

Site-specific conservation objectives for ROSCI0122 Făgăraș Mountain

3220 Alpine rivers and the herbaceous vegetation along their banks

The surface of this habitat in ROSCI0122 is 1,5-2 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 10	The estimated size of this habitat is only 1,5-2 ha. It is found from the upper mountain level to the alpine one. No reference value is provided in the management plan/baseline studies on the size of this habitat for the favorable conservation status. The surface area of this habitat should be increased from current 1,5-2 ha to at least 10 ha by reducing grazing pressure. It should be clarified within the earliest possible period whether a larger increase is feasible for this habitat.
Presence and abundance of characteristic species	Percent cover / 25 m ²	At least 35%	<i>Saxifraga stellaris</i> , <i>S. heucherifolia</i> , <i>Chrysosplenium alpinum</i> , <i>C. alternifolium</i> , <i>Caltha laeta</i> , <i>Philonotis seriata</i> , <i>Cardamine opizii</i> , <i>Juncus triglumis</i> , <i>Doronicum carpaticum</i> , <i>Cratoneuron commutatum</i> .
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 40%	This parameter is related to disturbance by overgrazing / trampling.
Abundance of invasive / ruderal / nitrofilous species	Percent cover / 25 m ²	Less than 5%	This parameter is related to disturbance by overgrazing / fertilization. <i>Rumex alpinus</i> , <i>Veratrum album</i> , <i>Urtica dioica</i> .
Species richness	Number of species / 25 m ²	At least 5 species	Baseline study on non-forest habitats for the management plan, 5-15 species
Vegetation height in June-August	cm	At least 12	Baseline study on non-forest habitats for the management plan. Mean vegetation height is 12-15 cm. This parameter is an indicator of overgrazing/trampling.
Shrub cover	%	Less than 1%	Baseline study on non-forest habitats for the management plan.

3230 Alpine rivers and their ligneous vegetation with *Myricaria germanica*

This habitat was not found during the baseline surveys for the management plan and its conservation status is not known. The site-specific conservation objective for habitat 3230 is set to **maintain or improve its conservation status**, depending on the results of ongoing investigation (to be decided within 2 years whether maintenance or improvement is required). Based on the available information, the presence of this habitat in ROSCI0122 is uncertain.

3240 Alpine rivers and their ligneous vegetation with *Salix elaeagnos*

This habitat was not found during the baseline surveys for the management plan and its conservation status is not known. The site-specific conservation objective for habitat 3240 is set to **maintain or improve its conservation status**, depending on the results of ongoing investigation (to be decided within 2 years whether maintenance or improvement is required). Based on the available information, the presence of this habitat in ROSCI0122 is uncertain.

4060 – Alpine and Boreal heaths

The surface of this habitat in ROSCI0122 is 17.000-22.000 ha and its conservation status is **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 21.117 Conservation status from the point of view of surface to be clarified within 1 year	The surface area of this habitat was estimated to 17.0000-22.000 ha. GIS database 21.117 ha. It is widespread in the subalpine and alpine vegetation levels. Although the management plan lists its conservation status as unfavorable-inadequate, the baseline study assessed it as favorable. Din punct de vedere al suprafeței habitatului starea de conservare a fost evaluată ca necunoscută, datorită absenței informațiilor necesare - aceasta fiind prima evaluare realizată. Tendința actuală a suprafeței habitatului este crescătoare. Comparativ cu situația de acum 6 ani, nu s-au înregistrat schimbări semnificative în tiparul de distribuție a acestui habitat. Structura vegetației, compoziția specifică și funcțiile comunităților vegetale, incluzând și speciile caracteristice sunt în condiții bune, starea de conservare din acest punct de vedere fiind evaluată ca favorabilă. Starea de conservare a habitatului din punct de vedere al perspectivelor habitatului în viitor a fost evaluată ca favorabilă. Deși au fost identificate 8 tipuri de impacturi, acestea vor avea un efect cumulativ scăzut, neafectând semnificativ viabilitatea pe termen lung a acestui tip de habitat. Principalele amenințări sunt reprezentate de: îndepărtarea prin tăiere sau ardere a ienupărului, tranzitului oilor și pășunatul, turismul necontrolat și colectarea florilor fructelor de afin, merișor, smirdar și ienupăr.
Cover of characteristic shrub species	Percent cover / 25 m ²	At least 35%	Baseline study on non-forest habitats for the management plan. <i>Pinus mugo</i> , <i>Juniperus sibirica</i> , <i>Vaccinium myrtillus</i> , <i>Vaccinium vitis-idaea</i>
Abundance-dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Cetraria islandica</i> , <i>Loiseleuria procumbens</i> , <i>Rhododendron myrtifolium</i> , <i>Vaccinium myrtillus</i> , <i>V. vitis-idaea</i> , <i>V. gaultherioides</i> , <i>Saxifraga paniculata</i> , <i>Campanula kladniana</i> , <i>C. abietina</i> , <i>Empetrum nigrum</i> , <i>Thamnolia vermicularis</i> , <i>Dryas octopetala</i> , <i>Sesleria coerulans</i> , <i>Achillea schurii</i> , <i>Juniperus sibirica</i>
Species richness	Number of species / 25 m ²	At least 5 species	Baseline study on non-forest habitats for the management plan, 5-15 species
Abundance of invasive / ruderal / nitrofilous species	Percent cover / 25 m ²	Less than 5%	This parameter is related to disturbance by overgrazing / fertilization. <i>Rumex alpinus</i> , <i>Veratrum album</i> , <i>Urtica dioica</i> .
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 10%	This parameter is a negative indicator related to disturbances like overgrazing/trampling.

4070* Bushes with *Pinus mugo* and *Rhododendron hirsutum* (Mugo - Rhododendretum hirsuti)

The surface of this habitat in ROSCI0122 is 5.200-6.500 ha and its conservation status was assessed to be **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 6.370 Conservation status from the point of view of surface to be clarified within 1 year	<p>The surface area of this habitat type was estimated to 5.200-6.500 ha. GIS database 6.370 ha. Although the management plan lists this habitat with an unfavorable-inadequate conservation status, the baseline study assessed its conservation status as favorable.</p> <p>Din punct de vedere al suprafeței habitatului starea de conservare a fost evaluată ca necunoscută, datorită datelor insuficiente. Tendința actuală a suprafeței ocupate de acest habitat este crescătoare. Față de situația de acum 6 ani, nu s-au identificat modificări în tiparul de distribuție a habitatului în aria protejată. Compoziția specifică, structura și funcțiile habitatului sunt în condiții bune, fără deteriorări semnificative - starea de conservare din acest punct de vedere fiind evaluată ca favorabilă. Starea de conservare a habitatului din punct de vedere al perspectivelor habitatului în viitor a fost evaluată ca favorabilă. Perspectivile habitatului în viitor sunt bune, impacturile identificate (3 presiuni actuale și 3 amenințări viitoare), vor avea un efect scăzut asupra tipului de habitat. Viabilitatea pe termen lung a habitatului nu este afectată.</p> <p>Fragments of this type of habitat have been identified in the upper vegetation levels in the subalpine level. The limiting factors are the physiological drought, high frequency of wind, short vegetation period.</p>
Abundance-dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Pinus mugo</i> , <i>Rhododendron myrtifolium</i> , <i>Calamagrostis villosa</i>
Cover of <i>Rhododendron</i> and <i>Pinus mugo</i>	Percent cover / 25 m ²	At least 35% Less than 80%	For this habitat the species of shrubs are defining
Species richness	Number of species / 25 m ²	At least 5 species	Baseline study on non-forest habitats for the management plan, 5-10 species
Abundance of invasive / ruderal / nitrofilous species	Percent cover / 25 m ²	Less than 5%	This parameter is related to disturbance by overgrazing / fertilization. <i>Rumex alpinus</i> , <i>Veratrum album</i> , <i>Urtica dioica</i> .
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 10%	This parameter is a negative indicator related to disturbances like overgrazing/trampling.

4080 Sub-arctic *Salix* spp. scrub

The surface of this habitat in ROSCI0122 is 90-150 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives unfavorable-inadequate). The site-specific conservation objective for this

habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 141 Conservation status from the point of view of surface to be clarified within 1 year	The surface of this habitat is estimated to 90-150 ha, it has a fragmented distribution in the subalpine level. GIS database 141 ha. Starea globală de conservare a acestui tip de habitat este nefavorabilă-inadecvată. Din punct de vedere al suprafeței habitatului starea de conservare a fost evaluată ca necunoscută, datorită absenței informațiilor necesare - aceasta fiind prima evaluare realizată. Structura și funcțiile habitatului, incluzând și speciile sale tipice sunt în condiții bune, fără deteriorări semnificative - starea de conservare din acest punct de vedere fiind evaluată ca favorabilă. Starea de conservare a habitatului din punct de vedere al perspectivelor habitatului în viitor a fost evaluată ca nefavorabilă-inadecvată. Datorită absenței datelor, perspectivele viitoare ale habitatului nu au putut fi evaluate. Au fost identificate 7 impacturi care vor avea un efect cumulat mediu asupra habitatului. În acest caz viabilitatea pe termen lung a habitatului este semnificativ afectată.
Abundance-dominance of the edifying / characteristic species	Percent cover / 25 m2	At least 35%	<i>Alnus viridis, Salix silesiaca, Adenostyles alliariae, Rumex arifolius, Aconitum tauricum, Rosa pendulina, Phleum alpinum, Achillea distans, Leucanthemum waldsteinii, Festuca pratensis ssp. apennina, Aconitum toxicum, Saxifraga heucherifolia, Carduus personatus, Senecio subalpinus, Cirsium waldsteinii, Senecio nemorensis, Chaerophyllum hirsutum, Doronicum austriacum, Calamagrostis villosa, Campanula abietina</i>
Species richness	Number of species / 25 m2	At least 5 species	Baseline study on non-forest habitats for the management plan, 5-20 species
Cover of characteristic shrub species	Percent cover / 25 m2	At least 10% Less than 35%	For this habitat the species of shrubs are defining
Abundance of invasive / ruderal / nitrofilous species	Percent cover / 25 m2	Less than 5%	This parameter is related to disturbance by overgrazing / fertilization. <i>Rumex alpinus, Veratrum album, Urtica dioica.</i>
Surface area of uncovered soil	Percent cover / 25 m2	Less than 5%	According to monitoring protocol of non-forest habitats for the management plan. Related to overgrazing / trampling.

6150 Siliceous alpine and boreal grasslands

The surface area of this habitat in ROSCI0122 is 12.000-15.000 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unknown, structure and function unfavorable-inadequate, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 13.367 Conservation status from the point of view of surface to be assessed within 1 year	The habitat was identified predominantly in the subalpine and alpine levels of the site. Improvement of the conservation status of this habitat should be reached by improving parameters related to structure and function as detailed below. GIS database 13.367 ha. Din punct de vedere al suprafeței habitatului starea de conservare a fost evaluată ca necunoscută, datorită absenței datelor, aceasta fiind prima evaluare realizată. Starea de conservare din punct de vedere al structurii și funcțiilor habitatului fost evaluată ca nefavorabilă – inadecvată. Starea de conservare a habitatului din punct de vedere al perspectivelor habitatului în viitor a fost evaluată ca nefavorabilă – inadecvată. Impacturile identificate vor avea în viitor un efect cumulat mediu asupra tipului de habitat, afectând semnificativ viabilitatea pe termen lung a acestuia. Viabilitatea pe termen lung este amenințată în principal de pășunatul intensiv și abandon.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Primula minima, Carex curvula, Oreochloa disticha, Potentilla ternata, Loiseleuria procumbens, Festuca supina, Salix herbacea, Juncus trifidus, Agrostis rupestris, Ranunculus crenatus, Soldanella pusilla, Polytrichum sexangulare, Luzula alpino-pilosa</i>
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 10%	Related to overgrazing/trampling. Overgrazing affects approximately 25% of the surface of this habitat in ROSCI0122.
Surface area negatively affected by overgrazing	% and ha	Less than 5% Less than 668 ha	Current level is estimated to 3.340 ha. While sheep grazing is a traditional practice that contributes to maintaining grassland habitats, overgrazing is one of the most important pressures on habitats as well. It is estimated that 25% of habitat 6150 is negatively affected by grazing in this site.
Allochthonous / invasive species	Percent cover / 25 m ²	Less than 25%	Allochthonous/invasive species do not represent a threat to this habitat. Native competitors for the habitat structure are <i>Picea abies, Pinus mugo, Vaccinium spp., Deschampsia caespitosa, Veratrum album, Nardus stricta, Poa media</i> . Compoziția specifică și structura comunităților vegetale sunt modificate, în special de pășunatul intensiv (aproximativ 25% din suprafața habitatului este afectată). Această activitate produce modificarea condițiilor pedologice (eutrofizare, modificarea regimului hidric și al pH-ului solului) și favorizarea afirmării unor specii cu comportament colonizator, care ajung să invadeze suprafețele ocupate de pajiști. Apare astfel tendința de refacere a tufărișurilor alpine și a formațiunilor nemorale edificate de molid și/sau consolidarea unui alt habitat de pajiște – ex. 6230*, 6170 (succesiune).
Species richness	Nr of species / 25 m ²	At least 5	According to baseline study, species richness of this habitat should be between 5-15.

