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

CODE: 2120

NAME: Shifting dunes along the shoreline with Ammophila arenaria (‘white dunes’)

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.

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Δρόσος Ε., Αθανασιάδης Ν., Θεοδωρόπουλος Κ. & Ελευθεριάδου Ε. 1996. Αμμόφ

ιλες, Αλόφιλες και υδρόφιλες φυτοκοινωνίες του Δέλτα του Θεσσαλικού Πηνειο ύ ποταμού. Επιστ. Επετ. Τμημ. Δασολογίας & Φυσικού Περιβάλλοντος 39(1): 327-365.
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Μπαμπαλώνας Δ.Γ. 1979. Φυτοκοινωνιολογική Μελέτη επί της Βλαστήσεως του Δέλτα του Ποταμού Έβρου (Αινήσιον Δέλτα). Διδακτορική Διατριβή. ΑΠΘ, σελ. 158 + Παράρτημα με 2 πίνακες.
Μπαμπαλώνας Δ. 1979. Οι φυτοκοινωνιολογικές τάξεις Ammophiletalia arundinaceae (Br.-Bl. 1933) R. Tx. et Oberd. 1958 και Elymetalia gigantei Vich. 1971 στην οριακή θέση της Θράκης.

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

2.3.1 Surface area - Range (km²)	105,71	
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)	33,12
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 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)
grazing (A04)	low importance (L)	N/A
forest planting on open ground (B01)	low importance (L)	N/A
Mining and quarrying (C01)	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
Discharges (E03)	low importance (L)	N/A
Outdoor sports and leisure activities, recreational activities (G01)	medium importance (M)	N/A
Sport and leisure structures (G02)	low importance (L)	N/A
Other human intrusions and disturbances (G05)	low importance (L)	N/A
Soil pollution and solid waste (excluding discharges) (H05)	low importance (L)	N/A
invasive non-native species (I01)	low importance (L)	N/A
fire and fire suppression (J01)	low importance (L)	N/A
Other ecosystem modifications (J03)	low importance (L)	N/A
Biocenotic evolution, succession (K02)	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
forest planting on open ground (B01)	low importance (L)	N/A
Mining and quarrying (C01)	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
Discharges (E03)	low importance (L)	N/A

Outdoor sports and leisure activities, recreational activities (G01)	medium importance (M)	N/A
Sport and leisure structures (G02)	low importance (L)	N/A
Other human intrusions and disturbances (G05)	low importance (L)	N/A
Soil pollution and solid waste (excluding discharges) (H05)	low importance (L)	N/A
invasive non-native species (I01)	low importance (L)	N/A
fire and fire suppression (J01)	low importance (L)	N/A
Other ecosystem modifications (J03)	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

Ammophila arenaria
Artemisia santonicum subsp. santonicum (syn: Artemisia maritima agg.)
Cakile maritima
Calystegia soldanella
Centaurea pumilio
Cutandia maritima
Cyperus capitatus
Echinophora spinosa
Elytrigia juncea (syn: Elymus farctus)
Eryngium maritimum
Euphorbia paralias
Hordeum marinum
Leymus racemosus
Medicago marina
Minuartia thymifolia
Achillea maritima (syn: Otanthus maritimus)
Oxalis debilis (syn: Oxalis corymbosa)
Pancratium maritimum
Peucedanum obtusifolium
Pseudorlaya pumila
Silene niceensis
Sporobolus pungens
Triplachne nitens
Verbascum pinnatifidum

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). References Chytrý , 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
2.8.2 Area	assessment	Inadequate (U1)
	qualifiers	stable (=)
2.8.3 Specific structures and functions (incl Species)	assessment	Bad (U2)
	qualifiers	stable (=)
2.8.4 Future prospects	assessment	Inadequate (U1)
	qualifiers	stable (=)
2.8.5 Overall assessment of Conservation Status	Bad (U2)	
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	26,7	max	26,7
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	Enhance Long term