CODE: 6520

NAME: Mountain hay meadows

#### 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 expert opinion with no or minimal sampling (1)

2005-2012

No

Yes

#### 2. Biogeographical Or Marine Level

2.1 Biogeographical Region

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 Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi and Liliana Zivkovic(SBI), Pietro Massimiliano Bianco and Pierangela Angelini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

11/04/2014 09:34:05 Page 1 of 8

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

2.3.1 Surface area - Range (km²) 27600

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 decrease (-)

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 much more than (>>)

unkown No

method

2.3.10 Reason for change Improved knowledge/more accurate data Use of different method

#### 2.4 Area covered by Habitat

2.4.1 Surface area (km²) 302,62

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 decrease (-)

2.4.6 Short-term trend magnitude min max

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

2.4.11 Long term trend method used N/A

2.4.12 Favourable reference area area (km)

operator much more than (>>)

unknown No

method

2.4.13 Reason for change Improved knowledge/more accurate data Use of different method

#### 2.5 Main Pressures

Pressure	ranking	pollution qualifier(s)
roads, motorways (D01.02)	medium importance (M)	N/A
paths, tracks, cycling tracks (D01.01)	low importance (L)	N/A
artificial planting on open ground (non-native trees) (B01.02)	medium importance (M)	N/A
abandonment of pastoral systems, lack of grazing (A04.03)	low importance (L)	N/A
damage by herbivores (including game species) (K04.05)	medium importance (M)	N/A
skiing, off-piste (G01.06)	medium importance (M)	N/A
species composition change (succession) (K02.01)	low importance (L)	N/A
Urbanised areas, human habitation (E01)	high importance (H)	N/A
skiing complex (G02.02)	high importance (H)	N/A
Mining and quarrying (C01)	high importance (H)	N/A

11/04/2014 09:34:05 Page 2 of 8

habitat types (Annex D)				
motorised vehicles (G01.03)	medium importance (M)	N/A		
modification of cultivation practices (A02)	medium importance (M)	N/A		
2.5.1 Method used – pressures mainly based on exp	pert judgement and other data (2)			
2.6 Main Threats				
Threat	ranking	pollution qualifier(s)		
roads, motorways (D01.02)	medium importance (M)	N/A		
paths, tracks, cycling tracks (D01.01)	low importance (L)	N/A		
artificial planting on open ground (non-native trees) (B01.02)	medium importance (M)	N/A		
abandonment of pastoral systems, lack of grazing (A04.03)	low importance (L)	N/A		
damage by herbivores (including game species) (K04.05)	medium importance (M)	N/A		
skiing, off-piste (G01.06)	medium importance (M)	N/A		
species composition change (succession) (K02.01)	low importance (L)	N/A		
Urbanised areas, human habitation (E01)	high importance (H)	N/A		
skiing complex (G02.02)	high importance (H)	N/A		
Mining and quarrying (C01)	high importance (H)	N/A		
motorised vehicles (G01.03)	medium importance (M)	N/A		
modification of cultivation practices (A02)	medium importance (M)	N/A		
2.6.1 Method used – threats expert opinion (1)				
2.7 Complementary Information				
2.7.1 Species				
Achillea stricta				
Achillea millefolium subsp. Sudetica				
Cardaminopsis halleri				
Chaerophyllum hirsutum subsp. Villarsii				
Crepis mollis				
Geranium sylvaticum				
Heracleum sphondylium (aggr.)				
Phleum alpinum				
Poa alpina				
Phyteuma betonicifolium				
Phyteuma orbiculare				
Rhinanthus alectorolophus				
Silene dioica				

11/04/2014 09:34:05 Page 3 of 8

Trisetum flavescens

Bistorta major (Polygonum bistorta)

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

2.7.5 Other relevant information

Estimate based on expert opinion with no or minimal sampling (1)

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

2.8.1 Range assessment Bad (U2) qualifiers N/A

2.8.2 Area assessment Bad (U2)

qualifiers N/A

2.8.3 Specific structures assessment Bad (U2) and functions (incl Species) qualifiers N/A

assessment Bad (U2) qualifiers N/A

2.8.5 Overall assessment of

**Conservation Status** 

2.8.4 Future prospects

2.8.5 Overall trend in Conservation Status

declining (-)

Bad (U2)

### 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 23,2306 max 23,2306

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**

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Other spatial measures (6.0)	Administrative Recurrent One-off	high importance (H)	Inside	Maintain Enhance Long term
Establish protected areas/sites (6.1)	Administrative	medium importance (M)	Both	Maintain Enhance Long term
Legal protection of habitats and species (6.3)	Administrative	medium importance (M)	Both	Maintain Enhance Long term
Specific single species or species group management measures (7.4)	Administrative	high importance (H)	Both	Maintain Enhance Long term

#### 2.1 Biogeographical Region

2.2 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

11/04/2014 09:34:05 Page 4 of 8

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\_I%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)

2.3.2 Range method used

2.3.3 Short-term trend period

2.3.4 Short-term trend direction

2.3.5 Short-term trend magnitude

2.3.6 Long-term trend period

2.3.7 Long-term trend direction

2.3.8 Long-term trend magnitude

2.3.9 Favourable reference range

52700

Estimate based on expert opinion with no or minimal sampling (1)

