

F3.1f Low steppic scrub

Summary

This is a dwarf scrub habitat of the forest-steppe and steppe zones across central Europe, in the Pannonian Basin and adjacent areas, ranging eastwards to Ukraine to Russia and central Asia. It develops on shallow soils near rock outcrops and, in drier and warmer situations, in small depressions where winter snow accumulates or on cooler, north-facing slopes, often forming small stands of clonally growing dominant species. In some places it is a permanent natural vegetation type, in others it is a successional stage of dry grassland after abandonment. The main pressure is agricultural intensification with changes in land use, succession and invasion of non-native species.

Synthesis

The habitat is assessed as Least Concern (LC) because of negative trends in quantity and quality below the thresholds for Near Threatened. The habitat may be considered to meet the B2 criteria (small distribution), as its area (in km²) may be very small. However, there is uncertainty about provided area data, and besides for criterion B2 usually the number of distribution grids is used as an indicator instead of area. Finally, large historical trends in area have been reported by some countries, but also here data gaps and uncertainties make a reliable assessment not possible.

Overall Category & Criteria			
EU 28		EU 28+	
Red List Category	Red List Criteria	Red List Category	Red List Criteria
Least Concern	-	Least Concern	-

Sub-habitat types that may require further examination

No sub-habitats have been distinguished for further analysis.

Habitat Type

Code and name

F3.1f Low steppic scrub



Low scrub dominated by *Prunus fruticosa* at a dry grassland site near Dolní Dunajovice, SE Czech Republic. (Photo: Milan Chytrý).



Prunus tenella on a south-facing exposed hill slope near the village of Rosia/Rotberg, Sibiu county, Romania. (Photo: E. Schneider).

Habitat description

This is dwarf scrub, usually less than 1m tall, occurring in the forest-steppe and steppe zones across central Europe, in the Pannonian Basin and adjacent areas, in the Danube lowlands in Romania and Bulgaria and the forest-steppe and steppe zones from south-eastern Poland through Ukraine to Russia and central Asia. It develops on both shallow leptosols near rock outcrops and on deep soils such as chernozems, kastanozems, phaeozems, cambisols or luvisols. Often it forms small stands of clonally growing dominant species on relatively mesic sites in dry grassland areas, for example in small terrain depressions with winter snow accumulation, on north-facing slopes, or at the edges of tall scrub or dry woodland; or it is found in extrazonal complexes of continental dry grassland vegetation. In some places it is a permanent natural vegetation type, in others it is a successional stage of dry grassland after abandonment.

Indicators of good quality:

This habitat often contains rare species of continental steppe and forest-steppe, which may occur at the western limit of their geographic range or at isolated sites west of their continuous range. Of particular conservation value are low and open stands that are rich in species, especially if they directly border on natural or semi-natural steppic grasslands. On the other hand, the spread of shrubs, especially of the hybrid *Prunus x eminens*, can indicate degradation of valuable dry grassland habitats. In these stands ruderal species such as *Artemisia vulgaris* and *Elymus repens* can be common.

The following characteristics can be considered as indicators of good quality:

- High species richness
- Occurrence of rare species, especially those of continental distribution
- Absence of ruderal, nutrient-demanding species
- Absence of alien species
- Long-term habitat stability, with no rapid successional trends
- Occurrence in habitat complexes with dry grassland vegetation

Characteristic species:

Flora: Vascular plants: *Caragana frutex* , *Cotoneaster integerrimus* , *C. melanocarpus* , *Elymus hispidus*, *Festuca rupicola*, *F. valesiaca*, *Fragaria viridis*, *Geranium sanguineum*, *Melica ciliata*, *M. transsilvanica*, *Poa angustifolia*, *Polygonatum odoratum*, *Prunus x eminens* , *Prunus fruticosa* , *Prunus tenella* , *Rosa gallica* , *Rosa pimpinellifolia* (= *R. spinosissima*), *Spiraea chamaedryfolia* , *Spiraea crenata* , *Spiraea media*.

Mosses: *Hypnum cupressiforme*, *Rhytidium rugosum*, *Thuidium abietinum*.

Classification

This habitat may be equivalent to, or broader than, or narrower than the habitats or ecosystems in the following typologies.

EUNIS:

F3.1 Temperate thickets and scrub

EuroVegChecklist:

Prunion fruticosae Tx. 1952

Annex I:

40A0 * Subcontinental peri-Pannonic scrub

Emerald:

F3.241 Central European subcontinental thickets

MAES-2:

Heathland and shrub

IUCN:

3.4 Temperate shrub

Does the habitat type present an outstanding example of typical characteristics of one or more biogeographic regions?

Yes

Regions

Continental

Pannonian

Justification

This habitat is typically continental confined to the dry lowlands of central Europe, in the Pannonian Basin and adjacent areas, in the Danube Lowland in Romania and Bulgaria and forest-steppe and steppe zones from south-eastern Poland through Ukraine to Russia and central Asia.

