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

CODE: 91L0

NAME: Illyrian oak-hornbeam forests (Erythronio-Carpinion)

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 Published and unpublished data, information and experts' judgments have been provided by Edoardo Biondi, Liliana Zivkovic and Giovanni Spampinato(SBI), Pietro Massimiliano Bianco and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

"Košir P., Casavecchia S., Čarni A., Škvorc Ž., Zivkovic L. & Biondi E., 2012 - Ecological and phytogeographical differentiation of oak-hornbeam forests in southeastern Europe. Plant Biosystems doi: 10.1080/11263504.2012.717550. Blasi C., Filibeck G. & Rosati L., 2002. La vegetazione forestale del ""Bosco di Oricola"", un querco-carpineto nell'Appennino laziale-abruzzese. Fitosociologia 39(1): 115-125. Angelini P., Augello R., Bianco P.M., Gennaio R., La Ghezza V., Lavarra P., Marrese M., Papallo O., Perrino V. M., Sani R., M. Stelluti. 2012. Carta degli habitat della Regione Puglia per il sistema informativo di Carta della Natura alla scala 1:50.000. ISPRA - Arpa Puglia 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 Falinski J.B. & Pedrotti F., 1990. The vegetation and dynamical tendencies in the vegetation of Bosco Quarto, promontorio del Gargano, Italy. Braun Blanquetia 5. 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)	32000	
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)	443,52		
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)
roads, motorways (D01.02)	medium importance (M)	N/A
burning down (J01.01)	medium importance (M)	N/A
artificial planting on open ground (non-native trees) (B01.02)	medium importance (M)	N/A
dispersed habitation (E01.03)	low importance (L)	N/A
removal of forest undergrowth (B02.03)	medium importance (M)	N/A
discontinuous urbanisation (E01.02)	medium importance (M)	N/A

forestry clearance (B02.02)	low importance (L)	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)
roads, motorways (D01.02)	medium importance (M)	N/A
burning down (J01.01)	medium importance (M)	N/A
artificial planting on open ground (non-native trees) (B01.02)	medium importance (M)	N/A
dispersed habitation (E01.03)	low importance (L)	N/A
removal of forest undergrowth (B02.03)	medium importance (M)	N/A
discontinuous urbanisation (E01.02)	medium importance (M)	N/A
forestry clearance (B02.02)	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
Quercus robur
Quercus petraea
Quercus cerris
Carpinus betulus
Aremonia agrimonoides
Asarum europaeum subsp. Caucasicum
Bromus ramosus
Crataegus laevigata
Cyclamen purpurascens
Erythronium dens-canis
Lonicera caprifolium
Lonicera xylosteum
Primula acaulis
Pulmonaria apennina
Rosa arvensis

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	

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

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	Inadequate(U1)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Inadequate(U1)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Inadequate(U1)	
2.8.5 Overall trend in Conservation Status	unknown(x)	

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	52,8179	max	52,8179
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). "Košir P., Casavecchia S., Čarni A., Škvorc Ž., Zivkovic L. & Biondi E., 2012 - Ecological and phytogeographical differentiation of oak-hornbeam forests in southeastern Europe. Plant Biosystems doi: 10.1080/11263504.2012.717550. Pirone G., Ciaschetti G., Frattaroli A,R., Corbetta F., 2003 - La vegetazione della Riserva Naturale Regionale “Lago di Serranella” (Abruzzo – Italia). Fitosociologia, 40 (2): 55-71. Conti F., Pirone G., 1992. Le cenosi di Fraxinus oxycarpa Bieb e di Carpinus betulus L. del bosco di Vallaspra nel bacino del fume Sangro (Abruzzo, Italia). Doc. Phytosoc., 14: 167-175. Biondi E., Allegrezza M. & Mentoni M., 2011. Vegetational and geomorphological analyses of a small biotope particularly important for biodiversity in Central Apennine. Fitosociologia 48(2): 109-122.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. ISPRABiondi 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_NaturaCasella 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 - SINAnetOriolo 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_NaturaPesaresi 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. Stoppa G., Villani M. & Buffa G., 2012. La componente floristica dei relitti boscati della pianura veneta orientale: qualità e grado di conservazione. Inf. Bot. It. 44(2): 301-313."

