

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

## NATIONAL LEVEL

### 1. General information

1.1 Member State	GR
1.2 Habitat code	5210 - Arborescent matorral with Juniperus spp.

### 2. Maps

2.1 Year or period	2007-2018
2.3 Distribution map	Yes
2.3 Distribution map Method used	Based mainly on extrapolation from a limited amount of data
2.4 Additional maps	Yes

## BIOGEOGRAPHICAL LEVEL

### 3. Biogeographical and marine regions

3.1 Biogeographical or marine region where the habitat occurs	<b>Mediterranean (MED)</b>
3.2 Sources of information	<p>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.</p> <p>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.</p> <p>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.</p> <p>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).</p> <p>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.</p> <p>Βαλλιανάτου Ε. 2005. Γεωβοτανική Έρευνα της Σαλαμίνας, Αίγινας και μερικών άλλων Νησιών του Σαρωνικού Κόλπου. Διδακτορική Διατριβή. Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών, σελ. 558.</p> <p>Barbero M. &amp; Quézel P. 1976. Les groupements forestiers de Grece Centro-Meridionale. <i>Ecologia Mediterranea</i> 2: 1-86.</p>

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

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

Γεωργιάδης Θ., Δημητρέλλος Γ., Δημόπουλος Π. & Βασιλάκης Κ. 1994. Μελέτη της οικολογικής κατάστασης της περιβάλλουσας βλάστησης στα πλαίσια της διαχείρισης και προστασίας του Δέλτα του Αχέροντα. Πρακτικά 5ου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανικής Εταιρείας, Δελφοί, 21-23 Οκτωβρίου 1994: 111-115.

Δεληπέτρου Π., Οικονομίδου Ε. & Τσιουρλής Γ. 1996. Η βιοποικιλότητα των νησιών του Αιγαίου όπως εκφράζεται από τους οικοτόπους και τα είδη της χλωρίδας που προστατεύονται από την οδηγία 92/43/ΕΟΚ στις προτεινόμενες περιοχές του δικτύου "Φύση 2000". Πρακτικά 6ου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανικής Εταιρείας και της Βιολογικής Εταιρείας Κύπρου, Παραλίμνι Κύπρου, 6-11 Απριλίου 1996: 74-78.

Δημητρέλλος Ν.Γ. 2005. Γεωβοτανική Έρευνα του Όρους Τυμφρηστού (ΒΔ Στερεά Ελλάδα) Χλωρίδα - Βλάστηση - Αξιολόγηση - Διαχείριση. Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 296 Θεοδωρόπουλος Κ. & Ελευθεριάδου Ε. 2003. Η βλάστηση θαμνώνων οξύκεδρης αρκεύθου (*Juniperus oxycedrus* L. ssp. *oxycedrus*) στο όρος Όρβηλος (Α. Μακεδονία, Νομός Δράμας, Ελλάδα). Πρακτικά 3ου Πανελληνίου Λιβαδοπονικού Συνεδρίου, Καρπενήσι, 4-6 Σεπτεμβρίου 2002: 223-232.

Κοκμοτός Ε. 2008. Χλωριδική και φυτοκοινωνιολογική μελέτη των ορεινών όγκων της Βοιωτίας (Ελικώνας-Ξεροβούνι-Νεραϊδολάκκωμα). Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 509 + 3 Παραρτήματα. Κοράκης Γ. & Αραβίδης Η. 2004. Καταγραφή, ταξινόμηση και αξιολόγηση των φυσικών ενδιαιτημάτων του Λακωνικού Ταυγέτου σύμφωνα με την οδηγία 92/43/ΕΟΚ. Πρακτικά 1ου Πανελληνίου Περιβαλλοντικού Συνεδρίου, Νέα Ορεστιάδα, 7-9 Μαΐου 2004: 891-900.

Πανίτσα Μ. & Τζανουδάκης Δ. 2005. Συμβολή στη γνώση της χλωρίδας και της βλάστησης του μικρονησιωτικού συμπλέγματος της Λέρου. Πρακτικά 10ου Πανελληνίου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανικής Εταιρείας, Ιωάννινα, 5-8 Μαΐου 2005, σελ. 3 (σε CD).

Πλατής Π., Παπαχρήστου Θ., Μελιάδης Ι. & Μαντζανάς Κ. 2007. Ποικιλότητα τύπων οικοτόπων της περιοχής Ακαρνανικών ορέων του Δικτύου "Φύση 2000". Πρακτικά 13ου Πανελληνίου Δασολογικού Συνεδρίου της Ελληνικής Δασολογικής Εταιρείας, Χλόη Καστοριάς, 7-10 Οκτωβρίου 2007 (τόμος Ι): 116-124.

