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

CODE: 6420

NAME: Mediterranean tall humid grasslands of the Molinio-Holoschoenion

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.

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

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Θεοδωρόπουλος Κ. 2001. Ζώνες βλάστησης και τύποι οικοτόπων του νομού Θεσσαλονίκης. Επιστ. Επετ. Τμημ. Δασολογίας & Φυσικού Περιβάλλοντος ΜΔ: 353-381.

Καζόγλου Ι. 2007. Επιδράσεις της βόσκησης βούβαλων στα υγρά ποολίβαδα του Εθνικού Δρυμού Πρεσπών. Διδακτορική διατριβή. Εργαστήριο Λιβαδικής Οικολογίας, Τομέας Λιβαδοπονίας και Άγριας Πανίδας – Ιχθυοπονίας Γλυκέων Υδάτων, Σχολή Δασολογίας και Φυσικού Περιβάλλοντος, Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης, σελ. 244.

Καράγιαννη Π., Τηνιακού Α. & Γεωργιάδης Θ. 2005. Συμβολή στην παρόχθια βλά

στηση των ποταμών της Δυτικής Ελλάδος. Πρακτικά 10ου Πανελλήνιου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανικής Εταιρίας, Ιωάννινα, 5-8 Μαίου 2005, σελ. 10 (σε CD).
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Λαυρεντιάδης Γ. & Παυλίδης Γ. 1985. Συμβολή στην έρευνα των υδρόβιων και ελόβιων φυτοκοινωνιών της Μικρής Πρέσπας. Πρακτικά 4ου Επιστημονικού Συμποσίου της Ελληνικής Βοτανικής Εταιρίας, Θεσσαλονίκη, 23-24 Μαρτίου 1985: 145-155.
Quézel P. 1989. Contribution à l'étude phytosociologique des pelouses ecorchées culminales du massif du Falakron. Bios (Thessalonika) 1989: 187-193
Φωτιάδης Γ., Καζόγλου Ι. & Μπούσμπουρας Δ. 2008. Τύποι βλάστησης της λίμνης Χειμαδίτιδας πριν από την τεχνητή άνοδο της στάθμης της. Πρακτικά 6ου Πανελλήνιου Λιβαδοπονικού Συνεδρίου, Λεωνίδιο Αρκαδίας, 2-4 Οκτωβρίου 2008: 101-106.
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Σαρίκα-Χατζηνικολάου Μ. 1999. Χλωριδική και φυτοκοινωνιολογική έρευνα υδάτινων οικοσυστημάτων της Ηπείρου. Διδακτορική Διατριβή. Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών, σελ. 495 + 1 Πίνακας.
Σαρίκα-Χατζηνικολάου Μ., Μπαμπαλώνας Δ. & Γιαννίτσαρος Α. 1998. Φυτοκοινωνιολογική μελέτη της ελοφυτικής βλάστησης υδάτινων οικοσυστημάτων της Ηπείρου. Πρακτικά 7ου Πανελλήνιου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανικής Εταιρίας, Αλεξανδρούπολη, 1-4 Οκτωβρίου 1998: 134-141.

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

2.3.1 Surface area - Range (km²)	1270	
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)	68,15	
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

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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)
Cultivation (A01)	low importance (L)	N/A
modification of cultivation practices (A02)	low importance (L)	N/A
grazing (A04)	low importance (L)	N/A
Fertilisation (A08)	low importance (L)	N/A
forest planting on open ground (B01)	low importance (L)	N/A
Roads, paths and railroads (D01)	low importance (L)	N/A
Urbanised areas, human habitation (E01)	low importance (L)	N/A
Outdoor sports and leisure activities, recreational activities (G01)	low importance (L)	N/A
Other human intrusions and disturbances (G05)	low importance (L)	N/A
human induced changes in hydraulic conditions (J02)	low importance (L)	N/A
Other ecosystem modifications (J03)	low importance (L)	N/A
Biocenotic evolution, succession (K02)	low importance (L)	N/A
storm, cyclone (L07)	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)
Cultivation (A01)	low importance (L)	N/A
modification of cultivation practices (A02)	low importance (L)	N/A
grazing (A04)	low importance (L)	N/A
livestock farming and animal breeding (without grazing) (A05)	low importance (L)	N/A
Fertilisation (A08)	low importance (L)	N/A
forest planting on open ground (B01)	low importance (L)	N/A
Roads, paths and railroads (D01)	low importance (L)	N/A
Urbanised areas, human habitation (E01)	low importance (L)	N/A
Outdoor sports and leisure activities, recreational activities (G01)	low importance (L)	N/A
Sport and leisure structures (G02)	low importance (L)	N/A

Other human intrusions and disturbances (G05)	low importance (L)	N/A
human induced changes in hydraulic conditions (J02)	low importance (L)	N/A
Other ecosystem modifications (J03)	low importance (L)	N/A
Biocenotic evolution, succession (K02)	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

Apium nodiflorum
Blechnum spicant
Bolboschoenus maritimus
Briza minor
Bromus racemosus
Carex distans
Carex divisa
Cirsium creticum
Conyza albida
Cynodon dactylon
Dittrichia viscosa
Eleocharis multicaulis
Equisetum ramosissimum
Euphorbia baselicis (syn: Euphorbia barrelieri)
Euphorbia hirsuta
Fritillaria species
Fuirena pubescens
Galium rivale
Helichrysum luteoalbum (syn: Gnaphalium luteoalbum)
Hydrocotyle vulgaris
Hypochaeris radicata
Juncus acutus
Juncus effusus
Lathyrus neurolobus
Linum bienne
Matricaria chamomilla (syn: Matricaria recutita)
Oenanthe pimpinelloides
Ophrys apifera
Ophrys fuciflora subsp. fuciflora (syn: Ophrys minoa)
Orchis laxiflora
Parentucellia viscosa

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Pinguicula crystallina subsp. Hirtiflora
Plantago lanceolata
Polypogon monspeliensis
Ranunculus sardous
Ranunculus velutinus
Rorippa species
Saccharum ravennae
Schoenus nigricans
Scirpoides holoschoenus
Scirpus holoschoenus
Serapias lingua
Teucrium scordium
Trifolium patens
Trifolium resupinatum
Verbascum sinuatum

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

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2.8.3 Specific structures and functions (incl Species)	assessment	Inadequate (U1)
	qualifiers	stable (=)
2.8.4 Future prospects	assessment	Inadequate (U1)
	qualifiers	stable (=)
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	25,2	max	25,2
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	medium importance (M)	Inside	Enhance Long term