CODE: 6170

NAME: Alpine and subalpine calcareous grasslands

#### 1. National Level

#### **1.1 Maps**

1.1.1 Distribution Map

1.1.2 Distribution Method

1.1.3 Year or period

1.1.4 Additional map

1.1.5 Range Map

Yes

Estimate based on partial data with some extrapolation and/or modelling (2)

2005-2012

No

Yes

#### 2. Biogeographical Or Marine Level

2.1 Biogeographical Region

2.2 Published

#### **Mediterranean (MED)**

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 Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi, Liliana Zivkovic and Giovanni Spampinato(SBI), Pietro Massimiliano Bianco and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).

Bianco P.M., Laureti L., Papallo O., Perfetti D. 2012 Carta degli habitat della Regione Umbria per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA

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

ISPRA, 2005. Dati del sistema informativo di Carta della Natura alla scala 1:50.000.

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

2.3.1 Surface area - Range (km²) 12400

2.3.2 Range method used Estimate based on partial data with some extrapolation and/or modelling (2)

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) 143,01

2.4.2 Year or period
 2.4.3 Method used
 Estimate based on partial data with some extrapolation and/or modelling (2)

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

2.4.8 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)
grazing (A04)	medium importance (M)	N/A
Mining and quarrying (C01)	high importance (H)	N/A
Erosion (K01.01)	low importance (L)	N/A
skiing complex (G02.02)	medium importance (M)	N/A
Taking / Removal of terrestrial plants, general (F04)	medium importance (M)	N/A
Trampling, overuse (G05.01)	low importance (L)	N/A

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<i>i</i> 1	•		
skiing, off-piste (G01.06)		low importance (L)	N/A
motorised vehicles (G01.03)		high importance (H)	N/A
2.5.1 Method used – pressures	Estimate based o	n partial data with some extrapol	ation and/or modelling( 2)
2.6 Main Threats			
Threat		ranking	pollution qualifier(s)
grazing (A04)		medium importance (M)	N/A
Mining and quarrying (C01)		high importance (H)	N/A
Erosion (K01.01)		low importance (L)	N/A
skiing complex (G02.02)		medium importance (M)	N/A
Taking / Removal of terrestrial plant	s, general (F04)	medium importance (M)	N/A
Trampling, overuse (G05.01)		low importance (L)	N/A
skiing, off-piste (G01.06)		low importance (L)	N/A
motorised vehicles (G01.03)		high importance (H)	N/A
2.6.1 Method used – threats	Estimate based o	n expert opinion with no or minir	mal sampling( 1)
2.7 Complementary Information			
2.7.1 Species			
Poa violacea			
Potentilla rigoana			
Sesleria juncifolia subsp. juncifolia (ii	ncl. S. apennina)		
Sesleria calabrica			
Anthyllis montana ssp. Atropurpurea	ı		
Carex kitaibeliana ssp. Kitaibeliana			
Carum heldreichii			
Edraianthus graminifolius ssp. Grami	nifolius		
Festuca macrathera			
Festuca nigrescens ssp. Microphylla			
Helianthemum nummularium ssp. G	randiflorum		
Taraxacum apenninum			
Luzula italica			
Pedicularis elegans			
2.7.2 Species method used	Selection and eva	luation by ISPRA's expert from bi	bliographical and field researc
2.7.3 Justification of % - thresholds for trends			
2.7.4 Structure and functions - methods used	Estimate based o	n expert opinion with no or minir	nal sampling( 1)

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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)

2.8.4 Future prospects

assessment Favourable(FV)
qualifiers N/A

assessment Favourable(FV)
qualifiers N/A

2.8.5 Overall assessment of Conservation Status

2.8.5 Overall trend in Conservation Status

Favourable( FV)

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 88,2737 max 88,2737

3.1.2 Method used Complete survey/Complete survey or a statistically robust estimate (3) N/A

#### **3.2 Conversation Measures**

### 2.1 Biogeographical Region2.2 Published

#### Continental (CON)

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). Bianco P.M., Laureti L., Papallo O., Perfetti D. 2012 Carta degli habitat della Regione Umbria per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA

