Annex 4. Distribution and suitability maps of the revised EUNIS heathland, scrub and tundra habitat types

The coding and names shown in the Annex are the ones proposed by the project and therefore reveal differences from the ones included in the final revision of heathland, scrub and tundra habitats at level 3 after the consultation. The final revision including codes and names is visible in Annex 1.

Modelling of each habitat followed two different approaches, assuming biased or non-biased data. The selection of the best modelling for each habitat type was based on expert knowledge.

EUNIS-3 code	EUNIS-3 habitat name	Background data pool
F1.1	Shrub tundra	Study area
F1.2	Moss and lichen tundra	No data
F2.1	Subarctic and alpine dwarf Salix scrub	Heathland, scrub, tundra
F2.2a	Alpine and subalpine ericoid heath	Study area
F2.2b	Alpine and subalpine Juniperus scrub	Study area
F2.2c	Balkan subalpine genistoid scrub	Study area
F2.3	Subalpine deciduous scrub	Heathland, scrub, tundra
F2.4	Subalpine Pinus mugo scrub	Heathland, scrub, tundra
F3.1a	Lowland to montane temperate and submediterranean Juniperus scrub	Study area
F3.1b	Temperate Rubus scrub	Study area
F3.1c	Lowland to montane temperate and submediterranean genistoid scrub	Study area
F3.1d	Balkan-Anatolian submontane genistoid scrub	Study area
F3.1e	Temperate and submediterranean thorn scrub	Study area
F3.1f	Low steppic scrub	Heathland, scrub, tundra
F3.1g	Corylus avellana scrub	Study area
F3.1h	Temperate forest clearing scrub	Study area
F4.1	Wet heath	Study area
F4.2	Dry heath	Study area
F4.3	Macaronesian heath	No data
F5.1	Mediterranean maquis and arborescent matorral	Heathland, scrub, tundra
F5.3	Submediterranean pseudomaquis	Study area
F5.4	Spartium junceum scrub	Study area

F5.5	Thermo-Mediterranean scrub	Study area
F6.1a	Western basiphilous garrigue	Heathland, scrub, tundra
F6.1b	Western acidophilous garrigue	Heathland, scrub, tundra
F6.2	Eastern garrigue	Study area
F6.6	Supra-Mediterranean garrigue	Study area
F6.7	Mediterranean gypsum scrub	Heathland, scrub, tundra
F6.8a	Mediterranean halo-nitrophilous scrub	Heathland, scrub, tundra
F6.8b	Caspian Sea halo-nitrophilous scrub	No data
F7.1	Western Mediterranean spiny heath	Heathland, scrub, tundra
F7.3	Eastern Mediterranean spiny heath (Phrygana)	Study area
F7.4a	Western Mediterranean mountain hedgehog-heath	Study area
F7.4b	Central Mediterranean mountain hedgehog-heath	Study area
F7.4c	Eastern Mediterranean mountain hedgehog-heath	Study area
F7.4d	Canarian mountain hedgehog-heath	No data
F8.1	Canary Island xerophytic scrub	No data
F8.2	Madeiran xerophytic scrub	No data
F9.1a	Arctic, boreal and alpine riparian scrub	Heathland, scrub, tundra
F9.1b	Temperate riparian scrub	Study area
F9.2	Salix fen scrub	Heathland, scrub, tundra
F9.3	Mediterranean riparian scrub	Heathland, scrub, tundra
B1.5a	Atlantic and Baltic coastal Empetrum heath	Study area
B1.5b	Atlantic coastal Calluna and Ulex heaths	Study area
B1.6a	Atlantic and Baltic coastal dune scrub	Study area
B1.6b	Mediterranean and Black Sea coastal dune scrub	Study area
B1.6c	Macaronesian coastal dune scrub	No data
B2.5	Shingle and gravel beaches with scrub	Study area

B1.5a - Atlantic and Baltic coastal Empetrum heath
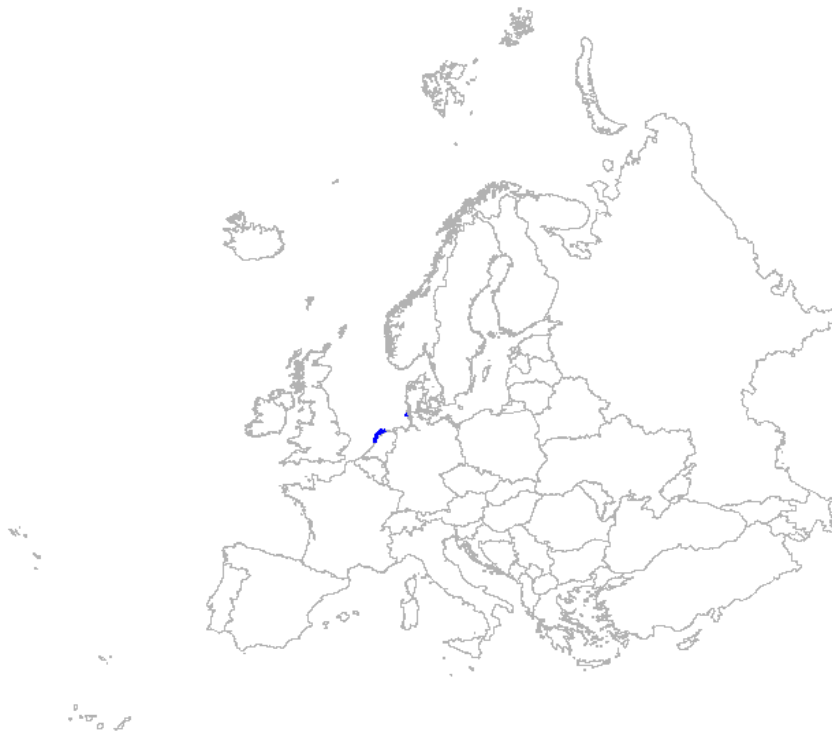
Distribution based on vegetation relevés
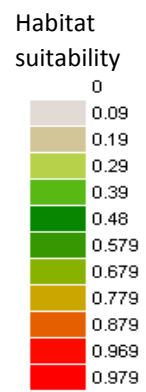
Habitat suitability
0
0.09
0.19
0.29
0.39
0.48
0.579
0.679
0.779
0.879
0.969
0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
Coastal sand dunes and sea shores according to Bohn map (P1)
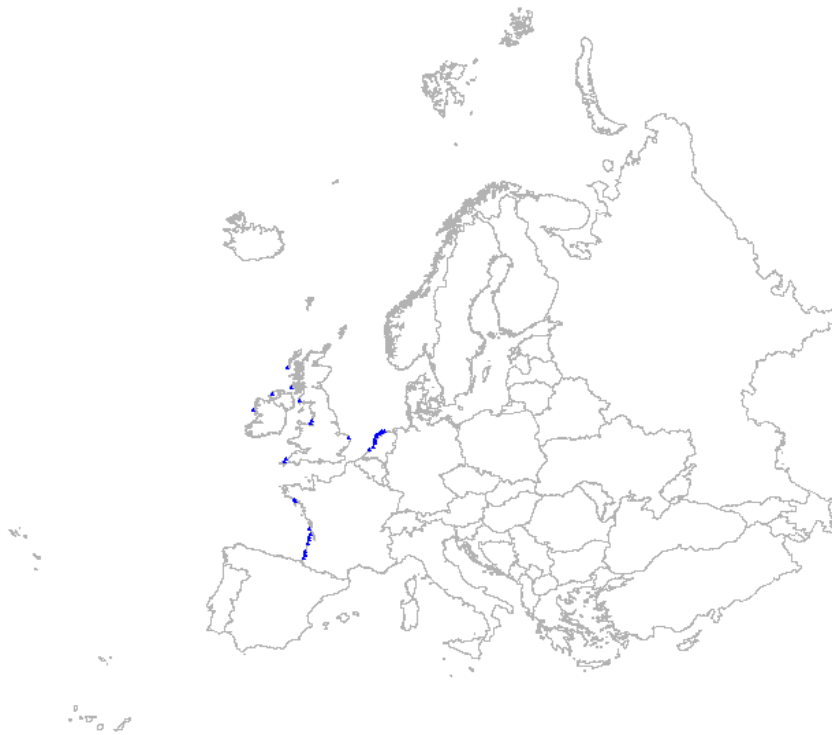

Statistics from Maxent modelling

AUC training (0-1)	0.9983
AUC test (0-1)	0.9978
Contribution variables to the Maxent model (%)	
Distance to water	65.288
Temperature seasonality (stdev * 100)	16.857
Precipitation of warmest quarter	9.181
pH (water)	3.1799
Volume % of coarse fragments (> 2 mm)	1.8697
Soil organic carbon content (‰)	1.6373
Mean temperature of wettest quarter	0.9176
Weight in % of silt particles (0.0002-0.05 mm)	0.4938
Weight in % of clay particles (<0.0002 mm)	0.4169
Annual precipitation	0.0401
Cation Exchange Capacity	0.0174
Solar radiation	0.0154
Weight in % of sand particles (0.05-2 mm)	0
Bulk density (kg/m³)	0
Potential evapotranspiration	0
Precipitation seasonality (coef. of var.)	0

Remarks
Inland prediction should be ignored. Hardly any prediction in the Baltic region.
Coastal habitats are difficult to model and often deliver unsatifying results. There are various reasons for this. 1) The area in which the habitat occurs is very small, 2) Some observations do not match with all environmental layers and are therefore left out of the analysis, 3) lack of observation data in large parts of the potential area.

B1.5b - Atlantic coastal Calluna and Ulex heaths

Distribution based on vegetation relevés

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
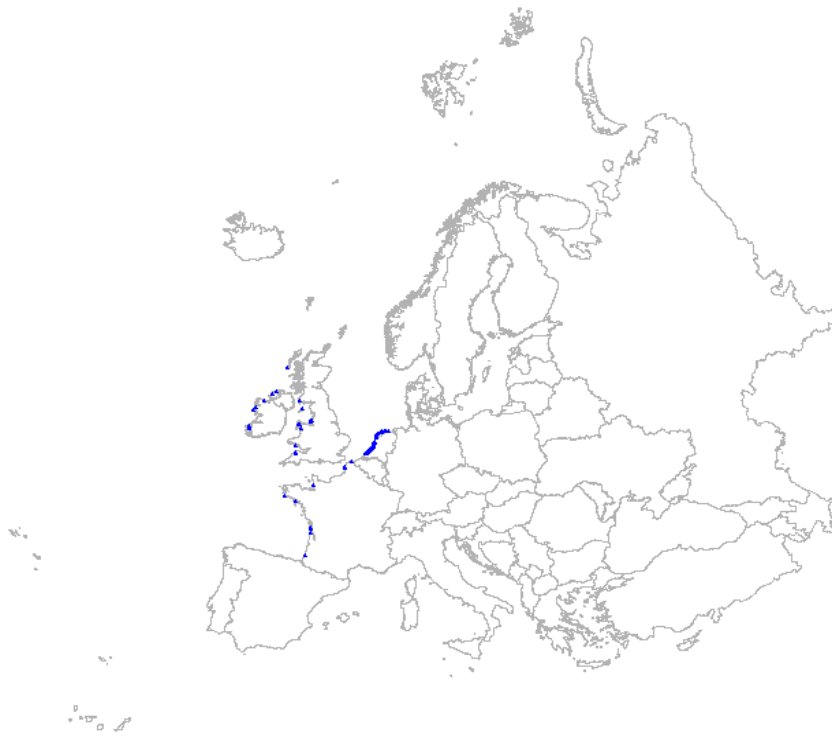Coastal sand dunes and sea shores according to Bohn map (P1)

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9971
AUC test (0-1)	0.9984
Contribution variables to the Maxent model (%)	
Distance to water	48.781
Temperature seasonality (stdev * 100)	27.841
pH (water)	7.4575
Precipitation of warmest quarter	5.0517
Mean temperature of wettest quarter	3.4666
Soil organic carbon content (‰)	3.0278
Bulk density (kg/m³)	1.711
Weight in % of silt particles (0.0002-0.05 mm)	1.077
Precipitation seasonality (coef. of var.)	0.4732
Volume % of coarse fragments (> 2 mm)	0.3776
Annual precipitation	0.3312
Potential evapotranspiration	0.1383
Solar radiation	0.061
Weight in % of clay particles (<0.0002 mm)	0.0525
Cation Exchange Capacity	0
Weight in % of sand particles (0.05-2 mm)	0

Remarks
Inland prediction should be ignored. Hardly any prediction in the along the French coast.
Coastal habitats are difficult to model and often deliver unsatifying results. There are various
reasons for this. 1) The area in which the habitat occurs is very small, 2) Some observations do not
match with all environmental layers and are therefore left out of the analysis, 3) lack of
observations in large parts of the potential area.

B1.6a - Atlantic and Baltic coastal dune scrub

Distribution based on vegetation relevés

Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979
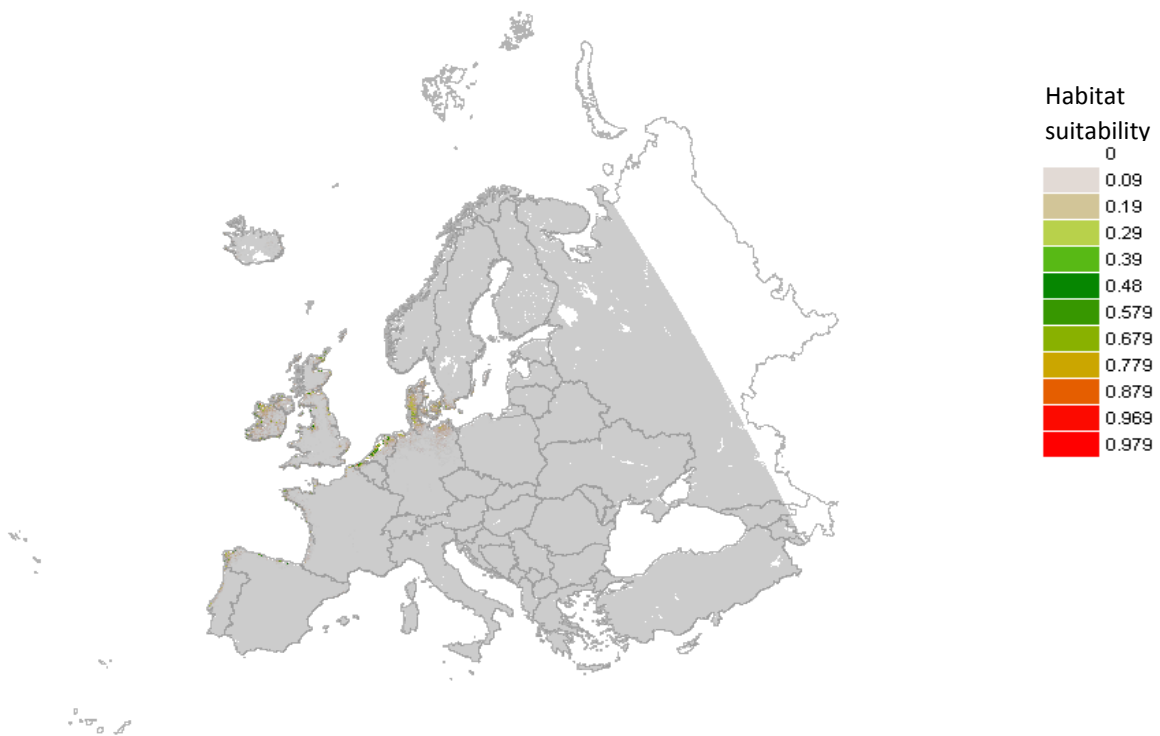
Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
Coastal sand dunes and sea shores according to Bohn map (P1)

Statistics from Maxent modelling

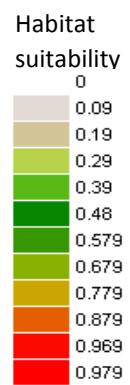|	
AUC training (0-1)	0.9944
AUC test (0-1)	0.9974
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	41.757
pH (water)	23.949
Soil organic carbon content (‰)	9.389
Volume % of coarse fragments (> 2 mm)	7.6674
Distance to water	5.2114
Precipitation seasonality (coef. of var.)	4.9242
Bulk density (kg/m³)	2.5775
Potential evapotranspiration	2.0785
Cation Exchange Capacity	0.7106
Weight in % of silt particles (0.0002-0.05 mm)	0.5353
Weight in % of clay particles (<0.0002 mm)	0.4876
Mean temperature of wettest quarter	0.3381
Precipitation of warmest quarter	0.2755
Solar radiation	0
Weight in % of sand particles (0.05-2 mm)	0
Annual precipitation	0

Remarks
Inland prediction should be ignored. Hardly any prediction in the along the French coast.
Coastal habitats are difficult to model and often deliver unsatifying results. There are various
reasons for this. 1) The area in which the habitat occurs is very small, 2) Some observations do not
match with all environmental layers and are therefore left out of the analysis, 3) lack of
observations in large parts of the potential area.

B1.6b - Mediterranean and Black Sea coastal dune scrub
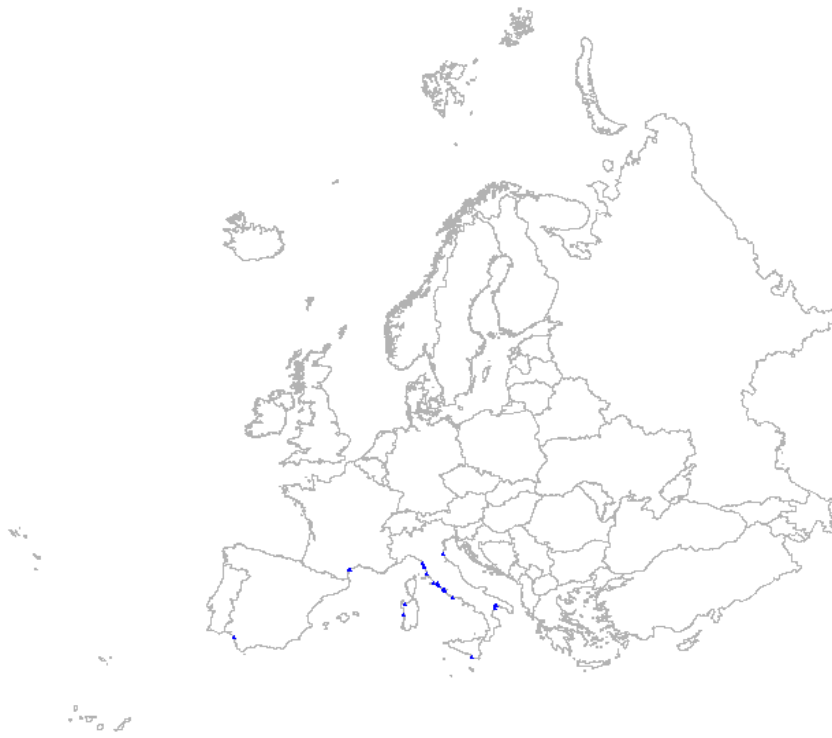
Distribution based on vegetation relevés

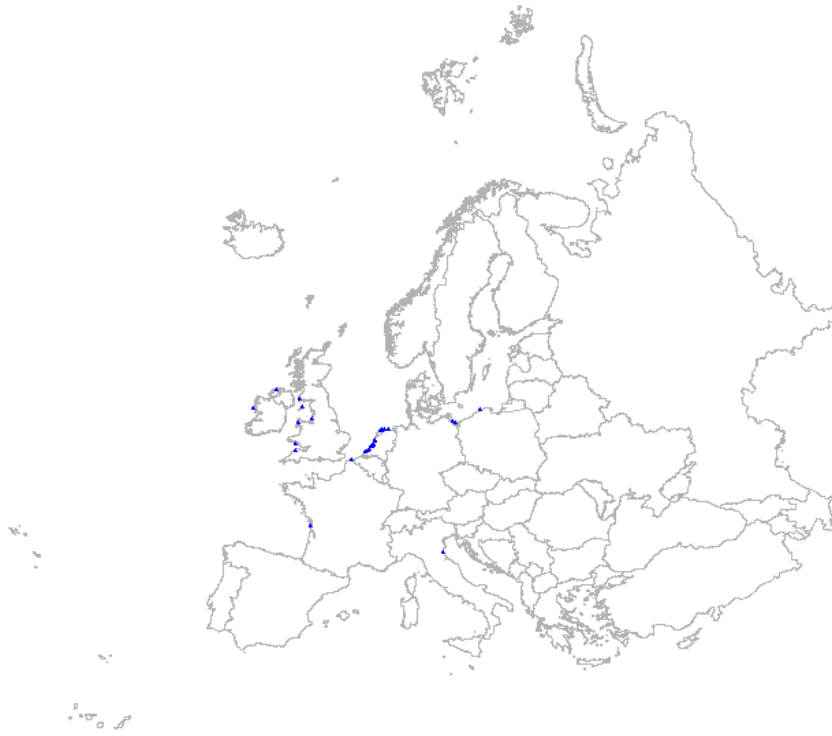*Model prediction. Background data randomly selected from heathland-scrub-tundra data set*

Geographic restriction distribution data
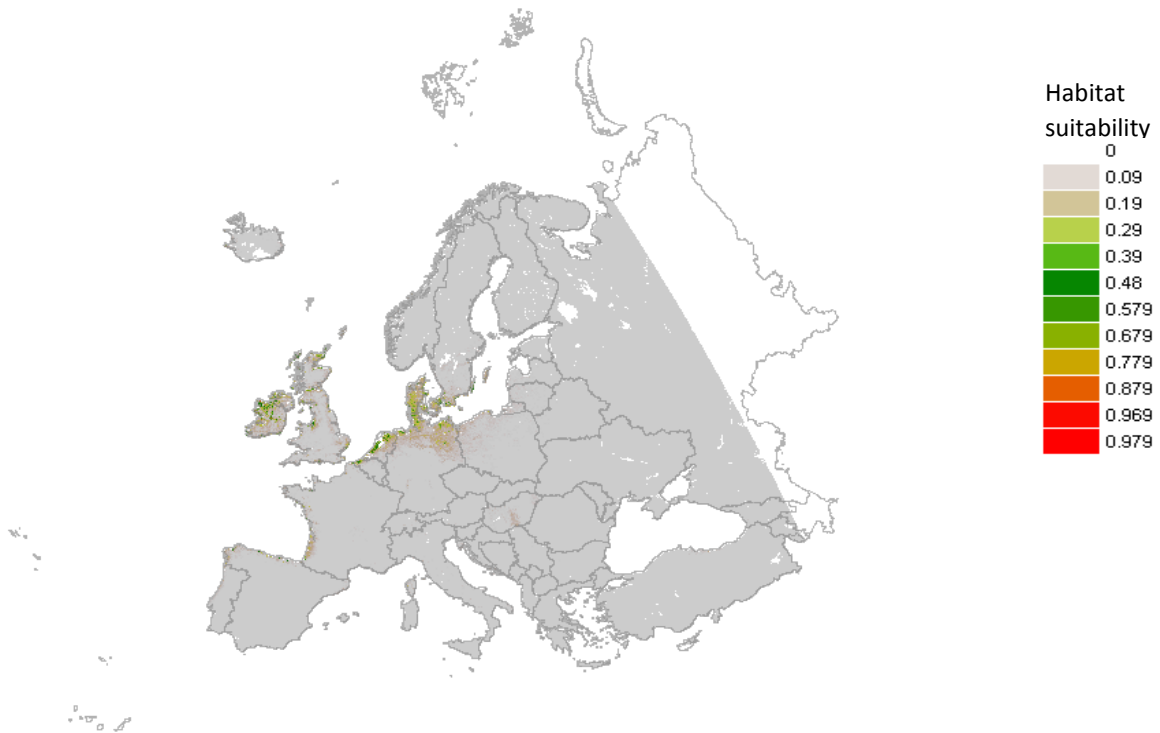Coastal sand dunes and sea shores according to Bohn map (P1)

Remarks
Insuffient data to create a model

B2.5 - Shingle and gravel beaches with scrub

Distribution based on vegetation relevés

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
Coastal sand dunes and sea shores according to Bohn map (P1)

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9905
AUC test (0-1)	0.9929
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	34.36
pH (water)	29.884
Soil organic carbon content (‰)	9.6488
Weight in % of silt particles (0.0002-0.05 mm)	5.8407
Distance to water	5.4668
Bulk density (kg/m³)	5.0144
Precipitation seasonality (coef. of var.)	4.0617
Potential evapotranspiration	2.2699
Volume % of coarse fragments (> 2 mm)	0.8194
Cation Exchange Capacity	0.7953
Weight in % of clay particles (<0.0002 mm)	0.7418
Mean temperature of wettest quarter	0.47
Weight in % of sand particles (0.05-2 mm)	0.4136
Precipitation of warmest quarter	0.1644
Solar radiation	0
Annual precipitation	0

Remarks

Inland prediction should be ignored. Hardly any prediction in large parts of the potential area.
Coastal habitats are difficult to model and often deliver unsatifying results. There are various
reasons for this. 1) The area in which the habitat occurs is very small, 2) Some observations do not
match with all environmental layers and are therefore left out of the analysis, 3) lack of
observations in large parts of the potential area.

