

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

CODE: 9530

NAME: (Sub-) Mediterranean pine forests with endemic black pines

## 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

### 2.2 Published

#### Mediterranean (MED)

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.

Αθανασιάδης Η.Ν., Θεοδωρόπουλος Γ.Κ. & Κωνσταντινίδης Ν.Π. 1992. Οι φυτοκοινωνιολογικές μονάδες βλάστησης των δασών της *Pinus nigra ssp. pallasiana* της χερσονήσου Σιθωνίας Χαλκιδικής. Επιστ. Επετ. Τμημ. Δασολογίας & Φυσ. Περιβάλλοντος, ΑΠΘ, ΛΕ/1: 273-306.

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Bergmeier E. 2002. Plant communities and habitat differentiation in the Mediterranean coniferous woodlands of Mt. Parnon (Greece). *Folia Geobotanica* 37: 309-331.

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Γεωργιάδης Θ., Δημόπουλος Π., Πανίτσα Μ. & Δημητρέλλος Γ. 1996. Τα φυσικά οικοσυστήματα της Πελοποννήσου με βάση την ποικιλότητα σε τύπους οικοτόπων

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ν και τα σημαντικά τους είδη. Πρακτικά 6ου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανικής Εταιρείας και της Βιολογικής Εταιρείας Κύπρου, Παραλίμνι Κύπρου, 6-11 Απριλίου 1996: 68-73.

Δημόπουλος Δ. Π. 1993. Χλωριδική και Φυτοκοινωνιολογική έρευνα του όρους Κυλλίνη - Οικολογική Προσέγγιση. Διδακτορική Διατριβή. Πανεπιστήμιο Πατρών, σελ. 370.

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Gamisans J. & Hebrard J.-P. 1979. A propos de la vegetation des forets d' Epire et de Macedoine Grecque occidentale. *Documents phytosociologiques* IV: 290-327.

Habeck F. & Reif A. 1994. Die Waldgesellschaften der montanen und subalpinen Stufe des Ostabfalls des Olymp, Griechenland. *Phytocoenologia* 22(4): 501-536.

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Μπαζός Ι. & Γιαννίσαρος Α. 2005. Χλωρίδα και βλάστηση της Λέσβου: γενική επισκόπηση. Πρακτικά 10ου Πανελληνίου Επιστημονικού Συνεδρίου της Ελληνικής Βοτανικής Εταιρείας, Ιωάννινα, 5-8 Μαΐου 2005, σελ. 8 (σε CD).

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Σμύρης Π., Ζάγκας Θ. & Τσιτσώνη Θ. 1992. Στάδια διαδοχής και παράγοντες που επηρεάζουν την εξέλιξή τους στο Βόρειο Όλυμπο. Επιστ. Επετ. Τμημ. Δασολογίας & Φυσ. Περιβάλλοντος, ΑΠΘ, ΛΕ/1: 307-367 + Πίνακας.

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Zoller H., Geissler P. & Athanasiadis N. 1977. Beiträge zur Kenntnis der Wälder, Moos- und Flechtenassoziationen in den Gebirgen Nordgriechenlands. *Bauhinia* 6/1: 215-255.

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

2.3.1 Surface area - Range (km <sup>2</sup> )	6545
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 (km <sup>2</sup> ) 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 (km <sup>2</sup> )	2582,6
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)
Forest and Plantation management & use (B02)	low importance (L)	N/A
Forestry activities not referred to above (B07)	low importance (L)	N/A
fire (natural) (L09)	low importance (L)	N/A
Changes in abiotic conditions (M01)	low importance (L)	N/A
Changes in biotic conditions (M02)	low importance (L)	N/A

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

## 2.6 Main Threats

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Threat	ranking	pollution qualifier(s)
Forestry activities not referred to above (B07)	low importance (L)	N/A
fire (natural) (L09)	low importance (L)	N/A
Changes in abiotic conditions (M01)	low importance (L)	N/A
Changes in biotic conditions (M02)	low importance (L)	N/A

2.6.1 Method used – threats expert opinion (1)

## 2.7 Complementary Information

### 2.7.1 Species

*Abies borisii-regis*

*Adenocarpus complicatus*

*Aremonia agrimonoides*

*Brachypodium pinnatum*

*Brachypodium sylvaticum*

*Buxus sempervirens*

*Campanula stenosiphon*

*Daphne blagayana*

*Erica carnea* (syn: *Erica herbacea*)

*Fragaria vesca*

*Galium rotundifolium*

*Juniperus communis*

*Juniperus oxycedrus*

*Orthilia secunda*

*Pinus nigra*

*Polygala nicaeensis*

*Pteridium aquilinum*

*Pyrola rotundifolia*

*Quercus cerris*

*Sanguisorba minor*

*Sesleria robusta*

*Sorbus aria*

*Stachys scardica*

*Staehelina uniflosculosa*

*Teucrium chamaedrys*

*Trifolium alpestre*

### 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

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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

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2.7.3 Justification of % - thresholds for trends

2.7.4 Structure and functions - methods used

2.7.5 Other relevant information

Complete survey/Complete survey or a statistically robust estimate (3)

## 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 (km<sup>2</sup>) min 842,45 max 842,45

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
Restoring/improving forest habitats (3.1)	One-off	medium importance (M)	Inside	Maintain Long term
Establish protected areas/sites (6.1)	Legal Administrative One-off	medium importance (M)	Inside	Maintain Long term

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Legal protection of habitats and species (6.3)

Legal high importance (H) Both

Maintain Long term

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