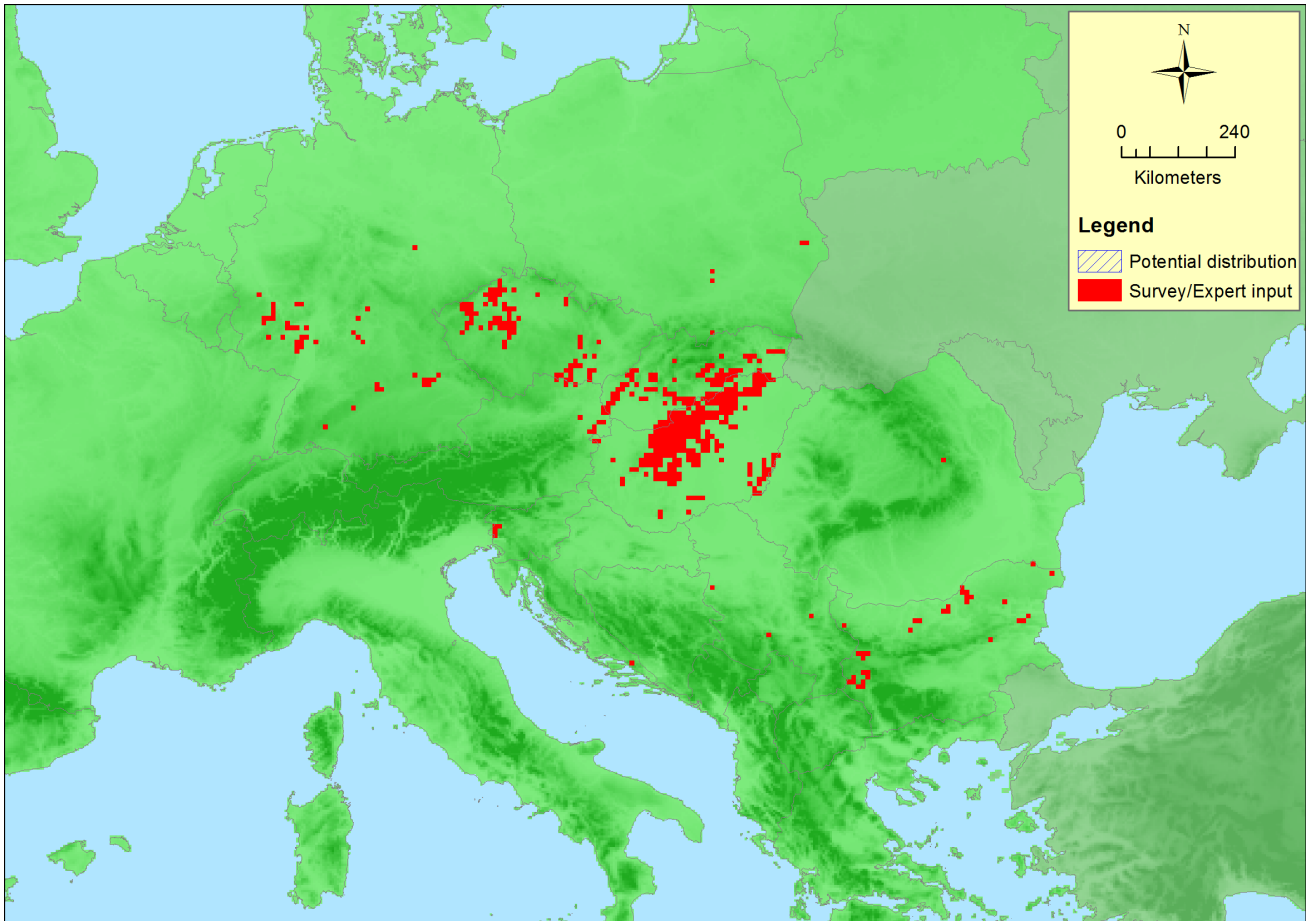
Geographic occurrence and trends

EU 28	Present or Presence Uncertain	Current area of habitat	Recent trend in quantity (last 50 yrs)	Recent trend in quality (last 50 yrs)
<i>Austria</i>	Present	0.15 Km ²	Unknown	Decreasing
<i>Bulgaria</i>	Present	0.02 Km ²	Stable	Stable
<i>Czech Republic</i>	Present	1 Km ²	Stable	-
<i>Germany</i>	Present	3 Km ²	Stable	Stable
<i>Hungary</i>	Present	0.1-1 Km ²	Stable	Stable
<i>Romania</i>	Present	126 Km ²	Stable	Stable

Extent of Occurrence, Area of Occupancy and habitat area

	Extent of Occurrence (EOO)	Area of Occupancy (AOO)	Current estimated Total Area	Comment
EU 28	993750 Km ²	503	131 Km ²	
EU 28+	1066550 Km ²	507	131 Km ²	

Distribution map



Map has data gaps in Romania and Balkan countries. Data sources: EVA, Art17.

Romanian area data is uncertain. For Annex I type 40A0 126 km² have been reported under Article 17, but in Donita et al. (2005) the sum of relevant types R3130, R3131, R3132 is about 125 hectares.