F1.1 - Shrub tundra

Distribution based on vegetation relevés
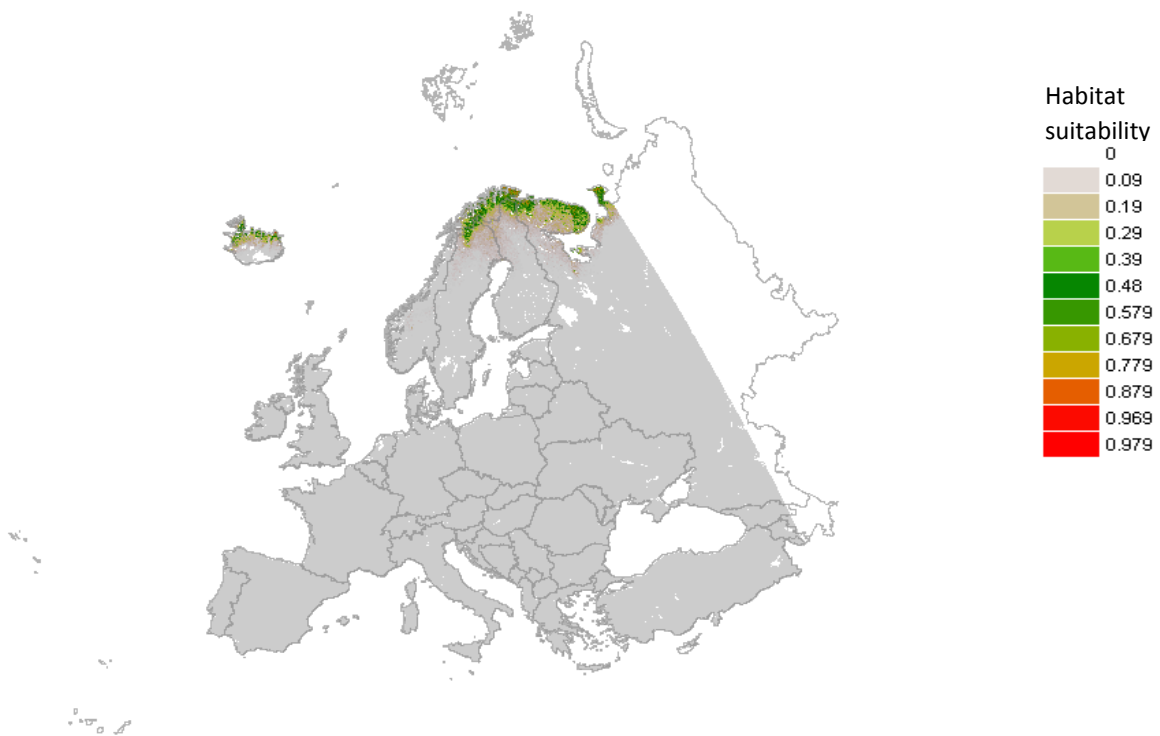
Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
Arctic polar deserts and Arctic tundras according to the Bohn map (A1 & B1)

Statistics from Maxent modelling

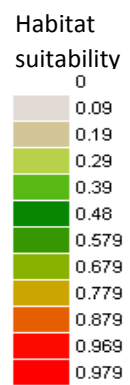|	
AUC training (0-1)	0.9958
AUC test (0-1)	0.9854
Contribution variables to the Maxent model (%)	
Soil organic carbon content (‰)	67.523
Annual precipitation	15
Mean temperature of wettest quarter	11.312
Distance to water	2.3658
Solar radiation	1.9878
Weight in % of clay particles (<0.0002 mm)	1.6928
Precipitation of warmest quarter	1.0834
pH (water)	0.8214
Potential evapotranspiration	0.1833
Volume % of coarse fragments (> 2 mm)	0.0186
Weight in % of silt particles (0.0002-0.05 mm)	0
Weight in % of sand particles (0.05-2 mm)	0
Precipitation seasonality (coef. of var.)	0
Temperature seasonality (stdev * 100)	0
Cation Exchange Capacity	0
Bulk density (kg/m³)	0

Remarks

-

F1.2 - Moss and lichen tundra

Distribution based on vegetation relevés

Habitat
suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from heathland-scrub-tundra data set
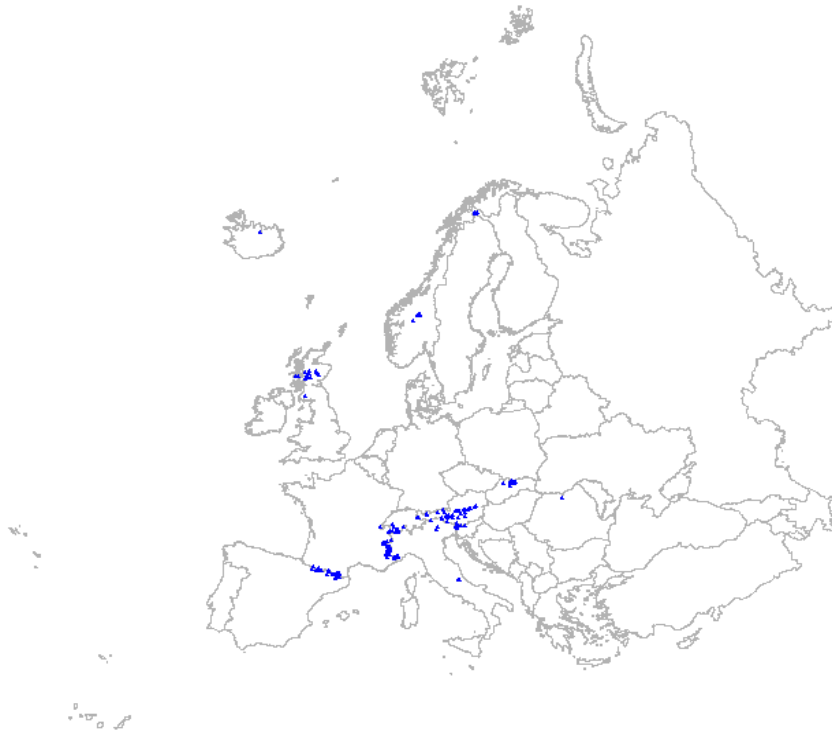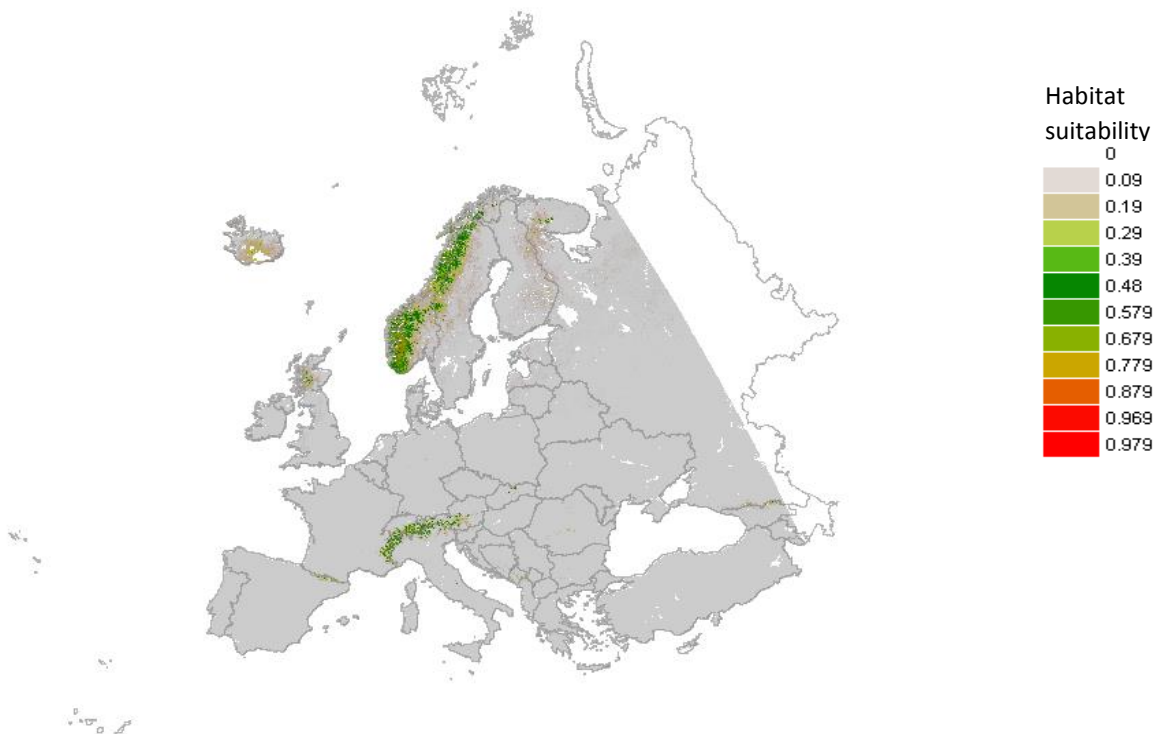
Geographic restriction distribution data

Arctic polar deserts and Arctic tundras according to the Bohn map (A1 & B1)

Remarks

Insuffient data to create a model

F2.1 - Subarctic and alpine dwarf Salix scrub

Distribution based on vegetation relevés

Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from heathland-scrub-tundra data set

Geographic restriction distribution data

-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9564
AUC test (0-1)	0.9398
Contribution variables to the Maxent model (%)	
Soil organic carbon content (‰)	63.908
Weight in % of silt particles (0.0002-0.05 mm)	16.818
Weight in % of sand particles (0.05-2 mm)	9.0678
Precipitation of warmest quarter	7.7665
Cation Exchange Capacity	3.4397
pH (water)	1.7674
Weight in % of clay particles (<0.0002 mm)	1.2574
Volume % of coarse fragments (> 2 mm)	1.2559
Precipitation seasonality (coef. of var.)	1.1556
Solar radiation	1.0445
Annual precipitation	0.6612
Mean temperature of wettest quarter	0.5955
Temperature seasonality (stdev * 100)	0.5363
Potential evapotranspiration	0.4298
Bulk density (kg/m³)	0.162
Distance to water	0.0459

Remarks

-

F2.2a - Alpine and subalpine ericoid heath
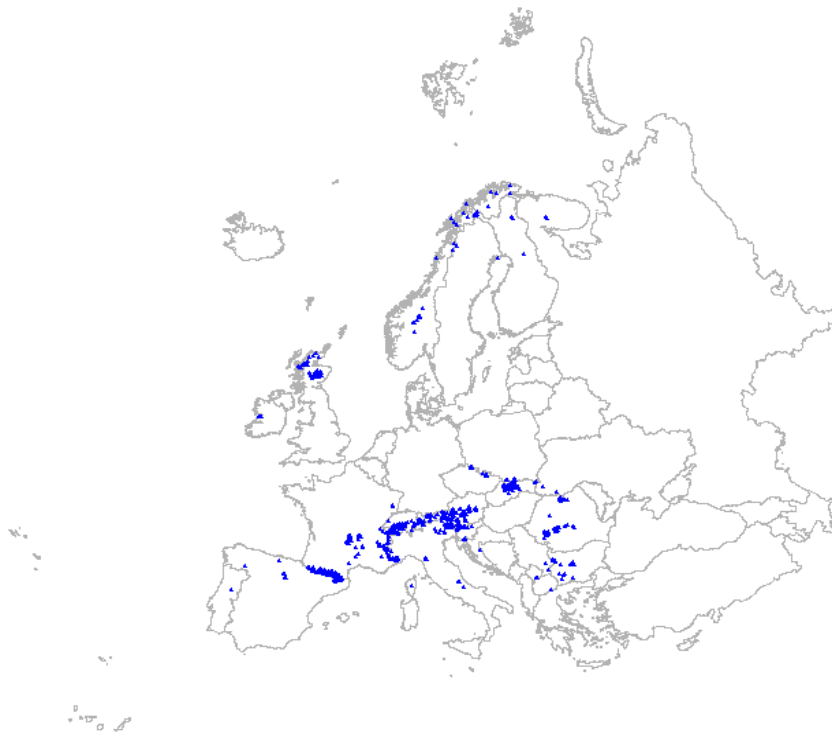
Distribution based on vegetation relevés
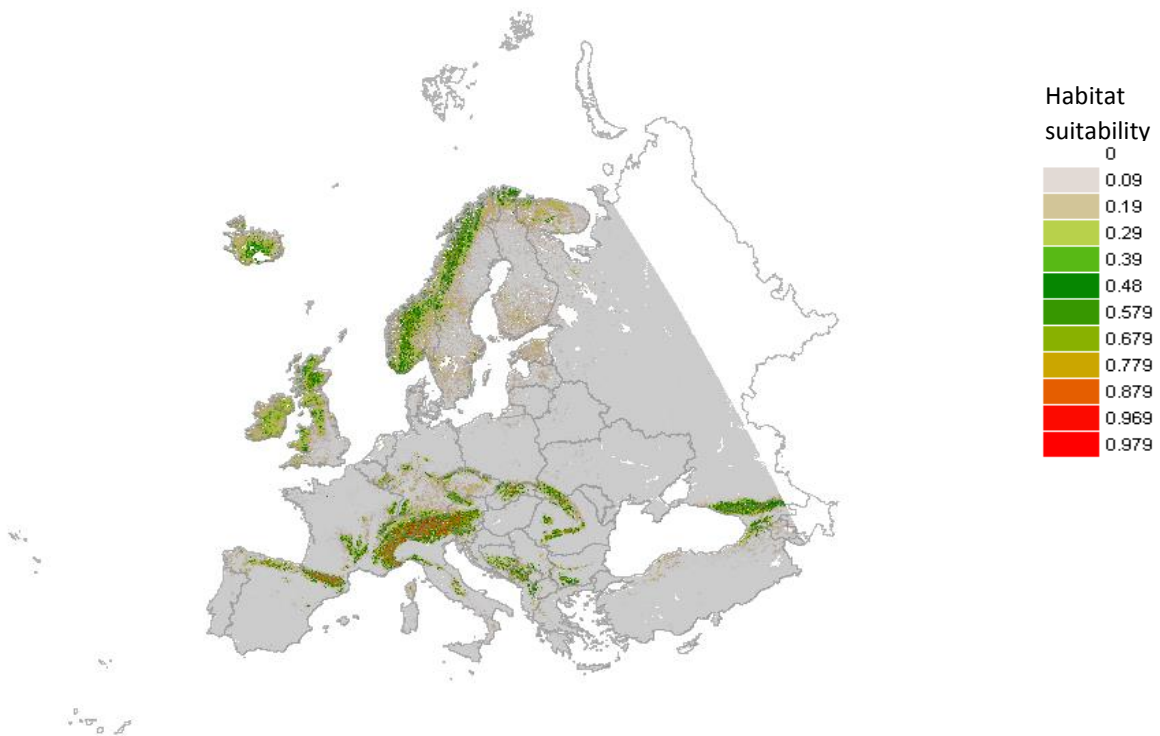
Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
-

Statistics from Maxent modelling

AUC training (0-1)	0.901
AUC test (0-1)	0.8861
Contribution variables to the Maxent model (%)	
Annual precipitation	33.527
Volume % of coarse fragments (> 2 mm)	18.106
Weight in % of sand particles (0.05-2 mm)	14.302
Precipitation of warmest quarter	9.6382
Soil organic carbon content (‰)	3.6068
Bulk density (kg/m³)	2.8496
pH (water)	1.8458
Weight in % of clay particles (<0.0002 mm)	1.2887
Solar radiation	1.0794
Temperature seasonality (stdev * 100)	1.0636
Weight in % of silt particles (0.0002-0.05 mm)	0.6931
Cation Exchange Capacity	0.6751
Mean temperature of wettest quarter	0.5933
Precipitation seasonality (coef. of var.)	0.1903
Potential evapotranspiration	0.1302
Distance to water	0

Remarks

Prediction in eastern part of Europe (Caucasus) uncertain due to lack of data for that area.

F2.2b - Alpine and subalpine Juniperus scrub
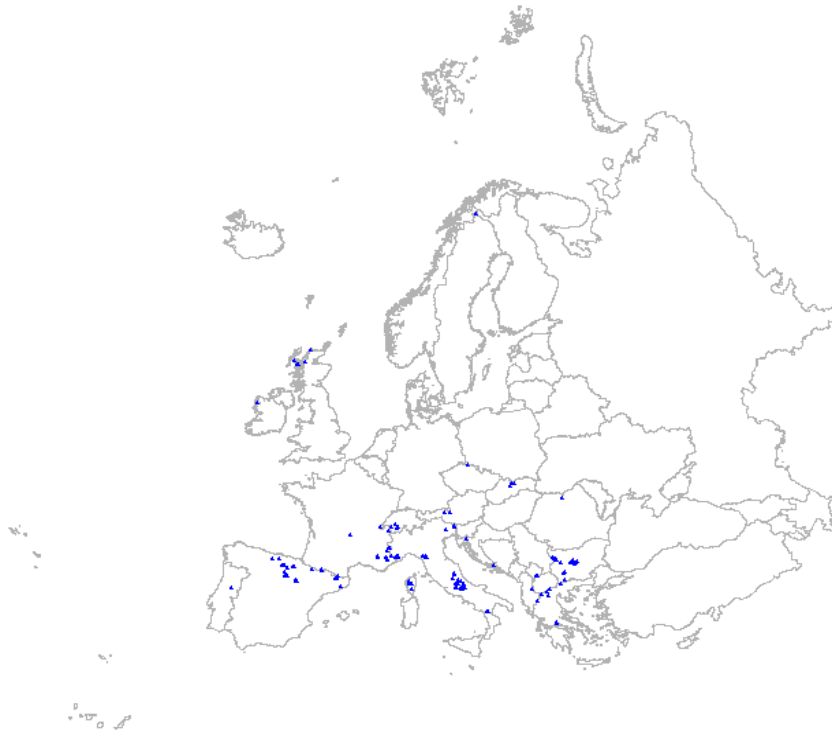
Distribution based on vegetation relevés
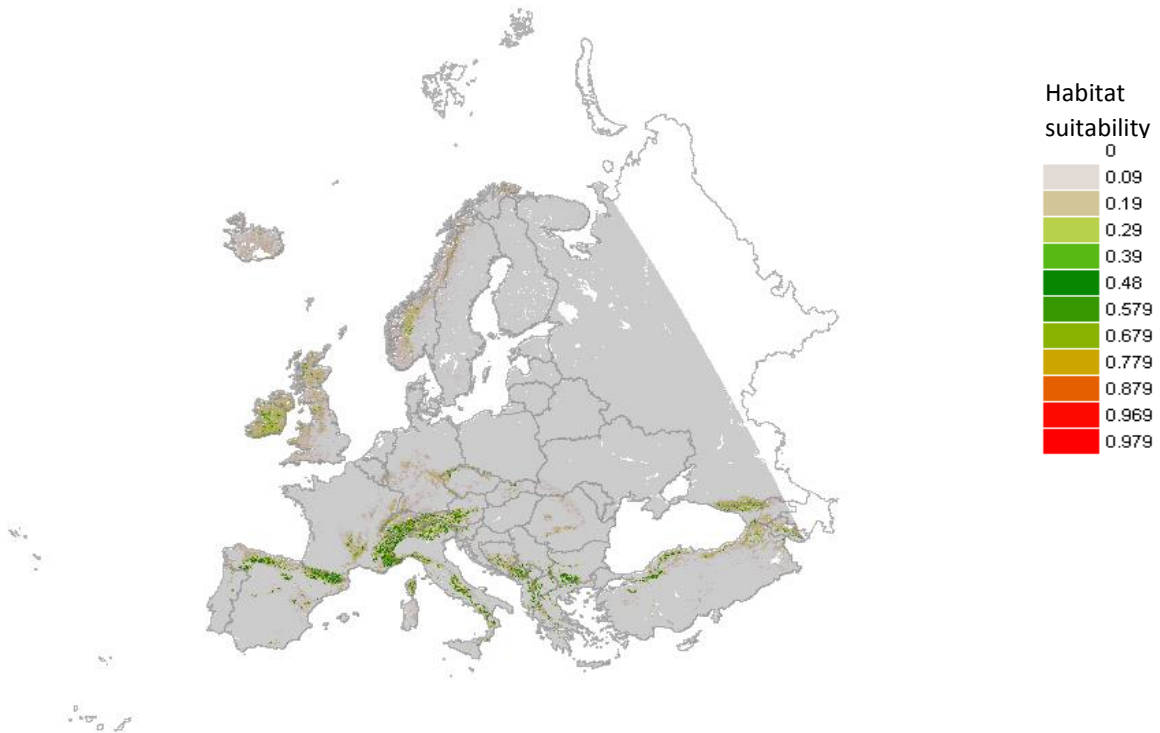
Model prediction. Background data randomly selected from study area
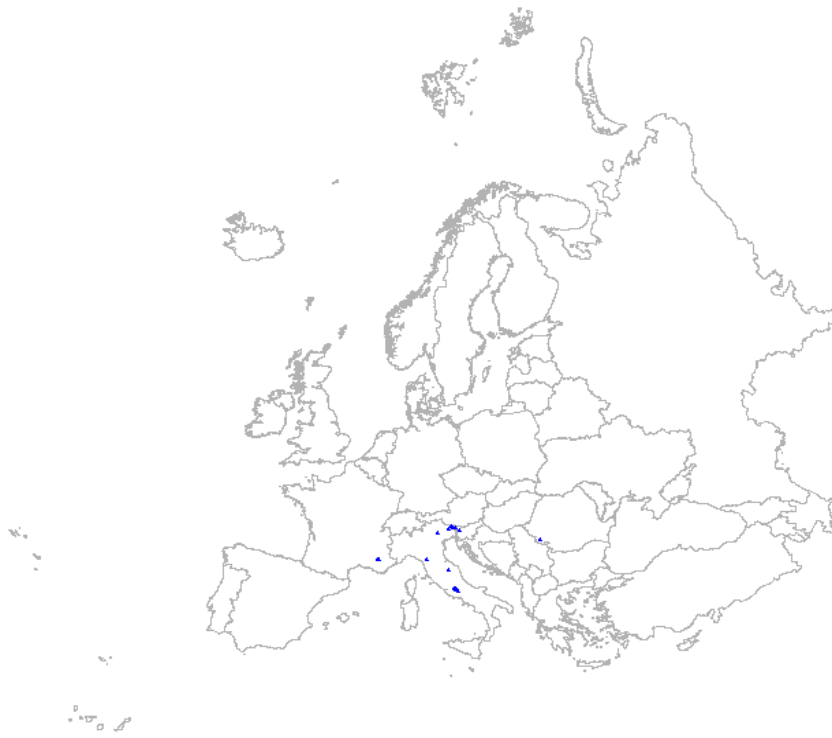
Geographic restriction distribution data

-

Statistics from Maxent modelling

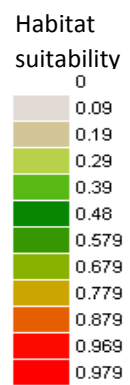|	
AUC training (0-1)	0.9745
AUC test (0-1)	0.8935
Contribution variables to the Maxent model (%)	
Weight in % of sand particles (0.05-2 mm)	28.459
Volume % of coarse fragments (> 2 mm)	19.039
Temperature seasonality (stdev * 100)	15.818
Annual precipitation	12.893
Bulk density (kg/m³)	7.0208
Soil organic carbon content (‰)	5.0007
Solar radiation	4.0254
Precipitation of warmest quarter	2.9895
Cation Exchange Capacity	2.2118
Potential evapotranspiration	1.9823
Weight in % of silt particles (0.0002-0.05 mm)	1.363
Mean temperature of wettest quarter	0.9385
Weight in % of clay particles (<0.0002 mm)	0.5595
Precipitation seasonality (coef. of var.)	0.3548
pH (water)	0.0419
Distance to water	0.004

Remarks

Prediction in eastern part of Europe (Causcasus, Turkey) uncertain due to lack of data for that area.

F2.2c - Balkan subalpine genistoid scrub

Distribution based on vegetation relevés

Habitat
suitability
0
0.09
0.19
0.29
0.39
0.48
0.579
0.679
0.779
0.879
0.969
0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
Balkan region

Remarks
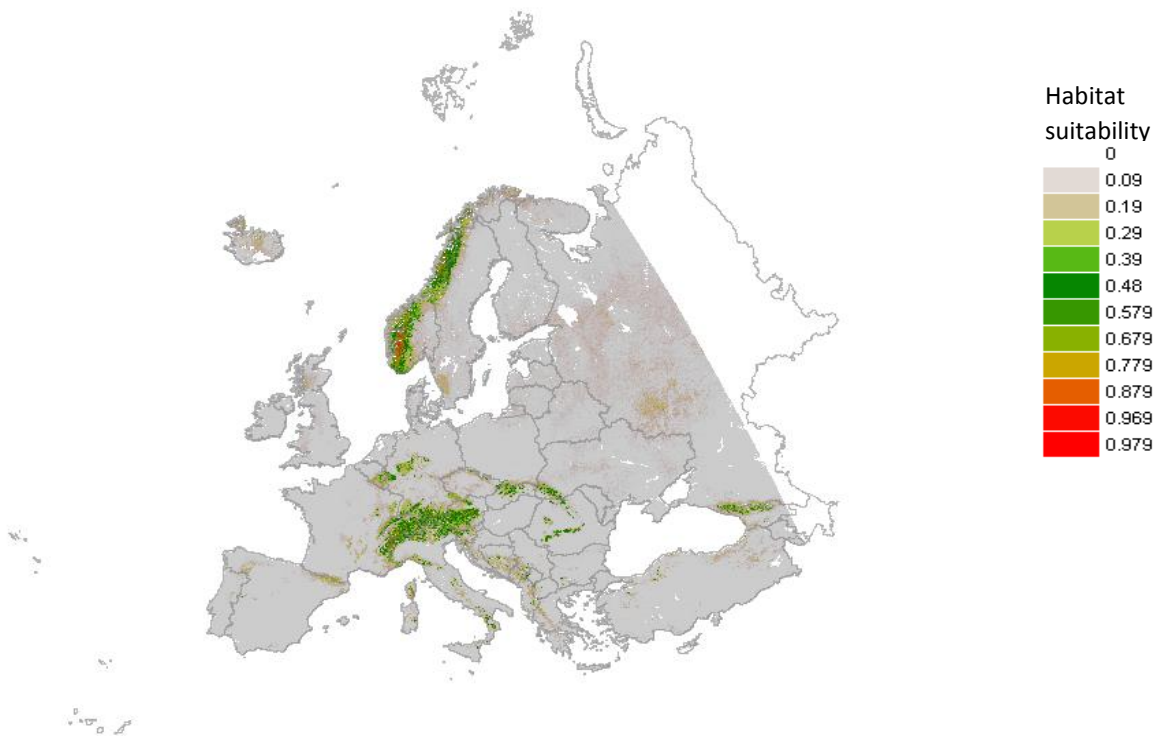Insuffient data to create a model

F2.3 - Subalpine deciduous scrub
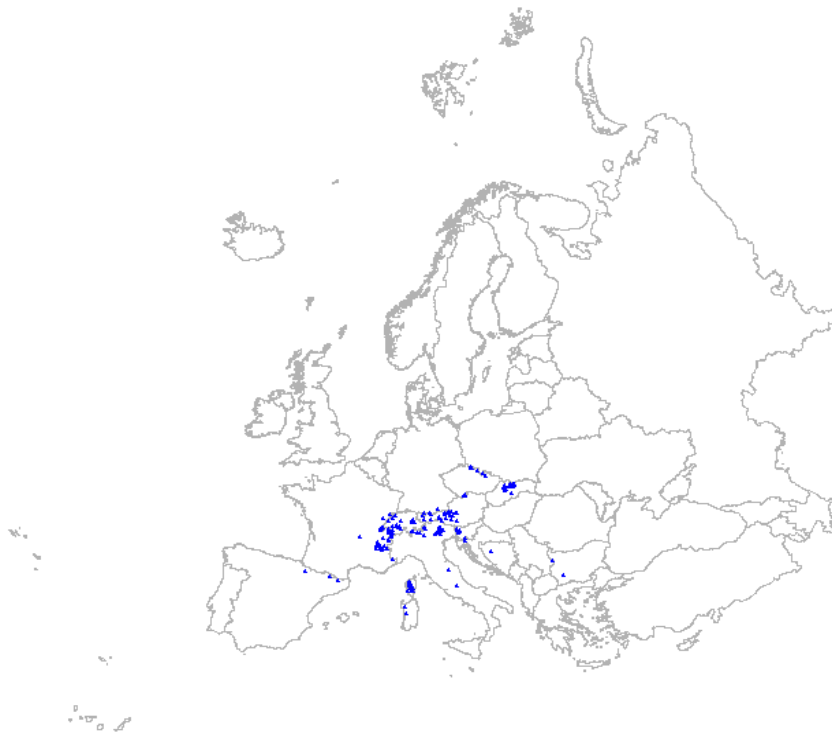
Distribution based on vegetation relevés

Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from heathland-scrub-tundra data set

Geographic restriction distribution data

-

Statistics from Maxent modelling

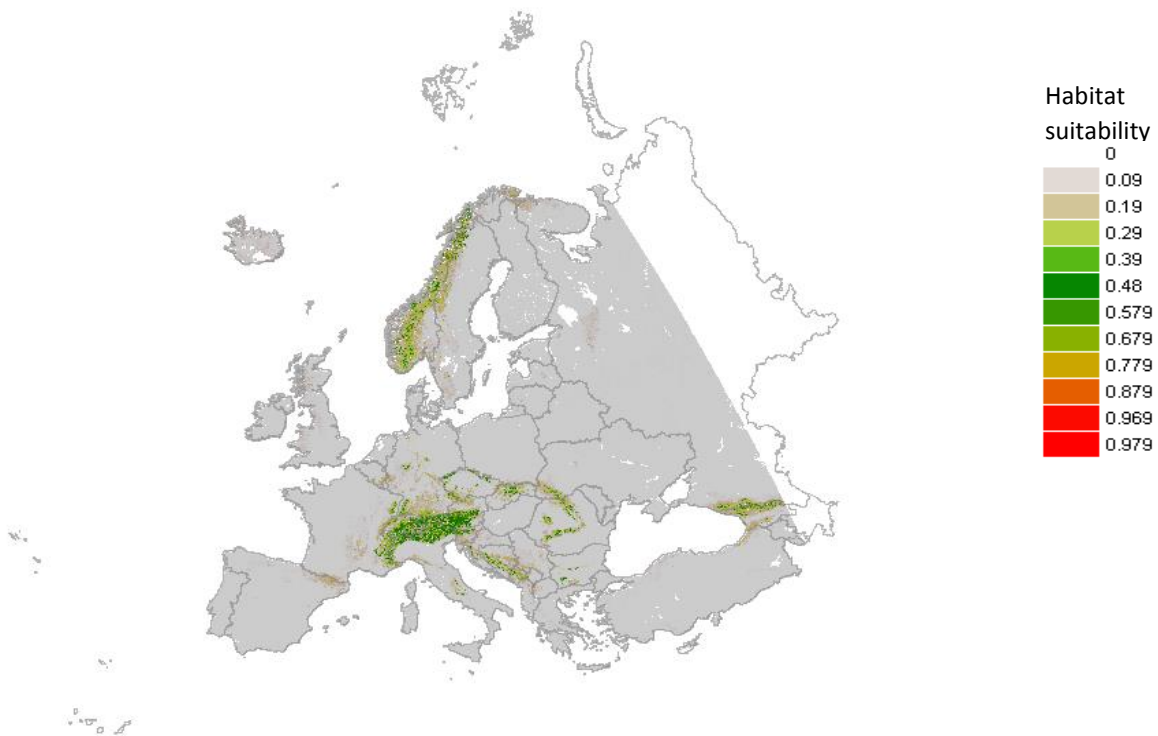|	
AUC training (0-1)	0.9336
AUC test (0-1)	0.9223
Contribution variables to the Maxent model (%)	
Precipitation of warmest quarter	24.867
Weight in % of sand particles (0.05-2 mm)	17.447
Annual precipitation	16.908
Temperature seasonality (stdev * 100)	13.929
Soil organic carbon content (‰)	8.9444
Solar radiation	5.4636
Precipitation seasonality (coef. of var.)	4.0239
Cation Exchange Capacity	3.7884
Mean temperature of wettest quarter	2.2471
Potential evapotranspiration	1.591
Volume % of coarse fragments (> 2 mm)	1.1602
Weight in % of silt particles (0.0002-0.05 mm)	1.0955
Distance to water	0.6474
Bulk density (kg/m³)	0.6196
pH (water)	0.5388
Weight in % of clay particles (<0.0002 mm)	0.4739

Remarks

Prediction in Germany should be ignored.