6170 Alpine and subalpine calcareous grasslands

The surface of this habitat in ROSCI0122 is 180-210 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unknown, structure and function unfavorable-inadequate, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 184 Conservation status from the point of view of surface to be assessed within 1 year	Management plan 180-210 ha, GIS database 184 ha. Din punct de vedere al suprafeței habitatului starea de conservare a fost evaluată ca necunoscută, datorită absenței datelor, aceasta fiind prima evaluare realizată. Starea de conservare din punct de vedere al structurii și funcțiilor habitatului fost evaluată ca nefavorabilă – inadecvată. Compoziția specifică și structura comunităților vegetale sunt modificate, în special de pășunatul intensiv (aproximativ 25% din suprafața habitatului este afectată). Această activitate produce modificarea condițiilor pedologice (eutrofizare, modificarea regimului hidric și al pH-ului solului) și favorizarea afirmării unor specii cu comportament colonizator, care ajung să invadeze suprafețele ocupate de pajișt (succesiune). Starea de conservare a habitatului din punct de vedere al perspectivelor habitatului în viitor a fost evaluată ca nefavorabilă – inadecvată. Viabilitatea pe termen lung este amenințată în principal de pășunatul intensiv și abandon, dar și de turismul necontrolat.
Surface area negatively affected by grazing	ha	0	Approximately 50 ha of this habitat is affected by grazing. Given the relatively small size of this habitat, target is set to reduce the area negatively affected by grazing to 0 ha.
Abundance-dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Sesleria bielzii</i> , <i>Carex sempervirens</i> , <i>C. atrata</i> , <i>Dianthus tenuifolius</i> , <i>Salix retusa</i> , <i>S. reticulata</i> , <i>S. kitaibeliana</i> , <i>Silene acaulis</i> , <i>Pedicularis oederi</i> , <i>Primula minima</i> , <i>Viola alpina</i> , <i>Achillea schurii</i> , <i>Salix kitaibeliana</i> , <i>Soldanella pusilla</i> , <i>Dryas octopetala</i> , <i>Sesleria rigida ssp. haynaldiana</i> , <i>Bartsia alpina</i> , <i>Anemone narcissiflora</i> , <i>Lloydia serotina</i> , <i>Saxifraga aizoides</i> , <i>S. oppositifolia</i> , <i>Soldanella hungarica</i> , <i>Oreochloa disticha</i> , <i>Polygonum viviparum</i> , <i>Ranunculus oreophilus</i> , <i>Rhodiola rosea</i> , <i>Myosotis alpestris</i>
Species richness	Nr of species / 25 m ²	At least 20	According to the monitoring protocol of non-forest habitats for the management plan.
Allochthonous / invasive species	Percent cover / 25 m ²	Less than 25%	Allochthonous/invasive species do not represent a threat to this habitat. Native competitors for the habitat structure are <i>Picea abies</i> , <i>Pinus mugo</i> , <i>Vaccinium spp.</i> , <i>Deschampsia caespitosa</i> , <i>Veratrum album</i> , <i>Nardus stricta</i> , <i>Poa media</i> .

6230* Species-rich *Nardus* grasslands

The surface of this habitat in ROSCI0122 is 2.000-3.000 ha and its conservation status is **unfavorable – inadequate** (conservation status from the point of view of surface unknown, structure and function unfavorable-inadequate, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 2.257 Conservation status from the point of view of surface to be assessed within 1 year	The surface of this habitat is estimated to 2000-3000 ha. GIS database 2.257 ha. Fragments have been identified in the mountain and subalpine levels. Management plan lists the conservation status of this habitat as unfavorable-bad, however baseline study assessed it as unfavorable-inadequate. This is accepted as a reference. Datorită caracterului secundar al comunităților vegetale caracteristice habitatului 6230*, abilităților competitive și a caracterului invaziv a speciei <i>Nardus stricta</i> , structurii și funcțiilor specifice parțial modificate, precum și a presiunilor și amenințărilor identificate asupra habitatului (în special pășunatul intensiv și abandonarea sistemelor pastorale), starea globală de conservare a habitatului în aria naturală protejată este apreciată ca fiind nefavorabilă – inadecvată.
Surface area negatively affected by grazing	ha	Less than 110	It is estimated that 564 ha (25%) of this habitat is affected by overgrazing. Target is set to reduce the area negatively affected by grazing to less than 110 ha, less 5%.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Scorzonera rosea</i> , <i>Festuca nigrescens</i> , <i>Poa media</i> , <i>Viola declinata</i> , <i>Nardus stricta</i>
Species richness	Number of species / 25 m ²	At least 15	According to the monitoring protocol of non-forest habitats for the management plan.
Shrub cover	Percent cover / 25 m ²	Less than 5%	According to the monitoring protocol of non-forest habitats for the management plan.
Allochthonous / invasive species	Percent cover / 25 m ²	Less than 25%	Allochthonous/invasive species do not represent a threat to this habitat. Native competitors for the habitat structure are <i>Picea abies</i> , <i>Pinus mugo</i> , <i>Juniperus sibirica</i> , <i>Vaccinium spp.</i> , <i>Deschampsia caespitosa</i> , <i>Juncus spp.</i>

6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

The surface of this habitat in ROSCI0122 is 13 ha and its conservation status is **unfavorable-bad** (conservation status from the point of view of surface unknown, structure and function unfavorable-bad, perspectives unfavorable-bad). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	13 Conservation status from the point of view of surface to be assessed within 1 year	This habitat was identified in the lower mountain level in the eastern part of the site, in the form of small discontinuous patches. The total area is estimated to 13 ha. Abandonment represents the main threat to this habitat. It can be maintained only by mowing according to baseline study. No reference value for favorable conservation status was provided. It should be documented within the earliest possible period and target value adjusted accordingly. Starea de conservare din punct de vedere al structurii și funcțiilor habitatului fost evaluată ca nefavorabilă – rea. Compoziția specifică și structura comunităților vegetale nu se află în condiții bune, fiind afectate în special de abandon (aproximativ 50% din suprafața habitatului este afectată), care ajung să invadeze suprafețele ocupate de aceste pajiști. Structura și compoziția specifică a pajiștilor edificate de <i>Molinia caerulea</i> pot fi menținute doar prin cosirea acestora.
Area affected by abandonment	ha	0	Current surface of <i>Molinia</i> meadows is estimated to 6,5 ha. Target is set to reduce the amount of abandoned meadows to 0 ha.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Molinia caerulea</i> , <i>Juncus atratus</i> , <i>Serratula tinctoria</i> , <i>Peucedanum rochelianum</i> , <i>Juncus conglomeratus</i> .
Species richness	Nr of species / 25 m ²	At least 25	According to the monitoring protocol of non-forest habitats for the management plan.
Allochthonous / invasive species	Percent cover / 25 m ²	Less than 5%	Allochthonous/invasive species do not represent a threat to this habitat. Native competitors for the habitat structure are <i>Salix spp.</i> , <i>Betula pendula</i> , <i>Deschampsia caespitosa</i> , <i>Juncus spp.</i>

6430 Hydrophilous tall-herb fringe communities of plain and of the montane to alpine levels

The surface of this habitat in ROSCI0122 is 500-1000 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status** as by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 1000 Target to be improved within 1 year based on clarification of the size and status of this habitat	Management plan considers a surface area of 200-300 ha and conservation status unfavorable-bad, however the baseline study assessed it to unfavorable - inadequate and surface area to 500-1000 ha. GIS database indicates only 29 ha. The assessment of the baseline study is taken as the reference. Should be verified within the earliest possible period whether increase of the habitat size is feasible/necessary. This habitat was identified in the form of discontinuous strips along the main watercourses throughout the site. Starea de conservare globală a habitatului a fost apreciată ca nefavorabilă-inadecvată, datorită efectului cumulat al presiunilor și amenințărilor identificate, care vor afecta în mod iminent structura și funcțiile habitatului în viitor, respectiv viabilitatea acestuia pe termen lung.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Angelica sylvestris</i> , <i>Cirsium oleraceum</i> , <i>Geranium palustre</i> , <i>Scirpus sylvaticus</i> , <i>Telekia speciosa</i> , <i>Petasites hybridus</i> , <i>Petasites albus</i> , <i>Filipendula ulmaria</i> , <i>Petasites kablikianus</i> , <i>Heracleum spondylium</i> ssp. <i>transsilvanicum</i> , <i>Cirsium waldsteinii</i>
Species richness	Nr of species / 25 m ²	At least 15	According to the monitoring protocol of non-forest habitats for the management plan.
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 5%	This parameter is related to disturbance, erosion pressure.
Allochthonous/invasive species	Percent cover / 25 m ²	Less than 25%	Allochthonous/invasive species do not represent a threat to this habitat. Native competitors for the habitat structure are <i>Salix spp.</i> , <i>Picea abies</i> .

6440 Alluvial meadows of river valleys of the *Cnidion dubii*

The surface of this habitat in ROSCI0122 is 150-200 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unknown, structure and function unfavorable-inadequate, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 148 Conservation status from the point of view of surface to be assessed within 1 year	Estimated to 150-200 ha. This is a semi-natural habitat, within the site it is located in a single area in its southern part. Reference value for the favorable conservation status was not provided. GIS database 148 ha. Should be verified within the earliest possible period whether increase of the habitat size is feasible/necessary. Starea de conservare globală a habitatului a fost apreciată ca nefavorabilă-inadecvată, datorită efectului cumulat al presiunilor și amenințărilor identificate, care vor afecta semnificativ viabilitatea acestuia pe termen lung.
Areas affected by abandonment	ha	0	Baseline study estimated that less than 25% or less than 110 ha of this habitat is affected by abandonment. Given the relatively small size of habitat 6440 in this site, target is set to reduce this pressure to 0.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Poa nemoralis</i> , <i>Jovibarba heuffelii</i> , <i>Saxifraga cuneifolia</i> , <i>S. paniculata</i> , <i>Veronica bachofenii</i> , <i>Dianthus henteri</i> , <i>Galium kitaibelianum</i> , <i>Asplenium trichomanes</i> , <i>A. viride</i> , <i>A. rutamuraria</i> , <i>A. septentrionale</i> , <i>Sedum hispanicum</i> , <i>S. maximum</i> , <i>Moehringia muscosa</i> , <i>Polypodium vulgare</i> , <i>Cystopteris fragilis</i> , <i>Valeriana tripteris</i> , <i>Epilobium collinum</i> , <i>Silene dinarica</i> , <i>S. lichenfeldiana</i> .
Species richness	Nr of species / 25 m ²	At least 25	According to the monitoring protocol of non-forest habitats for the management plan.
Allochthonous / invasive species	Percent cover / 25 m ²	Less than 25%	Allochthonous/invasive species do not represent a threat to this habitat. Native competitors for the habitat structure are <i>Deschampsia caespitosa</i> , <i>Cirsium spp.</i> , <i>Veratrum album</i> .

6520 Mountain hay meadows

The surface of this habitat in ROSCI0122 is 1000-1500 ha and its conservation status is **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 1312 Conservation status from the point of view of surface to be assessed within 1 year	The size of this habitat in the site is estimated to 1000-1500 ha. GIS database 1312 ha. Patches have been identified in the western part of the site on the mountain level. While the management plan listed its conservation status as unfavorable-bad, the baseline study assessed it as favorable. The conclusion of the baseline study is accepted as the reference. Starea globală de conservare a acestui tip de habitat a fost evaluată ca favorabilă. Din punct de vedere al suprafeței habitatului starea de conservare a fost evaluată ca necunoscută, datorita absenței datelor, aceasta fiind prima evaluare realizată. Tendința actuală a suprafeței ocupate de acest habitat este stabilă. Față de situația de acum 6 ani, nu s-au identificat modificări în tiparul de distribuție a habitatului în aria protejată. În prezent, compoziția floristică, structura și funcțiile habitatului se găsesc în condiții bune, fără deteriorări semnificative. Starea de conservare din punct de vedere al structurii și funcției a fost evaluată ca favorabilă. Starea de conservare a habitatului din punct de vedere al perspectivelor habitatului în viitor a fost evaluată ca favorabilă. Perspectivele habitatului în viitor sunt bune, impacturile identificate, vor avea un efect scăzut asupra tipului de habitat, tendința viitoare a suprafeței habitatului fiind stabilă. Caracteristicile structurale și funcționale ale acestui tip de habitat, reprezentat de pajiști folosite ca fânețe, pot fi menținute în parametri optimi numai prin cosirea acestora, evitându-se practicarea pășunatului. Creșterea intensității impacturilor poate duce, în viitor, la deteriorarea și înlocuirea habitatului, datorită sensibilității acestuia la efectul modificării metodelor de utilizare a terenurilor.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Festuca rubra</i> , <i>Agrostis capillaris</i> , <i>Cynosurus cristatus</i> , <i>Dactylis glomerata</i> , <i>Daucus carota</i> , <i>Pimpinella saxifraga</i> , <i>Anthoxanthum odoratum</i> , <i>Cerastium holosteoides</i> , <i>Holcus lanatus</i> , <i>Lotus corniculatus</i> , <i>Trifolium pratense</i> , <i>Briza media</i> , <i>Carex pallescens</i>
Species richness	Number of species / 25 m ²	At least 25	According to the monitoring protocol of non-forest habitats for the Conservation status from the point of view of surface to be assessed within 1 year management plan.
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 5%	According to the monitoring protocol of non-forest habitats for the management plan. Related to overgrazing/trampling
Allochthonous / invasive species	Percent cover / 25 m ²	Less than 25%	Allochthonous/invasive species do not represent a threat to this habitat. Native competitors for the habitat structure are especially native shrub <i>Betula pendula</i> , <i>Populus tremula</i> , <i>Picea abies</i> .

7140 – Transition mires and quaking bogs (not in SDF)

The surface of this habitat in ROSCI0122 is estimated to a few hundred square meters, its conservation status is **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	0,01 Conservation status from the point of view of surface to be assessed within 1 year	The habitat is located in the western part of the protected natural area, in the form of small patches, estimated to 0,001-0,01 ha in the management plan. Baseline study estimates the surface of this habitat to less than 1 ha. It is found in mosaic with 91D0*, should be treated linked to that habitat type. Pentru menținerea habitatului în stare favorabilă de conservare este necesară limitarea tranzitului și pășunatului în zonă, limitarea desecărilor, drenajelor și lucrărilor de captare a apelor subterane și supraterane.
Abundance - dominance of the edifying / characteristic species	Percent cover /10 m2	A least 35%	<i>Carex limosa</i> , <i>Rhynchospora alba</i> , <i>Sphagnum cuspidatum</i> , <i>Scheuchzeria palustris</i> , <i>Eriophorum vaginatum</i> , <i>Drosera rotundifolia</i> , <i>Carex pauciflora</i> , <i>Andromeda polifolia</i> , <i>Empetrum nigrum</i> , <i>Oxycoccus microcarpus</i> , <i>Oxycoccus palustris</i> , <i>Polytrichum strictum</i> .
Species richness	Nr of species / 10 m2	25	According to protocol for monitoring non-forest habitats in the management plan.