Πυρινή ΧΒ.Χ. 2011. Το οικοσύστημα των λιμνών Βεγορίτιδας και Πετρών: χλωρίδα, βλάστηση και φυτογεωγραφία. Διδακτορική Διατριβή. ΑΠΘ, σελ. 332 + Παράρτημα.

Theocharopoulos M., Dimitrellos G., Assimakopoulos I. & Georgiadis Th. 1998. Recherche phytosociologique des communautes a *Juniperus phoenicea* et *Euphorbia dendroides* en Grece: zone littorale et sub-littorale au nord du golfe de Corinthe (Sterea Hellas-Grece Centrale). Colloques Phytosociologiques XXVIII:

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

1197-1213

Theocharopoulos M., Dimitrellos G. & Georgiadis Th. 1998. Study on the vegetation and the dynamics of *Euphorbia dendroides* and *Juniperus phoenicea* plant communities in S. Greece (N. Korinthiakos Gulf). Proceedings of the 1st Balkan Botanical Congress (Progress in Botanical Research), Thessaloniki 1998. Kluwer Academic Publishers: 157-160.

Theocharopoulos M. & Georgiadis Th. 1984. Contribution a l'etude de la vegetation de l'Attique orientale (NEA MAKRI) en Grece (Prise en compte des impacts urbains et touristiques). *Ecologia Mediterranea* X(3-4): 133-157.

Χοχλίουρος Π.Σ. 2005. Χλωριδική και Φυτοκοινωνιολογική Έρευνα του Όρους Βερμίου - Οικολογική προσέγγιση. Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 352 + 3 Παραρτήματα.

Βραχνάκης, Μ., Φωτιάδης, Γ., Καζόγλου, Ι. 2011. Τύποι Οικοτόπων Εθνικού Πάρκου Πρεσπών, Αναγνώριση – Καταγραφή 2011. Εταιρία Προστασίας Πρεσπών – ΤΕΙ Λάρισας, 104 σελ. + Παραρτήματα.

Τσιτούρα Π., Βραχνάκης Μ., Καζόγλου Ι., Φωτιάδης Γ., Χουβαρδάς Δ., Μπούσμπουρας Δ., Κώτσιος Λ., Ππαπορφυρίου Π., Σπυρίδης Α., Τσιριπίδης Ι., Κουταλού Β., Νασιάκου Σ., Γεωργάκη Δ., Ζαγαλίκης Γ., Κεσκιλίδου Κ., Κιγκας Ν. 2015. Οριστικό Διαχειριστικό Βόσκησης του Δήμου Πρεσπών. Έργο: «Ειδική Μελέτη διαχείρισης της βόσκησης σε λιβαδικούς και δασικούς τύπους οικοτόπων στην περιοχή Ευθύνης του Φορέα Διαχείρισης Εθνικού Πάρκου Πρεσπών». Περιφέρεια Δυτικής Μακεδονίας, Φορέας Διαχείρισης Εθνικού Πάρκου Πρεσπών, 204 σελ.

## 4. Range

4.1 Surface area	2772
4.2 Short-term trend Period	2007-2018
4.3 Short-term trend Direction	Stable (0)
4.4 Short-term trend Magnitude	a) Minimum <span style="float: right;">b) Maximum</span>
4.5 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data
4.6 Long-term trend Period	
4.7 Long-term trend Direction	
4.8 Long-term trend Magnitude	a) Minimum <span style="float: right;">b) Maximum</span>
4.9 Long-term trend Method used	Based mainly on extrapolation from a limited amount of data
4.10 Favourable reference range	a) Area (km <sup>2</sup> ) b) Operator <span style="float: right;">Approximately equal to (≈)</span> c) Unknown <span style="float: right;">Yes</span> d) Method
4.11 Change and reason for change in surface area of range	No change The change is mainly due to:
4.12 Additional information	

## 5. Area covered by habitat

5.1 Year or period	2015-015-
5.2 Surface area (in km <sup>2</sup> )	a) Minimum <span style="float: right;">b) Maximum</span> <span style="float: right;">c) Best single value</span> 592,13

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

5.3 Type of estimate	Minimum
5.4 Surface area Method used	Based mainly on extrapolation from a limited amount of data
5.5 Short-term trend Period	2007-2018
5.6 Short-term trend Direction	Stable (0)
5.7 Short-term trend Magnitude	a) Minimum                      b) Maximum                      c) Confidence interval
5.8 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data
5.9 Long-term trend Period	
5.10 Long-term trend Direction	
5.11 Long-term trend Magnitude	a) Minimum                      b) Maximum                      c) Confidence interval
5.12 Long-term trend Method used	
5.13 Favourable reference area	a) Area (km <sup>2</sup> ) b) Operator      Approximately equal to (≈) c) Unknown      Yes d) Method
5.14 Change and reason for change in surface area of range	No change The change is mainly due to:
5.15 Additional information	The surface area of the habitat (5.2) is equal to the area of the habitat within the Natura 2000 network (pSCIs, SCIs and SACs) (11.1), as reported for the previous reporting period (2007-2013).