Prediction in eastern part of Europe (Caucasus) uncertain due to lack of data for that area.

F2.4 - Subalpine Pinus mugo scrub
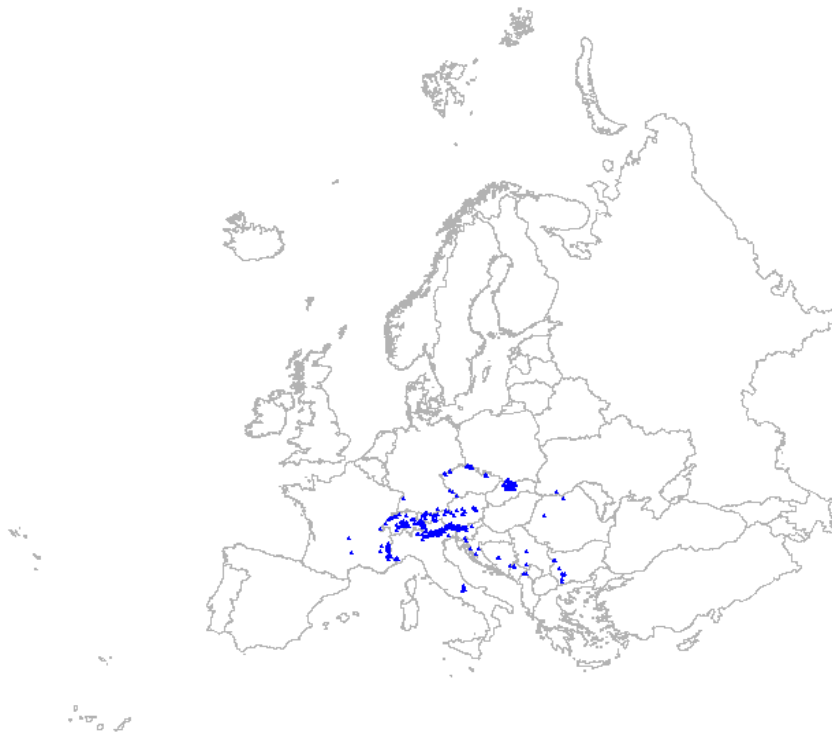
Distribution based on vegetation relevés

Habitat suitability

0
0.09
0.19
0.29
0.39
0.48
0.579
0.679
0.779
0.879
0.969
0.979

Model prediction. Background data randomly selected from heathland-scrub-tundra data set

Geographic restriction distribution data
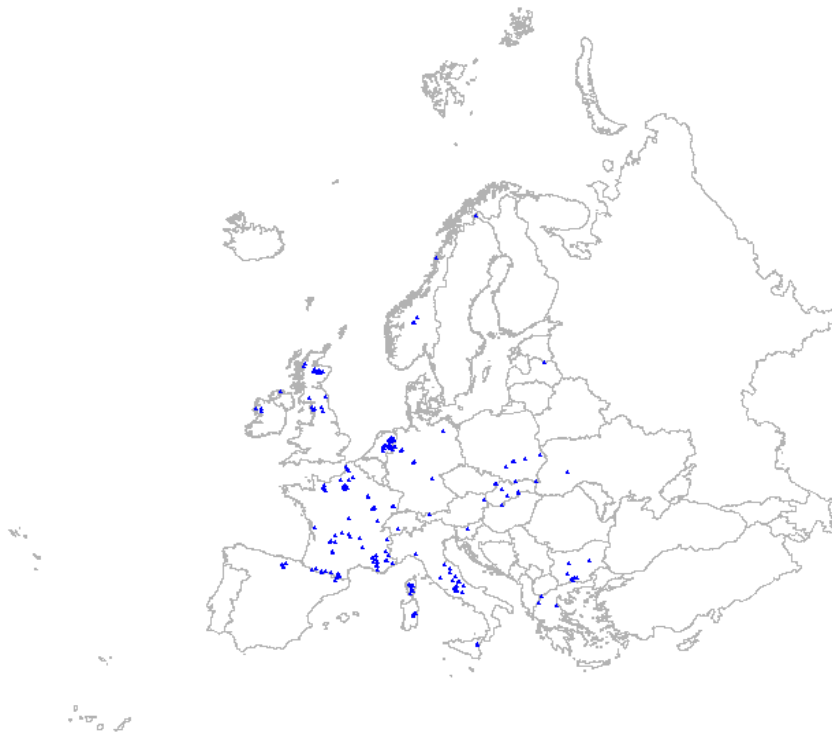
-

Statistics from Maxent modelling

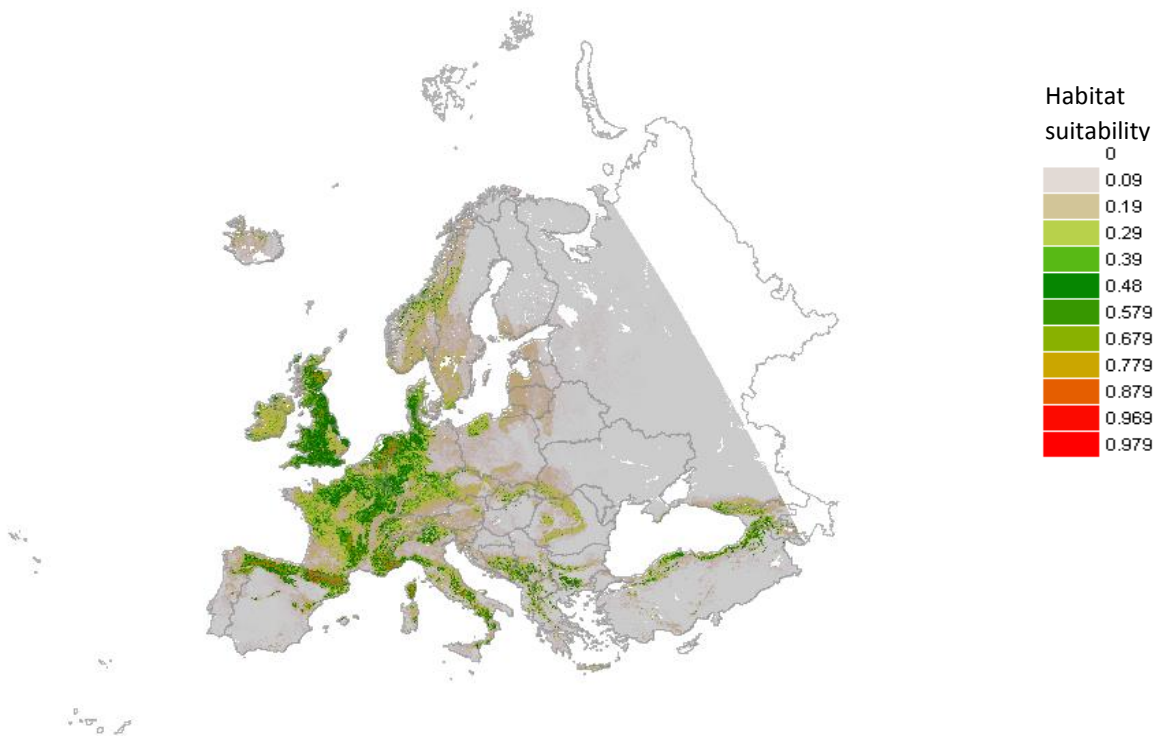|	
AUC training (0-1)	0.9143
AUC test (0-1)	0.9149
Contribution variables to the Maxent model (%)	
Precipitation of warmest quarter	43.953
Temperature seasonality (stdev * 100)	13.165
Weight in % of sand particles (0.05-2 mm)	11.199
Volume % of coarse fragments (> 2 mm)	9.3161
Bulk density (kg/m³)	7.3518
Potential evapotranspiration	2.9277
Annual precipitation	2.7221
Precipitation seasonality (coef. of var.)	2.6403
Soil organic carbon content (‰)	1.8856
Mean temperature of wettest quarter	1.5025
Weight in % of silt particles (0.0002-0.05 mm)	1.415
Solar radiation	0.952
Cation Exchange Capacity	0.9019
Distance to water	0.7246
Weight in % of clay particles (<0.0002 mm)	0.3665
pH (water)	0.069

Remarks

Pinus mugo does not occur in Scandinavia and therefore the prediction in this area should be ignored.

Prediction in eastern part of Europe (Caucasus) uncertain due to lack of data for that area.

F3.1a - Lowland to montane temperate and submediterranean Juniperus scrub

Distribution based on vegetation relevés

Model prediction. Background data randomly selected from study area
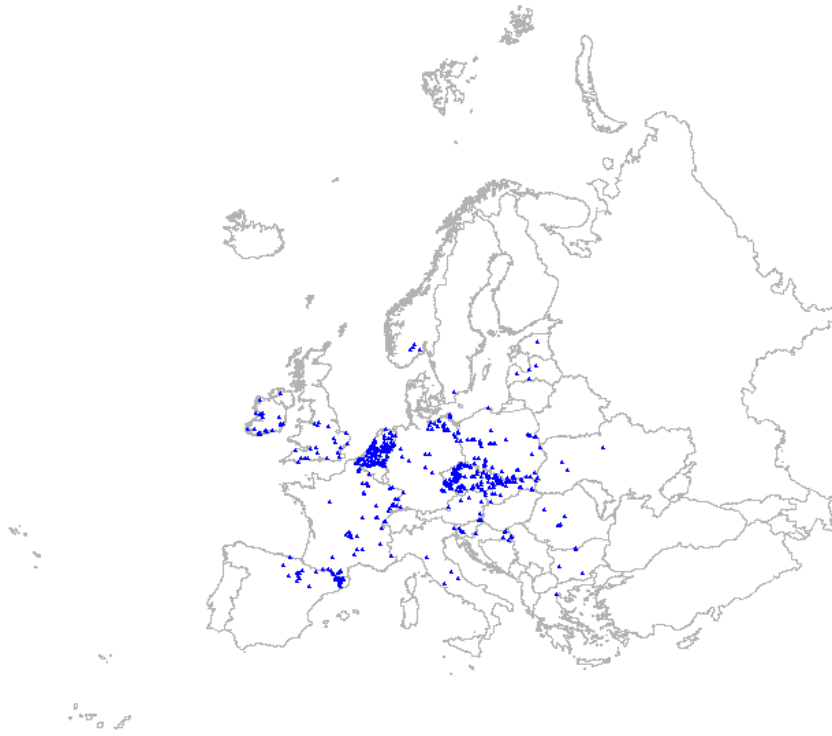
Geographic restriction distribution data
-

Statistics from Maxent modelling

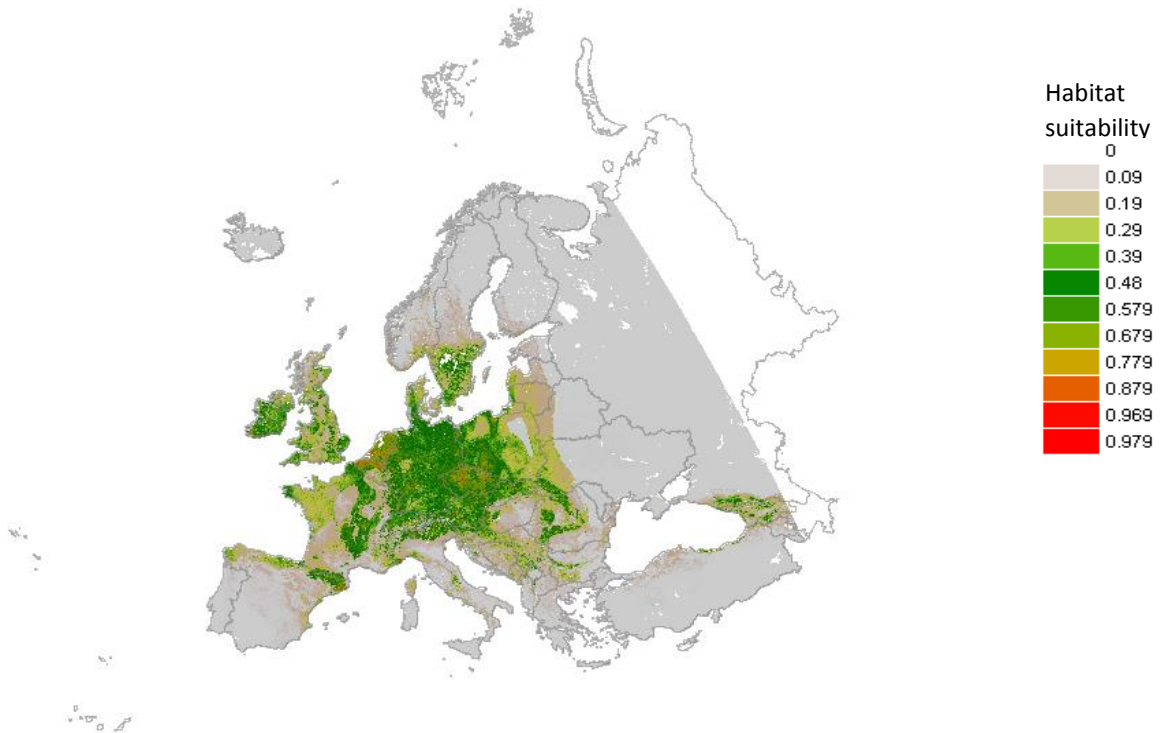|	
AUC training (0-1)	0.9294
AUC test (0-1)	0.9168
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	47.288
Annual precipitation	16.928
Soil organic carbon content (‰)	11.68
Solar radiation	11.098
Weight in % of sand particles (0.05-2 mm)	6.1532
Volume % of coarse fragments (> 2 mm)	4.1454
Precipitation of warmest quarter	3.0896
Bulk density (kg/m³)	2.8954
Weight in % of silt particles (0.0002-0.05 mm)	2.8708
Precipitation seasonality (coef. of var.)	1.7383
Mean temperature of wettest quarter	1.1727
pH (water)	0.4748
Potential evapotranspiration	0.3306
Weight in % of clay particles (<0.0002 mm)	0.2259
Cation Exchange Capacity	0.1047
Distance to water	0.0476

Remarks

-Prediction in eastern part of Europe (Caucasus, Turkey) uncertain due to lack of data for that area.

F3.1b - Temperate Rubus scrub

Distribution based on vegetation relevés

Habitat suitability
	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-

Statistics from Maxent modelling

AUC training (0-1)	0.9025
AUC test (0-1)	0.8724
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	45.024
Soil organic carbon content (‰)	22.813
Precipitation of warmest quarter	16.322
Mean temperature of wettest quarter	4.7928
Cation Exchange Capacity	3.1905
Precipitation seasonality (coef. of var.)	2.4142
Solar radiation	1.4328
Weight in % of silt particles (0.0002-0.05 mm)	0.9949
Bulk density (kg/m³)	0.9704
Weight in % of clay particles (<0.0002 mm)	0.8803
Annual precipitation	0.8323
Volume % of coarse fragments (> 2 mm)	0.4803
Distance to water	0.4007
Potential evapotranspiration	0.2595
pH (water)	0.2441
Weight in % of sand particles (0.05-2 mm)	0.1634

Remarks

Poor model, too much affected by the distribution of input data with a high concentration in NL and CZ.
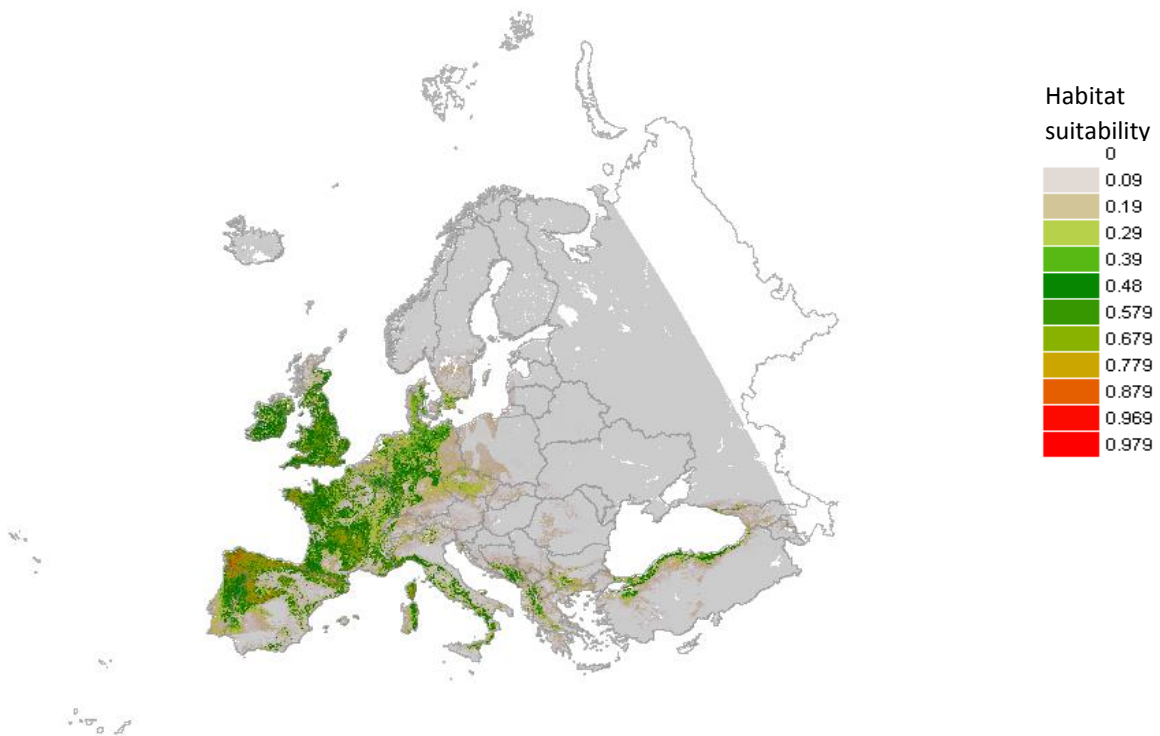
Prediction in eastern part of Europe (Caucasus, Turkey) uncertain due to lack of data for that area.

F3.1c - Lowland to montane temperate and submediterranean genistoid scrub
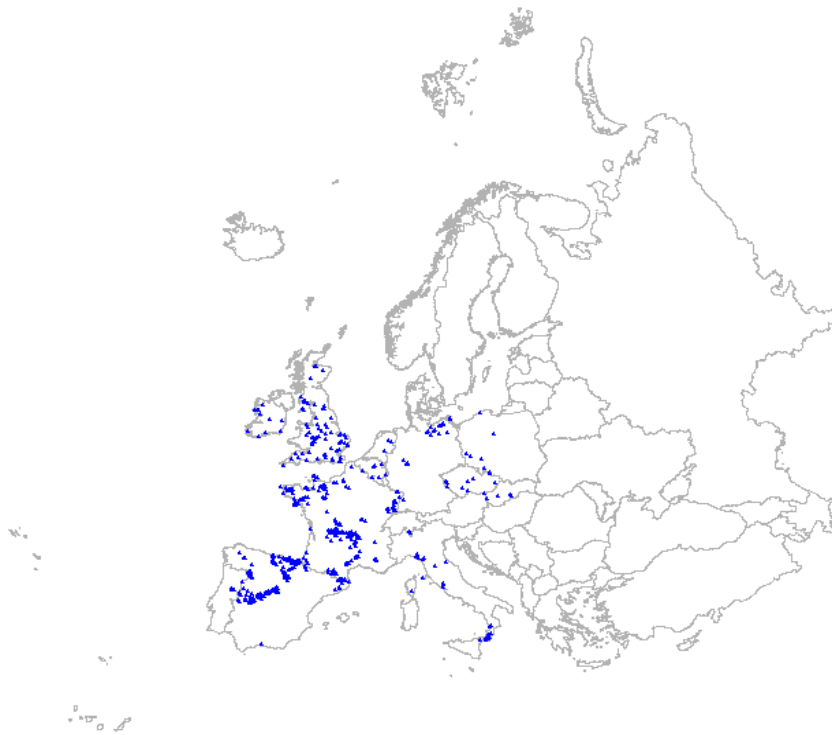
Distribution based on vegetation relevés

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-

Statistics from Maxent modelling

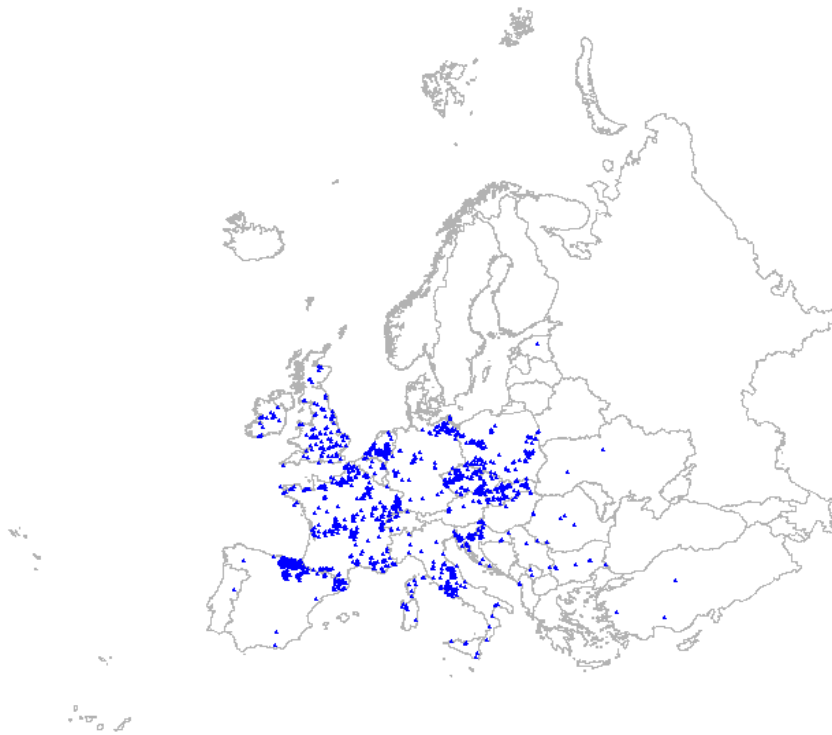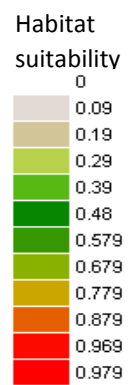|	
AUC training (0-1)	0.9059
AUC test (0-1)	0.8732
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	66.106
Potential evapotranspiration	9.5905
Soil organic carbon content (‰)	6.821
Bulk density (kg/m³)	4.9566
Precipitation seasonality (coef. of var.)	2.9731
Precipitation of warmest quarter	2.3412
Solar radiation	2.3055
Volume % of coarse fragments (> 2 mm)	2.1861
Weight in % of silt particles (0.0002-0.05 mm)	1.6297
Mean temperature of wettest quarter	1.2798
Weight in % of clay particles (<0.0002 mm)	1.1946
Annual precipitation	0.4269
Weight in % of sand particles (0.05-2 mm)	0.2346
pH (water)	0.0545
Cation Exchange Capacity	0.0476
Distance to water	0.0257

Remarks

Prediction in eastern part of Europe (Turkey) uncertain due to lack of data for that area.