7220* – Petrifying springs with tufa formations (Cratoneurion) (not in SDF)

The surface of this habitat in ROSCI0122 is about 100 m² and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	m ²	At least 100	The habitat is located in the central-western part of the protected natural area, in an isolated patch. Pentru menținerea habitatului în stare favorabilă de conservare este necesară limitarea activităților de amenajare și aducțiune a apei potabile din astfel de habitate fragile și cu valoare conservativă ridicată.
Surface area affected by pressures	m ²	0	Baseline study assessed conservation status from the point of view of structure and functions as favorable. Water captations and trampling by animals, including wild ungulates, are listed as current pressures and future threats. This effect should be limited to 0, including by fencing to protect against trampling. The hydrologic system has to remain intact.
Abundance - dominance of the edifying / characteristic species	Percent cover / 9 m ²	At least 35%	<i>Saxifraga aizoides</i> , <i>Doronicum carpaticum</i> , <i>Saxifraga stellaris</i> , <i>Caltha laeta</i> , <i>Chrysosplenium alternifolium</i> , <i>Cardamine amara</i> , <i>Epilobium nutans</i> , <i>Epilobium alsinifolium</i> , <i>Deschampsia caespitosa</i> , <i>Crepis paludosa</i> , <i>Silene pusilla</i> , <i>Pinguicula vulgaris</i> , <i>Chaerophyllum hirsutum</i> , <i>Stellaria nemorum</i> , <i>Viola biflora</i> .
Species richness	Number of species / 9 m ²	At least 5	According to baseline study for the management plan.

7240 Alpine pioneer formations of the *Caricion bicoloris-atrofuscae*

This habitat was not found during the baseline surveys for the management plan and its conservation status is **unknown**. The site-specific conservation objective for habitat 7240 is set to **maintain or improve its conservation status**, depending on the results of ongoing investigation (to be decided within 2 years whether maintenance or improvement is required). Based on the available information, the presence of this habitat in ROSCI0122 is uncertain.

8110 – Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* și *Galeopsietalia ladanii*)

The surface of this habitat in ROSCI0122 is 1500-2500 ha and its conservation status is **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 2289	Baseline study estimated the size of this habitat to 1500-2000 ha. GIS database 2289 ha, this is accepted as reference. Patches of this habitat are located at the base of the rocky slopes on a siliceous substrate. Viabilitatea pe termen lung a habitatului nu este afectată. Pentru acest tip de habitat, care vegetează pe versanți slab înclinați, amenințarea principală o constituie pășunatul în zonă și turismul necontrolat din zonele ușor accesibile.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Saxifraga bryoides</i> , <i>S. carpathica</i> , <i>Veronica baumgarteni</i> , <i>Silene acaulis</i> , <i>Poa cenisia</i> , <i>Oxyria dygina</i>
Species richness	Number of species / 25 m ²	At least 10	According to baseline study for the management plan.
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 60%	According to baseline study for the management plan.

8120 – Calcareous and calcashist screes of the montane to alpine levels (*Thlaspietea rotundifolii*)

The surface of this habitat in ROSCI0122 is 2-4 ha and its conservation status is **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 3	<p>The size of this habitat is estimated to 2-4 ha in the management plan. The habitat is represented by isolated fragments on the subalpine level. Management plan lists this habitat with an unfavorable-inadequate conservation status, however baseline study assessed it as favorable. The assessment of the baseline study is taken as the reference.</p> <p>Starea globală de conservare a acestui tip de habitat a fost evaluată ca favorabilă Din punct de vedere al suprafeței habitatului starea de conservare a fost evaluată ca necunoscută, datorită datelor insuficiente. Tendința actuală a suprafeței ocupate de acest habitat este necunoscută. Compoziția specifică, structura și funcțiile habitatului sunt în condiții bune, fără deteriorări semnificative - starea de conservare din acest punct de vedere fiind evaluată ca favorabilă. Starea de conservare a habitatului din punct de vedere al perspectivelor habitatului în viitor a fost evaluată ca favorabilă. Impacturile identificate vor avea un efect scăzut asupra tipului de habitat. Viabilitatea pe termen lung a habitatului nu este afectată. Datorită prezenței sale pe versanți mediu și puternic înclinați, amenințarea principală o constituie pășunatul, turismul și alpinismul necontrolat din zonele mai ușor accesibile.</p>
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m2	At least 25%	<p><i>Cerastium arvense</i> ssp. <i>calcicolum</i>, <i>Saxifraga moschata</i>, <i>S. aizoides</i>, <i>S. ascendens</i>, <i>S. bryoides</i>, <i>Doronicum carpaticum</i>, <i>Cardaminopsis neglecta</i>, <i>Papaver corona sancti-stephani</i>, <i>Arabis alpina</i>, <i>Galium anisophyllum</i>, <i>Oxyria dygina</i>, <i>Poa alpina</i>, <i>P. laxa</i>, <i>Rhodiola rosea</i>, <i>Festuca nitida</i> ssp. <i>flaccida</i>, <i>Luzula spicata</i>, <i>Veronica baumgartenii</i>, <i>Silene acaulis</i>, <i>Dianthus glacialis</i>, <i>Artemisia eriantha</i>.</p>
Species richness	Nr of species / 25 m2	At least 20	According to baseline study for the management plan.
Surface area of uncovered soil	Percent cover / 25 m2	Less than 60%	According to baseline study for the management plan.

8210 – Calcareous rocky slopes with chasmophytic vegetation

The surface of this habitat in ROSCI0122 is 1-3 ha and its conservation status is **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 2	Acest tip de habitat se autoconservă, datorită prezenței sale pe pereți stâncoși, uneori cu verticalitate mare. Amenințările pricipale sunt reprezentate de alpinismul, turismul necontrolat și tranzitul oilor.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 10-25%	<i>Achillea schurii</i> , <i>Campanula cochleriifolia</i> , <i>Saxifraga mutata ssp. demissa</i> , <i>S. paniculata</i> , <i>S. luteo viridis</i> , <i>Androsace lactaea</i> , <i>Kerneria saxatilis</i> , <i>Gypsophila petraea</i> , <i>Asplenium viride</i> , <i>A. trichomanes</i> , <i>Cystopteris fragilis</i>
Species richness	Number of species / 25 m ²	At least 20	According to baseline study for the management plan.
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 50%	According to baseline study for the management plan.

8220 – Silicious rocky slopes with chasmophytic vegetation

The surface of this habitat in ROSCI0122 is 250-300 ha and its conservation status is **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable - should be clarified within 1 year). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 275	Datorită prezenței sale pe versanți stâncoși, uneori puternic înclinați, amenințările principale sunt reprezentate de alpinismul și turismul necontrolat.
Abundance - dominance of the edifying / characteristic species	Percent cover / 25 m ²	At least 35%	<i>Poa nemoralis</i> , <i>Asplenium trichomanes</i> , <i>A. ruta - muraria</i> , <i>A. viride</i> , <i>Jovibarba heuffelii</i> , <i>Saxifraga cuneifolia</i> , <i>S. paniculata</i> , <i>Veronica bachofenii</i> , <i>Dianthus henteri</i> , <i>Galium kitaibelianum</i> , <i>Sedum hispanicum</i> , <i>S. maximum</i> , <i>Moehringia muscosa</i> , <i>Polypodium vulgare</i> , <i>Cystopteris fragilis</i> , <i>Valeriana tripteris</i> , <i>Asplenium septentrionale</i> , <i>Epilobium collinum</i> , <i>Silene dinarica</i> , <i>S. lerchenfeldiana</i> .
Species richness	Nr of species / 25 m ²	At least 5	According to baseline study for the management plan.
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 70%	According to baseline study for the management plan.

8310 – Caves not open to the public

The surface of this habitat in ROSCI0122 is 2-3 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface favorable, structure and function favorable, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve their conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 2	Management plan provides a surface area of 2-3 ha for this habitat type. It is located scattered at altitudes above 1500 m in the central and western part of the site.
Number of caves	Total number	56	According to GIS database of the management plan, total number of caves with no public access is 56. These are short caves situated at high altitudes, above 1500 m, most of them with a length smaller than 100 m.
Temperature	Celsius degrees	Usually around 10 Should be stable	No individual dataset is available in the management plan. Should be completed within the earliest possible period.
Cave fauna and flora	Presence / absence	Presence to be specified within 1 year	No individual dataset is available in the management plan. Should be completed within 1 year. Vegetația habitatului este reprezentată doar prin comunități edificate de briofite și alge: briofite <i>Schistostega pennata</i> și tapete de alge la intrarea în peșteri. Faună cavernicolă foarte specializată și strict endemică. Include forme relicte subterane ale unei faune care s-a diversificat în afara peșterilor. Această faună este în principal formată din nevertebrate care trăiesc exclusiv în peșteri și în apele subterane.

9110 Luzulo – Fagetum beech forest

The surface of this habitat in ROSCI0122 is 24.700-27.300 ha and its conservation status is **favorable** (conservation status from the point of view of surface favorable, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 26.000	The habitat includes forests developed on acidic soils, <i>Fagus sylvatica</i> and, in the higher mountains of <i>Fagus sylvatica</i> - <i>Abies alba</i> or <i>Fagus sylvatica</i> - <i>Abies alba</i> - <i>Picea abies</i> , the shrub layer contains species of <i>Lonicera nigra</i> , <i>L. xylosteum</i> , <i>Daphne mezereum</i> , and the herb contains of <i>Luzula luzuloides</i> , <i>Polytrichum formosum</i> and, often, <i>Deschampsia flexuosa</i> , <i>Calamagrostis villosa</i> , <i>Vaccinium myrtillus</i> , <i>Pteridium aquilinum</i> . Apare mozaicat cu habitatul 9130. Aceste habitate de fâgete de tip central-european, fără specii endemice regionale carpatine. Ades mozaicate în peisaj, au putut fi identificate pe suprafețe mari pe versantul nordic al Făgărașului unde se întind pe versanții văilor până în jurul altitudinii de 1000 m, de unde sunt înlocuite (treptat, limita nefiind niciodată tranșantă) de către către variantele acidofile sau bazofile ale habitatului 91V0 al fâgetelor dacice. Habitatele 9110 și 9130 sunt mult mai rare pe flancul vestic, estic și sudic al sitului ROSCI0122 unde fâgetele aparțin mai ales habitatelor 91V0 sau 91K0. Intensitatea defrișărilor în cadrul acestui tip de habitat va fi destul de redusă, din cauza productivității relativ reduse.
Characteristic tree species	Percent cover / 1000 m2	At least 70%	<i>Fagus sylvatica</i> , <i>Picea abies</i> , <i>Abies alba</i>
Characteristic species for herb layer	Number of species / 1000 m2	At least 3	<i>Luzula luzuloides</i> , <i>L. albida</i> , <i>L. sylvatica</i> , <i>Calamagrostis villosa</i> , <i>Deschampsia flexuosa</i> , <i>Vaccinium myrtillus</i> , <i>Festuca drymeja</i>
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m2	Less than 20%	The problem of invasive species is less relevant in the case of this habitat type, as it is very stable from the structural and functional point of view, according to baseline study. Problema monitorizării speciilor invazive nu se pune, ecosistemele forestiere fiind foarte stabile structural și funcțional, greu de invadat.
Deadwood volume	m3/ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

9130 Asperulo – Fagetum beech forest

The surface of this habitat in ROSCI0122 is 6311 ha and its conservation status is **favorable** (conservation status from the point of view of surface favorable, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is to **maintain its favorable conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 6.311	Aceste habitate de fâgete de tip central-european, fără specii endemice regionale carpatine, adesea mozaicate în peisaj, au putut fi identificate pe suprafețe mari pe versantul nordic al Făgărașului unde se întind pe versanții văilor până în jurul altitudinii de 1000 m, de unde sunt înlocuite (treptat, limita nefiind niciodată tranșantă) de către variantele acidofile sau bazofile ale habitatului 91V0 al fâgetelor dacice. Habitatele 9110 și 9130 sunt mult mai rare pe flancul vestic, estic și sudic al sitului ROSCI0122 unde fâgetele aparțin mai ales habitatelor 91V0 sau 91K0 (Baseline study on forest habitats). Suprafața ocupată de pădurile acestui tip de habitat în partea de nord a sitului este considerabilă și foarte aproape de cea potențială pentru acest tip de habitat.
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<i>Fagus sylvatica</i> , <i>Carpinus betulus</i> , <i>Quercus petraea</i> , <i>Acer pseudoplatanus</i> , <i>Cerasus avium</i> , <i>Sorbus torminalis</i> , <i>Ulmus glabra</i> , <i>U. minor</i> , <i>Tilia cordata</i>
Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	În timpul monitorizării habitatului 9130 se va ține seama de prezența și efectivul populațional al următorilor taxoni tipici pentru aceste fâgete: <i>Lamium maculatum</i> , <i>L. galeobdolon</i> , <i>Melica uniflora</i> , <i>Galium odoratum</i> , <i>G. schultesii</i> , <i>Dentaria bulbifera</i> , <i>Anemone nemorosa</i> .
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	Less than 20%	The problem of invasive species is less relevant in the case of this habitat type, as it is very stable from the structural and functional point of view, according to baseline study. Artificial introduction of <i>Picea abies</i> should be avoided.
Deadwood volume	m ³ / ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

9150 Medio-European limestone beech forests of the Cephalanthero-Fagion

This habitat was not found during the baseline surveys for the management plan and its conservation status is **unknown**. The site-specific conservation objective for habitat 9150 is set to **maintain or improve its conservation status**, depending on the results of ongoing investigation (to be decided within 2 years whether maintenance or improvement is required). Based on the available information, the presence of this habitat in ROSCI0122 is uncertain.