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.,

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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\_I%27Ambiente/Sistema\_Carta\_della\_Natura

Pesaresi S, Biondi E, Casavecchia S, Catorci A, Foglia M., 2007. Il Geodatabase del Sistema Informativo Vegetazionale delle Marche. Fitosociol 44 (2) suppl. 1: 95-101 http://www.ortobotanico.univpm.it/cartography

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

2.3.1 Surface area - Range (km²) 12400

2.3.2 Range method used Estimate based on partial data with some extrapolation and/or modelling (2)

2001-2012 stable (0)

2.3.5 Short-term trend magnitude min max

2.3.6 Long-term trend period

2.3.3 Short-term trend period

2.3.4 Short-term trend direction

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) 126,65 2.4.2 Year or period 2005-2012

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

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

2.4.8 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

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2.4.12 Favourable reference area area (km)

approximately equal to (≈) operator

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)
grazing (A04)		medium importance (M)	N/A
skiing complex (G02.02)		high importance (H)	N/A
skiing, off-piste (G01.06)		high importance (H)	N/A
Mining and quarrying (C01)		medium importance (M)	N/A
Erosion (K01.01)		low importance (L)	N/A
Taking / Removal of terrestrial plants, general (F04)		high importance (H)	N/A
damage by herbivores (including game species) (K04.05)		medium importance (M)	N/A
motorised vehicles (G01.03)		low importance (L)	N/A
abandonment of pastoral systems, lack of	grazing (A04.03)	low importance (L)	N/A
Biocenotic evolution, succession (K02)		low importance (L)	N/A
2.5.1 Method used – pressures	Estimate based on p	partial data with some extrapol	ation and/or modelling( 2)
2.6 Main Threats			
Threat		ranking	pollution qualifier(s)
grazing (A04)		medium importance (M)	N/A
skiing complex (G02.02) attraction park (G02.06)		high importance (H)	N/A
		high importance (H)	N/A
Mining and quarrying (C01)		medium importance (M)	N/A
Erosion (K01.01)		low importance (L)	N/A
Taking / Removal of terrestrial plants, gen	neral (F04)	high importance (H)	N/A
damage by herbivores (including game spe	ecies) (K04.05)	medium importance (M)	N/A
motorised vehicles (G01.03)		low importance (L)	N/A
abandonment of pastoral systems, lack of	grazing (A04.03)	low importance (L)	N/A
Biocenotic evolution, succession (KO2)		low importance (L)	N/A
2.6.1 Method used – threats	Estimate based on e	expert opinion with no or minir	nal sampling( 1)
2.7 Complementary Information			

#### 2.7 Complementary Information

#### 2.7.1 Species

Sesleria juncifolia subsp. juncifolia (= S. apennina, S. tenuifolia)

Androsace villosa ssp. villosa var. australis

Edraianthus graminifolius subsp. Graminifolius

Ajuga tenorii

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nabitat types (Annex	וט
Carex ferruginea	
Carex kitaibeliana ssp. Kitaibeliana	
Alchemilla nitida	
Campanula scheuchzeri	
Carex macrolepis	
Carum heldreichii	
Carex sempervirens	
Festuca nigrescens	
Globularia nudicaulis	
Helianthemum nummularium subsp	. Grandiflorum
Helianthemum oelandicum (aggr.)	
Ononis cristata	
Polygala alpestris	
Pedicularis spp.	
2.7.2 Species method used	Selection and evaluation 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	
2.9 Conclusions (assessment of	conservation status at end of reporting period)
2.8.1 Range	assessment Favourable(FV)
0	qualifiers N/A
2.8.2 Area	assessment Favourable (FV)
2026	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 or	
3.1 Area covered by habitat	
3.1.1 Surface area (km²)	min 86,11263 max 86,11263
J.T.T Juliace area (KIII)	11111 00,11203 111dA 00,11203

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N/A

Complete survey/Complete survey or a statistically robust estimate (3)

3.1.2 Method used

3.1.3. Trend of surface area

#### 3.2 Conversation Measures

### 2.1 Biogeographical Region2.2 Published

#### Alpine (ALP)

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. PEER T., 1980. Karte der aktuellen Vegetation Südtirols 1: 100.000. Blatt Bozen. Doc. de Cart. Ecol., XXIII: 25-46. Grenoble

PEER T., 1991. Karte der aktuellen Vegetation Südtirols, Maßtab 1:200.000. Autonome Provinz Bozen-Südtirol, Amt für Naturparke, Naturschutz und Landschaftspflege. Bozen.