## 6. Structure and functions

6.1 Condition of habitat	a) Area in good condition      Minimum 532,92      Maximum 532,92 (km <sup>2</sup> ) b) Area in not-good condition (km <sup>2</sup> )      Minimum 0      Maximum 0 c) Area where condition is not known (km <sup>2</sup> )      Minimum 59,21      Maximum 59,21
6.2 Condition of habitat Method used	Complete survey or a statistically robust estimate
6.3 Short-term trend of habitat area in good condition Period	20072018
6.4 Short-term trend of habitat area in good condition Direction	Stable (0)
6.5 Short-term trend of habitat area in good condition Method used	Complete survey or a statistically robust estimate
6.6 Typical species	Has the list of typical species changed in comparison to the previous reporting period?      No
6.7 Typical 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.

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

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.

## 6.8 Additional information

Assumption: 90% of habitat area is estimated to be in good condition.

## 7. Main pressures and threats

### 7.1 Characterisation of pressures/threats

Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Conversion to other types of forests including monocultures (B02)	M
Other forestry activities, excluding those relating to agro-forestry (B29)	M
Mining and extraction activities not referred to above (C15)	M
Sports, tourism and leisure activities (F07)	M
Other human intrusions and disturbance not mentioned above (H08)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Abandonment of traditional forest management (B04)	M
Sports, tourism and leisure activities (F07)	M
Suppression of fire for forestry (B14)	M
Mining and extraction activities not referred to above (C15)	H
Wind, wave and tidal power, including infrastructure (D01)	M
Other invasive alien species (other than species of Union concern) (I02)	M
Abiotic natural processes (e.g. erosion, silting up, drying out, submersion, salinization) (L01)	M

### 7.2 Sources of information

PRESSURES: Based mainly on expert judgement and other data.  
THREATS: Based on expert opinion.

### 7.3 Additional information

## 8. Conservation measures

### 8.1 Status of measures

- a) Are measures needed? **No**
- b) Indicate the status of measures

### 8.2 Main purpose of the measures taken

### 8.3 Location of the measures taken

### 8.4 Response to the measures

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

## 8.5 List of main conservation measures

()

## 8.6 Additional information

## 9. Future prospects

9.1 Future prospects of parameters	a) Range	Good
	b) Area	Good
	c) Structure and functions	Good

## 9.2 Additional information

## 10. Conclusions

10.1. Range	Favourable (FV)
10.2. Area	Favourable (FV)
10.3. Specific structure and functions (incl. typical species)	Favourable (FV)
10.4. Future prospects	Favourable (FV)
10.5 Overall assessment of Conservation Status	Favourable (FV)
10.6 Overall trend in Conservation Status	Stable (=)
10.7 Change and reasons for change in conservation status and conservation status trend	a) Overall assessment of conservation status No change The change is mainly due to:  b) Overall trend in conservation status No change The change is mainly due to:
10.8 Additional information	

## 11. Natura 2000 (pSCIs, SCIs, SACs) coverage for Annex I habitat types

11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network (in km <sup>2</sup> in biogeographical/marine region)	a) Minimum b) Maximum c) Best single value 592,13
11.2 Type of estimate	Minimum
11.3 Surface area of the habitat type inside the network Method used	Complete survey or a statistically robust estimate
11.4 Short-term trend of habitat area in good condition within the network Direction	Stable (0)
11.5 Short-term trend of habitat area in good condition within network Method used	Complete survey or a statistically robust estimate
11.6 Additional information	The change in 11.1 (in comparison to the previous report) is due to the updated

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

mapping datasets on terrestrial habitat types within the Natura 2000 network (pSCIs, SCIs and SACs), based on the most recent national project (results became available in 2018). As this project did not include the extended areas of the Natura 2000 sites, nor the newly proposed SCIs, the surface area reported is the minimum.

## 12. Complementary information

12.1 Justification of % thresholds for trends

12.2 Other relevant information