9170 *Galio -Carpinetum* oak – hornbeam forest

The surface of this habitat in ROSCI0122 is about 280 ha and its conservation status is **favorable** (conservation status from the point of view of surface favorable, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 282	According to the baseline study on forest habitats for the management plan, a small but very representative area was identified (282,4 ha) between Plopoasa și Strâmba valleys, one of the plots is a secular oak and beech forest estimated to over 300 years old.
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<i>Quercus petraea</i> , <i>Carpinus betulus</i> , <i>Fagus sylvatica</i> , <i>Tilia cordata</i> , <i>T. tomentosa</i> , <i>Acer campestre</i> , <i>A. platanoides</i> , <i>Sorbus torminalis</i> , <i>Sorbus domestica</i>
Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	<i>Ajuga reptans</i> , <i>Brachypodium sylvaticum</i> , <i>Dactylis polygama</i> , <i>Euphorbia amygdaloides</i> , <i>Genista tinctoria</i> , <i>Lamium galeobdolon</i> , <i>Lathyrus niger</i> , <i>L. venetus</i> , <i>Luzula luzuloides</i> , <i>Pulmonaria officinalis</i> , <i>Scrophularia nodosa</i> , <i>Stellaria holostea</i> , <i>Viola reichenbachiana</i> , <i>Bromus benekeni</i> , <i>Asarum europaeum</i> , <i>Galium odoratum</i> , <i>Stellaria holostea</i>
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	Less than 20%	The problem of invasive species is less relevant in the case of this habitat type, as it is very stable from the structural and functional point of view. Problema monitorizării speciilor invazive nu se pune, ecosistemele forestiere fiind foarte stabile structural și funcțional, greu de invadat (baseline study)
Deadwood volume	m ³ / ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

9180* *Tilio - Acerion* forests of slopes, screes and ravines

The surface of this habitat in ROSCI0122 is 68 ha and its conservation status is **favorable** (conservation status from the point of view of surface favorable, structure and function favorable,

perspectives favorable). The site-specific conservation objective for this habitat is to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 68	Acesta este cel mai fragmentat tip de habitat forestier, apărând în mici insule acolo unde stâncăriile sunt împădurite, oferind condiții pentru instalarea acestor habitate forestiere intrazonale. Deși nu sunt descrise încă de studiile publicate în zonă, pe versantul nordic făgărășean există circa 217 de puncte unde se găsesc stâncării împădurite cu acest tip de habitat prioritar. Ele sunt bine reprezentate și pe versanții Munților Iezer - Păpușa și pe versantul sudic făgărășean. Ele apar atât în etajul nemoral superior (al fagului) cât și în etajul boreal (al molidului). Ecosistem situat pe stâncării greu accesibile, ceea ce favorizează și va favoriza menținerea unei stări de conservare bună în viitor.
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<i>Acer pseudoplatanus</i> , <i>Fraxinus excelsior</i> , <i>Taxus baccata</i> , <i>Ulmus glabra</i> , <i>Carpinus betulus</i> , <i>Corylus avellana</i> , <i>Quercus spp.</i> , <i>Tilia cordata</i> , <i>T. platyphyllos</i> .
Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	<i>Athyrium filix-femina</i> , <i>Circaea lutetiana</i> , <i>Cystopteris fragilis</i> , <i>Dentaria glandulosa</i> , <i>Dryopteris filix-mas</i> , <i>Geranium robertianum</i> , <i>Helleborus purpurascens</i> , <i>Impatiens noli-tangere</i> , <i>Lamium galebdolon</i> , <i>Mercurialis perennis</i> , <i>Moehringia muscosa</i> , <i>Polystichum setiferum</i> , <i>Primula columnae</i> , <i>Sanicula europaea</i> , <i>Senecio neumorensis</i> , <i>Salvia glutinosa</i> , <i>Silene heuffeli</i> , <i>Stellaria nemorum</i> , <i>Stachys sylvatica</i> , <i>Bromus benekenii</i>
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	less than 20%	The problem of invasive species is less relevant in the case of this habitat type, as it is very stable from the structural and functional point of view. Problema monitorizării speciilor invazive nu se pune, ecosistemele forestiere fiind foarte stabile structural și funcțional, greu de invadat (baseline study)
Deadwood volume	m ³ / ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

91D0* – Bog woodland (not in SDF)

The surface of this habitat in ROSCI0122 is 40-41 ha and its conservation status is **favorable** (conservation status from the point of view of surface unknown, structure and function favorable, perspectives favorable - to be clarified within 1 year). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 41 The conservation status from the point of view of surface should be clarified within 1 year	The habitat is present in the basin of the Bătrâna valley in the perimeter of the Câmpulung Forest District, UP V Voina, in the part of the base of the northern slope with exposure of the Bătrâna valley. Este un subtip de habitat neîntâlnit până acum în altă parte de pe glob (moldișuri cu cuvertură turboasă groasă pe pante), de aceea nu avem suficiente date în acest sens. Habitatul cuprinde fitocenoze aflate la altitudini de peste 1000 m, formate din specii boreale, oligotrofe, mezo-oligotermice, higrofile, acidofile. Cuprinde un strat arbustiv format din molid (<i>Picea abies</i>), însoțite de specii de <i>Vaccinium myrtillus</i> și <i>V. vitis-idaea</i> , și alte ericacee: <i>Empetrum nigrum</i> , <i>Vaccinium oxycoccus</i> , <i>V. microcarpum</i> . Habitatul are o stare de conservare favorabilă din toate punctele de vedere.
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<i>Picea abies</i> , <i>Pinus sylvestris</i>
Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	<i>Eriophorum vaginatum</i> , <i>Carex pauciflora</i> și un strat de mușchi gros ce acoperă complet solul, cu specii ale genului <i>Sphagnum</i> , <i>S. wulfianum</i> , <i>S. squarrosum</i> , <i>S. rusowii</i> , <i>S. palustre</i> , și <i>Polytrichum</i> , <i>P. commune</i> , <i>P. strictum</i> , <i>Orthilia secunda</i> , <i>Lycopodium annotinum</i> , <i>Huperzia sellago</i> , <i>Carex canescens</i> , <i>C. echinata</i> , <i>Crepis paludosa</i> , <i>Poa trivialis</i> , <i>Pleurozium schreberi</i> , <i>Calispogon sphagnicola</i>
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	Less than 20%	The problem of invasive species is less relevant in the case of this habitat type, as it is very stable from the structural and functional point of view, according to baseline study.
Deadwood volume	m ³ /ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

91E0* – Alluvial forest with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno - Padion, Alnion incanae, Salicion albae*)

The surface area of this habitat in ROSCI0122 is 408 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface area favorable, structure and function favorable, future perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 408	This habitat is concentrated along the watercourses, which most often do not have well-developed floodplain on the northern slopes of Făgăraș mts - which is why their floristic structure is loose, according to baseline study. Pe versantul sudic, în luncile văilor principale, o mare parte din arinișurile albe au fost îndepărtate prin lucrări hidrotehnice în albie și de creare / întreținere a drumurilor forestiere. În această regiune a Carpaților Meridionali, inclusiv în Munții Leaota, am observat însă adesea extinderea, în văile umbrite, a arinișurilor albe mult pe versanți pornind din lunca văilor, unde alcătuiesc fitocenoze încă nedescrise din punct de vedere fitosociologic, cu un covor compact de taulă, <i>Spiraea ulmifolia</i> . Acest lucru face dificilă cartarea acestor arinișuri extinse de versant, prezente uneori chiar pe pante abrupte, de peste 30 de grade. Cel mai ușor ele ar putea fi observate pe fotografiile satelitare realizate în luna octombrie. Starea de conservare actuală a habitatului este bună, dar cu foarte mari presiuni în viitor (defrișări, suprapășunat, drumuri forestiere, etc).
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<i>Alnus incana</i> , <i>A. glutinosa</i> , <i>Salix sp.</i> , <i>Sambucus nigra</i> , <i>Spiraea ulmifolia</i>
Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	<i>Geum rivale</i> , <i>Doronicum austriacum</i> , <i>Matteucia struthiopteris</i> , <i>Petasites hybridus</i> , <i>P. kablikianus</i> , <i>Spiraea ulmifolia</i> Pentru ca habitatul 91E0* cu arin alb să fie menținut într-o stare bună de conservare, nu este suficientă conservarea arboretului ca atare, ci și a sinuziilor sale ierbacee și arbustive. În proporție de 65 % pădurile ripariene au sinuziile arbustivă și ierbacee bine conservate.
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	Less than 20%	<i>Bellis perennis</i> , <i>Urtica dioica</i> , <i>Cirsium lanceolatum</i>
Deadwood volume	m ³ / ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

91K0 – Illyrian *Fagus sylvatica* forests (Aremonio-Fagion) (not in SDF)

The surface area of this habitat in ROSCI0122 is 3.760 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unfavorable-inadequate, structure and function favorable, perspectives unfavorable - inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	3.760 To be verified in 1 year whether an increase of this target is needed	<p>The reference value for favorable conservation status is set to 3.760 ha in the baseline study for the management plan. As the conservation status from the point of view of its surface area was assessed as U1 , but the reference value for favorable conservation status given in the assessment is equal to current extent, it has to be verified whether there is need to increase the size of this habitat in order to improve its conservation status within 1 year, alongside with the inconsistency regarding the assessment of the conservation status from the point of view of the habitat size and the reference value for favorable conservation status set in the management plan</p> <p>Illyrian beech forests are widespread on the southern slopes of Fagaraș up to the altitude of 800 m, from where they are replaced to the Dacian beech forests. Species characteristic of the habitat are <i>Fagus orientalis</i>, <i>Potentilla micrantha</i>, <i>Galium kitaibelianum</i>, <i>Aremonia agrimonioides</i>, <i>Helleborus odorus</i>. With a contingent of poorer species, including without <i>Fagus orientalis</i>, the habitat is present on steep southern slopes towards the Olt Valley to an altitude of 600 m.</p> <p><i>Defrișările afectează puternic suprafețe mari de habitate, reducând anual considerabil suprafața acestora în numeroase porțiuni din sit. Structura floristică, sinuziile și funcțiile fâgetelor ilirice sunt bine conservate. Presiunea exploatărilor forestiere este în creștere pentru următorii zece ani pe macroversantul sudic și vestic al Munților Făgăraș. Aceste ecosisteme forestiere sunt acum și vor fi supuse și în viitor unor presiuni mari din cauza exploatărilor forestiere, aflate în extindere. Păduri cu structuri și funcții particulare, aparte, bine conservate, dar cu suprafața aflată în curs de reducere în cadrul sitului.</i></p> <p>According to the management plan and baseline study, the surface area of this habitat is reduced by excessive logging. No data are available on the surface areas negatively affected by logging. It should be clarified within 1 year.</p>
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<i>Fagus sylvatica</i> ssp. <i>moesiaca</i> , <i>Fagus orientalis</i> , <i>Acer pseudoplatanus</i> , <i>Fraxinus excelsior</i> , <i>Tilia platyphyllos</i> , <i>Fraxinus ornus</i> , <i>Carpinus betulus</i>

Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	Characteristic species: <i>Potentilla micrantha</i> , <i>Galium kitaibelianum</i> , <i>Aremonia agrimonioides</i> , <i>Helleborus odorus</i>
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	Less than 20%	The problem of invasive species is less relevant in the case of this habitat type, as it is very stable from the structural and functional point of view, according to baseline study.
Deadwood volume	m ³ /ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSC10304 Hârtibaciu Sud-Vest and ROSC10132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

91L0 – Illyrian oak-hornbeam forests (Erythronio-carpinion) (not in SDF)

The surface area of this habitat in ROSCI0122 is 974 ha and its conservation status is **favorable** (conservation status from the point of view of surface favorable, structure and function favorable, perspectives favorable). The site-specific conservation objective for this habitat is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 974	Acestea sunt prezente la periferia vestică și sudică a masivului Făgăraș, între altitudini de 300- 600 m pe versanți abrupti cu expoziție însoțită, adesea deasupra unor centuri de fâgete. Astfel, gorunetele din arealul studiat au o dispunere insulară, fragmentată. În Defileul Oltului ele reprezintă prelungirea spre nord a gorunetelor din Cozia, având aceeași natură, subspeciile mai termofile de gorun, în primul rând <i>Quercus petraea ssp. dalechampii</i> predominând. Este favorabilă pe toată suprafața ocupată de acest ecosistem forestier în vestul sitului
Characteristic trees species	Percent cover / 1000 m ²	At least 70%	<i>Quercus robur</i> , <i>Q. petraea</i> , <i>Q. cerris</i> , <i>Carpinus betulus</i> , <i>Acer tataricum</i> , <i>Tilia tomentosa</i> , <i>Fraxinus angustifolia</i>
Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	<i>Galium kitaibelianum</i> , <i>Poa nemoralis</i> , <i>Erythronium dens-canis</i> , <i>Aposeris foetida</i>
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	Less than 20%	The problem of invasive species is less relevant in the case of this habitat type, as it is very stable from the structural and functional point of view, according to baseline study.
Deadwood volume	m ³ / ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

91Q0 Western Carpathian calcicolous *Pinus sylvestris* forests

This habitat was not found during the baseline surveys for the management plan and its conservation status is **unknown**. The site-specific conservation objective for habitat 91Q0 is set to **maintain or improve its conservation status**, depending on the results of ongoing investigation (to be decided within 2 years whether maintenance or improvement is required). Based on the available information, the presence of this habitat in ROSCI0122 is uncertain.