F3.1d - Balkan-Anatolian submontane genistoid scrub

Distribution based on vegetation relevés

Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from heathland-scrub-tundra data set
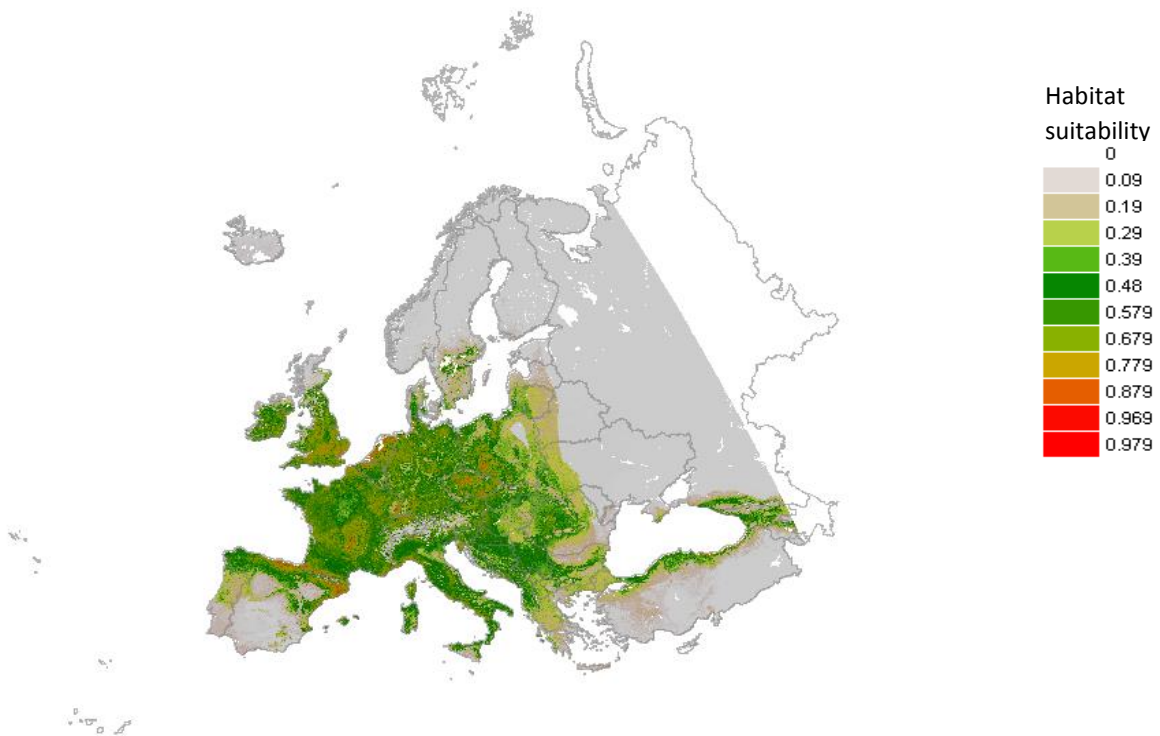
Geographic restriction distribution data

-

Remarks

Insuffient data to create a model

F3.1e - Temperate and submediterranean thorn scrub

Distribution based on vegetation relevés

Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-

Statistics from Maxent modelling

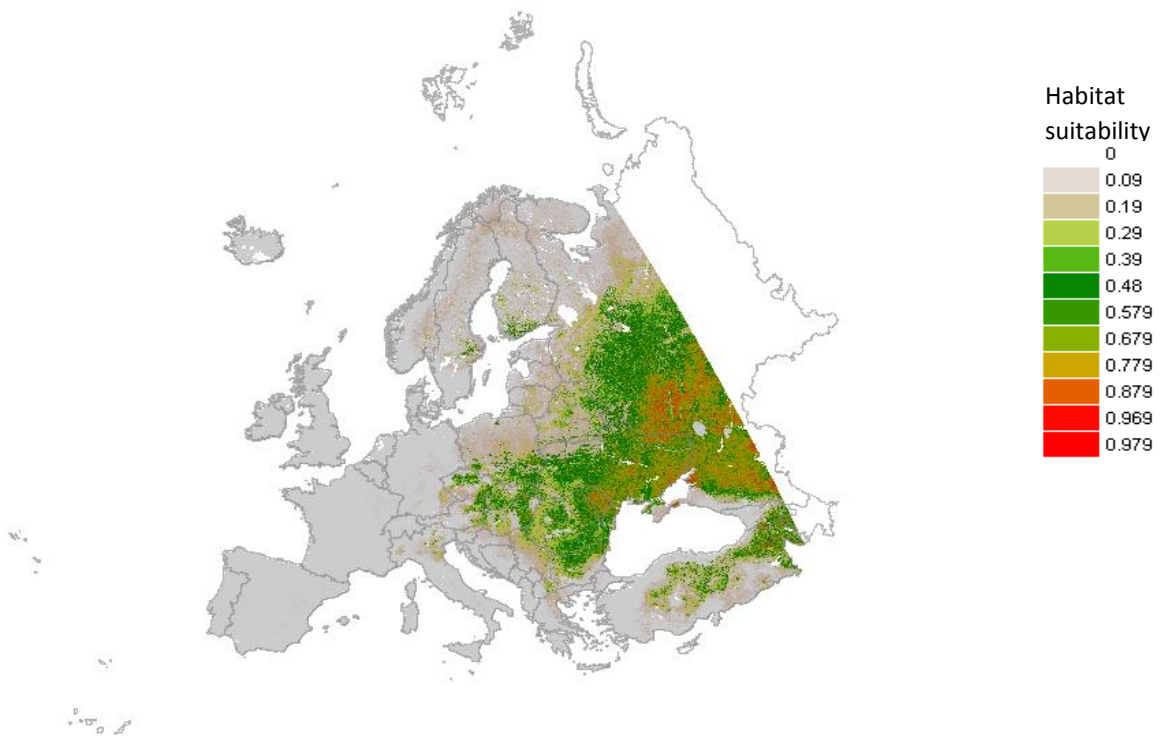|	
AUC training (0-1)	0.8197
AUC test (0-1)	0.8155
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	56.525
Precipitation of warmest quarter	11.908
Soil organic carbon content (‰)	11.747
Bulk density (kg/m³)	5.5983
Solar radiation	4.3068
Cation Exchange Capacity	4.2608
Annual precipitation	3.2244
Potential evapotranspiration	1.965
Weight in % of sand particles (0.05-2 mm)	1.0066
Mean temperature of wettest quarter	0.9434
Precipitation seasonality (coef. of var.)	0.8685
Distance to water	0.7498
Weight in % of clay particles (<0.0002 mm)	0.5767
pH (water)	0.2574
Volume % of coarse fragments (> 2 mm)	0.112
Weight in % of silt particles (0.0002-0.05 mm)	0.0726

Remarks

Poor model, too much affected by the distribution of input data with a high concentration in NL and CZ.

Prediction in eastern part of Europe (Caucasus, Turkey) uncertain due to lack of data for that area.

F3.1f - Low steppic scrub
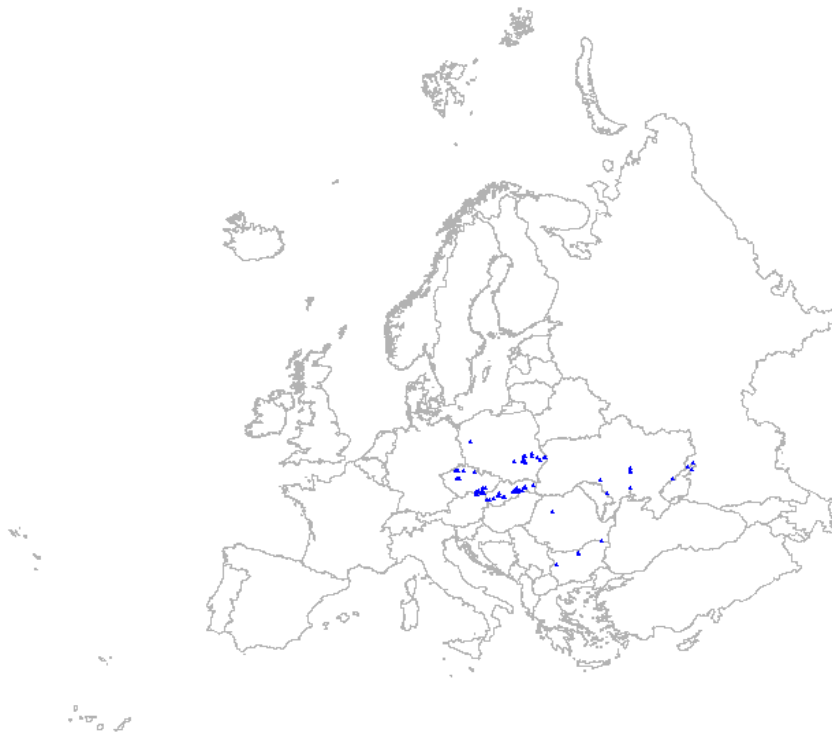
Distribution based on vegetation relevés

Model prediction. Background data randomly selected from heathland-scrub-tundra data set

Geographic restriction distribution data
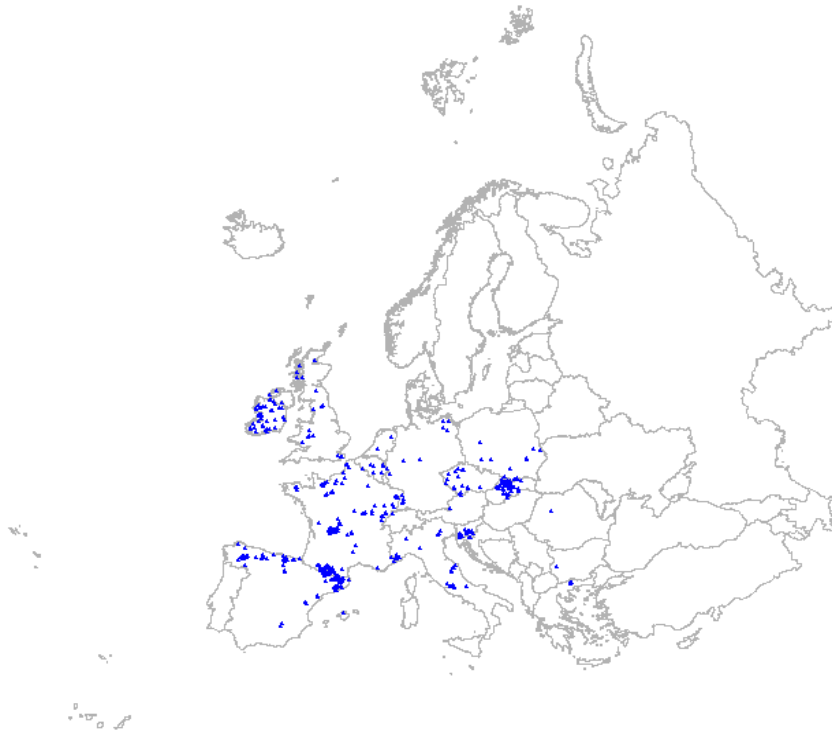
-

Statistics from Maxent modelling

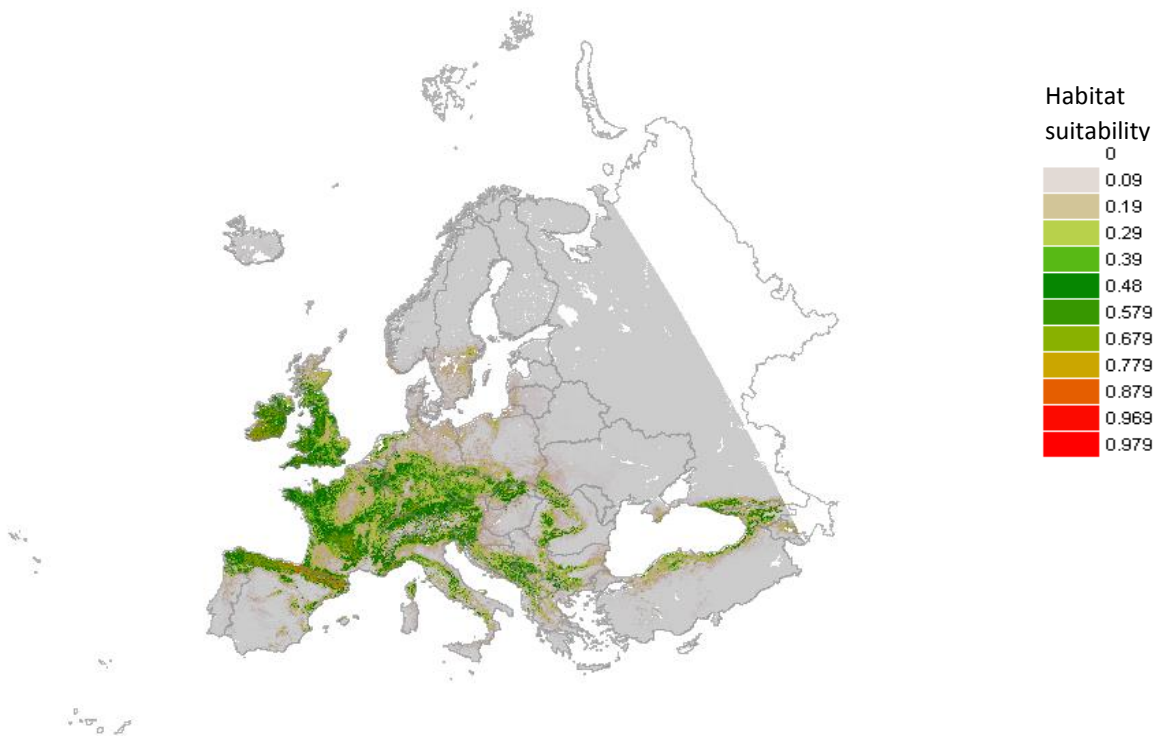|	
AUC training (0-1)	0.9839
AUC test (0-1)	0.9817
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	70.284
Weight in % of sand particles (0.05-2 mm)	11.889
Annual precipitation	6.7421
pH (water)	6.1524
Mean temperature of wettest quarter	5.0984
Potential evapotranspiration	4.5709
Soil organic carbon content (‰)	2.3728
Weight in % of clay particles (<0.0002 mm)	1.4129
Volume % of coarse fragments (> 2 mm)	0.8514
Weight in % of silt particles (0.0002-0.05 mm)	0.6615
Precipitation of warmest quarter	0.4852
Precipitation seasonality (coef. of var.)	0.3781
Distance to water	0.3029
Bulk density (kg/m³)	0.2286
Cation Exchange Capacity	0.1622
Solar radiation	0.0496

Remarks

Prediction in eastern part of Europe uncertain due to lack of data for that area.

F3.1g - Corylus avellana scrub

Distribution based on vegetation relevés

Model prediction. Background data randomly selected from study area
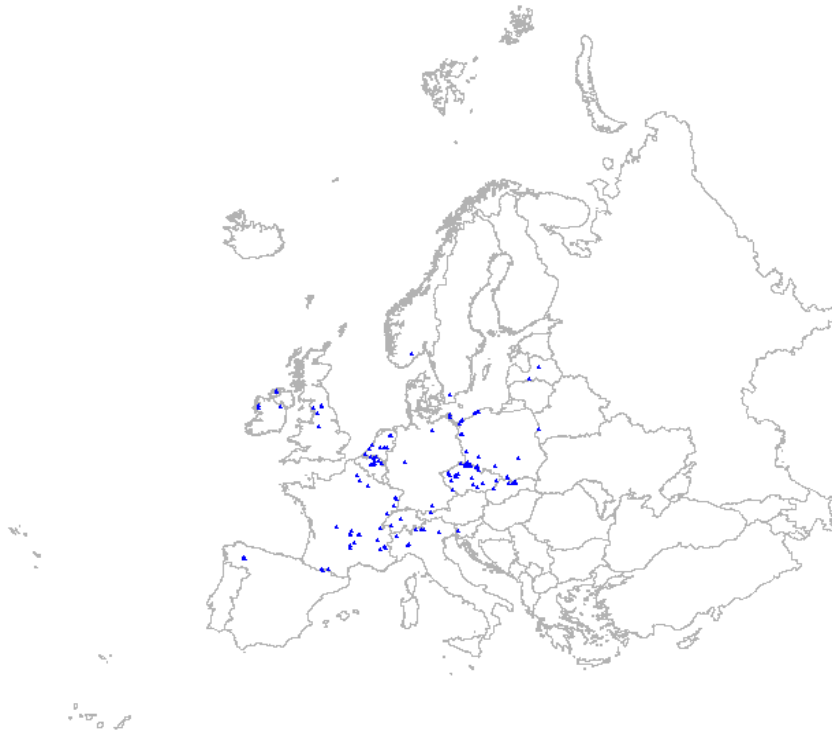
Geographic restriction distribution data

-

Statistics from Maxent modelling

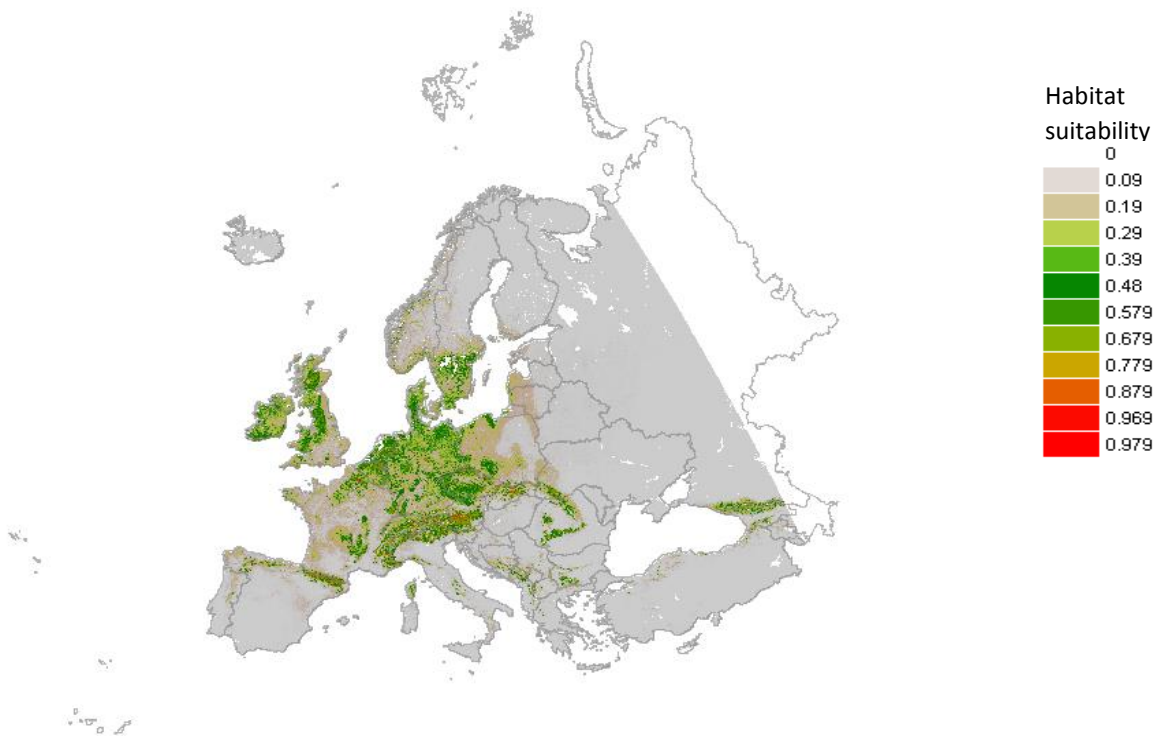|	
AUC training (0-1)	0.9214
AUC test (0-1)	0.9127
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	38.479
Annual precipitation	21.375
Soil organic carbon content (‰)	13.466
Bulk density (kg/m³)	6.9894
Weight in % of clay particles (<0.0002 mm)	6.0154
Volume % of coarse fragments (> 2 mm)	4.1324
Precipitation of warmest quarter	3.8228
Solar radiation	2.1368
Cation Exchange Capacity	1.5709
Precipitation seasonality (coef. of var.)	1.4767
Mean temperature of wettest quarter	0.5229
Weight in % of silt particles (0.0002-0.05 mm)	0.4396
Distance to water	0.3184
Potential evapotranspiration	0.2333
pH (water)	0.1342
Weight in % of sand particles (0.05-2 mm)	0.0344

Remarks

Prediction in eastern part of Europe uncertain due to lack of data for that area.

F3.1h - Temperate forest clearing scrub

Distribution based on vegetation relevés

Model prediction. Background data randomly selected from study area
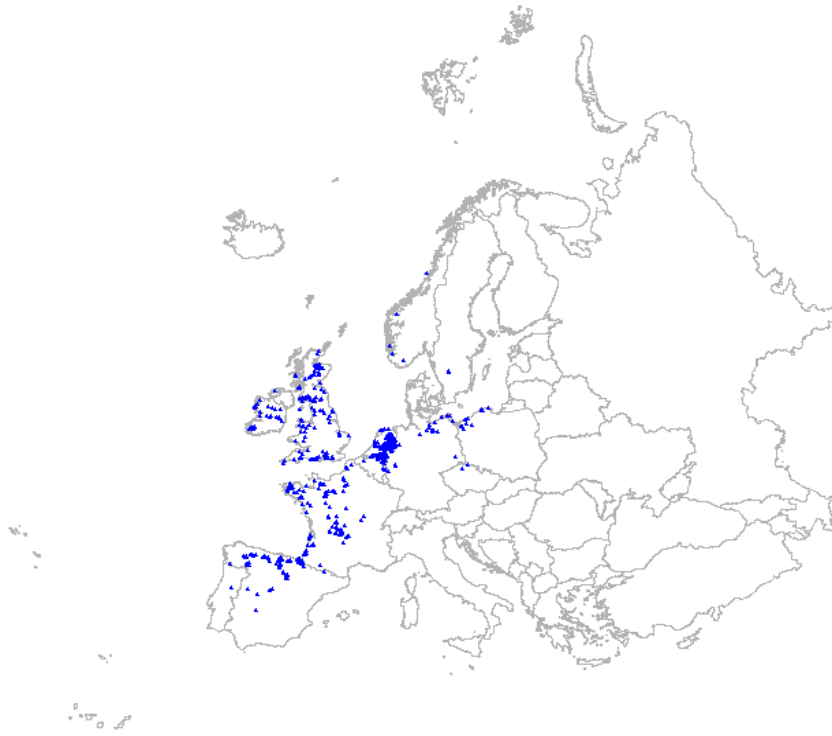
Geographic restriction distribution data

-

Statistics from Maxent modelling

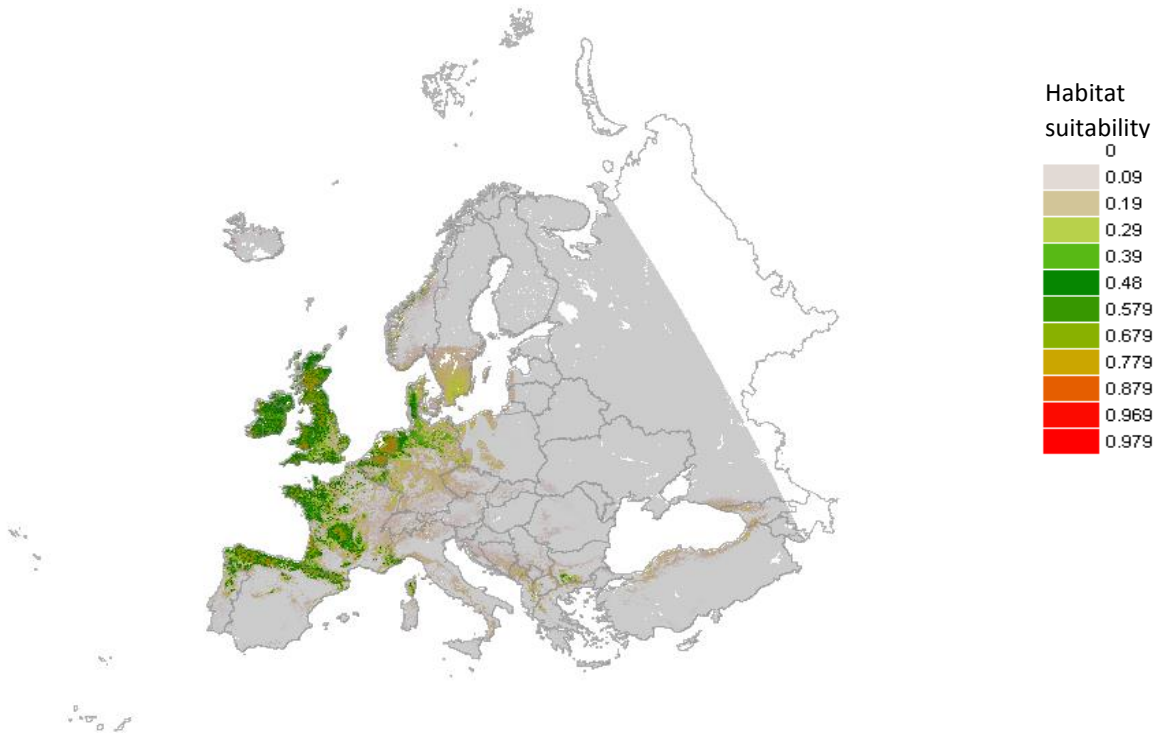|	
AUC training (0-1)	0.9574
AUC test (0-1)	0.9256
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	42.334
Soil organic carbon content (‰)	25.678
Precipitation of warmest quarter	6.175
Potential evapotranspiration	6.1546
Volume % of coarse fragments (> 2 mm)	5.506
Weight in % of silt particles (0.0002-0.05 mm)	5.051
Weight in % of clay particles (<0.0002 mm)	2.7162
Weight in % of sand particles (0.05-2 mm)	1.2624
Solar radiation	1.1384
Bulk density (kg/m³)	1.0246
Precipitation seasonality (coef. of var.)	0.954
Annual precipitation	0.7647
pH (water)	0.6205
Cation Exchange Capacity	0.4204
Mean temperature of wettest quarter	0.1205
Distance to water	0.0265

Remarks

Prediction in eastern part of Europe uncertain due to lack of data for that area.

F4.1 - Wet heath

Distribution based on vegetation relevés

Habitat
suitability
- 0
- 0.09
- 0.19
- 0.29
- 0.39
- 0.48
- 0.579
- 0.679
- 0.779
- 0.879
- 0.969
- 0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-

Statistics from Maxent modelling

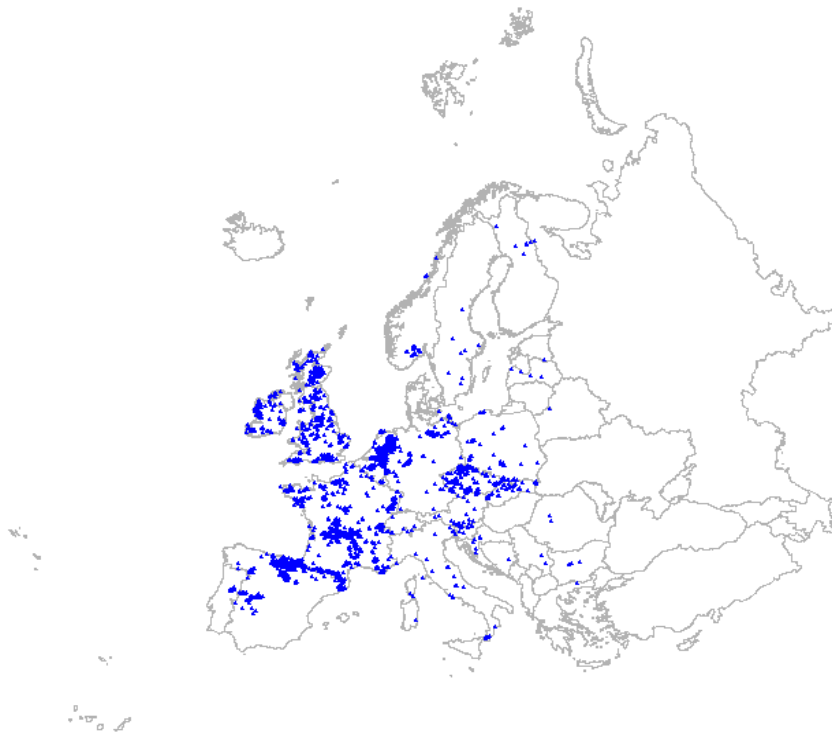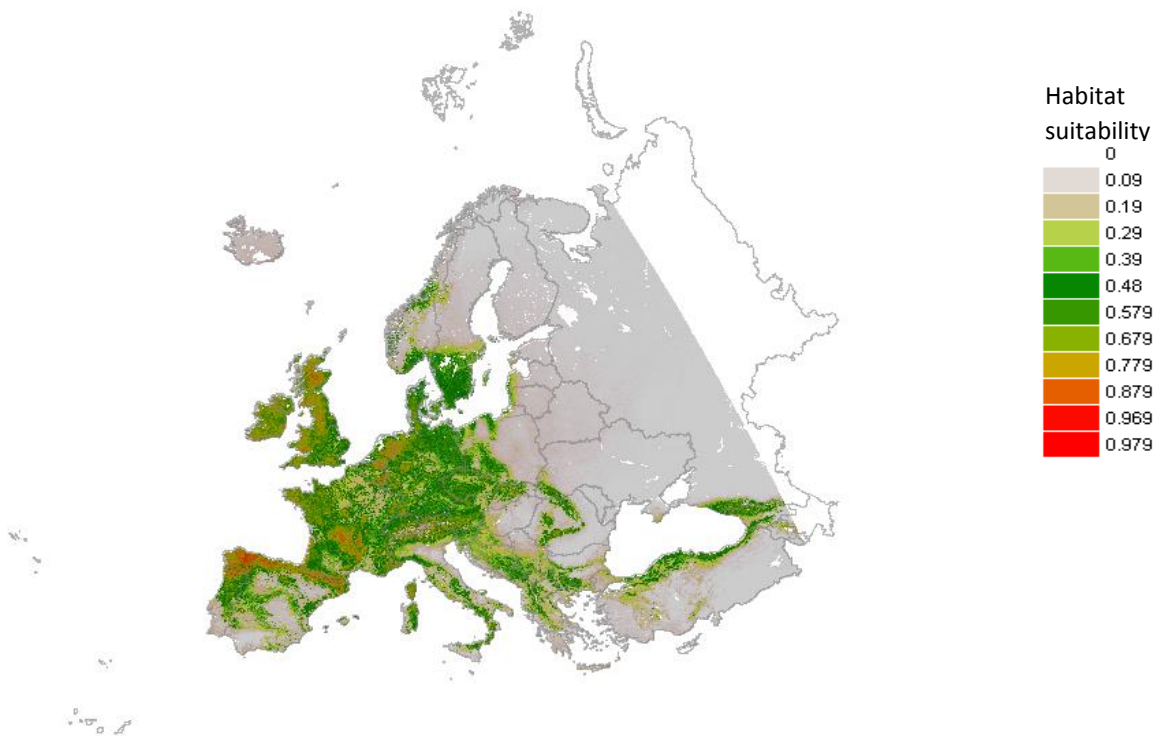|	
AUC training (0-1)	0.9118
AUC test (0-1)	0.9158
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	74.655
Potential evapotranspiration	6.5263
Soil organic carbon content (‰)	5.217
Bulk density (kg/m³)	4.9738
pH (water)	4.9587
Weight in % of silt particles (0.0002-0.05 mm)	1.1275
Precipitation seasonality (coef. of var.)	0.6302
Weight in % of clay particles (<0.0002 mm)	0.6261
Solar radiation	0.5099
Precipitation of warmest quarter	0.3854
Mean temperature of wettest quarter	0.3431
Weight in % of sand particles (0.05-2 mm)	0.2921
Annual precipitation	0.1603
Distance to water	0.0314
Cation Exchange Capacity	0.0011
Volume % of coarse fragments (> 2 mm)	0.001

Remarks

-

F4.2 - Dry heath

Distribution based on vegetation relevés

Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.7839
AUC test (0-1)	0.7792
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	72.114
Potential evapotranspiration	11.395
Soil organic carbon content (‰)	9.17
Annual precipitation	3.1502
Precipitation seasonality (coef. of var.)	1.5042
Weight in % of clay particles (<0.0002 mm)	0.4387
Volume % of coarse fragments (> 2 mm)	0.432
Weight in % of silt particles (0.0002-0.05 mm)	0.3866
Bulk density (kg/m³)	0.3832
Weight in % of sand particles (0.05-2 mm)	0.303
pH (water)	0.2384
Precipitation of warmest quarter	0.1225
Solar radiation	0.117
Distance to water	0.0888
Cation Exchange Capacity	0.0446
Mean temperature of wettest quarter	0.0238

Remarks

Prediction in eastern part of Europe uncertain due to lack of data for that area.