How much of the current distribution of the habitat type lies within the EU 28?

About 80% occurs in the EU28.

Trends in quantity

The present trend is stable but the recent past trend in quantity is on average a decrease of 15 to 20%

- Average current trend in quantity (extent)

EU 28: Decreasing

EU 28+: Decreasing

- Does the habitat type have a small natural range following regression?

No

Justification

The habitat is widespread in continental areas of Europe.

- Does the habitat have a small natural range by reason of its intrinsically restricted area?

Yes

Justification

The habitat occurs almost everywhere in relatively small stands and the total area is relatively small.

Trends in quality

In some countries the trend in quality is stable, while others reported a slight to moderate decline.

- Average current trend in quality

EU 28: Decreasing
EU 28+: Decreasing

Pressures and threats

The main pressure is agricultural intensification followed by restructuring agricultural land holding, succession and invasive species.

List of pressures and threats

Agriculture

Agricultural intensification
Restructuring agricultural land holding

Invasive, other problematic species and genes

Invasive non-native species

Conservation and management

In this habitat it is aimed to maintain high species richness together with occurrence of the typical rare plants, especially those of continental distribution. One way to realize this is to prevent the increase of ruderal or alien species.

List of conservation and management needs

Measures related to forests and wooded habitats

Restoring/Improving forest habitats

Measures related to hunting, taking and fishing and species management

Specific single species or species group management measures

Measures related to special resource use

Regulating/Management exploitation of natural resources on land

Conservation status

Annex I:

40A0: ALP U2, CON, U2, PAN U2

When severely damaged, does the habitat retain the capacity to recover its typical character and functionality?

The habitat requires about 10 years to recover through intervention. To recover both through intervention and naturally it takes at least 20-30 years more.

Effort required

10 years	50+ years	200+ years
Through intervention	Naturally	Naturally

Red List Assessment

Criterion A: Reduction in quantity

Criterion A	A1	A2a	A2b	A3
EU 28	-18 %	unknown %	unknown %	unknown %
EU 28+	-18 %	unknown %	unknown %	unknown %

Total current surface EU28 is uncertain because of uncertain data from Romania. It may be very small (6.5 km²) or much larger (131.15 km²). Trends have been calculated using the smaller values, resulting in an average European trend of -18% (data from 6 out of 7 countries). Some countries reported large historical negative trends (-25/75 in Hungary, -70/90 in Germany) while others reported stable trends (Bulgaria). Because of data gaps and uncertainties in provided no reliable average European long historical trend could be calculated.

Criterion B: Restricted geographic distribution

Criterion B	B1				B2				B3
	EOO	a	b	c	AOO	a	b	c	
EU 28	>50000 Km ²	Yes	Unknown		>50	Unknown	Unknown		
EU 28+	>50000 Km ²	Yes	Unknown		>50	Unknown	Unknown		

The AOO and EOO are relatively large, but on the other hand the total area (in km²) is very small. This may be a reason to assess the habitat under B2, but as it is not according to the strict criteria, the assessment for B2 has been based on AOO only, and results in Least Concern. The same goes for criteria B1 and B3.

Criterion C and D: Reduction in abiotic and/or biotic quality

Criteria C/D	C/D1		C/D2		C/D3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	35 %	46% %	unknown %	unknown %	unknown %	%
EU 28+	35 %	46% %	unknown %	unknown %	unknown %	%

Criterion C	C1		C2		C3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	unknown %	unknown %	unknown %	unknown %	unknown %	%
EU 28+	unknown %	unknown %	unknown %	unknown %	unknown %	%

Criterion D	D1		D2		D3	
	Extent affected	Relative severity	Extent affected	Relative severity	Extent affected	Relative severity
EU 28	unknown %	unknown%	unknown %	unknown%	unknown %	unknown%
EU 28+	unknown %	unknown%	unknown %	unknown%	unknown %	unknown%

The average trend in quality is an affected part of the area of 35%, with a severity of decline of 46%. These values just do not meet the thresholds for Near Threatened, and therefore result in the Least Concern (LC) category.

Criterion E: Quantitative analysis to evaluate risk of habitat collapse

Criterion E	Probability of collapse
EU 28	unknown
EU 28+	unknown

There is no quantitative analysis available that estimates the probability of collapse of this habitat type.

Overall assessment "Balance sheet" for EU 28 and EU 28+

	A1	A2a	A2b	A3	B1	B2	B3	C/D1	C/D2	C/D3	C1	C2	C3	D1	D2	D3	E
EU28	LC	DD	DD	DD	LC	LC	LC	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD
EU28+	LC	DD	DD	DD	LC	LC	LC	LC	DD	DD	DD	DD	DD	DD	DD	DD	DD

Overall Category & Criteria			
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Confidence in the assessment

Low (mainly based on uncertain or indirect information, inferred and suspected data values, and/or limited expert knowledge)

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Date of assessment

15/10/2015

Date of review

26/02/2016

References

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