91V0 Dacian beech forest (*Symphyto - Fagion*)

The surface of this habitat in ROSCI0122 is approximately 52.200 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unfavorable-inadequate, structure and function favorable, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve the conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	52.275	<p>Its conservation status was listed as favorable in the management plan but in the baseline study it was assessed as unfavorable-inadequate. The assessment of the baseline study is accepted as the reference. This habitat is under pressure from clearcutting, roads for logging and artificial increase of spruce by plantation. <i>În mare parte habitatul este afectat de defrișări rase, drumuri forestiere, chiar și înrășinare (efectuarea de plantații forestiere cu molid).</i></p> <p>A large part of the beech and mixed forests belong to this habitat with a wide distribution in the site:</p> <ul style="list-style-type: none"> - pe macroversantul nordic al Munților Făgăraș din jurul altitudinii de 1000 m până la limita inferioară a molidișurilor, în jurul altitudinii de 1400 m. - pe macroversantul sudic al Munților Făgăraș, din jurul altitudinii de 800 de m până la limita inferioară a molidișurilor. Sub 800 m fâgetele dacice sunt înlocuite de fâgetele ilirice, 91K0. - pe macroversantul vestic al Munților Făgăraș pe clinele nordice pe tot ecartul altitudinal, dar pe cele cu expoziție sudică doar de la circa 600 de m altitudine în sus, mai jos de această altitudine fiind prezentă o mixtură a habitatelor de gorunete ilirice (91L0) și fâgete ilirice (91K0). - pe macroversantul estic al Munților Făgăraș (bazinele Bărselor) și pe porțiunea din macroversantul sudic al Munților Iezer - Păpușa inclusă în sit toate fâgetele și pădurile de amestec aparțin habitatului 91V0, speciile caracteristice acestuia coborând până la cele mai joase altitudini. <p>According to the management plan and baseline study, the surface area of this habitat is reduced by excessive logging. No data are available on the surface areas negatively affected by logging. It should be clarified within 1 year and the target should be reviewed.</p>
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<i>Picea abies, Fagus sylvatica, Abies alba, Acer pseudoplatanus, A. campestre, Ulmus glabra, Fraxinus excelsior, Carpinus betulus, Quercus sp</i>

Characteristic species for herb layer	Number of species /1000 m ²	At least 3	<i>Symphytum cordatum</i> , <i>Pulmonaria rubra</i> , <i>Silene heuffelii</i> , <i>Euphorbia carniolica</i> , <i>Dentaria glandulosa</i> , <i>Helleborus purpurascens</i> , <i>Aconitum moldavicum</i> (baseline study on forest habitats for management plan)
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	less than 20%	Allochthonous/invasive species do not represent a threat to his habitat. Artificial increase of spruce by plantation (<i>înărășinare</i>) is a main pressure according to baseline study.
Deadwood volume	m ³ /ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

9410 Acidophilous *Picea* forests of the montane to alpine levels (*Vaccinio - Piceetea*)

The surface area of this habitat in ROSCI0122 is 45.660 ha and its conservation status is **unfavorable-inadequate** (conservation status from the point of view of surface unfavorable-inadequate, structure and function favorable, future prospects unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	At least 45.660	<p>According to the baseline study, the reference value for favorable conservation status for this parameter is 45.600 ha.</p> <p>Molidișurile din Munții Făgăraș și Iezer - Păpușa formează etajul forestier boreal, cuprins în general între altitudinile de 1400 - 1800 m. Totuși, pâlcuri de molid coboară uneori până la altitudinea de 1000 m din cauza inversiunilor termice. Pe versantul nordic, în multe locuri limita superioară a pădurii boreale coboară până spre 1600 m. Acest habitat include păduri de conifere subalpine și alpine în care sunt cuprinse două subtipuri: păduri de molid subalpine și păduri de molid perialpine. Din punctul de vedere al structurii și funcțiilor starea de conservare a habitatului este favorabilă, dar suprafața ocupată de acesta se reduce foarte mult în urma defrișărilor.</p> <p>According to the management plan and baseline study, the surface area of this habitat is reduced by excessive logging. No data are available on the surface areas negatively affected by logging. It should be clarified within 1 year and the target should be reviewed.</p>
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<p><i>Picea abies</i>, <i>Pinus mugo</i>, <i>Juniperus nana</i>, <i>Betula pendula</i></p> <p>Ca structură acest tip de habitat conține un strat al arborilor compus exclusiv din molid (<i>Picea abies</i>) sau cu puțin amestec scoruș de munte (<i>Sorbus aucuparia</i>), paltin de munte (<i>Acer pseudoplatanus</i>).</p>
Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	<p><i>Oxalis acetosella</i>, <i>Soldanella hungarica</i>, <i>S. major</i>, <i>S. montana</i>, <i>Vaccinium myrtillus</i>, <i>Dryopteris dilatata</i>, <i>Homogyne alpina</i>, <i>Calamagrostis villosa</i>, <i>Campanula abietina</i>, <i>Athyrium distentifolium</i>, <i>Luzula sylvatica</i>, <i>Vaccinium myrtillus</i>, <i>Vaccinium vitis-idaea</i>, <i>Moneses uniflora</i>, <i>Huperzia selago</i>, <i>Melampyrum sylvaticum</i>, <i>Dicranum scoparium</i>, <i>Hylocomium proliferum</i>, <i>Sphagnum girgensohnii</i></p>
The cover of the characteristic species	Percent cover / 1000 m ²	At least 70%	According to baseline study for the management plan.
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	Less than 20%	The problem of invasive species is less relevant in the case of this habitat type, as it is very stable from the structural and functional point of view, according to baseline study.

Deadwood volume	m3/ha	<p>At least 20</p> <p>Current value should be evaluated in a 3-5 year period and target value reviewed accordingly</p>	<p>Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.</p>
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9420 Alpine *Larix decidua* and/or *Pinus cembra* forests (not in SDF)

The current surface area of this habitat in ROSCI0122 according to the baseline study on forest habitats for the management plan is 7 ha, and the surface area of the forest ecosystem with *Larix decidua* that should be strictly protected is 134.5 ha. Its conservation status was assessed as **unfavorable-inadequate** (area unfavorable-inadequate, structure and function favorable, perspectives unfavorable-inadequate). The site-specific conservation objective for this habitat is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Surface area / size of the habitat	ha	20 The status of the total surface with <i>Larix decidua</i> to be clarified within 1 year.	This habitat is known from only one location in the Western part of the site on 7 ha. This location is unique, being the only one out of seven known relic refugia for this association that is of the Alpine type of boreal forests. The reference value for the favorable conservation of this habitat in ROSCI0122 from the point of view of the surface is 20 ha (baseline study). The status of the total surface with <i>Larix decidua</i> in the baseline study to be clarified within 1 year. Versantul vestic al Pleşii lui Ilie este singurul loc din Carpați unde <i>Larix decidua ssp. carpatica</i> este integrată pădurilor boreale exact ca în Alpi, la paritate cu molidul, fiind din acest punct de vedere singura pădure boreală de tip alpin din munții noștri. Suprafața ocupată în prezent de habitat este de circa 7 ha. Suprafața ocupată de ecosistemul forestier cu lariță ce ar trebui strict protejat este de 134,5 hectare.
Characteristic tree species	Percent cover / 1000 m ²	At least 70%	<i>Larix decidua ssp. carpatica</i> , <i>Pinus cembra</i>
Characteristic species for herb layer	Number of species / 1000 m ²	At least 3	<i>Vaccinium myrtillus</i> , <i>V. vitis-idaea</i> , <i>Bruckenthalia spiculifolia</i> , <i>Campanula abietina</i> , <i>Dryopteris expansa</i> , <i>Deschampsia flexuosa</i> , <i>Huperzia sellago</i> , <i>Homogyne alpina</i> , <i>Soldanella hungarica</i> , <i>Luzula sylvatica</i> , <i>Calamagrostis villosa</i> , <i>Viola declinata</i> .
Invasive and allochthonous tree species, including not corresponding ecotypes	Percent cover / 1000 m ²	Less than 20%	Not relevant for this habitat type.
Deadwood volume	m ³ / ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value not known. Should be evaluated within earliest possible period. Current level for this forest habitat type is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu-Cibin-Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

4070* *Campanula serrata*

The population size of *Campanula serrata* is estimated to more than 15.000 individuals and its distribution area to more than 10.000 ha. However, the baseline study considers that **existing data are not sufficient to allow a reliable assessment of the conservation status of the species**. Therefore, the site-specific conservation objective for this species is set to **continue investigations on its conservation status** and to define baseline and target values for the following parameters:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals / population size class	At least 15.000 / class 7	Baseline study provides size classes for plant species. For <i>Campanula serrata</i> population size class 7 is given as the current value, that corresponds to 10.000-50.000 individuals. Reference value was not defined in the baseline study because of lack of data - should be assessed within earliest possible period..
Habitat surface area	ha	At least 10.000	It is common from the beech level to the alpine one, on grassland and scrub. It can be identified in habitats 6230*, 6520. Nu există date suficiente pentru a estima suprafața adecvată a habitatului speciei în aria naturală protejată. According to baseline study, the area of suitable habitats for this species is more than 10.000 ha.
Species richness of the habitats 6230*, 6520	Number of species / 25 m ²	25	According to baseline study for the management plan.
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 5%	According to baseline study for the management plan. Related to overgrazing/trampling

4116 *Tozzia carpathica*

The population size of *Tozzia carpathica* is estimated to about 500-1000 individuals and its distribution area to 5-25 ha. However, the baseline study considers that **existing data are not sufficient to allow a reliable assessment of the conservation status** of the species. Therefore, the site-specific conservation objective for this species is set to **continue investigations on its conservation status** and to define baseline and target values for the following parameters:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals / population size class	At least 750 / class 4	Baseline study provides size classes for plant species. For <i>Tozzia carpathica</i> population size class 4 is given as the current value, that corresponds to 500-1.000 individuals. Reference value was not defined in the baseline study because of lack of data - should be assessed within earliest possible period.
Habitat surface area	ha	At least 15 ha To be clarified within 1 year	It was found in the northeastern part of the site, its distribution is estimated to between 5-25 ha. It is found in remote, wet and cold valleys. It is very sensitive to air temperature and humidity and it has low dispersal capacities. It occurs in habitat 6230 * according to the baseline study on plants for the management plan.
Structure and function of the habitat in which it occurs 6230* - species richness	Number of species / 25 m ²	At least 15	This parameter is an indicator of vegetation integrity for the habitat type in which <i>Tozzia carpathica</i> occurs.
Uncovered soil	Percent cover / 25 m ²	Less than 1%	The species is very sensitive to disturbance, in its distribution area the main pressures are grazing and logging.

4122 *Poa granitica* ssp. *disparilis*

The population size of *Poa granitica* ssp. *disparilis* is estimated to about 500-1000 individuals and its distribution area to 250-700 ha. However, the baseline study concluded that **existing data are not sufficient to allow a reliable assessment of the conservation status** of the species. Therefore, the site-specific conservation objective for this species is set **to maintain, or improve its conservation status** depending of the results of ongoing investigations (to be decided within 1 year whether maintenance or improvement is required and the targets below revised accordingly), as defined by the following parameters:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals / population size class	At least 750 / class 4 To be better defined within 1 year	Baseline study provides size classes for plant species. For <i>Poa granitica</i> population size class 4 is given as the current value, that corresponds to 500-1.000 individuals. Reference value was not defined in the baseline study because of lack of data - should be assessed within earliest possible period.
Habitat surface area	ha	At least 475	It is found in rocky areas and grasslands on skeletal soils in the alpine zone, its distribution in ROSCI0122 is estimated to between 250-700 ha. It occurs in the following habitats: 8110, 8120. Reference value for favorable conservation was not provided in lack of data - should be assessed within earliest possible period.
Structure and function of the habitat in which it occurs - species richness of habitats 8110, 8120	Number of species / 25 m ²	At least 10	This parameter is an indicator of vegetation integrity for the habitat type in which <i>Poa granitica</i> occurs.
Surface area of uncovered soil	Percent cover / 25 m ²	Less than 60%	Typical feature of the habitat of this species is a large percentage (up to 40%) of rock/scree.

1389 *Meesia longiseta*

The species was not found during the baseline surveys for the management plan and its conservation status is not known. The site-specific conservation objective for *Meesia longiseta* is set **to maintain, or improve its conservation status**, depending on the results of ongoing investigations (to be decided within 1 year whether maintenance or improvement is required). In the available phytosociological databases for ROSCI0122 (total 696 phytosociological surveys), the species has not been reported. Given the available information, the presence of the species in ROSCI0122 is **uncertain**.

1393 *Drepanocladus vernicosus*

The species was not found during the baseline surveys for the management plan and its conservation status is not known. The site-specific conservation objective for *Drepanocladus vernicosus* is set **to maintain, or improve its conservation status**, depending on the results of ongoing investigations (to be decided within 1 year whether maintenance or improvement is required). In the available phytosociological databases for ROSCI0122 (total 696 phytosociological surveys), the species has not been reported. Given the available information, the presence of the species in the area of the site is **uncertain**.

1903 *Liparis loeselii*

The species was not found during the baseline surveys for the management plan and its conservation status is not known. The site-specific conservation objective for *Liparis loeselii* is set **to maintain, or improve its conservation status**, depending on the results of ongoing investigation (to be decided within 1 year whether maintenance or improvement is required). In the available phytosociological databases for ROSCI0122 (total 696 phytosociological surveys), the species has not been reported. Given the available information, the presence of the species in the area of the site is **uncertain**.

1898 *Eleocharis carniolica*

The species was not found during the baseline surveys for the management plan and its conservation status is **unknown**. The site-specific conservation objective for *Eleocharis carniolica* is set **to maintain, or improve its conservation status**, depending on the results of ongoing investigation (to be decided within 1 year whether maintenance or improvement is required). Only one citation of this species was found in the literature, outside the limits of the protected natural area. Given the available information, the presence of the species in the area of the site is **uncertain**.

1014 *Vertigo angustior*

The population size of this species is estimated to 1000-5000 individuals distribution area to 1900 ha. Its conservation status is assessed as **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals / population size class	1.000- 5.000 / class 5	Baseline study provides size classes for invertebrates. For <i>Vertigo angustior</i> population size class 5 is given as the current and reference value, that corresponds to 1.000-5.000 individuals.
Population density	Individuals / m ²	To be defined within 2 years	No baseline data are available. Should be completed.
Distribution area / Habitat size	Number of quadrats 5x5 km ha	At least 5 1900	It is a higrophilous species that inhabits moist areas, under rocks, moss water shores in detritus, usually in open habitats without much shade. It is a lowland species that is found under 1000 m asl. The distribution of the species is mainly in the northern part of the site, in the southern part it is more sparse.
Deadwood volume along streams	m ³ / 100 m habitat length	At least 1	Deadwood is important for the species.
Length of herbaceous riparian vegetation	km	At least 190	Humidity and light is important for the species.

4057 *Chilostoma banaticum*

The species was recorded on five sample plots, most of them in the northern part of the site. Its distribution is estimated to 1900 ha. Its conservation status is assessed as **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals / population size class	10.000- 50.000 / class 7	Baseline study provides size classes for invertebrates. For <i>Chilostoma banaticum</i> population size class 7 is given as the current and reference value, that corresponds to 10.000-50.000 individuals.
Population density	Individuals / m ²	To be defined within 2 years	No baseline data are available. Should be completed.
Distribution area / Habitat size	Number of quadrats 5x5 km ha	At least 5 At least 1900 ha	The species was found in 5 out of 28 quadrats investigated during the baseline study. Four of these are located on the northern part of the site and one in southern part, near cabana Moviliș, Poiana Troacei, jud. Argeș. It is found in a relatively broad range of habitats, but prefers humid habitats along valleys with tree cover. Its habitat size is estimated to 1900 ha, especially riparian habitats up to 850 altitude. This is considered also the reference value for favorable conservation status by the baseline study.
Deadwood volume along streams	m ³ / 100 m habitat length	At least 1	Deadwood is important for the species. Pe sub pietre, printre lemne putrede, bușteni, pe stânci, pe plante, în frunzar pe sol, în păduri, tufărișuri, formațiuni vegetale dintre cele mai diverse, inclusiv parcuri și grădini, la marginea drumurilor, în locuri umbrite și umede, deseori în apropierea apelor, de la munte și până la șes, de-a lungul văilor, respectiv a apelor curgătoare, preferând altitudini medii.
Length of woody riparian vegetation	km	At least 190	Shade and humidity is important for the species.