F5.1 - Mediterranean maquis and arborescent matorral
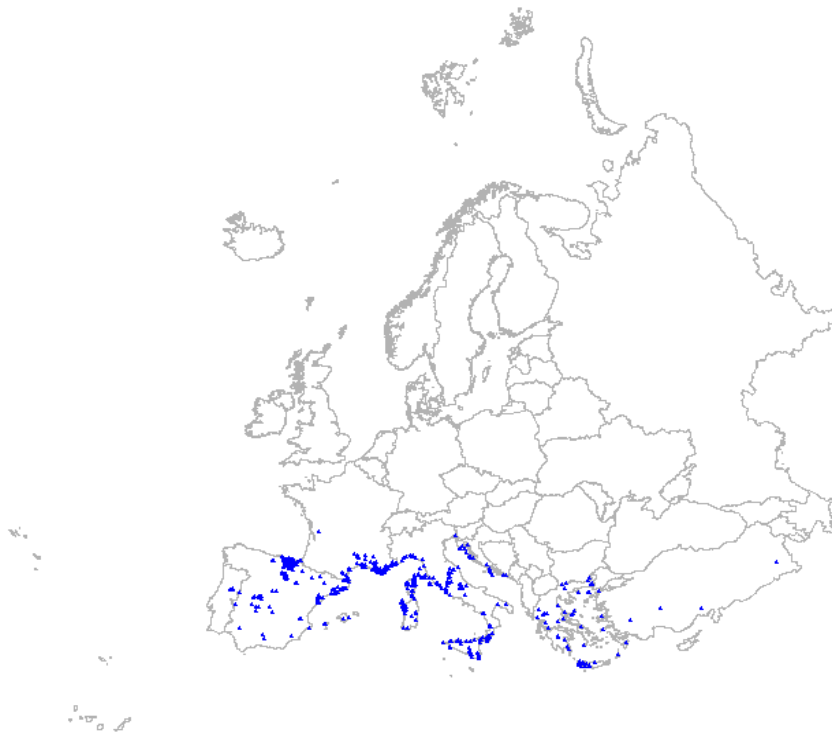
Distribution based on vegetation relevés
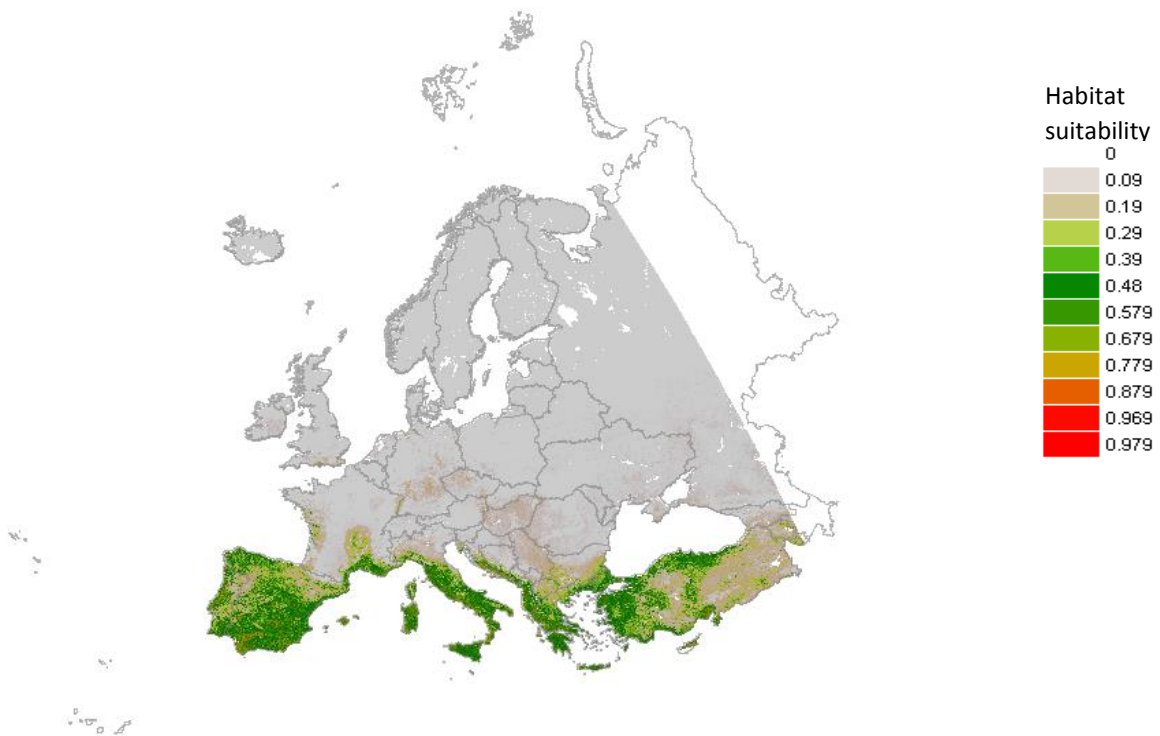
Model prediction. Background data randomly selected from heathland-scrub-tundra data set
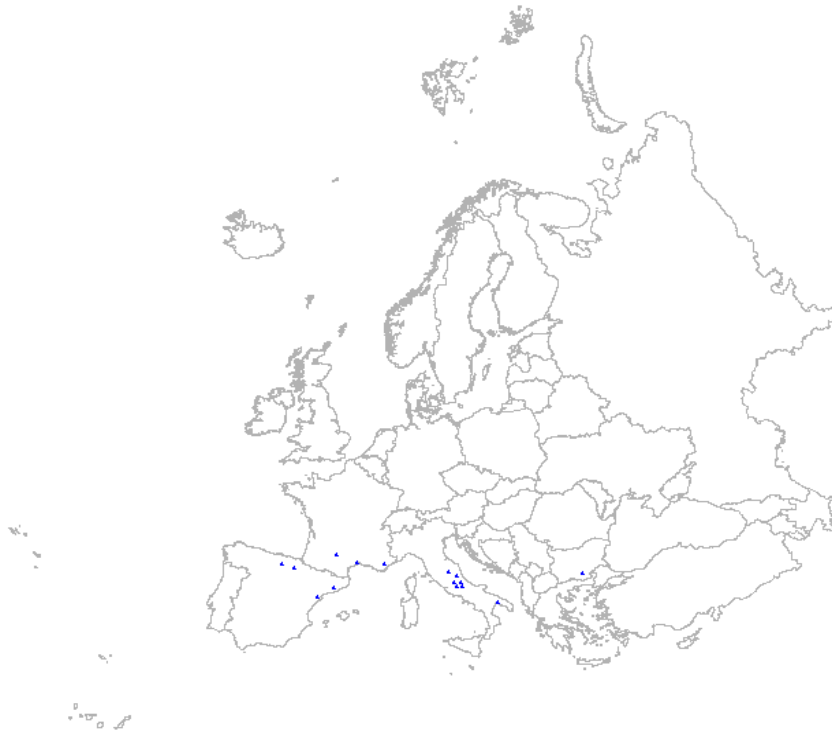
Geographic restriction distribution data

-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.896
AUC test (0-1)	0.8916
Contribution variables to the Maxent model (%)	
Precipitation of warmest quarter	43.13
Soil organic carbon content (‰)	19.031
Weight in % of clay particles (<0.0002 mm)	15.644
Solar radiation	12.614
Precipitation seasonality (coef. of var.)	7.0148
Potential evapotranspiration	5.0247
Temperature seasonality (stdev * 100)	2.3359
Cation Exchange Capacity	2.3304
Weight in % of sand particles (0.05-2 mm)	2.1861
Distance to water	1.3011
Mean temperature of wettest quarter	1.0568
Annual precipitation	0.7252
Bulk density (kg/m³)	0.7121
pH (water)	0.3943
Weight in % of silt particles (0.0002-0.05 mm)	0.1041
Volume % of coarse fragments (> 2 mm)	0.1013

Remarks

Prediction in eastern part of Europe (Turkey) uncertain due to lack of data for that area.

F5.3 - Submediterranean pseudomaquis

Distribution based on vegetation relevés
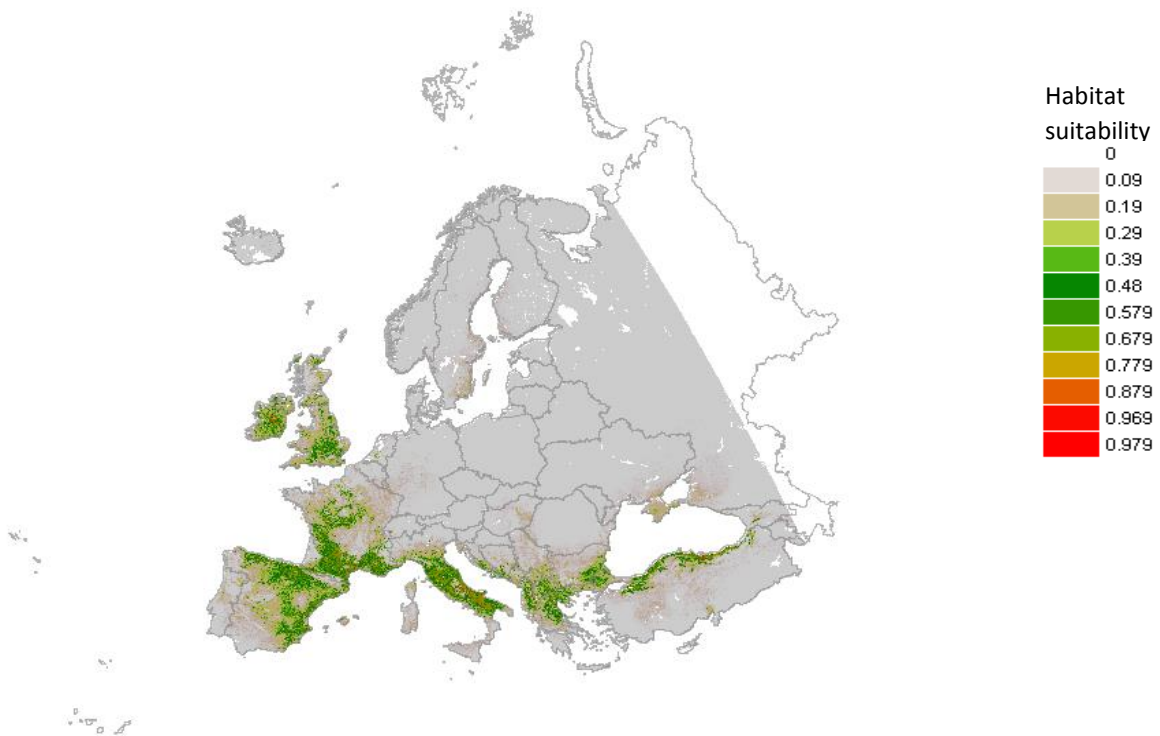
Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
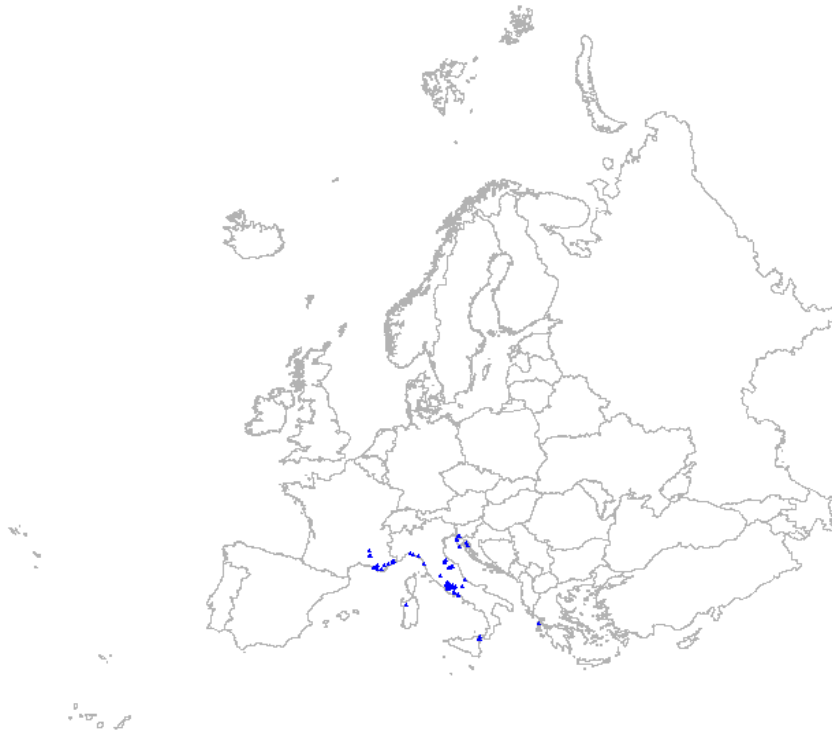-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9786
AUC test (0-1)	0.9577
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	27.217
Precipitation seasonality (coef. of var.)	13.35
Potential evapotranspiration	11.811
Weight in % of silt particles (0.0002-0.05 mm)	11.161
Volume % of coarse fragments (> 2 mm)	10.129
pH (water)	8.4849
Soil organic carbon content (‰)	6.334
Precipitation of warmest quarter	5.0467
Weight in % of sand particles (0.05-2 mm)	3.2053
Weight in % of clay particles (<0.0002 mm)	2.2254
Solar radiation	1.046
Annual precipitation	0.7049
Cation Exchange Capacity	0.3314
Mean temperature of wettest quarter	0
Bulk density (kg/m³)	0
Distance to water	0

Remarks

Bad model, because of prediction in Ireland, England, and Hungary. The reason for for this is that this habitat type has a poor relation to climatic factors.

Prediction in eastern part of Europe (Turkey) uncertain due to lack of data for that area.

F5.4 - Spartium junceum scrub

Distribution based on vegetation relevés
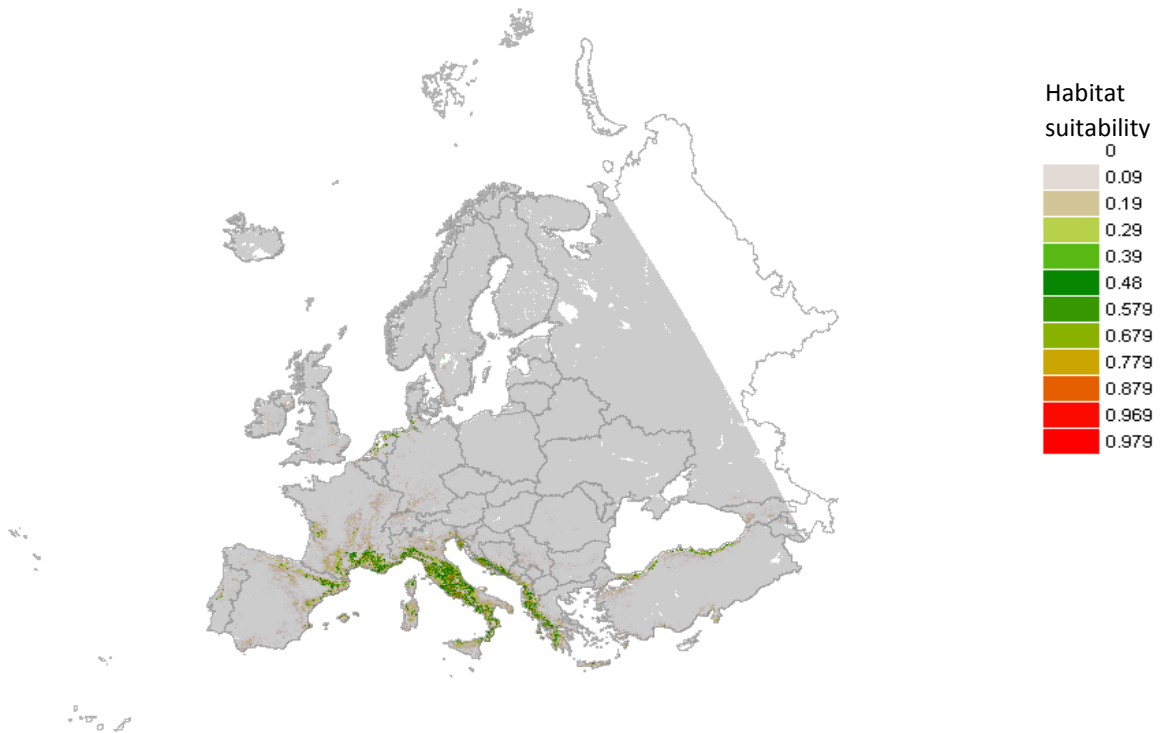
Habitat
suitability
0
0.09
0.19
0.29
0.39
0.48
0.579
0.679
0.779
0.879
0.969
0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
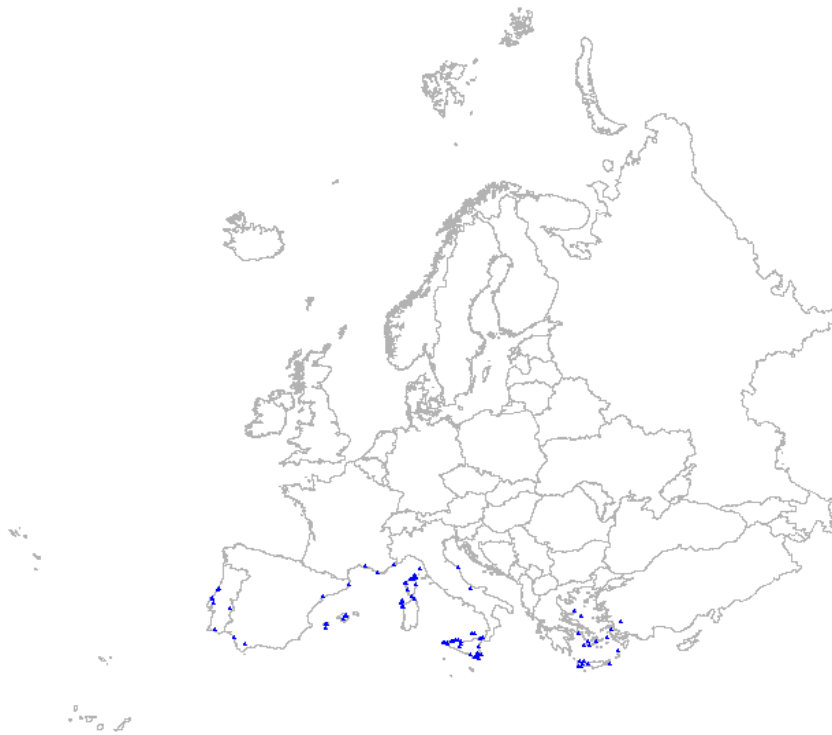
-

Statistics from Maxent modelling

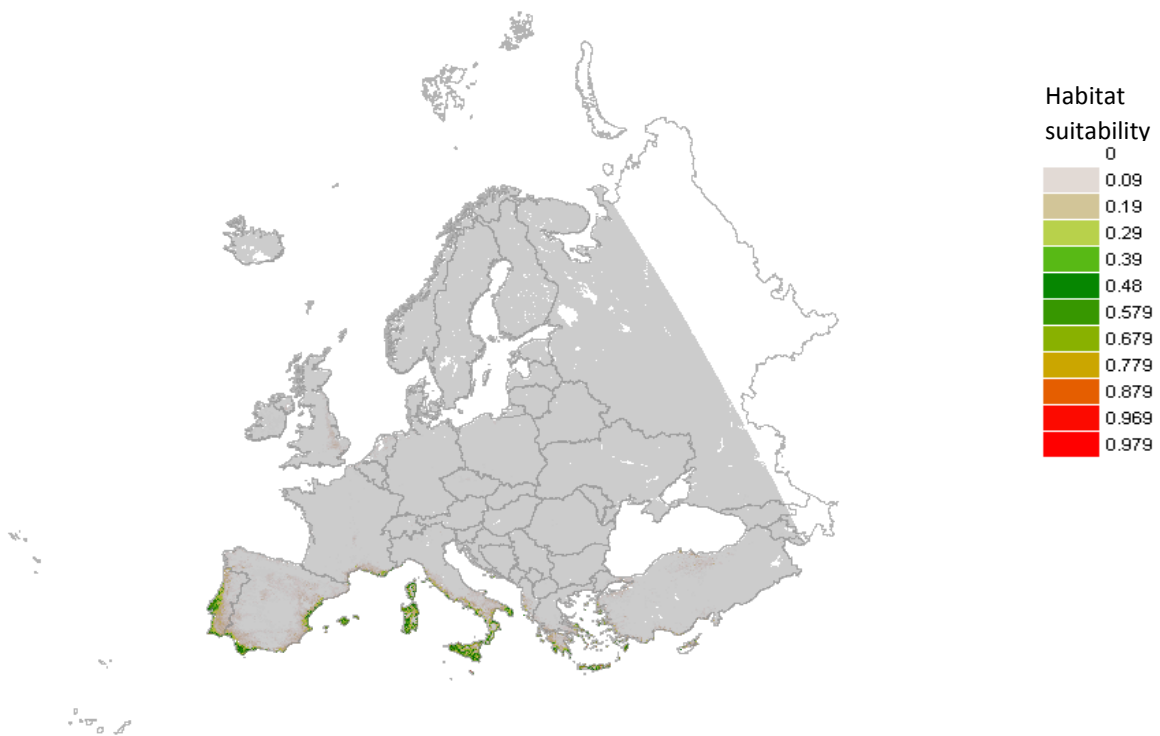|	
AUC training (0-1)	0.9873
AUC test (0-1)	0.9804
Contribution variables to the Maxent model (%)	
Weight in % of clay particles (<0.0002 mm)	26.326
Temperature seasonality (stdev * 100)	22.785
Solar radiation	20.5
Annual precipitation	18.903
Potential evapotranspiration	13.457
Mean temperature of wettest quarter	6.4925
Precipitation seasonality (coef. of var.)	3.7847
pH (water)	2.8043
Precipitation of warmest quarter	2.6968
Bulk density (kg/m³)	1.4665
Volume % of coarse fragments (> 2 mm)	0.7765
Soil organic carbon content (‰)	0.0964
Distance to water	0.0908
Cation Exchange Capacity	0.0768
Weight in % of silt particles (0.0002-0.05 mm)	0.0555
Weight in % of sand particles (0.05-2 mm)	0.0156

Remarks

Due to lack of data there is a poor prediction for Spain. Spartium junceum occurs throughout that country.

Prediction in eastern part of Europe (Turkey) uncertain due to lack of data for that area.

