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

CODE: 4090

NAME: Endemic oro-Mediterranean heaths with gorse

1. National Level

1.1 Maps

1.1.1 Distribution Map	Yes
1.1.2 Distribution Method	Estimate based on partial data with some extrapolation and/or modelling (2)
1.1.3 Year or period	2006-2012
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

Dimopoulos P., Xystrakis F. and Tsiripidis I. 2014. Deliverable A1. Final Catalogue of Habitat Types – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, pages 54.

Dimopoulos P., Fotiadis G., Tsiripidis I., Panitsa M. and Karadimou E. 2014. Deliverable A2. Report and Literature Database on Habitat Types of Greece – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, pages 210.

Tsiripidis I., Xystrakis F., Kasampalis D., Mastrogianni A., Strid A. and Dimopoulos P., 2014. Deliverable A4. Potential Distribution Maps of Habitat Types – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, Athens, pages 176.

Dimopoulos P., Tsiripidis I., Xystrakis F., Panitsa M., Fotiadis G., Kallimanis A.S. and Kazoglou I. 2014. Deliverable A6. Explanatory Implementation Manual for the Conservation Degree Assessment of Habitat Types – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, pages 35. (with Annexes: I. Habitat types protocols, pages 600; II. Explanatory notes on the habitat types protocols selection, pages 4; III. Correspondence of Habitat types protocols with the clusters of vegetation relevés (excel file).

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Βραχνάκης Μ., Φωτιάδης Γ. & Καζόγλου Ι. 2011. Τύποι Οικοτόπων Εθνικού Πάρκ ου Πρεσπών – Αναγνώριση-Καταγραφή 2011. Εταιρία Προστασίας Πρεσπών, σελ . 101.

Γερασιμίδης Α. & Κοράκης Γ. 2006. Η βλάστηση των ορεινών λιβαδικών περιοχώ ν στο όρος Μιτσικέλι. Πρακτικά 4ου Πανελλήνιου Λιβαδοπονικού Συνεδρίου της Ελληνικής Λιβαδοπονικής Εταιρείας, Βόλος, 10-12 Νοεμβρίου 2004: 183-191.

Δημητρέλλος Ν.Γ. 2005. Γεωβοτανική Έρευνα του Όρους Τυμφρηστού (ΒΔ Στερεά Ελλάδα) Χλωρίδα - Βλάστηση - Αξιολόγηση - Διαχείριση. Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 296.

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Georgiadis Th. & Dimopoulos P. 1993. Etude de la vegetation supraforestiere du Mont Kyllini (Peloponnese-Grece). Bot. Helv. 103: 149-175.

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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)	4882	
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	Improved knowledge/more accurate data Use of different method	

2.4 Area covered by Habitat

2.4.1 Surface area (km²)	1809,12	
2.4.2 Year or period	2000-2012	
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
2.4.7 Short term trend method used	Estimate based on partial data with some extrapolation and/or modelling (2)	
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	approximately equal to (≈)
	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)
modification of cultivation practices (A02)	low importance (L)	N/A
grazing (A04)	low importance (L)	N/A
Roads, paths and railroads (D01)	low importance (L)	N/A
Utility and service lines (D02)	low importance (L)	N/A
Structures, buildings in the landscape (E04)	low importance (L)	N/A
Taking / Removal of terrestrial plants, general (F04)	low importance (L)	N/A
Changes in abiotic conditions (M01)	low importance (L)	N/A

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

2.6 Main Threats

Threat	ranking	pollution qualifier(s)
grazing (A04)	low importance (L)	N/A
Roads, paths and railroads (D01)	low importance (L)	N/A
Structures, buildings in the landscape (E04)	low importance (L)	N/A
Taking / Removal of terrestrial plants, general (F04)	low importance (L)	N/A
abiotic (slow) natural processes (K01)	low importance (L)	N/A
Changes in abiotic conditions (M01)	low importance (L)	N/A

2.6.1 Method used – threats	expert opinion (1)

2.7 Complementary Information

2.7.1 Species
Acantholimon androsaceum
Acinos alpinus
Allium frigidum
Anchusa cespitosa
Anthemis cretica
Asperula boissieri
Aster alpinus
Astragalus angustifolius
Astragalus creticus
Astragalus sempervirens
Astragalus sirinicus
Astragalus taygeteus
Astragalus thracicus
Asyneuma limonifolium
Campanula spatulata
Centaurea pichleri
Cerastium candidissimum
Cirsium hypopsilum
Daphne oleoides
Draba lacaitae
Eryngium amethystinum
Erysimum pusillum
Festuca polita
Festuca varia
Fumana bonapartei
Galium thymifolium
Genista acanthoclada
Geranium macrostylum
Globularia stygia

Koeleria lobata

Marrubium cylleneum

Marrubium velutinum

Minuartia attica

Minuartia stellata

Peucedanum vourinense

Poa thessala

Prunus prostrata

Ptilostemon afer

Rindera graeca

Sesleria coerulans

Sesleria vaginalis

Sideritis clandestina

Stipa pennata

Telephium imperati

Thymus leucotrichus (syn:Thymus hirsutus subsp. leucotrichus)

Thymus parnassicus syn:Thymus hirsutus subsp. Parnassicus)

Thymus teucrioides subsp. Alpinus

2.7.2 Species method used	Typical species were determined on the basis of a vegetation database, comprised of about 22000 sampling plots. First, a list of possible typical species was determined per habitat type, selecting the ones presenting a high fidelity value to the habitat types according the algorithm of Tsiripidis et al. (2009) and the phi coefficient value (Chytrý et al. 2002). Then typical species per habitat type were selected from the above-mentioned lists by expert judgment and using as criteria species niche breadth, their ability to comprise indicators of habitat types' conservation status and their function as keystone species. The nomenclature of the typical species follows Dimopoulos et al. (2013).ReferencesChytrý , M., Tichý , L., Holt, J. & Botta-Duká t, J. 2002. Determination of diagnostic species with statistical fidelity measures. Journal of Vegetation Science 13: 79–90.Dimopoulos, P., Raus, Th., Bergmeier, E., Constantinidis, Th., Iatrou, G., Kokkini, S., Strid, A. & Tzanoudakis, D. 2013: Vascular plants of Greece: an annotated checklist. – Berlin: Botanischer Garten und Botanisches Museum Berlin-Dahlem, Freie Universität Berlin; Athens: Hellenic Botanical Society. Englera 31: 1-367.Tsiripidis, I., Bergmeier, E., Fotiadis, G. & Dimopoulos, P. 2009. A new algorithm for the determination of differential taxa. Journal of Vegetation Science 20: 233-240.
2.7.3 Justification of % - thresholds for trends	
2.7.4 Structure and functions - methods used	Complete survey/Complete survey or a statistically robust estimate (3)
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

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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	1355,2	max	1355,2
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)			
3.1.3. Trend of surface area	stable (0)			

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
Establish protected areas/sites (6.1)	Legal Administrative One-off	high importance (H)	Inside	Maintain Long term