1060 *Lycaena dispar*

Its conservation status is assessed as **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals / population size class	5.000- 10.000 / class 6	Baseline study provides size classes for invertebrates. For <i>Lycaena dispar</i> population size class 6 is given as the current and reference value, that corresponds to 5.000-10.000 individuals.
Population density	Number of individuals / 50 m transects	To be defined within 1 year	No baseline data are available. Should be completed within 1 year.
Habitat size	ha	At least 18.500	The species is estimated to have a distribution between 15.000-22.000 ha, it partially overlaps with the distribution of habitat 6520 Mountain hay meadows, and this is also considered to be the reference value for favorable conservation status by the baseline study. Target value for this parameter is set to 18.500 ha.
Vegetation height on meadows with <i>Rumex spp.</i> in May-August	cm	At least 40	Favorable habitats for the species are wet, marshy hay meadows, floodplains, river and lakeshores. The food plant of <i>Lycaena dispar</i> is <i>Rumex</i> species, especially <i>R. hydrolapathum</i> and <i>R. aquaticus</i> . Grass height is an indicator of herbaceous vegetation integrity as one of the main threats to the species is intensive grazing.
Cover of shrub and tree vegetation	%/ha	Less than 20%	The species needs open grassland. Abandonment and shrub encroachment are a threat to the habitats of the species.

1065 *Euphydryas aurinia*

Its conservation status is assessed as **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals / population size class	1.000- 5.000 / class 5	Baseline study provides size classes for invertebrates. For <i>Euphydryas aurinia</i> population size class 5 is given as the current and reference value, that corresponds to 1.000-5.000 individuals.
Population density	Number of individuals / 50 m transects	To be defined within 1 year	No baseline data are available. Should be completed within 1 year.
Habitat size	ha	At least 1.500	The species was found in one location during the baseline study, Șinca Nouă - Valea Strâmbă, the current distribution is estimated to 500-1.000 ha, and the reference value for favorable conservation status to 1.000-2.000 ha.
Vegetation height on wet meadows with <i>Succisa pratensis</i> in June-September	cm	At least 40	The main food plant of this species is <i>Succisa pratensis</i> . Grass height is an indicator of herbaceous vegetation integrity as one of the main threats to the species is intensive grazing. Other important herbs for the species are <i>Plantago</i> , <i>Digitalis</i> , <i>Centaurea</i> , <i>Gentiana</i> , <i>Geranium spp.</i> Main foodplant blooms in September, land use practices should allow this.
Cover of shrub and tree vegetation	% / ha	Less than 20%	Abandonment and shrub encroachment are a threat to the habitats of the species.

1078* *Callimorpha quadripunctaria*

Its conservation status is assessed as **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals / population size class	100.000 - 500.000 / class 9	Baseline study provides size classes for invertebrates. For <i>Callimorpha quadripunctaria</i> , population size class 9 is given in the baseline study as the current value, that corresponds to 100.000 - 500.000 individuals. Reference value for favorable status is 100.000 - 500.000 individuals, population size class 9. Target is to maintain this population size.
Population density	Number of individuals / 50 m transects	To be defined within 1 year	No baseline data are available. Should be completed within 1 year.
Habitat size	ha	At least 19.862	Habitat surface area is not specified in the baseline study. Baseline study considers that it is equal to the sum of grassland habitats with tall grass in the site under 1000 m altitude, and current habitat size is equal to potential habitat size (reference value). În perioada de zbor a speciei a fost identificată în văile umede și parțial înșorite, cu vegetație ierbioasă bogată, din care nu lipsește <i>Eupatorium cannabinum</i> . Specia apare doar la altitudini sub 1000 m.
Length of natural riparian vegetation in the known localities with the main host plant of the species <i>Eupatorium cannabinum</i> as well as habitats with <i>Plantago sp.</i> , <i>Trifolium sp.</i> , <i>Urtica sp.</i> , <i>Mentha sp.</i> , <i>Sambucus ebulus</i> ,	km	At least 300	To be defined within 1 year.
Width of natural riparian vegetation in the known localities with the main host plant of the species <i>Eupatorium cannabinum</i> as well as habitats with <i>Plantago sp.</i> , <i>Trifolium sp.</i> , <i>Urtica sp.</i> , <i>Mentha sp.</i> , <i>Sambucus ebulus</i>	m	At least 3 m on both sides of streams and rivers	Riparian vegetation is very important for the species. Larvae are polyphagous and develop from September to May on species belonging to the genera <i>Urtica</i> , <i>Rubus</i> , <i>Taraxacum</i> , <i>Lamium</i> , <i>Glechoma</i> , <i>Senecio</i> , <i>Plantago</i> , <i>Borago</i> , <i>Lactuca</i> and <i>Eupatorium</i> .
Presence of food plant species	Number of species / 25 m ²	At least 3	Species of the genera <i>Eupatorium</i> , <i>Urtica</i> , <i>Mentha</i> , <i>Sambucus</i> , <i>Rubus</i> , <i>Taraxacum</i> , <i>Lamium</i> , <i>Glechoma</i> , <i>Senecio</i> , <i>Plantago</i> , <i>Borago</i> , <i>Lactuca</i> .

1083 *Lucanus cervus*

Its conservation status is assessed as **unfavorable-inadequate**. The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals / population size class	10.000 - 50.000 / class 7	Baseline study provides size classes for invertebrates. For <i>Lucanus cervus</i> size class 6 is given in the baseline study as the current value, that corresponds to 5.000 - 10.000 individuals. Reference value for favorable status is 10.000 - 50.000 individuals, population size class 7. Target is to increase population size from class 5 to class 6 on the long term.
Population density	Number of individuals / 500 m transects	To be defined within 1 year	No baseline data are available. Should be completed within 1 year. Transect length according to Campanaro et al (2016).
Habitat size	ha	At least 47.670 to be achieved gradually	Habitat is old oak, beech and hornbeam stands where deadwood is abundant, especially towards the lower altitude areas / edges of the site Valea Strâmbei, Transfăgărășan, Sebeșul de Sus and Valea Boia Mare. Current extent of the species habitat is estimated to 9.534 ha oak forest older than 100 years. Reference value according to baseline study is 47.670 ha
Amount of standing deadwood in deciduous and mixed forests	Number/ha	At least 3	In deciduous and mixed forests 3-5 standing deadwood will be left, according to management plan. În arboretele de foioase și de amestec se vor menține 3-5 escari /ha.
Deadwood (whole trunks) on the ground in deciduous and mixed forests	Number/ha	At least 3	In deciduous and mixed forests 3-5 pieces of deadwood (whole trunks) will be left, according to management plan. În arboretele de foioase și de amestec se vor menține 3-5 arbori doborâți și aflați în contact cu solul la ha.
At final cut in deciduous or mixed forests, number of 5-7 mature/old trees over 80 y old left standing Insule de îmbătrânire	Number/ha	At least 5	At the final cuts in the habitats of deciduous and mixed forests will 5-7 mature trees, with a minimum age of 80 years / ha will be left, according to management plan.
Veteran deciduous trees within and outside forest stands within the potential distribution of <i>Lucanus cervus</i>	Total number of veteran trees	To be defined within 1 year	Veteran deciduous trees especially oak <i>Quercus sp.</i> are crucial habitat for <i>Lucanus cervus</i> . Their number is not currently known. A complete mapping of such trees should be done in the near future. See map of potential distribution of the species in Management plan. The term veteran tree refers to particularly old trees both within and outside forest stands (i.e. both in forests and on grasslands). They are typical features of wood pastures. While old trees refer to the oldest generation of trees in a forest stand that is rarely older than 150 years, veteran trees are particularly old individuals, often older than 150 years that play key role in the ecosystem and particularly deadwood-related beetle species.

1087* *Rosalia alpina*

Its conservation status is assessed as **unfavorable-inadequate**. The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals / population size class	5.000 - 10.000 / class 6	Baseline study provides size classes for invertebrates. For <i>Rosalia alpina</i> size class 5 is given in the baseline study as the current value, that corresponds to 1.000 - 5.000 individuals. Reference value for favorable status is 5.000 - 10.000 individuals, population size class 6. Target is to increase population size from class 5 to class 6 on the long term.
Population density	Number of individuals / 500 m transects	To be defined within 1 year	No baseline data are available. Should be completed within 1 year. Transect length according to Campanaro et al (2016).
Habitat size	ha	Around 47.570 To be achieved gradually	Old beech and mixed stands with low canopy cover with abundant deadwood, including live trees that have dry parts, and trunks on the ground with proper microclimate exposure to sunlight, clearings and forest edge. Current habitats size is estimated to 9.514 ha in the baseline study. The maximum extent of potential habitat for <i>Rosalia alpina</i> is estimated to 47.570 ha.
Amount of standing deadwood in deciduous and mixed forests	Number/ha	At least 3	In deciduous and mixed forests 3-5 standing deadwood will be left, according to management plan. În arboretele de foioase și de amestec se vor menține 3-5 escari /ha.
Deadwood (whole trunks) on the ground in deciduous and mixed forests	Number/ha	At least 3	In deciduous and mixed forests 3-5 pieces of deadwood (whole trunks) will be left, according to management plan. În arboretele de foioase și de amestec se vor menține 3-5 arbori doborâți și aflați în contact cu solul la ha.
At final cut in deciduous or mixed forests, number of 5-7 mature/old trees over 80 y old left standing Insule de îmbătrânire	Number/ha	At least 5	At the final cuts in the habitats of deciduous and mixed forests will 5-7 mature trees, with a minimum age of 80 years / ha will be left, according to management plan.
Veteran deciduous trees within and outside forest stands within the potential distribution of <i>Rosalia alpina</i>	Total number of veteran trees	To be defined within 1 year	Veteran deciduous trees especially beech <i>Fagus sp.</i> are crucial habitat for <i>Rosalia alpina</i> . Their number is not currently known. A complete mapping of such trees should be done in the near future. See map of potential distribution of the species in Management plan. The term veteran tree refers to particularly old trees both within and outside forest stands (i.e. both in forests and on grasslands). They are typical features of wood pastures. While old trees refer to the oldest generation of trees in a forest stand that is rarely older than 150 years, veteran trees are particularly old individuals often older than 150 years that play key role in the ecosystem and particularly deadwood related beetle species.

1089 *Morimus funereus*

Its conservation status is assessed as **unfavorable-inadequate** (population unfavorable-inadequate, habitat unfavorable-inadequate, perspectives favorable). The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals / population size class	10.000 -50.000 / class 7	Baseline study provides size classes for invertebrates. For <i>Morimus funereus</i> size class 6 is given in the baseline study as the current value, that corresponds to 5.000-10.000 individuals. Reference value for favorable status is 10.000-50.000 individuals, population size class 7. Target is to increase population size class from 6 to 7 on the long term.
Population density	Number of individuals / 500 m transects	To be defined within 1 year	No baseline data are available. Should be completed within 1 year. Transect length according to Campanaro et al (2016).
Habitat size	ha	Around 68.800 To be achieved gradually	The species habitat overlaps partially with deciduous and mixed forests composed of beech, oak and silver fir <i>Abies alba</i> . Current distribution is estimated to 13.765 ha. Potential habitat and reference value for the species is estimated to 68.823 ha according to baseline study.
Amount of standing deadwood in deciduous and mixed forests	Number/ha	At least 3	In deciduous and mixed forests 3-5 standing deadwood will be left, according to management plan. În arboretele de foioase și de amestec se vor menține 3-5 escari /ha.
Deadwood (whole trunks) on the ground in deciduous and mixed forests	Number/ha	At least 3	In deciduous and mixed forests 3-5 pieces of deadwood (whole trunks) will be left, according to management plan. În arboretele de foioase și de amestec se vor menține 3-5 arbori doborâți și aflați în contact cu solul la ha.
At final cut in deciduous or mixed forests, number of 5-7 mature/old trees over 80 y old left standing Insule de îmbătrânire	Number/ha	At least 5	At the final cuts in the habitats of deciduous and mixed forests will 5-7 mature trees, with a minimum age of 80 years / ha will be left, according to management plan.
Veteran deciduous trees within and outside forest stands within the potential distribution of <i>Morimus funereus</i>	Total number of veteran trees	To be defined within 1 year	Veteran deciduous trees especially oak <i>Quercus sp.</i> are crucial habitat for <i>Morimus funereus</i> . Their number is not currently known. A complete mapping of such trees should be done in the near future. See map of potential distribution of the species in Management plan. The term veteran tree refers to particularly old trees both within and outside forest stands (i.e. both in forests and on grasslands). They are typical features of wood pastures. While old trees refer to the oldest generation of trees in a forest stand that is rarely older than 150 years, veteran trees are particularly old individuals often older than 150 years that play key role in the ecosystem and particularly deadwood related beetle species.

4054 *Pholidoptera transsylvanica*

Its conservation status is assessed as **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals / population size class	100.000-500.000 / class 9	Baseline study provides size classes for invertebrates. For <i>Pholidoptera transsylvanica</i> size class 9 is given as the current and reference value, that corresponds to 100.000-500.000 individuals.
Population density	Number of individuals / 50 m transects	To be defined within 1 year	No baseline data are available. Should be completed within 1 year.
Habitat size	ha	19.862	The habitat of the species in the site is mosaics of mesophilous grassland (including habitat 6520 Mountain hay meadows) with shrub, forest edges, clearings, mostly in the altitude zone between 1200 - 2000 m, avoiding compact forests. Full altitudinal range recorded in the baseline study is 780 - 1968 m.
Herbaceous vegetation height in July-August	cm	At least 40	The species prefers tall herbaceous vegetation rich in dicots. Intensive grazing/overgrazing reduces vegetation height.
Cover of shrub and tree vegetation	%/ha	Less than 30%	Abandonment and shrub encroachment are a threat to the habitats of the species.

1084 *Osmoderma eremita*

The species was not found in the site. Because of the unlikely occurrence of the species in the site, its conservation status was not assessed. Data from the literature on this species date back to 1887 and 1912 but it is likely that they refer to the low altitude surroundings of Făgăraș town (north of the site in ROSCI0132, ROSPA0099) and not to Făgăraș mountains, according to the baseline study.