F5.5 - Thermo-Mediterranean scrub

Distribution based on vegetation relevés

Habitat
suitability
0
0.09
0.19
0.29
0.39
0.48
0.579
0.679
0.779
0.879
0.969
0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-
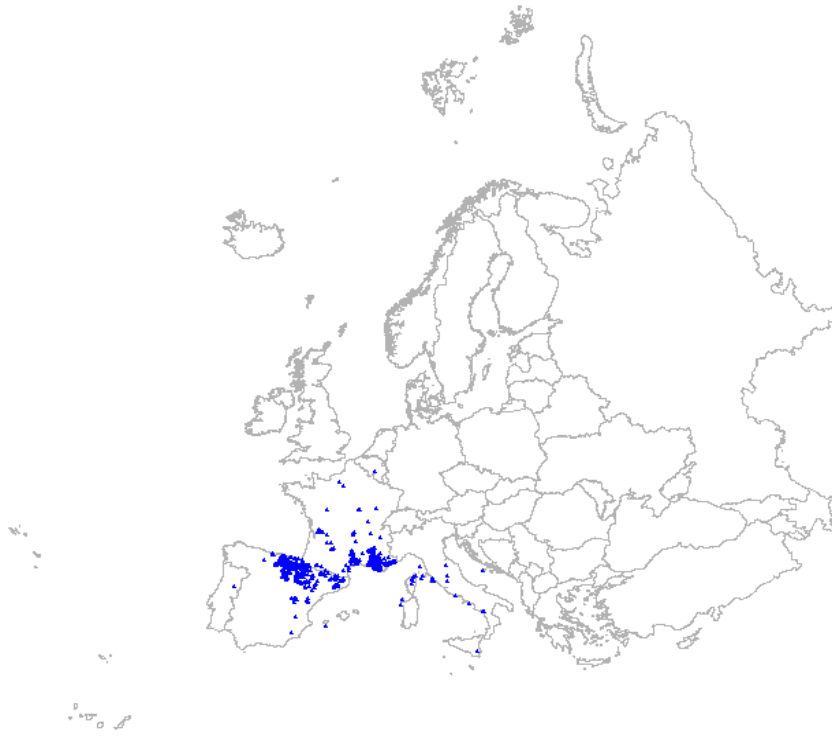
Statistics from Maxent modelling

AUC training (0-1)	0.9874
AUC test (0-1)	0.9814
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	38.237
Precipitation of warmest quarter	28.105
Precipitation seasonality (coef. of var.)	11.85
Mean temperature of wettest quarter	7.9066
Weight in % of clay particles (<0.0002 mm)	3.5663
Soil organic carbon content (‰)	2.799
pH (water)	2.5521
Potential evapotranspiration	2.0164
Weight in % of silt particles (0.0002-0.05 mm)	0.7747
Volume % of coarse fragments (> 2 mm)	0.7313
Weight in % of sand particles (0.05-2 mm)	0.655
Bulk density (kg/m³)	0.3056
Solar radiation	0.2875
Annual precipitation	0.0773
Distance to water	0.0443
Cation Exchange Capacity	0

Remarks

-

F6.1a - Western basiphilous garrigue
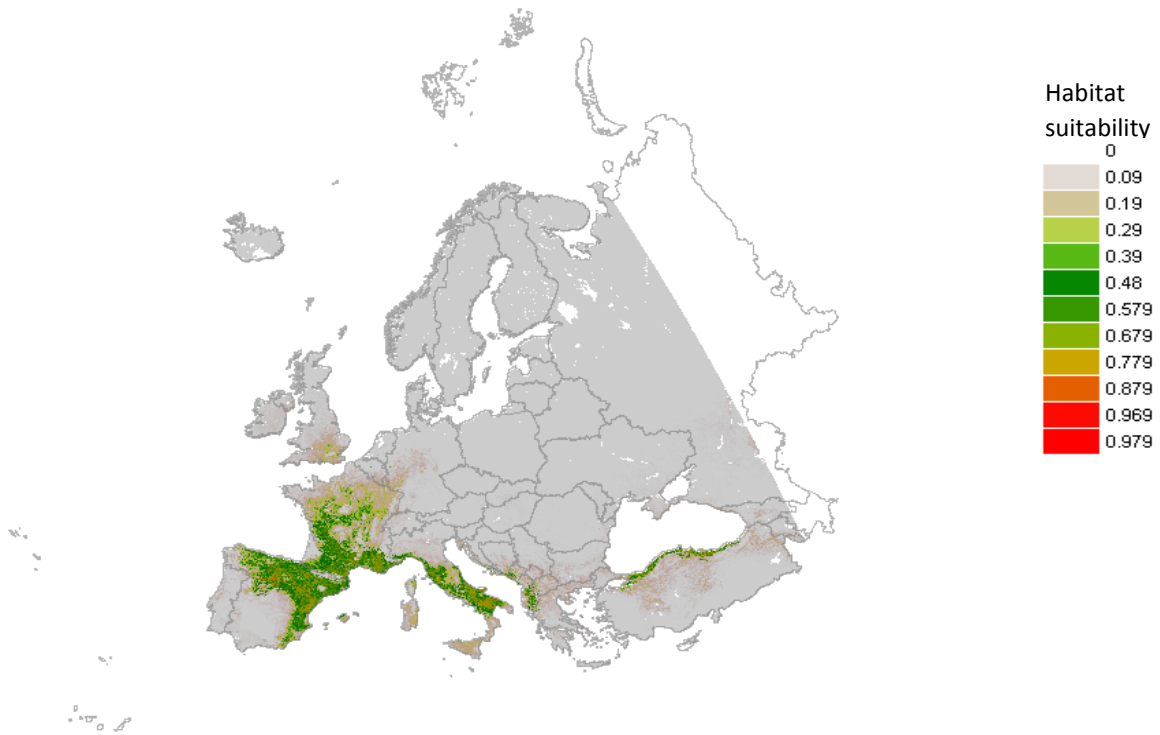
Distribution based on vegetation relevés

Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from heathland-scrub-tundra data set
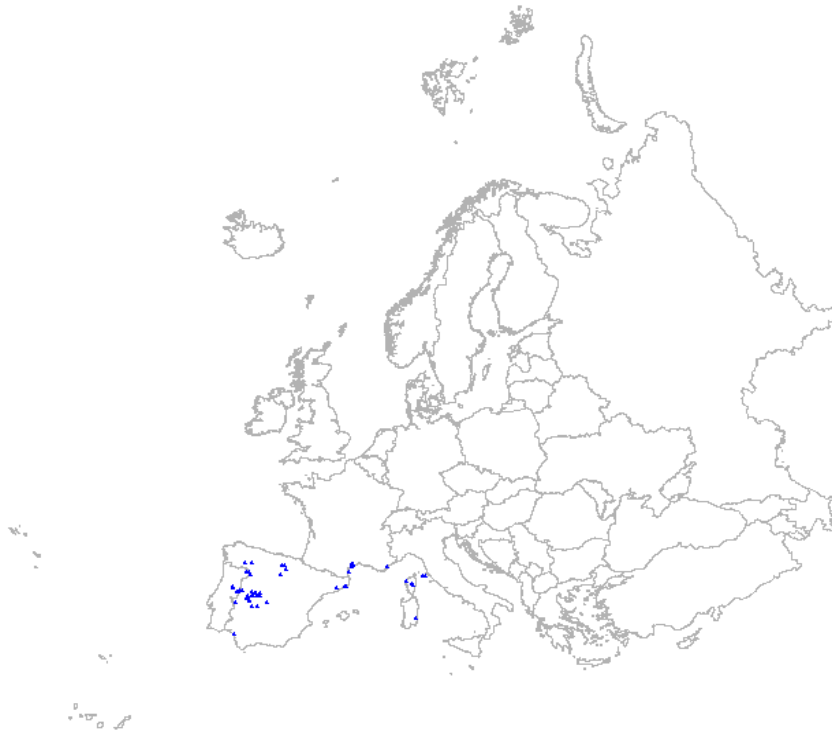
Geographic restriction distribution data

-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9066
AUC test (0-1)	0.8951
Contribution variables to the Maxent model (%)	
Soil organic carbon content (‰)	40.173
pH (water)	14.171
Solar radiation	13.27
Temperature seasonality (stdev * 100)	13.257
Weight in % of clay particles (<0.0002 mm)	8.9195
Precipitation seasonality (coef. of var.)	6.7018
Volume % of coarse fragments (> 2 mm)	6.6706
Precipitation of warmest quarter	4.066
Bulk density (kg/m³)	3.7736
Weight in % of sand particles (0.05-2 mm)	0.7942
Potential evapotranspiration	0.7076
Distance to water	0.4612
Cation Exchange Capacity	0.3458
Mean temperature of wettest quarter	0.3284
Annual precipitation	0.2318
Weight in % of silt particles (0.0002-0.05 mm)	0.077

Remarks

Prediction in eastern part of Europe (Turkey) uncertain due to lack of data for that area.

F6.1b - Western acidophilous garrigue
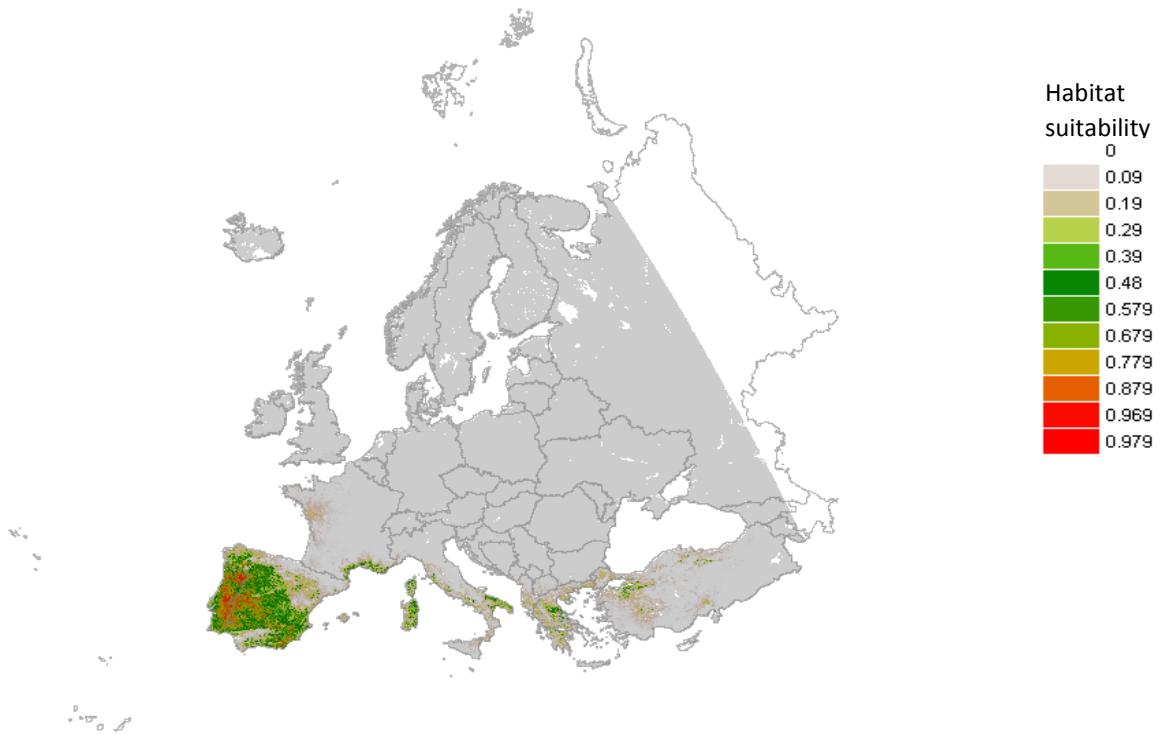
Distribution based on vegetation relevés

Model prediction. Background data randomly selected from heathland-scrub-tundra data set
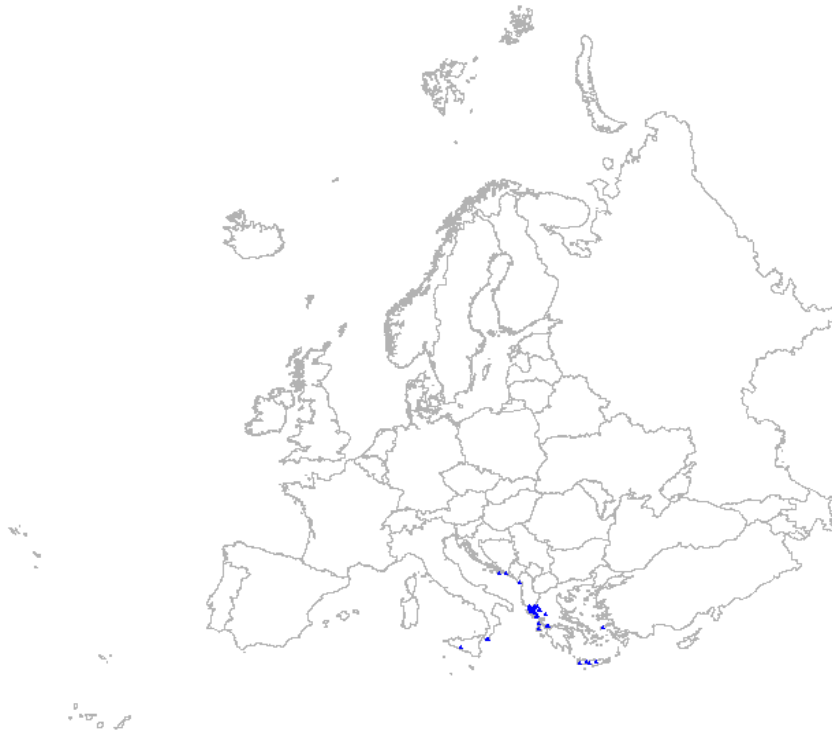
Geographic restriction distribution data

-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9756
AUC test (0-1)	0.9415
Contribution variables to the Maxent model (%)	
Precipitation of warmest quarter	49.165
Soil organic carbon content (‰)	16.059
Precipitation seasonality (coef. of var.)	13.554
Weight in % of clay particles (<0.0002 mm)	6.2395
Solar radiation	5.8264
Bulk density (kg/m³)	5.8124
Weight in % of sand particles (0.05-2 mm)	3.5449
Mean temperature of wettest quarter	2.3443
Temperature seasonality (stdev * 100)	2.1301
Volume % of coarse fragments (> 2 mm)	1.9674
Weight in % of silt particles (0.0002-0.05 mm)	0.8768
Annual precipitation	0.8398
pH (water)	0.4292
Potential evapotranspiration	0.3234
Cation Exchange Capacity	0.14
Distance to water	0.0443

Remarks

Predictions in the east Mediterranean area should be ignored.

F6.2 - Eastern garrigue

Distribution based on vegetation relevés
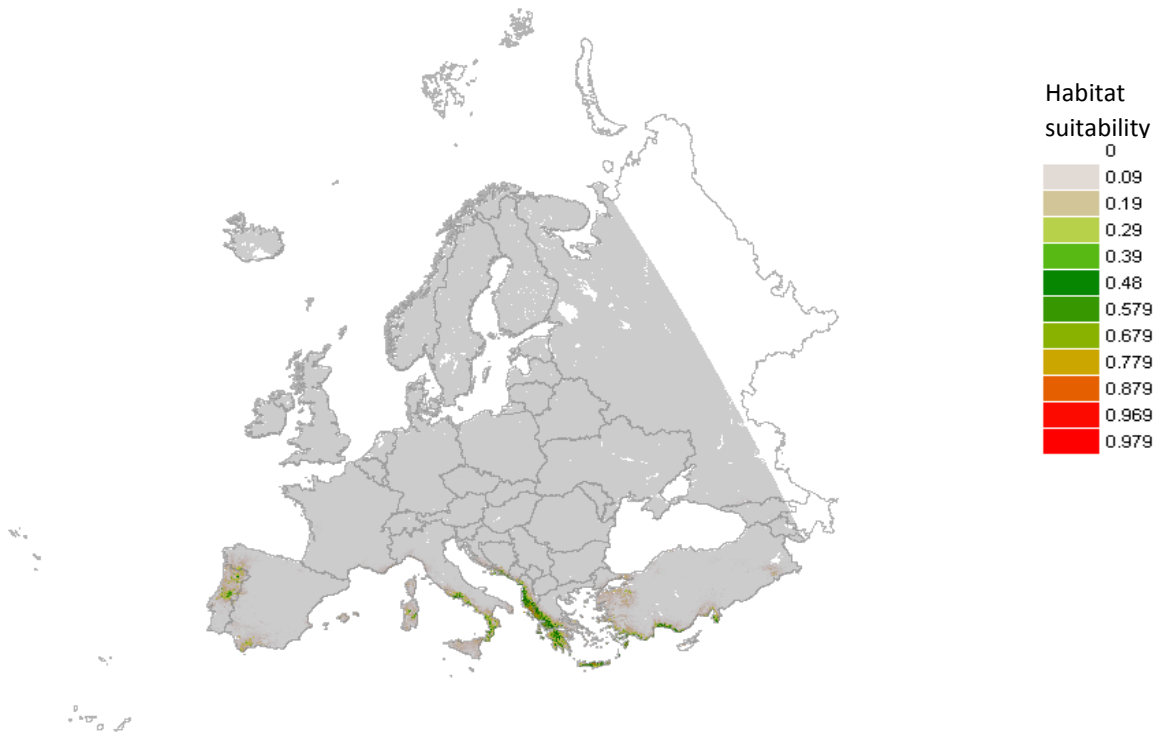
Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
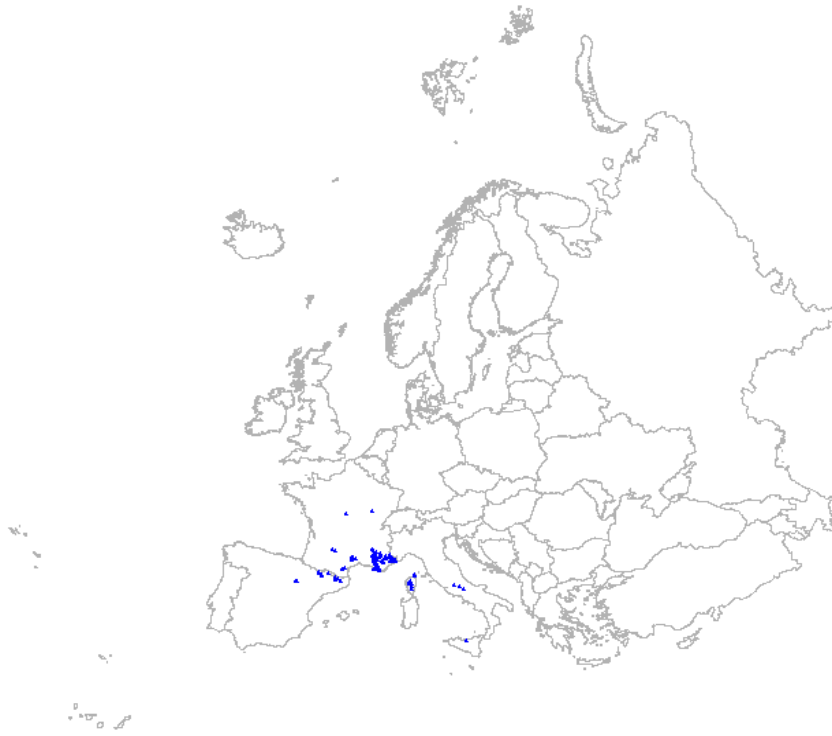
-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9923
AUC test (0-1)	0.9916
Contribution variables to the Maxent model (%)	
Annual precipitation	39.947
Precipitation seasonality (coef. of var.)	37.282
Solar radiation	13.916
Potential evapotranspiration	11.44
Temperature seasonality (stdev * 100)	3.8421
Precipitation of warmest quarter	2.5152
Weight in % of clay particles (<0.0002 mm)	1.8396
Weight in % of silt particles (0.0002-0.05 mm)	0.7661
Soil organic carbon content (‰)	0.633
Distance to water	0.4519
Volume % of coarse fragments (> 2 mm)	0.0504
Cation Exchange Capacity	0.0256
pH (water)	0.0137
Mean temperature of wettest quarter	0.0112
Weight in % of sand particles (0.05-2 mm)	0.0046
Bulk density (kg/m³)	0

Remarks

Prediction in the Iberian Penissula should be ignored.

Prediction in eastern part of Europe (Turkey) uncertain due to lack of data for that area.

F6.6 - Supra-Mediterranean garrigue

Distribution based on vegetation relevés
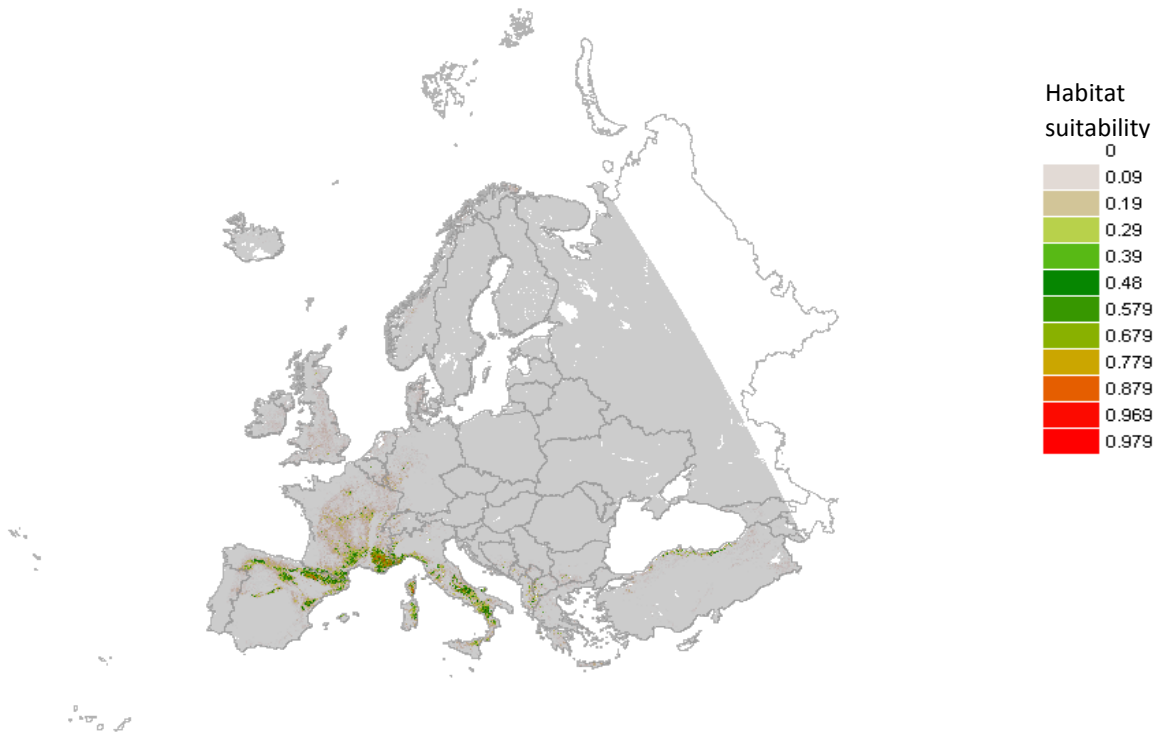
Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
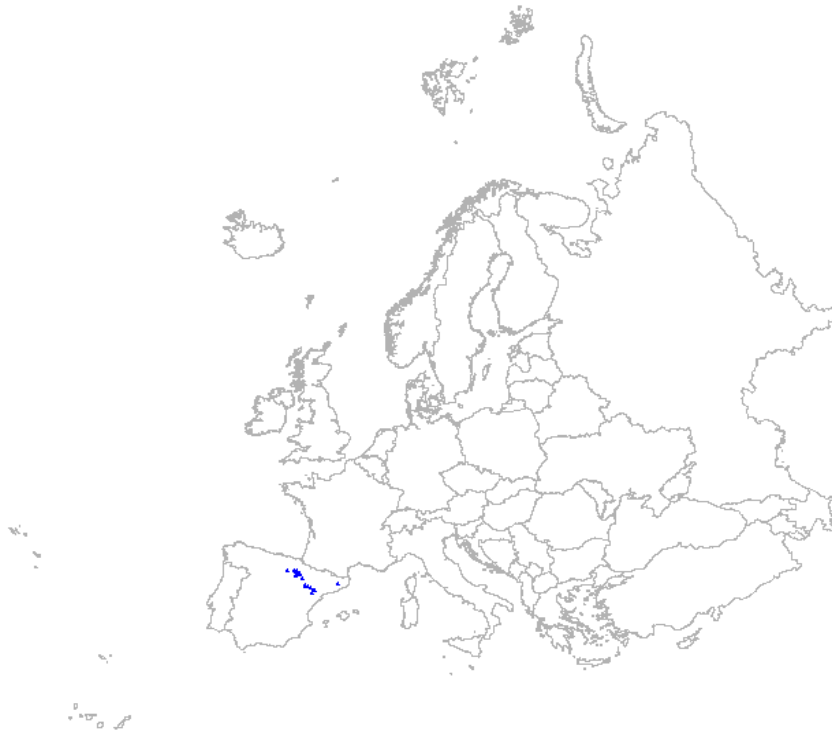
-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.982
AUC test (0-1)	0.9828
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	35.536
Volume % of coarse fragments (> 2 mm)	22.254
Annual precipitation	8.7275
Weight in % of sand particles (0.05-2 mm)	7.5503
Bulk density (kg/m³)	5.5881
Precipitation seasonality (coef. of var.)	4.2175
Potential evapotranspiration	3.9178
Soil organic carbon content (‰)	3.5513
Mean temperature of wettest quarter	2.6417
Precipitation of warmest quarter	2.4728
Solar radiation	2.2173
Cation Exchange Capacity	2.1144
pH (water)	1.0109
Weight in % of silt particles (0.0002-0.05 mm)	0.0835
Weight in % of clay particles (<0.0002 mm)	0.0665
Distance to water	0.0067