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

2.3.1 Surface area - Range (km²)	29500	
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)	266,67		
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)
roads, motorways (D01.02)	medium importance (M)	N/A
Forest and Plantation management & use (B02)	high importance (H)	N/A
burning down (J01.01)	high importance (H)	N/A
dispersed habitation (E01.03)	low importance (L)	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)
roads, motorways (D01.02)	medium importance (M)	N/A
Forest and Plantation management & use (B02)	high importance (H)	N/A
burning down (J01.01)	high importance (H)	N/A
dispersed habitation (E01.03)	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

Quercus robur
Loncomelos pyrenaicus (=Ornithogalum pyrenaicum)
Euonymus verrucosus
Euphorbia carniolica
Anemonoides nemorosa (=Anemone nemorosa)
Anemonoides rapunculoides (=Anemone ranunculoides)
Anemonoides trifolia (=Anemone trifolia)
Arisarum proboscideum
Asarum europaeum
Carex umbrosa
Carex alba

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Carex digitata
Carpinus betulus
Crataegus laevigata
Galanthus nivalis
Gagea lutea
Isopyrum thalictroides
Lamiastrum galeobdolon
Quercus petraea
Erythronium dens-canis

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	Inadequate(U1)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Inadequate(U1)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Inadequate(U1)	
2.8.5 Overall trend in Conservation Status	stable(=)	

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	80,034	max	80,034
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

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

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 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)	12700	
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	more than (>)
	unkown	No
	method	
2.3.10 Reason for change	genuine change	No
	improved knowledge	Yes
	different method	Yes

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2.4 Area covered by Habitat

2.4.1 Surface area (km²)	149,29		
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	more than (>)	
	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
artificial planting on open ground (non-native trees) (B01.02)	low importance (L)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A
Forest and Plantation management & use (B02)	medium importance (M)	N/A
Forestry activities not referred to above (B07)	medium importance (M)	N/A
Improved access to site (D05)	low importance (L)	N/A
Outdoor sports and leisure activities, recreational activities (G01)	medium importance (M)	N/A
Other human intrusions and disturbances (G05)	low importance (L)	N/A
invasive non-native species (I01)	medium importance (M)	N/A
Water abstractions from groundwater (J02.07)	low importance (L)	N/A
Other ecosystem modifications (J03)	low importance (L)	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)
roads, motorways (D01.02)	medium importance (M)	N/A
artificial planting on open ground (non-native trees) (B01.02)	low importance (L)	N/A
Urbanised areas, human habitation (E01)	medium importance (M)	N/A
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A

Forest and Plantation management & use (B02)	medium importance (M)	N/A
Forestry activities not referred to above (B07)	medium importance (M)	N/A
Improved access to site (D05)	low importance (L)	N/A
Outdoor sports and leisure activities, recreational activities (G01)	medium importance (M)	N/A
Other human intrusions and disturbances (G05)	low importance (L)	N/A
invasive non-native species (I01)	medium importance (M)	N/A
Water abstractions from groundwater (J02.07)	low importance (L)	N/A
Other ecosystem modifications (J03)	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

- Quercus robur
- Carpinus betulus
- Quercus petraea
- Asparagus tenuifolius
- Anemone spp.
- Cyclamen purpurascens
- Crataegus laevigata
- Epimedium alpinum
- Erythronium dens-canis
- Lathyrus venetus
- Lonicera caprifolium
- Ornithogalum pyrenaicum
- Stellaria holostea
- Vaccinium myrtillus
- Vinca minor

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: Inadequate(U1)
- qualifiers: N/A

2.8.2 Area
- assessment: Inadequate(U1)
- qualifiers: N/A

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2.8.3 Specific structures and functions (incl Species)	assessment	Bad(U2)
	qualifiers	N/A
2.8.4 Future prospects	assessment	Bad(U2)
	qualifiers	N/A
2.8.5 Overall assessment of Conservation Status	Bad(U2)	
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	39,4854	max	39,4854
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

Notes

Habitat code: 91L0 Region code: MED

Field label	Note	User
2.1 Region	Questo habitat è molto probabilmente presente in Liguria, dove è stato erroneamente attribuito, almeno in parte, all'habitat 91H0 che è da escludere per la regione.	ISPRA_habi