Conform literaturii de specialitate, specia se întâlnește în pădurile de foioase din etajul stepelor colinare până în etajul fagului. Este cunoscută din pădurile de cvercinee și mixte din lungul luncii inundabile a Dunării și din pădurile mixte de fag și carpen din zonele joase ale Munților Carpați. Cu precădere în arbori bătrâni scorburoși din marginea pădurii poieni și în arbori izoți din pășuni cu expunere solară, preferând un microclimat cald.

1037 *Ophiogomphus cecilia*

A single citation from the literature is available on this species from 1964, near Lake Bălea at 1900 m altitude. The species was not found during the baseline surveys and its conservation status was not evaluated. Effort should be increased to clarify the presence and conservation status of the species in ROSCI0122 within 2 years.

4012 *Carabus hampei*

The species was found during the baseline surveys on one location, 2 individuals at the edge of an old beech stand in Valea Sebeș, 760 m altitude. Baseline study concluded that the population of the species is insignificant compared to the national population. Its conservation status was not evaluated. Effort should be increased to confirm the presence of the species in the site, and to assess its conservation status within 3 years.

În urma analizei materialului colectat din capcanele Barber au fost identificate 2 exemplare de Carabus hampei la bateria de capcane Barber nr. 6, amplasată pe Valea Sebeș, în marginea unor arborete bătrâne de fag, la aproximativ 760 m altitudine. Distribuția speciei este prezentată în Anexa nr. 18.12 a Planului de management. Din analiza literaturii de specialitate nu au fost întâlnite semnalări certe ale prezenței acestei specii strict în limitele Munților Făgăraș.

1927 *Stephanopachys substriatus*

The species is listed in the current and previous version of the standard data form of the site, and it is discussed in the baseline study for the management plan. It was not found during the surveys but baseline study concludes that proper habitats for this species exist in the site and its presence cannot be excluded. Its conservation status is assessed as **unfavorable-inadequate** (from the point of view of the population and habitat unfavorable-inadequate, perspectives favorable). The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals / population size class	10.000- 50.000 / class 7	Baseline study provides size classes for invertebrates. For <i>Stephanopachys substriatus</i> size class 7 is given as the reference value, that corresponds to 10.000-50.000 individuals. Current population size is estimated to 1000-5000 individuals, size class 5. The species was not actually found during surveys, the only citation of the species from Făgăraș mountains dates from 1912. Its actual presence and population size should be defined within 3 years.
Habitat size	ha	21.153	Baseline study estimates current habitat size to 4231 ha, this being coniferous forests where windbreaks, Ipsidae attacks and fires happen in the superior mountain level and subalpine level. La nivel general se suprapune arboretelor de rășinoase în care se produc doborâturi, atacuri de ipidae și incendii de pădure situate în zona montană superioară ori zona subalpină.
Deadwood volume	m3/ha	At least 20 Current value should be evaluated in a 3-5 year period and target value reviewed accordingly	Baseline value is not known. It should be evaluated in a pilot study within a year in the site ROSC10304 Hârtibaciu Sud-Vest and ROSC10132 Oltul Mijlociu - Cibin - Hârtibaciu. Depending on funding availability, a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

1138 *Barbus meridionalis*

This species was found on the downstreams sections within and outside the limit of the site. Its conservation status is assessed as **unfavorable-bad** by the baseline study on fish species for the management plan. Baseline study also concludes that for the long-term conservation of this and other fish species, the site should be extended to include downstreams sections of the rivers and streams currently included in the site. The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals	To be defined at next evaluation of fish species within 2 years	Baseline study on fish species for the management plan does not provide data on population size but does provide detailed data on habitat, fragmentation elements etc. This and other population parameters have to be defined at the next evaluation of fish species in the site.
Habitat size	ha	At least 206	11 small hydrographic basins and river groups were evaluated where the surface of potential habitat for <i>Barbus meridionalis</i> is estimated to 206,48 ha Current habitat size is estimated to 77,9 ha according to baseline study on fish for the management plan. Habitat size should be increased from current 78 ha to potential 206 ha by improving habitat conditions for the species.
Woody riparian vegetation on each side of the streams	Total length (km) and percent cover of each 100 m section of the potential distribution	200 km At least 50%	Attribute for favorable conservation status of fish species in ROSCI0122 according to baseline study.
Natural riverbed with a complex (natural) structure / Number of meanders	For streams with less than 3 m width: number of meanders / 30 m For streams wider than 3 m: number of meanders / 100 m	At least 1	According to monitoring plan on fish for the management plan
Invasive fish species	Presence / absence	Absent	<i>Carassius gibelio</i> , <i>Lepomis gibbosus</i> , <i>Pseudorasbora parva</i> According to baseline study, currently absent in most streams. <i>Pseudorasbora parva</i> was recorded on Șercăița, <i>Salvelinus fontinalis</i> allochthonous, not invasive species in Sâmbăta, Vistea
Degree of fragmentation	Number of fragmentation elements	1 to be achieved gradually	At least 41 fragmentation elements were mapped in the baseline study on fish for the management plan. These are mostly small dams and other obstructions where it is possible to increase the efficiency of fish steps and creation of bypasses. The only case where such solutions are probably not feasible is Lake Vidraru

			with a 166 m high dam. Fragmentation effect should be reduced to the minimum by fish steps, bypasses etc.
Water transparency	Secchi depth	at least 50 cm	This parameter is an indicator of organic pollution. Currently in ROSCI0122 low level organic pollution was observed on two locations. Reference value of water transparency for favorable condition is 50-100 cm

1163 *Cottus gobio*

Its conservation status is assessed as **unfavorable-bad** by the baseline study on fish species for the management plan. The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	individuals	To be defined at next evaluation of fish species within 2 years	Baseline study on fish species for the management plan does not provide data on population size but does provide detailed data on habitat, fragmentation elements and other parameters.
Habitat size	ha	About 308	21 hydrographic basins and river groups were evaluated in the site where the surface of the potential habitat of <i>Cottus gobio</i> is estimated to 308,29 ha. Current level is estimated to 198,37 ha according to baseline study on fish for the management plan. An increase of the distribution of the species from current 198 ha to potential 308 ha should be achieved by improving habitat parameters.
Woody riparian vegetation on each side of the streams in the distribution area of the species, about 300 km	Total length (km) and percent of each 100 m section of the potential distribution	300 km At least 50%	Attribute for favorable conservation status of fish species in ROSCI0122 according to baseline study.
Natural riverbed with a complex (natural) structure	For streams less than 3 m wide: number of meanders / 30 m For streams wider than 3 m: number of meanders / 100 m	At least 1	According to baseline study on fish for the management plan. Attribute for favorable conservation status of stream fish species.
Invasive fish species	Presence/absence	Absent	<i>Carassius gibelio</i> , <i>Lepomis gibbosus</i> , <i>Pseudorasbora parva</i> According to baseline study, currently absent in most streams. <i>Pseudorasbora parva</i> was recorded on Șercăița, <i>Salvelinus fontinalis</i> allochthonous, not invasive species in Sâmbăta, Vistea
Degree of fragmentation	Number of fragmentation elements	1 to be achieved gradually	At least 41 fragmentation elements were mapped in the baseline study on fish for the management plan. These are mostly small dams and other obstructions where it is possible to increase the efficiency of fish steps and creation of bypasses. The only case where such solutions are probably not feasible is Lake Vidraru with a 166 m high dam. Fragmentation effect should be reduced to the minimum by fish steps, bypasses etc.
Water transparency	Secchi depth	at least 50 cm	This parameter is an indicator of organic pollution. Currently in ROSCI0122 organic pollution is not a significant problem. Reference value for favorable conditions is 50-100 cm

6145 *Gobio uranoscopus*

The species was not found during the baseline surveys for the management plan. It was found close to the site boundary in the downstreams sections of rivers. Baseline study concludes that river sections contained in the site are not suitable for the species, and the site should be extended to include downstreams sections of water courses.

2484 *Eudontomyzon mariae*

The species was not found during the baseline surveys for the management plan. The site is not within the natural distribution area of this species, therefore *Eudontomyzon mariae* should be eliminated from SDF. Related species *Eudontomyzon danfordi* was found on one location.

4123 *Eudontomyzon danfordi*

This species was found on one location at the boundary of the site. It is likely that the extension of the site's boundary to include downstreams sections of rivers would benefit this species as well. It should be further investigated within 2 years, and site-specific conservation objective set for this species according to the results of these investigations.

1193 *Bombina variegata*

The population size of *Bombina variegata* is estimated to about 5.000-10.000 individuals and its distribution area to 1.000-5.000 ha. Its conservation status is **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Habitat surface area	ha	At least 3000	The distribution of the species is estimated to 1000-5000 ha. As a result of the evaluation of amphibian fauna, the species was identified almost throughout the protected natural area, being present in hundreds of aquatic habitats - temporary pools, water ditches, traces of vehicles, marshy areas and lakes.
Population size	Individuals	At least 7500	Population size estimated to 5000-10000 individuals
Breeding habitat density One unit is at least 10 m ² shallow water body (around 40 cm maximum depth) with max. 40% shade surrounded by terrain with natural vegetation, along linear dispersal corridors (unpaved field roads, forestry roads)	Breeding habitats/km valley length	At least 2	No target was set in the management plan. Attributes for favorable conservation status in the nearby Hârțibaciu management plan for the species provide for at least one habitat each 500 m along linear structures (unpaved field roads, forestry roads)
Cover of natural terrestrial habitats (meadows, shrubs and forests) around aquatic (breeding) habitats in a 0.5 km long and 100 m wide strip parallel with linear dispersal structures (unpaved field and forestry roads)	% of land cover	At least 75%	Target set in nearby Hârțibaciu site management plan provides 0.5-1 km wide strip around the breeding habitat. It is considered that a 500 m long and 100 m wide strip around linear structures (unpaved field and forestry roads) is sufficient. No target is set in the current management plan on this attribute. In order to define this parameter and habitat surface area more precisely, breeding habitats together with dispersal corridors (especially unpaved field and forestry roads) should be mapped in the near future.

1166 *Triturus cristatus*

The population size of *Triturus cristatus* is estimated to about 100-500 individuals and its distribution area to 10-50 ha. Its conservation status is **unfavorable-inadequate**. The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Habitat surface area	ha	At least 50	The site's geographic features are not optimal for this species, typical of lower altitudes. The current surface of the habitat of this species is estimated to 10-50 ha. The species was located at the boundary of the site in a single location further inside the area at the edge of Lake Vidraru, south of the town Porumbacu de Sus, Lisa Valley, Berivoi Valley, Strâmba Valley, Doamnei River, on the Argeş Valley, Topologus Valley,Boia Mare Valley.
Population size	Individuals	At least 500	The baseline study assessed population size to between 100-500 individuals.
Breeding habitat density Breeding habitats are permanent or semipermanent small water bodies of at least 10 m ² surface area and maximum depth larger than 50 cm, with max. 40% shade surrounded by terrain with natural vegetation	Breeding habitats/km within the distribution of the species in the site	At least 2/km	According to the baseline study of the management plan of Hartibaciu, shallow water bodies are important as breeding habitats with a depth of at least 50 cm, these should be maintained or created at maximum 500 m distance from each other (the distance represents average dispersal distance of the species). Such habitats are rarer than shallow ponds suitable for <i>Bombina variegata</i> , therefore the target is set lower than for that species. Habitats are situated exclusively on valley bottoms, therefore a linear measure is given.
Cover of natural terrestrial habitats (meadows, shrubs and forests) around aquatic (breeding) habitats in a 0.5 km radius circle	% of land cover	At least 75%	According to the ecology of the species, and based on the final report for the management plan, target is set to maintain a 0.5-1 km wide strip around the breeding habitat. <i>Triturus cristatus</i> is less dependent on linear dispersal corridors than <i>Bombina variegata</i> , it needs natural vegetation in the surroundings of the breeding habitat.

2001 *Triturus montandoni*

The population size of *Triturus montandoni* is estimated to about 100-500 individuals and its distribution area to 100-500 ha. Its conservation status is **unfavorable-inadequate**. The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Habitat surface area	ha	At least 500	The species was located in the south of the protected natural area, in the lezer Păpușa massif, on the Cuca Valley and the Dâmbovița Valley, but also in the vicinity of Iezer Lake. The habitat size of the species is estimated to 100-500 ha. ROSCI0122 represents the southwestern distribution limit of this species.
Population size	Individuals	At least 500	Population size is estimated to 100-500 individuals.
Suitable breeding habitats	Number of breeding habitats	At least 50	Currently known number of habitats for <i>Triturus montandoni</i> is 6.
Cover of natural terrestrial habitats (meadows, shrub and forests) around aquatic (breeding) habitats in a 0.5 km radius circle	% of land cover	At least 75%	According to the ecology of the species, and based on the final report for the management plan, target is set to maintain a 0.5-1 km wide strip around the breeding habitat. <i>Triturus montandoni</i> is less dependent on linear dispersal corridors than <i>Bombina variegata</i> , it needs natural vegetation in the surroundings of the breeding habitat.

4008 *Triturus vulgaris ampelensis*

The population size of *Triturus vulgaris ampelensis* and its conservation status is **unknown**. The site-specific conservation objective for this species is set to **maintain or improve its conservation status**, depending on the results of ongoing investigations to clarify population size and conservation status within 2 years, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Habitat surface area	ha	To be defined within 2 years	The species was not included in the first version of the standar data form of the site, and it was recorded during the baseline surveys for the management plan. It co-occurrence rate with <i>Bombina variegata</i> is 10% but no further data are available on this species.
Population size	Individuals	To be defined within 2 years	Population size is not known, Should be eaitimated within 2 years.
Breeding habitat density One unit is at least 10 m2 shallow water body (around 40 cm maximum depth) with max. 40% shade surrounded by terrain with natural vegetation, along linear dispersal corridors (unpaved field roads, forestry roads)	Breeding habitats/km valley length	At least 2	No target was set in the management plan. Attributes for favorable conservation status in the nearby Hârtibaciu management plan for the species provide for at least one habitat each 500 m along linear structures (unpaved field roads, forestry roads)
Cover of natural terrestrial habitats (meadows, shrubs and forests) around aquatic (breeding) habitats in a 0.5 km long and 100 m wide strip parallel with linear dispersal structures (unpaved field and forestry roads)	% of land cover	At least 75%	Target set in nearby Hârtibaciu site management plan provides 0.5-1 km wide strip around the breeding habitat. It is considered that a 500 m long and 100 m wide strip around linear structures (unpaved field and forestry roads) is sufficient. No target is set in the current management plan on this attribute. In order to define this parameter and habitat surface area more precisely, breeding habitats together with dispersal corridors (especially unpaved field and forestry roads) should be mapped in the near future.