Remarks

-

F6.7 - Mediterranean gypsum scrub

Distribution based on vegetation relevés
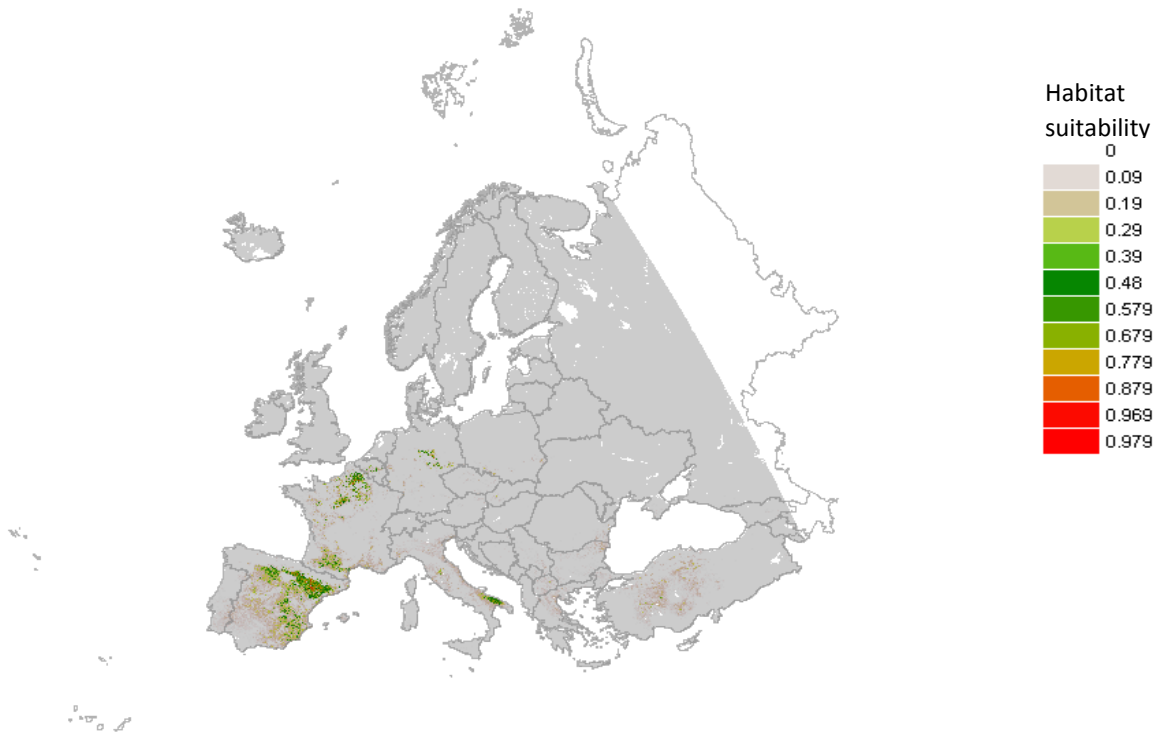
Model prediction. Background data randomly selected from heathland-scrub-tundra data set
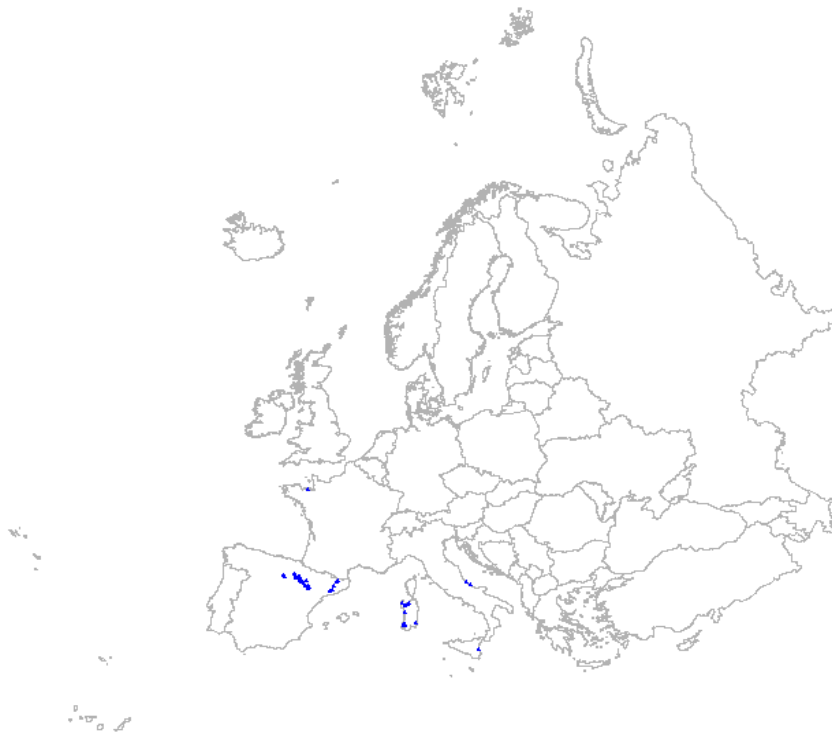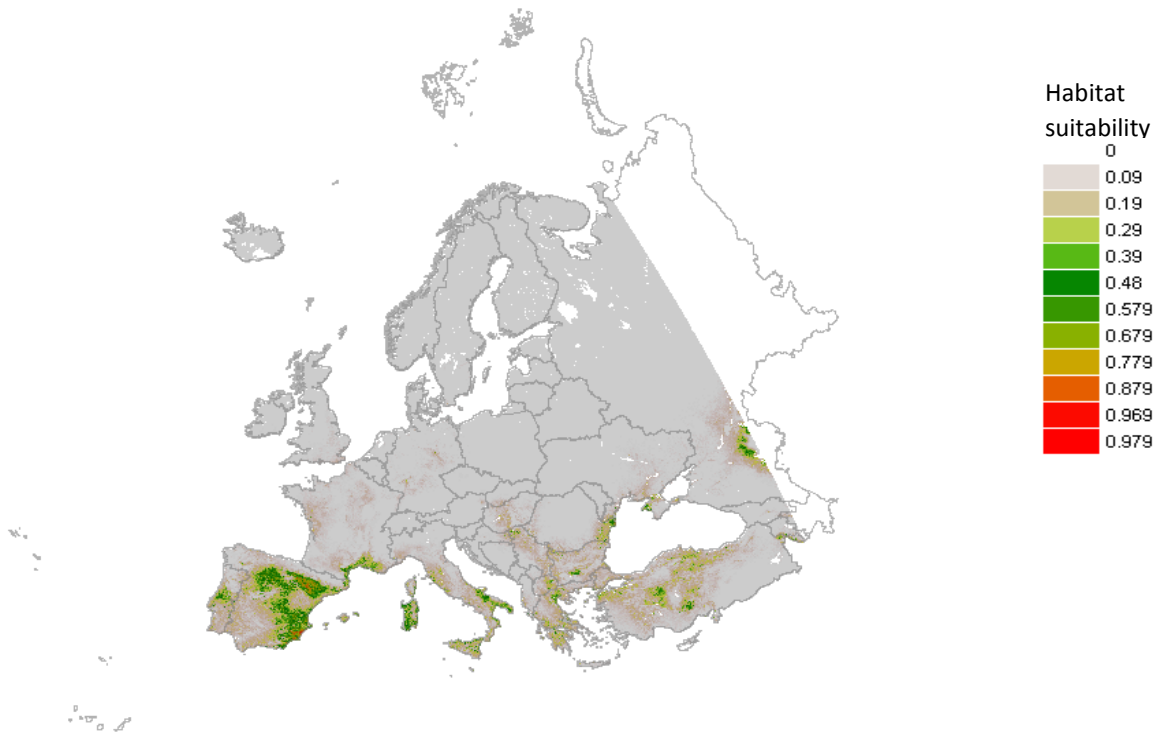
Geographic restriction distribution data

-

Statistics from Maxent modelling

AUC training (0-1)	0.9961
AUC test (0-1)	0.9968
Contribution variables to the Maxent model (%)	
Potential evapotranspiration	21.138
Bulk density (kg/m³)	17.271
Soil organic carbon content (‰)	15.464
Annual precipitation	3.5452
Distance to water	2.2883
Weight in % of sand particles (0.05-2 mm)	2.0027
Precipitation seasonality (coef. of var.)	1.9717
Temperature seasonality (stdev * 100)	1.3211
Solar radiation	1.063
Cation Exchange Capacity	0.3305
Volume % of coarse fragments (> 2 mm)	0.3214
Weight in % of silt particles (0.0002-0.05 mm)	0.2797
Precipitation of warmest quarter	0.0221
Mean temperature of wettest quarter	0
Weight in % of clay particles (<0.0002 mm)	0
pH (water)	0

Remarks

-

F6.8a - Mediterranean halo-nitrophilous scrub

Distribution based on vegetation relevés

Habitat
suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from heathland-scrub-tundra data set

Geographic restriction distribution data

-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9759
AUC test (0-1)	0.911
Contribution variables to the Maxent model (%)	
Soil organic carbon content (‰)	39.169
Precipitation of warmest quarter	16.086
Weight in % of clay particles (<0.0002 mm)	9.1065
Annual precipitation	6.3801
Solar radiation	4.6929
Bulk density (kg/m³)	3.8742
Temperature seasonality (stdev * 100)	3.4085
Precipitation seasonality (coef. of var.)	3.2556
Mean temperature of wettest quarter	2.8701
Weight in % of sand particles (0.05-2 mm)	1.4553
Distance to water	0.5444
Cation Exchange Capacity	0.3583
Potential evapotranspiration	0.3013
pH (water)	0.2237
Volume % of coarse fragments (> 2 mm)	0.0369
Weight in % of silt particles (0.0002-0.05 mm)	0

Remarks

Prediction in eastern part of Europe uncertain due to lack of data for that area.

F6.8b - Caspian Sea halo-nitrophilous scrub
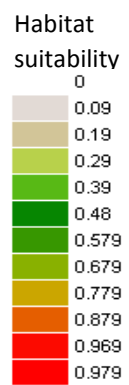
Distribution based on vegetation relevés

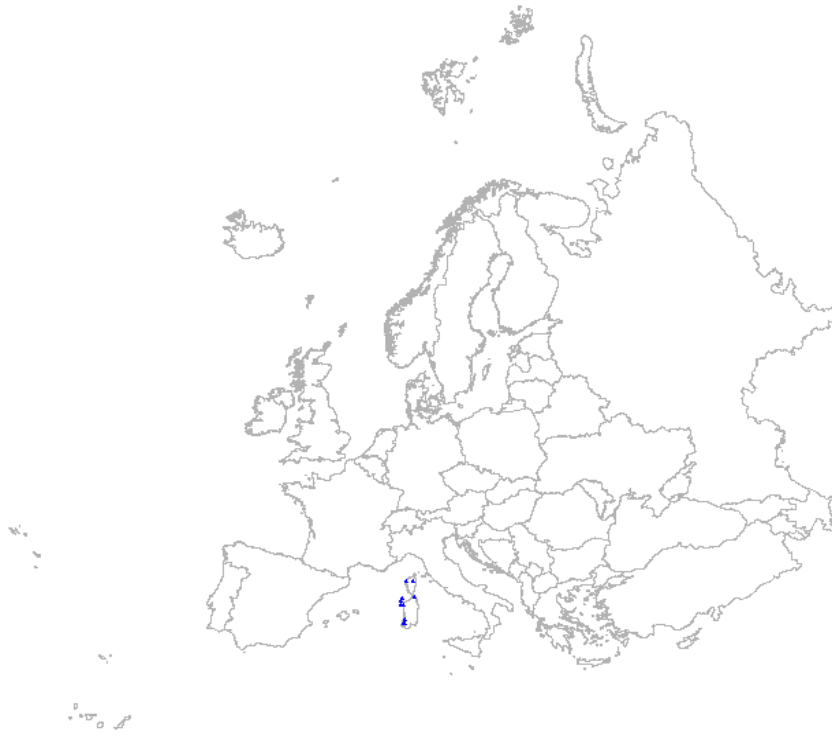*Model prediction. Background data randomly selected from heathland-scrub-tundra data set*

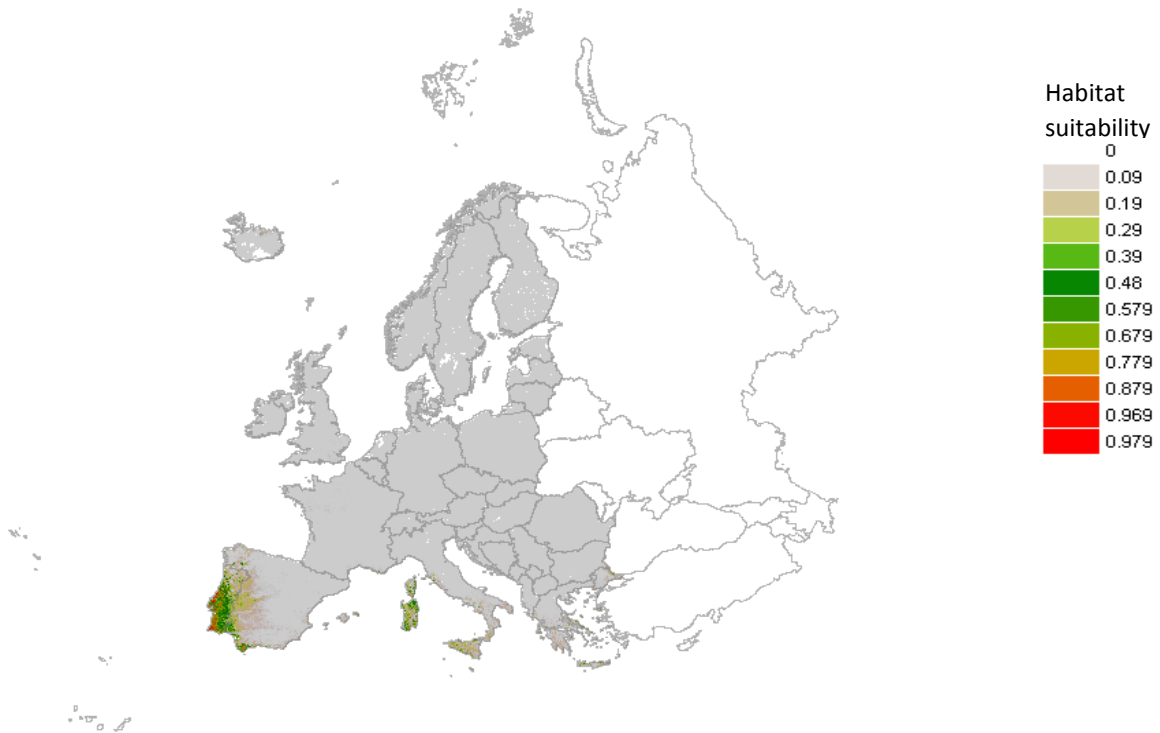**Geographic restriction distribution data**

-

Remarks

Insuffient data to create a model

F7.1 - Western Mediterranean spiny heath

Distribution based on vegetation relevés

Model prediction. Background data randomly selected from heathland-scrub-tundra data set

Geographic restriction distribution data
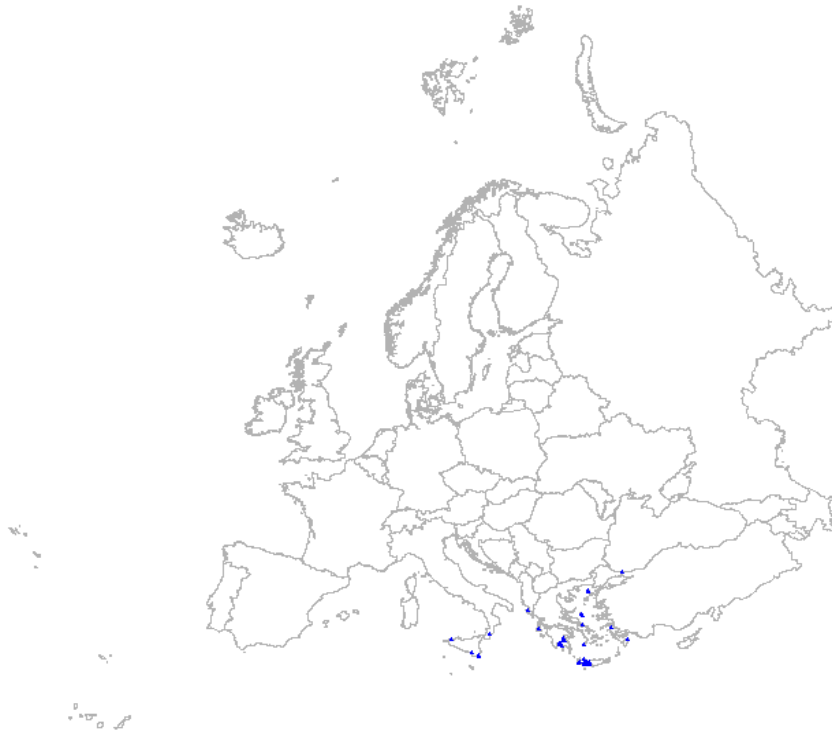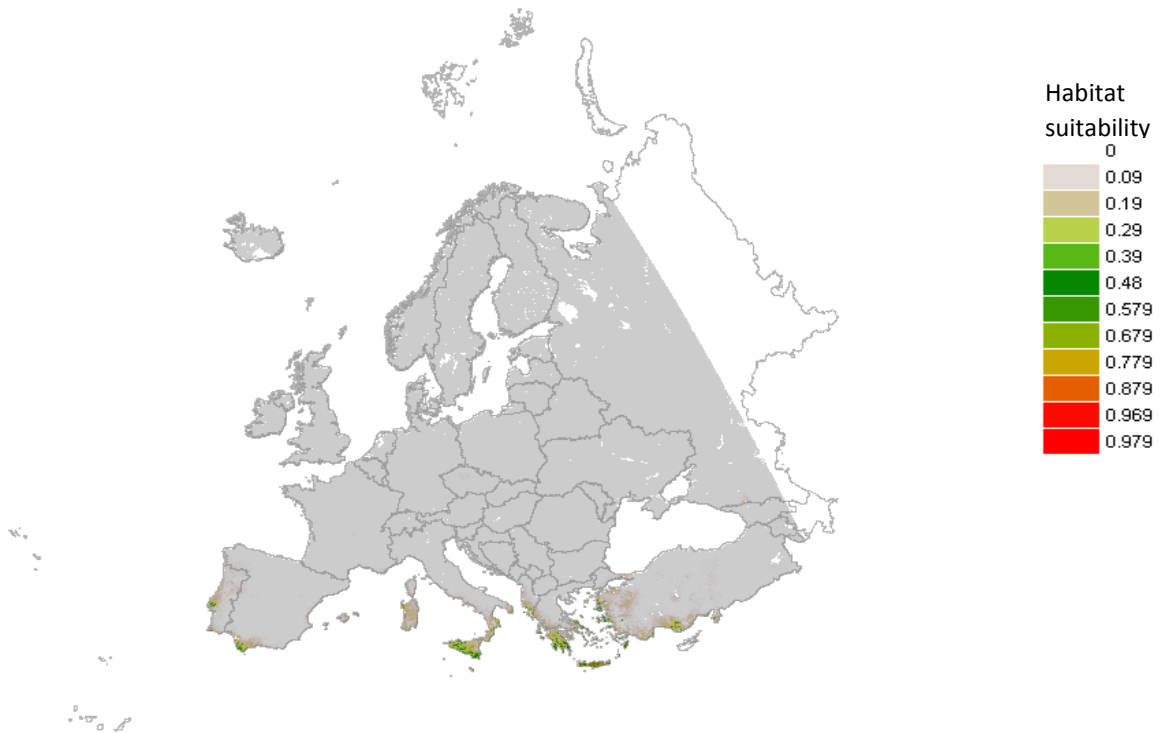
-

Statistics from Maxent modelling

AUC training (0-1)	0.9931
AUC test (0-1)	0.9766
Contribution variables to the Maxent model (%)	
Precipitation of warmest quarter	50.929
Precipitation seasonality (coef. of var.)	20.775
pH (water)	8.6147
Temperature seasonality (stdev * 100)	7.3093
Annual precipitation	5.8502
Solar radiation	2.5222
Weight in % of clay particles (<0.0002 mm)	2.1209
Potential evapotranspiration	0.5715
Weight in % of silt particles (0.0002-0.05 mm)	0.5677
Distance to water	0.5286
Soil organic carbon content (‰)	0.1832
Bulk density (kg/m³)	0.0243
Cation Exchange Capacity	0.0036
Weight in % of sand particles (0.05-2 mm)	0
Mean temperature of wettest quarter	0
Volume % of coarse fragments (> 2 mm)	0

Remarks

-

F7.3 - Eastern Mediterranean spiny heath (Phrygana)

Distribution based on vegetation relevés

Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-

Statistics from Maxent modelling

AUC training (0-1)	0.9935
AUC test (0-1)	0.9902
Contribution variables to the Maxent model (%)	
Precipitation seasonality (coef. of var.)	49.153
Precipitation of warmest quarter	23.755
Temperature seasonality (stdev * 100)	13.081
Soil organic carbon content (‰)	10.193
Weight in % of clay particles (<0.0002 mm)	1.3448
Potential evapotranspiration	0.6572
Volume % of coarse fragments (> 2 mm)	0.2328
Bulk density (kg/m³)	0.1621
Mean temperature of wettest quarter	0.1344
Weight in % of sand particles (0.05-2 mm)	0.1124
Weight in % of silt particles (0.0002-0.05 mm)	0.0856
Cation Exchange Capacity	0.0163
pH (water)	0.0147
Distance to water	0.0032
Solar radiation	0
Annual precipitation	0

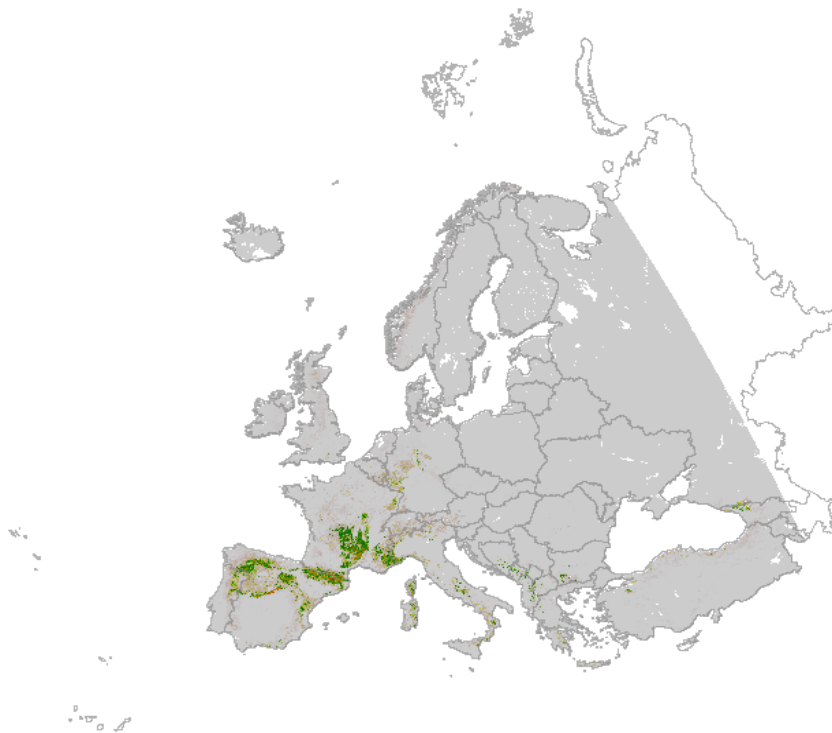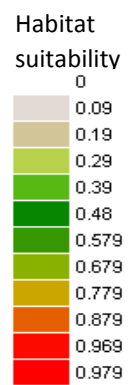**Remarks**

Prediction in the Iberian Penissula should be ignored.

F7.4a - Western Mediterranean mountain hedgehog-heath
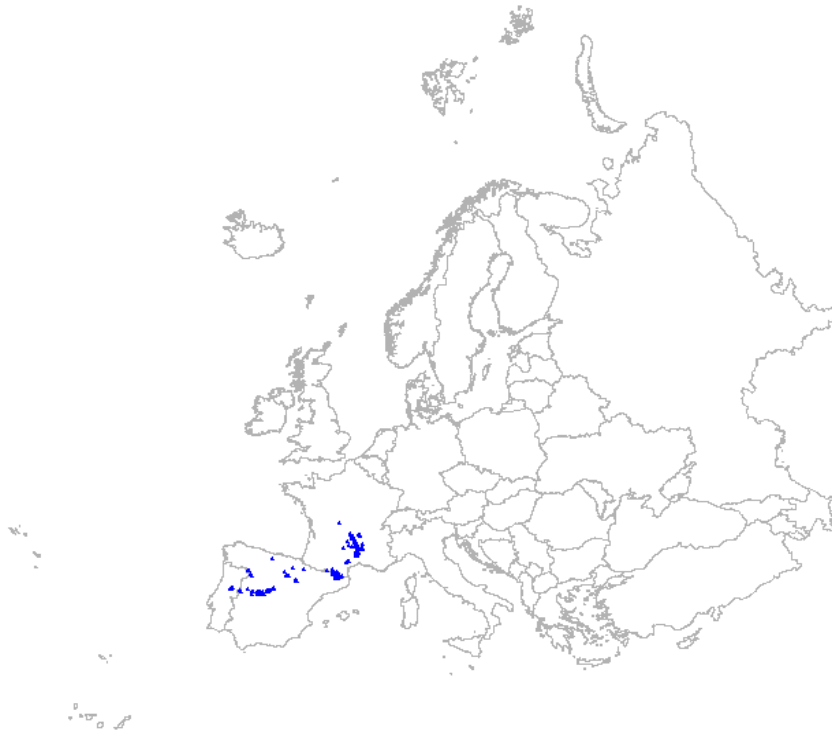
Distribution based on vegetation relevés

Model prediction. Background data randomly selected from study area
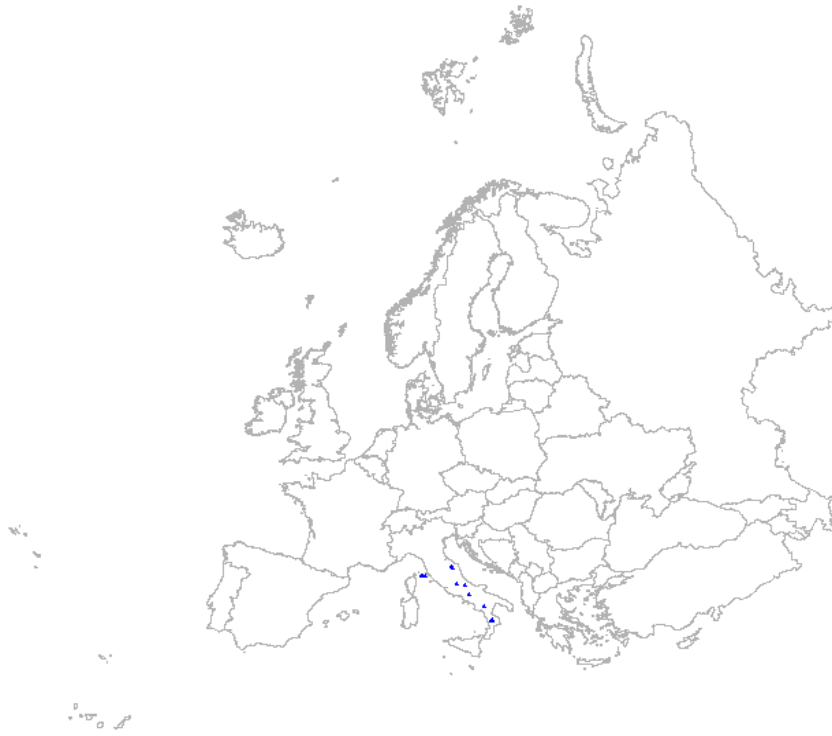
Geographic restriction distribution data

-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.978
AUC test (0-1)	0.9749
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	44.113
Weight in % of sand particles (0.05-2 mm)	23.984
Volume % of coarse fragments (> 2 mm)	11.42
Weight in % of silt particles (0.0002-0.05 mm)	6.6428
Bulk density (kg/m³)	4.8498
Soil organic carbon content (‰)	4.481
Precipitation of warmest quarter	1.9568
Weight in % of clay particles (<0.0002 mm)	1.069
Precipitation seasonality (coef. of var.)	0.4649
Potential evapotranspiration	0.4291
Solar radiation	0.3837
Mean temperature of wettest quarter	0.1845
pH (water)	0.17
Distance to water	0.1268
Annual precipitation	0.0604
Cation Exchange Capacity	0.0109

Remarks

Prediction in Germany should be ignored.

