

# The insecure future of Bulgarian refugial mires: economic progress versus Natura 2000

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**Appendix** List of rare plant and mollusc species, based on the review of Hájek et al. (2009), by categorization as extremely rare species (found in  $\leq 3$  localities), other rare species (4–9 localities), and species found in  $> 9$  sites but that are red-listed or European Habitat Directive species. For localities of the species see Table 1.

ID	Species	Distribution in Europe*
<b>Extremely rare species</b>		
Plants		
1	<i>Amblyodon dealbatus</i>	Arctic–Alpine
2	<i>Calliargon giganteum</i>	Boreal
3	<i>Campyliadelphus elodes</i>	European temperate
4	<i>Carex appropinquata</i>	Continental
5	<i>Carex buxbaumii</i> s.s.	Boreal
6	<i>Carex cespitosa</i>	Continental
7	<i>Carex elata</i>	Boreal
8	<i>Carex ferruginea</i>	C & S European Mts
9	<i>Carex lasiocarpa</i>	Boreal
10	<i>Carex limosa</i>	Boreal
11	<i>Carex rupestris</i>	Boreal
12	<i>Cirsium oleraceum</i>	Continental
13	<i>Cirsium rivulare</i>	C & S European Mts
14	<i>Cladium mariscus</i>	European temperate
15	<i>Cynodontium strumiferum</i>	Arctic–Alpine
16	<i>Dicranella staphylina</i>	European temperate
17	<i>Drepanocladus longifolius</i>	Boreal
18	<i>Eleocharis mamillata</i>	Boreal
19	<i>Empetrum nigrum</i> agg.	Boreal
20	<i>Eriophorum gracile</i>	Boreal
21	<i>Fissidens osmundoides</i>	Boreal
22	<i>Gagea fistulosa</i>	C & S European Mts
23	<i>Galium uliginosum</i>	Boreal
24	<i>Geum rhodopaeum</i>	Balkan
25	<i>Gymnadenia densiflora</i>	European temperate
26	<i>Gymnocolea inflata</i>	Boreal
27	<i>Hammarbya paludosa</i>	Boreal
28	<i>Helodium blandowii</i>	Boreal
29	<i>Hypnum pratense</i>	Boreal
30	<i>Juncus triglumis</i>	Boreal
31	<i>Laserpitium archangelica</i>	C & S European Mts
32	<i>Lathyrus palustris</i>	Continental
33	<i>Ligularia sibirica</i>	Continental
34	<i>Lycopodiella inundata</i>	Boreo–Atlantic

## Appendix (Continued)

ID	Species	Distribution in Europe*
35	<i>Meesia longiseta</i>	Arctic–Alpine
36	<i>Meesia uliginosa</i>	Arctic–Alpine
37	<i>Mylia anomala</i>	Boreal
38	<i>Pedicularis palustris</i>	Boreal
39	<i>Philonotis marchica</i>	South–European
40	<i>Philonotis tomentella</i>	Boreal
41	<i>Plantago maxima</i>	Continental
42	<i>Polygala amarella</i>	Continental
43	<i>Salix pentandra</i>	Boreal
44	<i>Salix rosmarinifolia</i>	Continental
45	<i>Scorpidium cossonii</i>	Boreal
46	<i>Scorpidium revolvens</i>	Boreal
47	<i>Senecio subalpinus</i>	C & S European Mts
48	<i>Sesleria uliginosa</i>	European temperate
49	<i>Schoenus nigricans</i>	European temperate
50	<i>Sphagnum fuscum</i>	Boreal
51	<i>Stellaria palustris</i>	Continental
52	<i>Swertia perennis</i>	C & S European Mts
53	<i>Valeriana simplicifolia</i>	C & S European Mts
Mollusc		
54	<i>Pisidium globulare</i>	Continental
<b>Other rare species</b>		
Plants		
55	<i>Alopecurus riloensis</i>	Balkan
56	<i>Bryum schleicheri</i>	Arctic–Alpine
57	<i>Bryum weigeli</i>	Boreal
58	<i>Carex hartmanii</i>	Subcontinental
59	<i>Carex punctata</i>	Submediterranean–Subatlantic
60	<i>Carex disticha</i>	Subcontinental
61	<i>Dactylorhiza incarnata</i>	Subcontinental
62	<i>Juncus alpinus</i>	Boreal
63	<i>Menyanthes trifoliata</i>	Boreal
64	<i>Molinia caerulea</i> s.s.	Boreal
65	<i>Montia hallii</i>	Boreo–Atlantic
66	<i>Poa cenisia</i>	Arctic–Alpine
67	<i>Polytrichum strictum</i>	Boreal
68	<i>Potentilla palustris</i>	Boreal
69	<i>Pyrola rotundifolia</i>	Boreal
70	<i>Scapania paludicola</i>	Arctic–Alpine
71	<i>Silene asterias</i>	Balkan
72	<i>Sphagnum auriculatum</i>	Boreo–Atlantic
73	<i>Sphagnum fallax</i>	Boreal
74	<i>Sphagnum inundatum</i>	Boreo–Atlantic

## Appendix (Continued)

ID	Species	Distribution in Europe*
75	<i>Sphagnum magellanicum</i>	Boreal
76	<i>Thelypteris thelypteroides</i>	Continental
77	<i>Tomenthypnum nitens</i>	Boreal
78	<i>Triglochin palustre</i>	Boreal
79	<i>Viola palustris</i>	Boreal
Molluscs		
80	<i>Euconulus alderi</i>	Boreal
81	<i>Orculella bulgarica</i>	Balkan–Caucasus
<b>Other red-listed and Habitat Directive species</b>		
Plants		
82	<i>Drosera rotundifolia</i>	Boreal
83	<i>Hamatocaulis vernicosus</i>	Boreal
84	<i>Philonotis caespitosa</i>	Subatlantic
85	<i>Primula deorum</i>	Balkan
86	<i>Utricularia minor</i>	Boreal
Molluscs		
87	<i>Vertigo angustior</i>	Continental
88	<i>Vertigo substriata</i>	Boreal
89	<i>Bulgarica fritilaria</i>	The only fen populations of family Clausiliidae

\*Arctic-Alpine, Arctic and Boreal zone and in scattered localities in high C European mountains; Boreal, Boreal and Arctic zone (in all of northern Europe); Boreo-Atlantic, NW Europe; Continental, rare in N, W and S Europe, with a distribution extending towards continental Eurasia; C & S European Mts, absent in Boreal, Atlantic and Arctic zones and occurring in C and S European mountains; European temperate, within the range of calcareous fens in Europe, from lowlands and basins of S and C Europe to around the Baltic Sea; Balkan–Caucasus, Balkans and Caucasus