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

CODE: 6230

NAME: Species-rich Nardus grasslands, on silicious substrates in mountain areas (and submountain areas in Continental Eur

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).

Dimopoulos P., Tsiripidis I., Xystrakis F., Kallimanis A.S and Panitsa M. 2014. Deliverable A7. Preliminary Analysis of the Field Data for the Habitat Types – 1st edition. Ministry of Environment, Energy and Climate Change, OIKOM Ltd - E. Alexandropoulou - A. Glavas, Athens, pages 16.

Παναγιωτίδης Σ., Ιώβη Α., Φωτιάδης Γ. & Γερασιμίδης Α. 2008. Βλάστηση των ψε υδαλπικών λιβαδιών των Πιερίων ορέων και απεικόνισή της στα ετήσια κατακρη μνίσματα γύρης. Πρακτικά 6ου Πανελλήνιου Λιβαδοπονικού Συνεδρίου «Λιβαδο πονία και Προστατευόμενες Περιοχές» (Μαντζανάς Κ. & Παπαναστάσης Π.Β. εκδ .), 2-4 Οκτωβρίου 2008, Λεωνίδιο Αρκαδίας: 51-56.

Φωτιάδης Γ., Ιώβη Κ., Αθανασιάδης Ν. & Παπαναστάσης Β. 2006. Συμβολή στη φ υτοκοινωνιολογική γνώση των ψευδαλπικών λιβαδιών: οι περιπτώσεις των Πιερί ων ορέων και του όρους Μπέλες. Πρακτικά 4ου Πανελλήνιου Λιβαδοπονικού Συ νεδρίου της Ελληνικής Λιβαδοπονικής Εταιρείας, Βόλος, 10-12 Νοεμβρίου 2004: 245-252.

Θεοδωρόπουλος Κ., Ξυστράκης Φ., Ελευθεριάδου Ε. & Σαμαράς Δ. 2011. Ζώνες βλάστησης και τύποι οικοτόπων της περιοχής του φορέα διαχείρισης Εθνικού Δρ υμού Ολύμπου. Επιστ. Επετ. Σχολής Δασολογίας και Φυσικού Περιβάλλοντος, Α ΠΘ 2002, ΜΕ, σελ. 18 (σε CD).

Χοχλιούρος Π.Σ. 2005. Χλωριδική και Φυτοκοινωνιολογική Έρευνα του Όρους Βε

ρμίου - Οικολογική προσέγγιση. Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 352 + 3 Παραρτήματα.
Κοκμοτός Ε. 2008. Χλωριδική και φυτοκοινωνιολογική μελέτη των ορεινών όγκων της Βοιωτίας (Ελικώνας-Ξεροβούνι-Νεραϊδολάκκωμα). Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 509 + 3 Παραρτήματα.
Δημητρέλλος Ν.Γ. 2005. Γεωβοτανική Έρευνα του Όρους Τυμφρηστού (ΒΔ Στερεά Ελλάδα) Χλωρίδα - Βλάστηση - Αξιολόγηση - Διαχείριση. Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 296
Βραχνάκης Μ., Φωτιάδης Γ. & Καζόγλου Ι. 2011. Τύποι Οικοτόπων Εθνικού Πάρκου Πρεσπών – Αναγνώριση-Καταγραφή 2011. Εταιρία Προστασίας Πρεσπών, σελ. 101.
Βλάχος Α. 2006. Χλωρίδα Βλάστηση και Οικολογία του ορεινού συγκροτήματος των Βαρδουσίων. Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 396.
Μαρούλης Γ. 2003. Χλωρίδα και βλάστηση των οικοσυστημάτων του όρους Ερύμανθος (ΒΔ Πελοπόννησος). Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 450 + 1 Παράρτημα + 1 Χάρτης.
Καρέτσος, Γ. 2002. Μελέτη της Οικολογίας και της Βλάστησης του Όρους Οίτη. Διδακτορική Διατριβή. Πάτρα, σελ. 325.
Karagiannakidou V. 1994. Contribution to the study of mountain-subalpine grassland vegetation of Mount Menikion, north-eastern Greece. Ecologia Mediterranea XX (3-4): 73-84.
Δημόπουλος Δ. Π. 1993. Χλωριδική και Φυτοκοινωνιολογική έρευνα του όρους Κυλλήνη - Οικολογική Προσέγγιση. Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 370.
Quézel P. 1969. La vegetation du massif du Bela-Voda (Macédoine nord-occidentale). Biol. Gallo-Hellen. 2(2): 93-112.
Quézel P. 1967a. La vegetation des hauts sommets du Pinde et de l'Olympe de Thessale. Vegetatio XIV (1/4): 127-229.
Marulis G. & Georgiadis T. 2005. The vegetation of supra–forest meadows and rock crevices of Mount Erimanthos (NW Peloponnisos, Greece). Fitosociologia 42(1): 33-56.
Quézel P. 1964. Vegetation des hautes montanges de la Grece meriodionale. Vegetatio XII (5/6):289-385 + 33 Tables.

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

2.3.1 Surface area - Range (km²)	1257	
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

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

2.4.1 Surface area (km²)	150,16	
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)
grazing (A04)	low importance (L)	N/A
Other human intrusions and disturbances (G05)	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)
modification of cultivation practices (A02)	low importance (L)	N/A
grazing (A04)	low importance (L)	N/A
Other human intrusions and disturbances (G05)	low importance (L)	N/A
Biocenotic evolution, succession (K02)	low importance (L)	N/A

2.6.1 Method used – threats	expert opinion (1)

2.7 Complementary Information

2.7.1 Species
Agrostis castellana
Alopecurus gerardii
Anthoxanthum odoratum
Armeria canescens
Bellardiochloa variegata
Bruckenthalia spiculifolia
Campanula radicosa
Campanula spatulata
Campanula tymphaea

Crocus sieberi

Danthonia decumbens

Dianthus deltoides

Dianthus viscidus

Euphrasia minima

Festuca species

Herniaria parnassica

Hieracium hoppeanum s.l.

Lotus corniculatus

Luzula spicata

Luzula sudetica

Nardus stricta

Phleum alpinum

Plantago atrata

Plantago holosteum

Poa thessala

Ranunculus sartorianus

Scleranthus perennis

Sedum atratum

Silene roemeri

Taraxacum sect. Erythrosperma

Thymus longicaulis

Trifolium ottonis

Trifolium parnassi

Trifolium repens

Verbascum eriophorum

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-Dukát, 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
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	141,8	max	141,8
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
Legal protection of habitats and species (6.3)	Legal	high importance (H)	Both	Maintain Long term