F7.4b - Central Mediterranean mountain hedgehog-heath

Distribution based on vegetation relevés
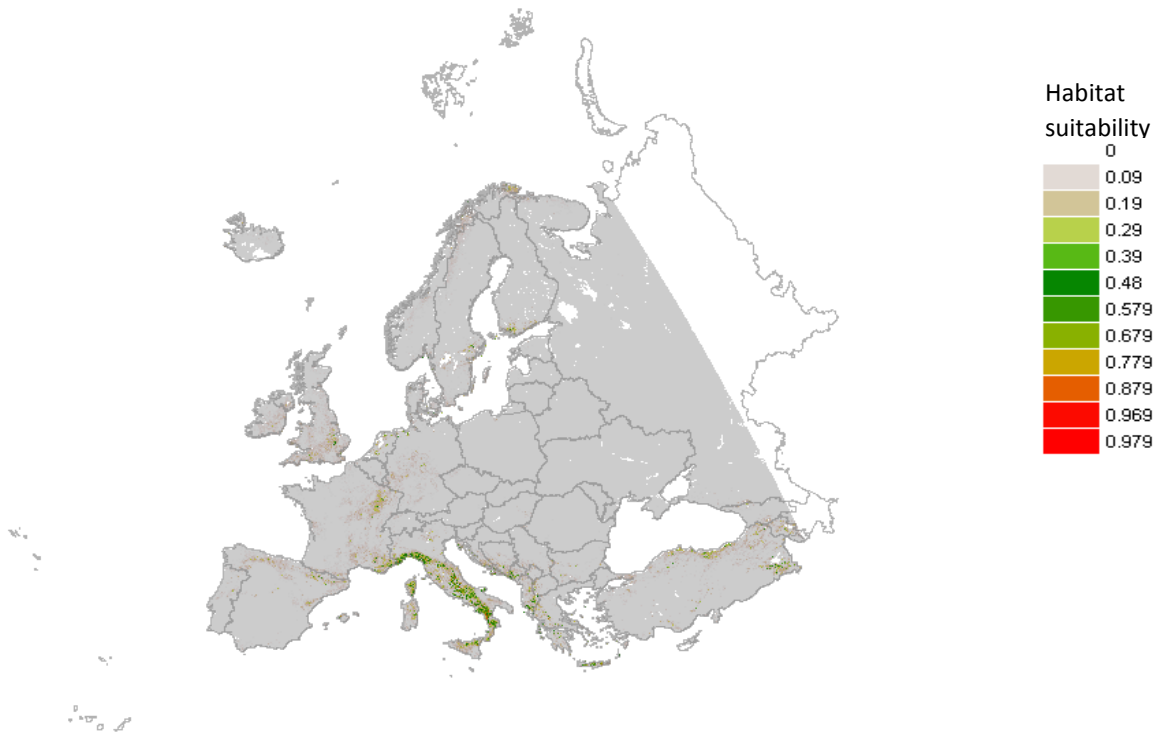
Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
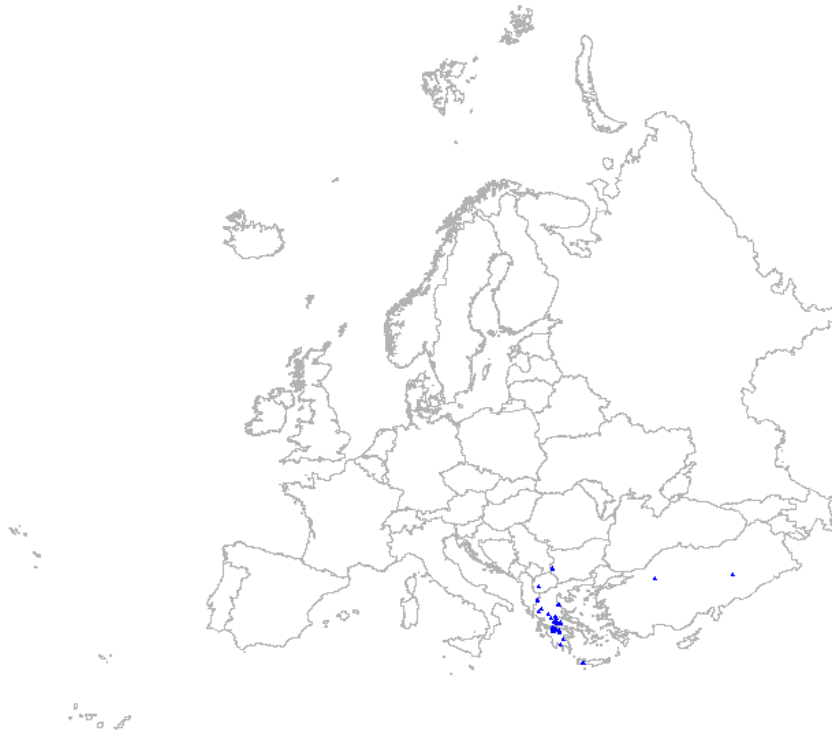-

Statistics from Maxent modelling

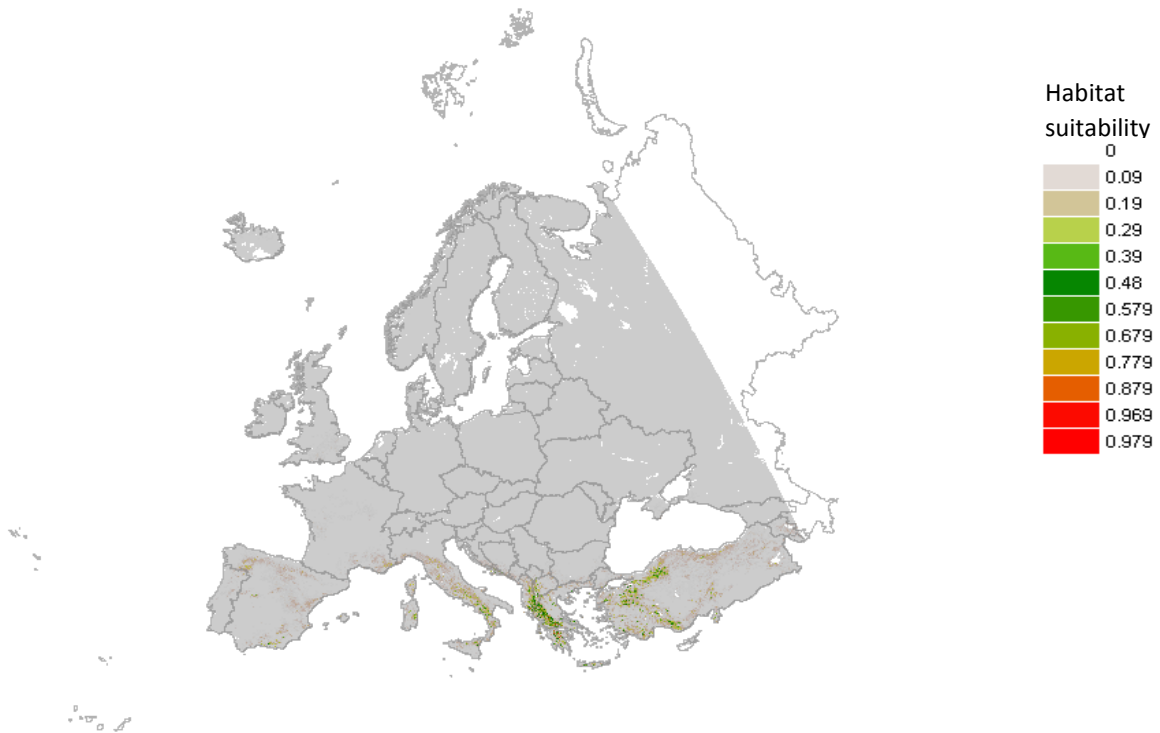|	
AUC training (0-1)	0.9961
AUC test (0-1)	0.9995
Contribution variables to the Maxent model (%)	
Distance to water	31.316
Volume % of coarse fragments (> 2 mm)	19.27
Temperature seasonality (stdev * 100)	13.329
Precipitation of warmest quarter	11.369
Weight in % of clay particles (<0.0002 mm)	10.382
Soil organic carbon content (‰)	5.9573
Cation Exchange Capacity	2.2802
Annual precipitation	1.9425
Solar radiation	1.9071
Precipitation seasonality (coef. of var.)	0.6398
Mean temperature of wettest quarter	0.5679
pH (water)	0.2645
Potential evapotranspiration	0.2598
Weight in % of sand particles (0.05-2 mm)	0.204
Bulk density (kg/m³)	0
Weight in % of silt particles (0.0002-0.05 mm)	0

Remarks

Poor prediction, should be restricted to southern Europe.

Prediction in eastern part of Europe (Turkey) uncertain due to lack of data for that area.

F7.4c - Eastern Mediterranean mountain hedgehog-heath

Distribution based on vegetation relevés

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.991
AUC test (0-1)	0.9575
Contribution variables to the Maxent model (%)	
Mean temperature of wettest quarter	23.244
Volume % of coarse fragments (> 2 mm)	18.863
Annual precipitation	15.578
Precipitation of warmest quarter	8.5922
Weight in % of sand particles (0.05-2 mm)	7.6495
Soil organic carbon content (‰)	7.5398
Potential evapotranspiration	7.4881
Precipitation seasonality (coef. of var.)	6.2742
Solar radiation	2.1758
Bulk density (kg/m³)	2.1347
Temperature seasonality (stdev * 100)	1.0485
Weight in % of clay particles (<0.0002 mm)	0.6099
Cation Exchange Capacity	0.3437
Distance to water	0.3099
Weight in % of silt particles (0.0002-0.05 mm)	0.2446
pH (water)	0.0592

Remarks

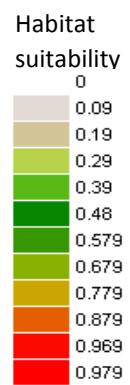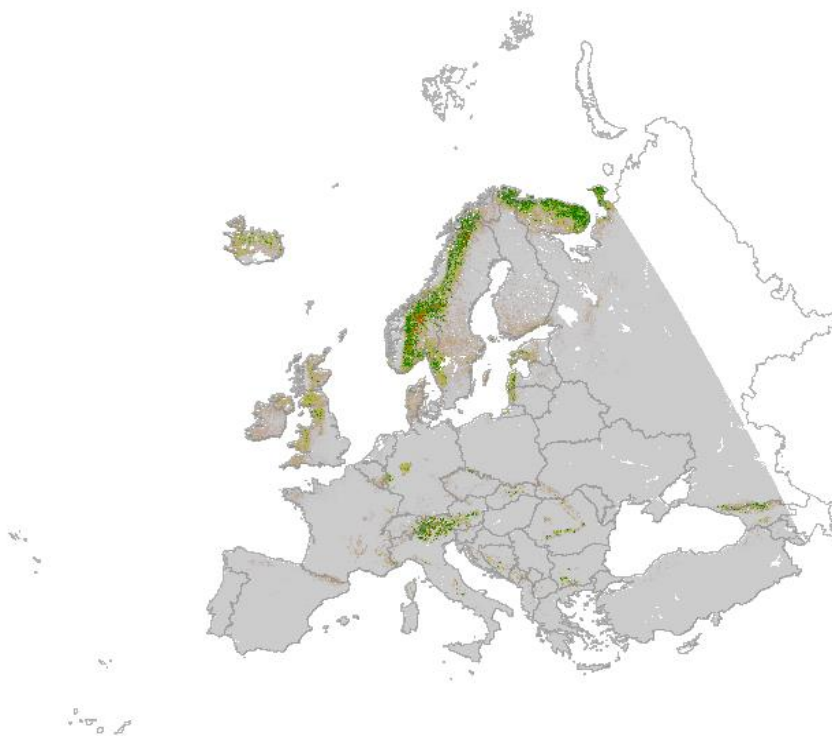Prediction in the Iberian Penissula should be ignored.

Prediction in eastern part of Europe (Turkey) uncertain due to lack of data for that area.

F9.1a - Arctic, boreal and alpine riparian scrub
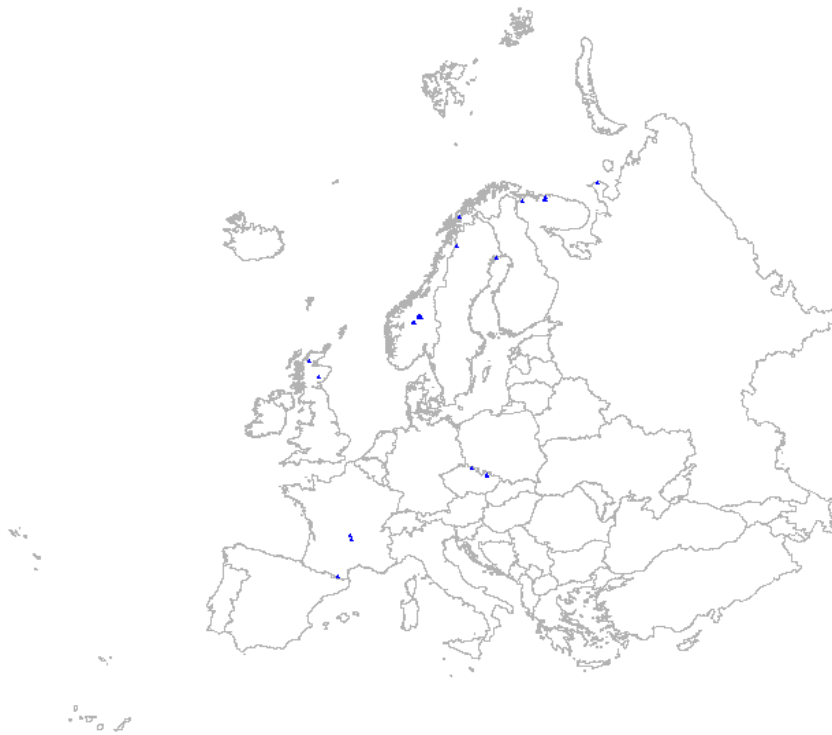
Distribution based on vegetation relevés

Habitat
suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data

-

Statistics from Maxent modelling

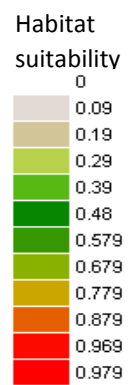|	
AUC training (0-1)	0.9784
AUC test (0-1)	0.9554
Contribution variables to the Maxent model (%)	
Soil organic carbon content (‰)	39.457
Temperature seasonality (stdev * 100)	15.736
Mean temperature of wettest quarter	13.372
Precipitation of warmest quarter	5.4374
Weight in % of clay particles (<0.0002 mm)	4.7988
Bulk density (kg/m³)	3.9422
Cation Exchange Capacity	3.8722
Precipitation seasonality (coef. of var.)	2.7475
Solar radiation	2.6305
Annual precipitation	2.062
Weight in % of sand particles (0.05-2 mm)	1.6505
Distance to water	0.0549
Volume % of coarse fragments (> 2 mm)	0.0194
Potential evapotranspiration	0.0006
pH (water)	0
Weight in % of silt particles (0.0002-0.05 mm)	0

Remarks

Prediction in eastern part of Europe (Caucasus) uncertain due to lack of data for that area.

F9.1b - Temperate riparian scrub
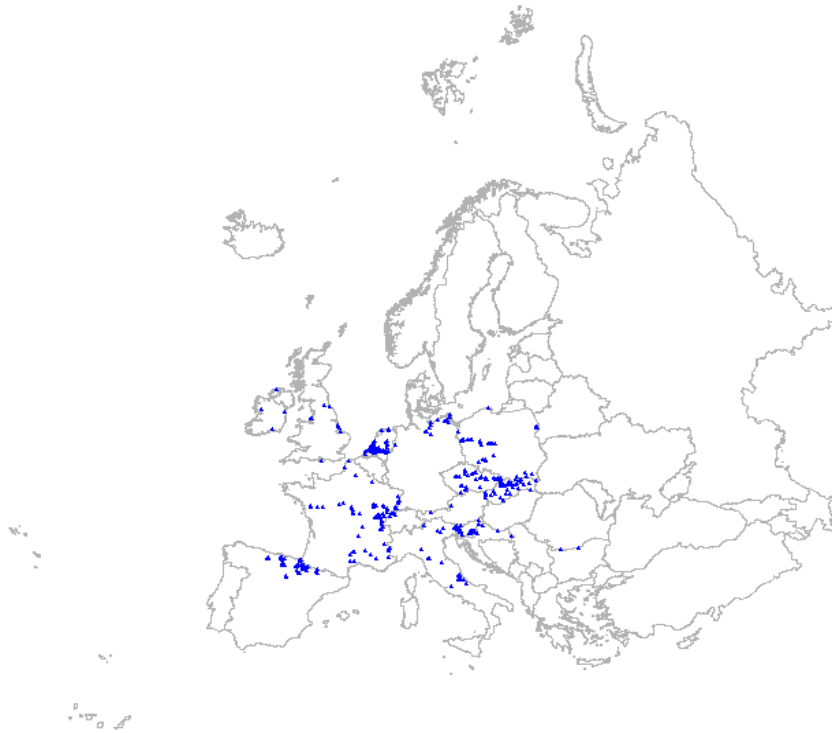
Distribution based on vegetation relevés

Habitat suitability
0
0.09
0.19
0.29
0.39
0.48
0.579
0.679
0.779
0.879
0.969
0.979

Model prediction. Background data randomly selected from study area

Geographic restriction distribution data
-

Statistics from Maxent modelling

|	
AUC training (0-1)	0.9273
AUC test (0-1)	0.9289
Contribution variables to the Maxent model (%)	
Temperature seasonality (stdev * 100)	35.708
Precipitation of warmest quarter	18.048
Distance to water	16.398
Bulk density (kg/m³)	12.726
Weight in % of sand particles (0.05-2 mm)	4.8341
Soil organic carbon content (‰)	4.7908
Potential evapotranspiration	2.9534
pH (water)	1.3926
Annual precipitation	0.8483
Weight in % of silt particles (0.0002-0.05 mm)	0.6835
Mean temperature of wettest quarter	0.4779
Volume % of coarse fragments (> 2 mm)	0.3478
Precipitation seasonality (coef. of var.)	0.336
Cation Exchange Capacity	0.3013
Weight in % of clay particles (<0.0002 mm)	0.1545
Solar radiation	0.0724

Remarks

Prediction in eastern part of Europe (Caucasus, Turkey) uncertain due to lack of data for that area.

F9.2 - Salix fen scrub
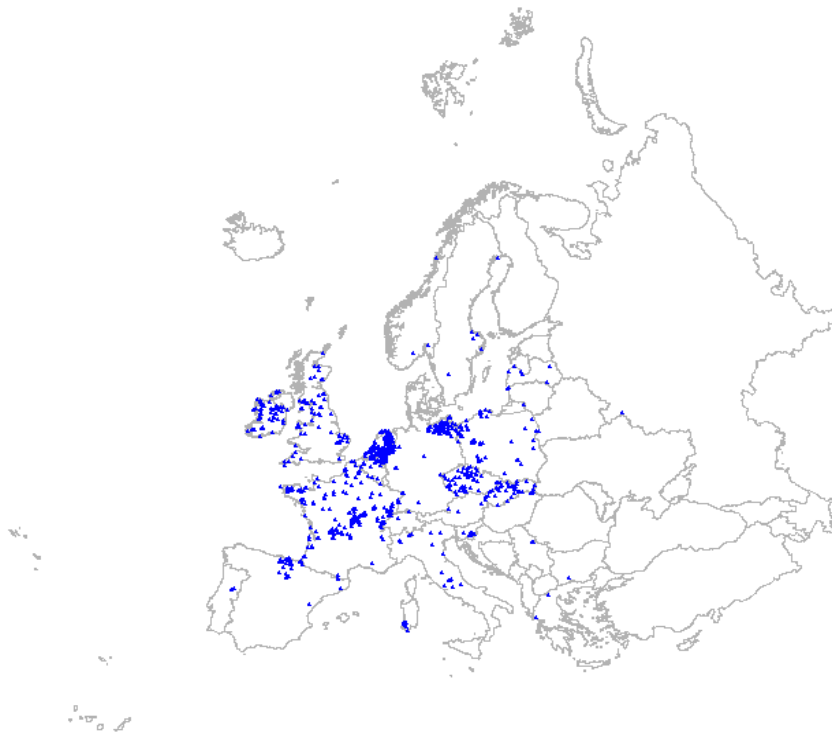
Distribution based on vegetation relevés
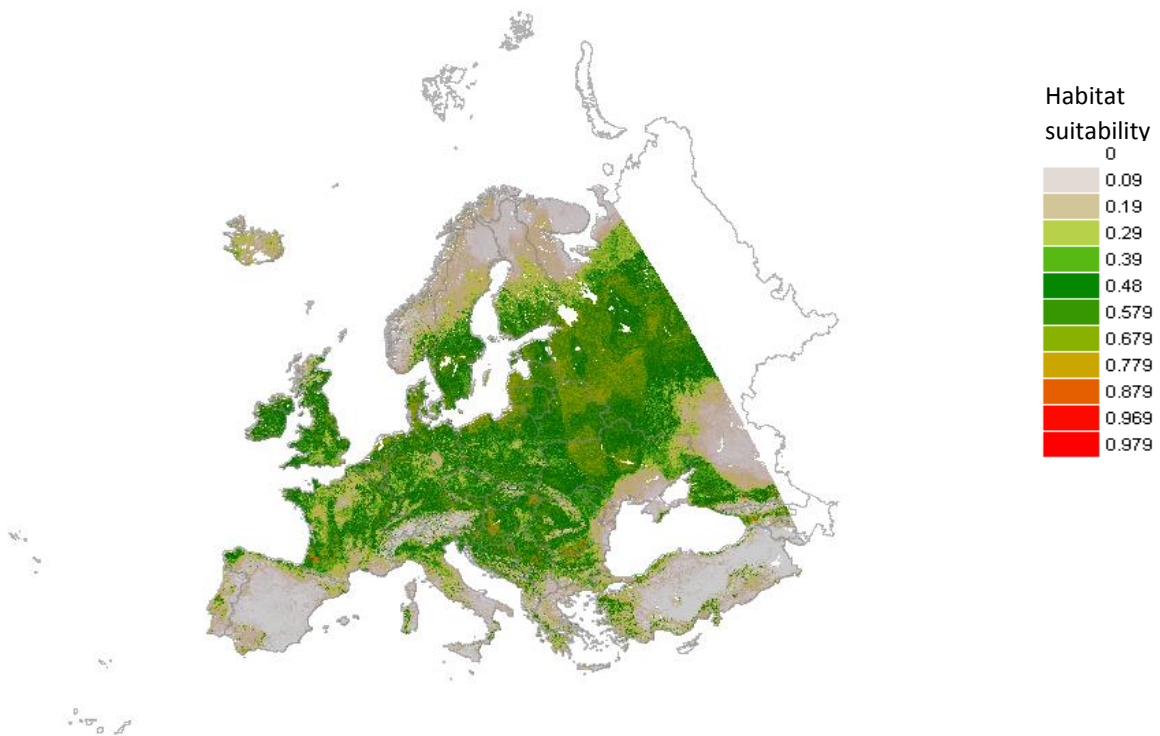
Habitat suitability

	0
	0.09
	0.19
	0.29
	0.39
	0.48
	0.579
	0.679
	0.779
	0.879
	0.969
	0.979

Model prediction. Background data randomly selected from heathland-scrub-tundra data set

Geographic restriction distribution data

-

Statistics from Maxent modelling

AUC training (0-1)	0.7945
AUC test (0-1)	0.7679
Contribution variables to the Maxent model (%)	
Weight in % of silt particles (0.0002-0.05 mm)	32.125
Volume % of coarse fragments (> 2 mm)	31.06
Precipitation of warmest quarter	11.818
Solar radiation	5.6519
Soil organic carbon content (‰)	5.1577
Weight in % of sand particles (0.05-2 mm)	4.558
Precipitation seasonality (coef. of var.)	3.6013
pH (water)	2.8443
Annual precipitation	2.8352
Potential evapotranspiration	2.4878
Weight in % of clay particles (<0.0002 mm)	1.8138
Bulk density (kg/m³)	1.6898
Distance to water	1.0777
Temperature seasonality (stdev * 100)	1.0261
Mean temperature of wettest quarter	1.021
Cation Exchange Capacity	0.2901

Remarks

Prediction in eastern part of Europe uncertain due to lack of data for that area.

F9.3 - Mediterranean riparian scrub

Distribution based on vegetation relevés

Model prediction. Background data randomly selected from heathland-scrub-tundra data set
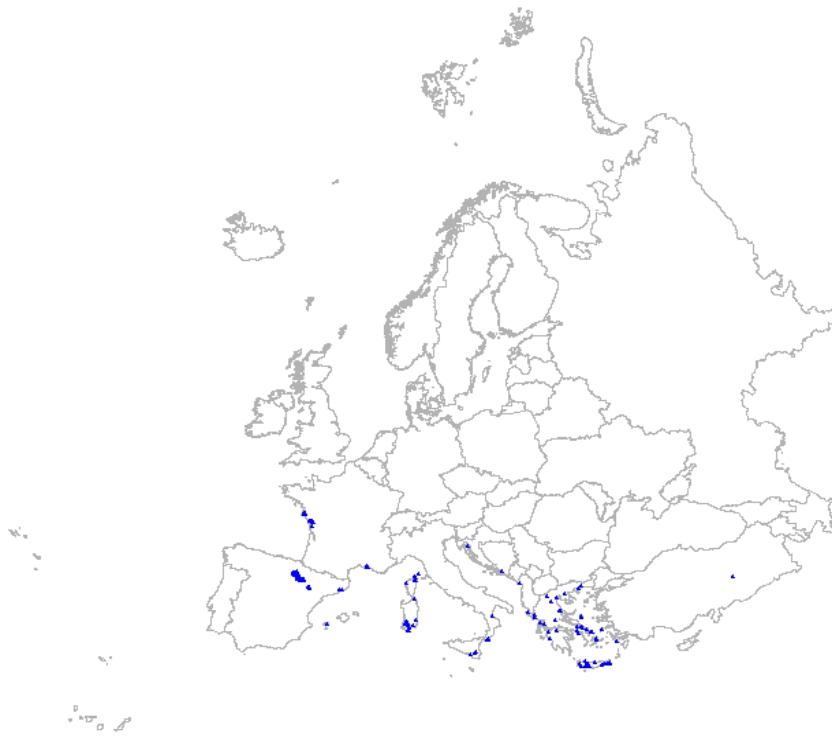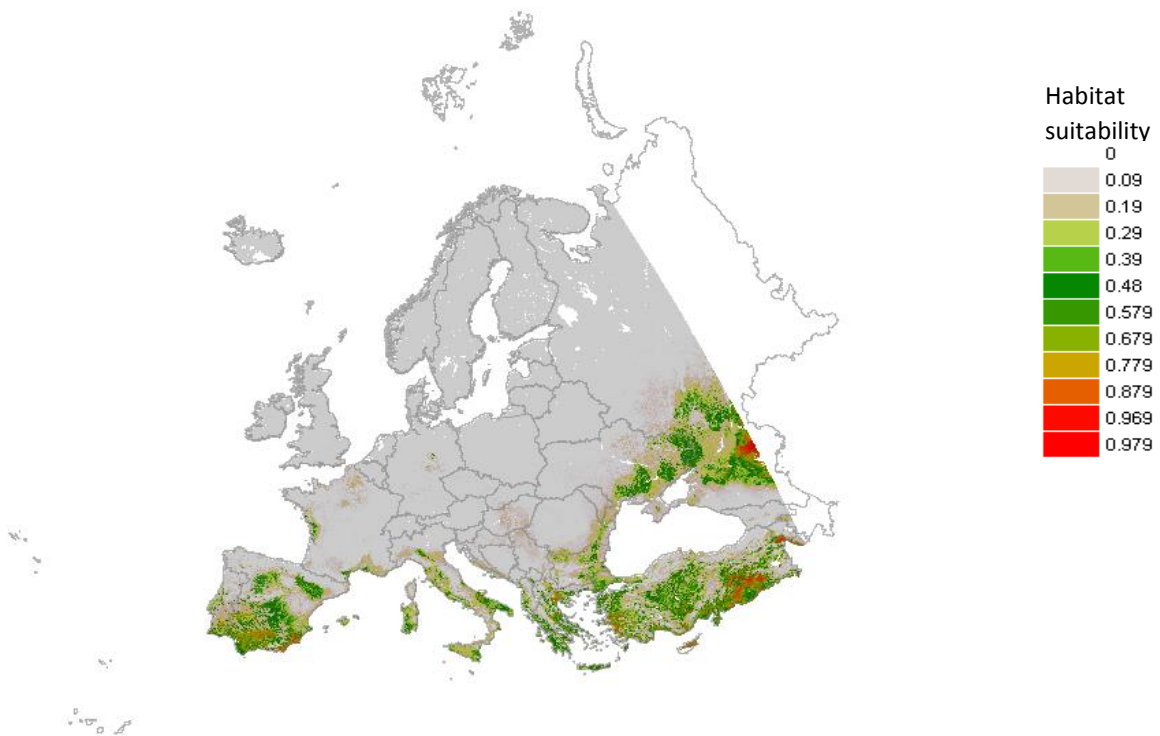
Geographic restriction distribution data

-

Statistics from Maxent modelling

AUC training (0-1)	0.972
AUC test (0-1)	0.9649
Contribution variables to the Maxent model (%)	
Precipitation of warmest quarter	38.061
Bulk density (kg/m³)	35.246
Soil organic carbon content (‰)	7.2959
Weight in % of clay particles (<0.0002 mm)	7.2877
Solar radiation	6.5436
Precipitation seasonality (coef. of var.)	3.1528
Weight in % of silt particles (0.0002-0.05 mm)	3.1492
Potential evapotranspiration	2.3526
pH (water)	0.8838
Mean temperature of wettest quarter	0.8456
Volume % of coarse fragments (> 2 mm)	0.5201
Annual precipitation	0.4784
Distance to water	0.1944
Temperature seasonality (stdev * 100)	0.1564
Weight in % of sand particles (0.05-2 mm)	0.0878
Cation Exchange Capacity	0.0865

Remarks

Prediction in eastern part of Europe uncertain due to lack of data for that area.