum spp.

Saxifraga spp.

Dryas octopetala

Scabiosa graminifolia

Sesleria sphaerocephala

Salix retusa

2.7.2 Species method used	Selected by ISPRA's expert from bibliographical and field research
2.7.3 Justification of % - thresholds for trends	
2.7.4 Structure and functions - methods used	Estimate based on expert opinion with no or minimal sampling(1)
2.7.5 Other relevant information	

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

2.8.1 Range	assessment	Favourable(FV)
	qualifiers	N/A
2.8.2 Area	assessment	Favourable(FV)
	qualifiers	N/A
2.8.3 Specific structures and functions (incl Species)	assessment	Favourable(FV)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Favourable(FV)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Favourable(FV)	
2.8.5 Overall trend in Conservation Status	N/A	

3. Natura 2000 coverage conservation measures - Annex I habitat types on biogeographical level

3.1 Area covered by habitat

3.1.1 Surface area (km²)	min	97,4511	max	97,4511
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)			
3.1.3. Trend of surface area	N/A			

3.2 Conversation Measures

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Notes

Habitat code: 8240 Region code: ALP

Field label	Note	User
2.4.1 Surface area	I dati forniti dalle regioni risultano disomogenei, probabilmente a seguito di differenze interpretative e, in ogni caso, è verosimile vi siano altre significative presenze esterne ai SIC.	ISPRA_habitat

Habitat code: 8240 Region code: CON

Field label	Note	User
3.1.1 a)Natura 2000 surface area min	Per quanto riguarda la nostra conoscenza (SBI), la regione continentale non ospita questo habitat. Andrebbero quindi eliminate le indicazioni dell'habitat in questa regione	ISPRA_habitat
2.1 Region	Per quanto riguarda la nostra conoscenza (SBI), la regione continentale non ospita questo habitat. Andrebbero quindi eliminate le indicazioni dell'habitat in questa regione	ISPRA_habitat