2001-2012

decrease (-)

min max

N/A

min max

area (km²)

operator more than (>)

unkown No

method

2.3.10 Reason for change

Improved knowledge/more accurate data Use of different method

#### 2.4 Area covered by Habitat

11/04/2014 09:34:05 Page 5 of 8

2.4.1 Surface area (km²) 682,12 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 decrease (-) 2.4.6 Short-term trend magnitude min max 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 2.4.11 Long term trend method used N/A 2.4.12 Favourable reference area area (km) operator more than (>) unknown No method

2.4.13 Reason for change Improved knowledge/more accurate data Use of different method

2.5 Main Pressures		
Pressure	ranking	pollution qualifier(s)
abandonment of pastoral systems, lack of grazing (A04.03)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A
discontinuous urbanisation (E01.02)	medium importance (M)	N/A
skiing complex (G02.02)	medium importance (M)	N/A
skiing, off-piste (G01.06)	low importance (L)	N/A
Erosion (K01.01)	medium importance (M)	N/A
Trampling, overuse (G05.01)	medium importance (M)	N/A
Mining and quarrying (C01)	medium importance (M)	N/A
Improved access to site (D05)	medium importance (M)	N/A

modification of cultivation practices (A02) medium importance (M) N/A

Biocenotic evolution, succession (K02) medium importance (M) N/A

Soil pollution and solid waste (excluding discharges) (H05) medium importance (M) N/A

intensive grazing (A04.01) medium importance (M) N/A

Fertilisation (A08) medium importance (M) N/A

2.5.1 Method used – pressures mainly based on expert judgement and other data (2)

Urbanised areas, human habitation (E01)

2.6 Main Threats		
Threat	ranking	pollution qualifier(s)
abandonment of pastoral systems, lack of grazing (A04.03)	medium importance (M)	N/A
roads, motorways (D01.02)	medium importance (M)	N/A
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A
discontinuous urbanisation (E01.02)	medium importance (M)	N/A

11/04/2014 09:34:05 Page 6 of 8

medium importance (M)

N/A

skiing complex (G02.02)	medium importance (M)	N/A
skiing, off-piste (G01.06)	low importance (L)	N/A
Erosion (K01.01)	medium importance (M)	N/A
Trampling, overuse (G05.01)	medium importance (M)	N/A
Mining and quarrying (C01)	medium importance (M)	N/A
Improved access to site (D05)	medium importance (M)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
modification of cultivation practices (A02)	medium importance (M)	N/A
Biocenotic evolution, succession (KO2)	medium importance (M)	N/A
Soil pollution and solid waste (excluding discharges) (H05)	medium importance (M)	N/A
intensive grazing (A04.01)	medium importance (M)	N/A
Fertilisation (A08)	medium importance (M)	N/A

2.6.1 Method used – threats	expert opinion (1)
2.7 Complementary Information	
2.7.1 Species	
Alchemilla spp.	
Campanula rhomboidalis	
Campanula rotundifolia	
Campanula scheuchzeri	
Cardaminopsis halleri	
Chaerophyllum hirsutum subsp. Villarsi	ii
Crepis mollis	
Crepis pyrenaica	
Geranium sylvaticum	
Phyteuma betonicifolium	
Phleum alpinum	
Phleum rhaeticum	
Poa alpina	
Rhinanthus alectorolophus	
Rhinanthus facchinii	
Rumex alpestris	
Silene dioica	
Trisetum flavescens	
Heracleum sphondylium (aggr.)	
Bistorta major (=Polygonum bistorta)	

11/04/2014 09:34:05 Page 7 of 8

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

2.7.5 Other relevant information

Estimate based on expert opinion with no or minimal sampling (1)

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

2.8.1 Range assessment Inadequate (U1)

qualifiers N/A

assessment Inadequate (U1)

qualifiers N/A

assessment Bad (U2)

qualifiers N/A

assessment Bad (U2)

qualifiers N/A

2.8.5 Overall assessment of Bad (U2)

**Conservation Status** 

2.8.3 Specific structures

2.8.4 Future prospects

and functions (incl Species)

2.8.2 Area

2.8.5 Overall trend in

**Conservation Status** 

declining (-)

### 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 149,686 max 149,686

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**

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Maintaining grasslands and other open habitats (2.1)	Legal Administrative Recurrent One-off	high importance (H)	Both	Maintain Enhance Long term
Establish protected areas/sites (6.1)	Legal	high importance (H)	Inside	Long term
Legal protection of habitats and species (6.3)	Legal	high importance (H)	Both	Long term Not evaluated
Manage landscape features (6.4)	Legal	high importance (H)	Both	Long term

11/04/2014 09:34:05 Page 8 of 8

### Notes

Habitat code: 6520 Region o	rode: CON	
Field label	Note	User
2.4.1 Surface area	Nel calcolo delle superfici (campi 2.3.1, 2.4.1 e 3.1.1) rientra anche la superficie delle aree comprese nella regione mediterranea	ISPRA_h abitat

23/04/2014 09:19:41 Page 1 of 1