PEER T., 1995. La vegetazione naturale dell'Alto Adige. Note illustrative della carta della vegetazione naturale 1:200.000. Provincia Autonoma di Bolzano-Alto

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Adige. Ufficio pianificazione paesaggistica, Ripartizione tutela del paesaggio e della natura, Bolzano.

2.3 Range of the habitat type in the biogeographical region or marine r	ie regio	marine reg	or marin	ion or	ı regior	zrapnicai	piogeo	tne	ın	tvpe	nabitat	tne	OT	Kange	2.3
---	----------	------------	----------	--------	----------	-----------	--------	-----	----	------	---------	-----	----	-------	-----

2.3.1 Surface area - Range (km²) 46000

2.3.2 Range method used Estimate based on partial data with some extrapolation and/or modelling (2)

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

2.3.3 Short-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) 2701,66 2.4.2 Year or period 2005-2012

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

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)
roads, motorways (D01.02)	medium importance (M)	N/A
grazing (A04)	medium importance (M)	N/A
skiing complex (G02.02)	high importance (H)	N/A
Erosion (K01.01)	medium importance (M)	N/A
Taking / Removal of terrestrial plants, general (F04)	low importance (L)	N/A

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skiing, off-piste (G01.06)	low importance (L)	N/A
Trampling, overuse (G05.01)	medium importance (M)	N/A
Improved access to site (D05)	medium importance (M)	N/A
Mining and quarrying (C01)	medium importance (M)	N/A
abandonment of pastoral systems, lack of grazing (A04.03)	low importance (L)	N/A
Biocenotic evolution, succession (KO2)	low importance (L)	N/A
damage by herbivores (including game species) (K04.05)	medium importance (M)	N/A

2.5.1 Method used – pressures Estimate based on pa		partial data with some extrapol	ation and/or modelling( 2)
2.6 Main Threats			
Threat		ranking	pollution qualifier(s)
roads, motorways (D01.02)		medium importance (M)	N/A
grazing (A04)		medium importance (M)	N/A
skiing complex (G02.02)		medium importance (M)	N/A
Erosion (K01.01)		high importance (H)	N/A
Taking / Removal of terrestrial plants, general (F04)		low importance (L)	N/A
skiing, off-piste (G01.06)		low importance (L)	N/A
Trampling, overuse (G05.01)		medium importance (M)	N/A
Improved access to site (D05)		medium importance (M)	N/A
Mining and quarrying (C01)		medium importance (M)	N/A
abandonment of pastoral systems, lack of	of grazing (A04.03)	low importance (L)	N/A
Biocenotic evolution, succession (KO2)		low importance (L)	N/A
damage by herbivores (including game s	pecies) (K04.05)	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

Gnaphalium hoppeanum

Carex ferruginea (aggr.)

Carex firma

Carex sempervirens

Carex rupestris

Festuca norica

Elyna myosuroides

Festuca nigrescens

Oxytropis sp.

Pedicularis spp.

Helictotrichon spp.

Arabis caerulea

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Salix reticulata	
Salix retusa	
Sesleria sphaerocephala	
Agrostis alpina	
Sesleria juncifolia subsp. Juncifolia	
Sesleria caerulea	
2.7.2 Species method used	Selection and evaluation 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 co	onservation status at end of reporting period)
2.8.1 Range	assessment Favourable(FV) qualifiers N/A
2.8.2 Area	assessment Favourable( FV)

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	Favourable( FV)

2.8.5 Overall assessment ofConservation Status2.8.5 Overall trend in

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 1080,2812 max 1080,2812
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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