1303 *Rhinolophus hipposideros*

The population size of *Rhinolophus hipposideros* is estimated to be about 500-800 individuals. Its conservation status is **unfavorable-inadequate**. The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals	At least 650	Population size of the species is estimated to 500-800 individuals.
Roosting, breeding and hibernation habitats	Number of shelters / colonies	At least 6 shelters that act as summer colonies and hibernation habitats for the species	Baseline study provides a detailed list of habitats and colonies. Summer colonies of this species are located mainly in settlements. Hibernation sites are mainly underground shelters. Valea Avrig: former pioneer camp abandoned building: small colony of <i>R. hipposideros</i> . Valea Arpaşului: Arpaşu mine gallery: important mating habitat for 15 bat species, important hibernation habitat for 8 species. Valea Sebeşului: at the head of the valley at 1150 m there is mine gallery with collapsed entrance but accessible for bats. At the lower end of the valley a cellar was identified that hosts a small <i>R. hipposideros</i> colony at the end of summer, autumn and spring. Valea Capra: Lacul Vidraru-Lacul Bâlea, in the area of Piscu Negru there is a mine gallery and caves. This mine hosts summer colonies of <i>R. hipposideros</i> , it is the most important mating site for bats in the site and the most important hibernation habitat of the site south of the main ridge. Valea Buda: at the valey head there is Buda mine at 1444m and a second mine at 1627 m. At the entrance of the former 5 bat species were identified including <i>R. hipposideros</i> . Valea Vâlsanului: mine gallery 3 species of bats including <i>R. hipposideros</i> .
Quantity of deadwood in the areas suitable for the species	m ³ / ha	At least 15 Baseline to be evaluated within 3-5 years and target adjusted accordingly	Current level is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu - Cibin - Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

1303 *Miniopterus schreibersii*

The population size of *Miniopterus schreibersii* was recorded on 4 locations mainly using ultrasound detector, out of which 3 are in Valea Arpaşului and 1 in Valea Avrig. Its conservation status is **unknown**. The site-specific conservation objective for this species is set to **maintain or improve its conservation status**, depending on the results of ongoing investigation to clarify the conservation status of the species within 2 years, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals	To be defined within 2 years	Population size of this species is not known in ROSCI0122.
Roosting, breeding and hibernation habitats	Number of shelters / colonies	At least 1 shelter that act as summer colony for the species	Valea Arpaşului: Arpaşu mine gallery: important mating habitat for 15 bat species, important hibernation habitat for 8 species. A total of 11 <i>Miniopterus schreibersii</i> were captured here using mist nets, and 30% of encounters when using ultrasound detector belonged to this species
Quantity of deadwood in the areas suitable for the species	m ³ / ha	At least 15 Baseline to be evaluated within 3-5 years and target adjusted accordingly	Current level is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu - Cibin - Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

1304 *Rhinolophus ferrumequinum*

The species was detected only on one location in the site. Its conservation status is **unknown**. The site-specific conservation objective for this species is set to **maintain or improve its conservation status**, depending on the results of ongoing investigations to clarify the conservation status of the species within 2 years, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals	To be defined within 2 years	Population size of the species is not known.
Roosting, breeding and hibernation habitats	Number of shelters / colonies	At least 2 mine galleries that act as summer colonies and hibernation habitats for the species	The species was detected on one transect in Valea Arpaşului using ultrasound detector. Important shelters for the species are Mine gallery in Valea Arpaşului 1 individual captured by mistnet, but at this location 13.5% of the ultrasound contacts were with this species. Hibernation shelters: Piscul Negru, Valea Capra mine gallery 30 and 31 individuals in two seasons 2014,2015 Arpaşu mine in Valea Arpaşu: 2 and 3 individuals in two seasons.
Quantity of deadwood in the areas suitable for the species	m ³ /ha	At least 15 Baseline to be evaluated within 3-5 years and target adjusted accordingly	Current level is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu - Cibin - Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

1324 *Myotis myotis* and 1307 *Myotis blythii*

These two species usually form mixed colonies and it is practically impossible to separate them in these colonies and to estimate them separately. Breeding colonies made sometimes of thousands of specimens are found in church towers, wide attics or in caves. Hibernation habitats are underground shelters, caves, mines, cellars, fissures in rocks. The population size of the two species is estimated to be about 2000-3000 individuals. Its conservation status is **unfavorable-inadequate**. The site-specific conservation objective for this species is set to **improve its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals	At least 2500	Population size of this species is estimated to 2000-3000 individuals.
Roosting, breeding and hibernation habitats	Number of shelters / colonies	At least 12 hibernation habitats At least 4 summer colonies At least 9 abandoned mine galleries used by the species	Baseline study identified 12 hibernation habitats Summer colonies: 4 locations Valea Sebeşului-Măliniș, Baza militară Mârşa, Valea Avrig spre Poiana Neamţului, Valea Topologului. Summer colonies of this species are located mainly in nearby settlements. Hibernation sites are mainly underground shelters. Valea Porumbacului: attic of kindergarten in Porumbacu de Jos host a <i>Myotis myotis</i> colony that likely use this valley. Valea Arpaşului: Arpaşu mine gallery: important mating habitat for 15 bat species, important hibernation habitat for 8 species. Valea Boia Mare, Boia Mică: at 5 km distance from the entrance to the valley in Balota village church attic there is a colony of about 2000 <i>Myotis myotis</i> / <i>Myotis blythii</i> , part of that probably feed in Boia Mare valley.
Length of linear vegetation connecting forests to feeding areas / km ²	m / km ²	At least 500 m	The species needs linear vegetation structures trees, hedges, which offers connection for the flight to the feeding areas and shelters.
Quantity of deadwood standing and on the ground	m ³ / ha	At least 15 Baseline to be evaluated within 3-5 years and target adjusted accordingly	Current level is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu - Cibin - Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

1323 *Myotis bechsteinii*

The species was recorded on 51 locations in the site, from most of the studied valleys. Its conservation status is **unknown**. The site-specific conservation objective for *Myotis bechsteinii* is set to **maintain or improve its conservation status**, depending on the results of ongoing investigations to clarify its conservation status, as defined by the following parameters and target values:

Parameters	Measure	Target value	Additional information
Population size	Number of individuals	To be defined within 2 years	Initial estimations of the population size of this species should be improved within 2 years.
Distribution in the site	number of valleys number of colonies	At least 17 At least 1 To be better defined within 2 years	The species was recorded on 51 locations, in 17 valleys: Valea Capra, Valea Bâlea, Valea Vâlsanului, Valea Dâmbovița, Valea Arpașului, Valea Rea, Valea Cernat, Valea cu Pești, Valea Pojorta, Valea Dejani, Valea Sîmbăta, Valea Porumbacului, Valea Srâmba, Valea Avrig, Valea Boia Mare and Boia Mică, Valea Rudărița. It is one of the most widespread, typical bat species of the site. A hibernation shelter was identified at the research gallery in Cheile Vâlsanului and at Arpașu Mine.
Quantity of deadwood standing and on the ground	m ³ / ha	At least 15 Baseline to be evaluated within 3-5 years and target adjusted accordingly	Current level is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu - Cibin - Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

1321 *Myotis emarginatus*

The species was recorded on three locations in the site. Its conservation status is **unknown**. The site-specific conservation objective for *Myotis emarginatus* is set to **maintain or improve its conservation status**, depending on the results of ongoing investigations to clarify its conservation status, as defined by the following parameters and target values:

Parameters	Measure	Target value	Additional information
Population size	Number of individuals	To be defined within 2 years	Initial estimations of the population size of this species should be improved within 2 years.
Distribution in the site	Number of valleys Number of colonies	At least 3 At least 1 To be better defined within 2 years	The species was recorded on 3 locations, it is one of the rarest bat species in the site: Valea Capra: in the area of Piscul Negru at the mine gallery and caves of Piscul Negru. This mine gallery hosts summer colonies of <i>Rhinolophus hipposideros</i> and <i>Myotis emarginatus</i> , it is the most important breeding shelter in the site and the most important hibernation shelter south of the main ridge for bats. Valea Vâlsanului: 1 individual recorded by ultrasound detector. Valea Arpaşului: no details available regarding the number of individuals, only presence is listed in baseline study.
Quantity of deadwood standing and on the ground	m ³ / ha	At least 15 Baseline to be evaluated within 3-5 years and target adjusted accordingly	Current level is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu - Cibin - Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

1308 *Barbastella barbastellus*

The species was recorded on 23 locations in the site. Its conservation status is **unknown**. The site-specific conservation objective for *Barbastella barbastellus* is set to **maintain or improve its conservation status**, depending on the results of ongoing investigations to clarify its conservation status, as defined by the following parameters and target values:

Parameters	Measure	Target value	Additional information
Population size	Number of individuals	To be defined within 2 years	Initial estimations of the population size of this species should be improved within 2 years.
Distribution in the site	number of valleys number of colonies	At least 17 At least 1 To be better defined within 2 years	The species was recorded on 23 locations, in 17 valleys: Valea Buda, Valea Bâlea, Valea Vâlsanului, Valea Dâmbovița, Valea Arpașului, Valea Râul Doamnei, Valea Rea, Valea cu Pești, Valea Pojorta, Valea Dejani, Valea Porumbacului, Valea Satului, Valea Boia Mare and Boia Mică, Valea Topolog. It is one of the typical bat species of the site. A hibernation shelter was identified at the research gallery in Cheile Vâlsanului and at Arpașu Mine.
Quantity of deadwood standing and on the ground	m ³ / ha	At least 15 Baseline to be evaluated within 3-5 years and target adjusted accordingly	Current level is not known and should be evaluated in a pilot study within a year in the site ROSCI0304 Hârtibaciu Sud-Vest and ROSCI0132 Oltul Mijlociu - Cibin - Hârtibaciu. Depending on funding availability a comprehensive evaluation of deadwood at the national level would be planned in 3-5 years.

1352* *Canis lupus*

The population size of *Canis lupus* is estimated to about 121-161 individuals and its distribution area to 145.560 ha. Its conservation status is **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals	At least 142	The baseline study estimated wolf population size to 121-161 individuals. Highest wolf densities were recorded on the northern part of the site, especially Arpaș, Arpășel, Seaca, in the western part of the site especially Dâmbovița, Strâmba and Sebeș valleys. The baseline study takes the population size 121 as the reference value for favorable conservation status. Until more precise data will be available, target value is set to the average of the estimated range.
Habitat surface area	ha	About 145.560	The baseline study estimated the habitat size of this species to 145.560 ha that is equal to its potential habitat, reference value for favorable conservation status.
Prey population density	Individuals / km ²	about 3 deer/km ² Or 4-5 wild boar/km ² Or 7-10 roedeer/km ²	This attribute is used in Hârțibaciu management plan for large carnivores.

1354* *Ursus arctos*

The bear population size is estimated to between 417-527 individuals and its distribution area to 167.000 ha. Its conservation status is **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals	At least 472	The bear population size is estimated to 417-527 individuals. According to the baseline study, the reference value for favorable conservation status from the population point of view is 417. Because of the relatively wide range of the current estimation, target value is set to the average of the estimated range until more precise data will be available.
Habitat surface area	ha	About 167.000	The baseline study estimated the habitat size of this species to 167.000 ha that is equal to its potential habitat, reference value for favorable conservation status from the point of view of its habitat.
Prey population density	Individuals / km ²	about 3 deer/km ² Or 4-5 wild boar/km ² Or 7-10 roedeer/km ²	This attribute is used in Hârtibaciu management plan for large carnivores.

1361 *Lynx lynx*

The population size of *Lynx lynx* is estimated to about 61-107 individuals and its distribution area to 145.560 ha. Its conservation status is **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	Individuals	At least 84	Lynx population size in the site was estimated to between 61-107 individuals. Baseline study considers the population size 61 as the reference for favorable conservation status. Because of the relatively wide range of the current estimation, target value is set to the average of the estimated range until more precise data will be available.
Habitat surface area	ha	About 145.560	According to the baseline study, higher lynx densities were found in the northern and especially the northeastern part of the site (Valea Breaza, Dejani, Sebeș, Strâmba, Bârsa and Dâmbovița-Pecineagu. Lower densities of Lynx were recorded in the southern parts of the site, especially in the Topolog and Argeș river basins upstreams of Lake Vidraru.
Prey population density	Individuals / km ²	about 3 deer/km ² Or 4-5 wild boar/km ² Or 7-10 roedeer/km ²	This attribute is used in nearby Hârțibaciu management plan for large carnivores.

1355 *Lutra lutra*

The population size of *Lutra lutra* is estimated to about 104 families and its distribution area to 1040 ha. It has a wide distribution along the river network in ROSCI0122. Its conservation status is **favorable**. The site-specific conservation objective for this species is set to **maintain its conservation status**, as defined by the following parameters and target values:

Parameter	Unit of measurement	Target value	Additional information
Population size	families	At least 104	According to the baseline study on mammals for the management plan the otter population size was estimated to between 312-520 individuals that corresponds to 104 families. The reference value for favorable conservation status taken by the baseline study is 312 individuals. Highest otter densities were found in the northern central part of the site, Porumbacu, Arpaş, Viştea, Dejani, Sebeş valleys, in the northeastern part of the site Pecineagu and southeastern part of the site Doamnei valley.
Length of river sections suitable for the species	km	About 800	According to the baseline study, the main river network (order 1 to 4 watercourses according to Romanian hydrographic classification) and shoreline of dam lakes is the reference value for the distribution otter in the site.
Surface area of standing water bodies	ha	1.040	Baseline study considers the surface of standing water bodies as a reference value for otter habitat size.
Degree of fragmentation of streams for fish (main food for otter)	Number of fragmentation elements	1 to be achieved gradually	At least 41 fragmentation elements were mapped in the baseline study on fish for the management plan. These are mostly small dams and other obstructions where it is possible to increase the efficiency of fish steps and creation of bypasses. The only case where such solutions are probably not feasible is Lake Vidraru with a 166 m high dam. Fragmentation effect should be reduced to the minimum by fish steps, bypasses etc.