

# Natural grass seed sowing activity

## Kemeru National Park, September 14, 2021

### INTRO

Currently, semi-natural grasslands (=EU importance grassland habitats) cover only 0.7% of Latvia. Most of them, though still qualify as protected habitats, are in bad or very bad condition. The areas of these valuable habitats are declining, they suffer from fragmentation.

Dundurplavas grassland massif is a typical example of grasslands that were heavily drained and converted into intensively cultivated agricultural lands during the Soviet period. Though the hydrology of the area is restored and the grasslands are used for hay collecting and grazing, the recovery of semi-natural plant species composition is very slow. The main reason is lack of donor area in the surrounding landscape. The seeding event in 2021 continues a tradition of Kemeru NP, started in 2008 with small experimental plots and extended to several hectares in 2020 (the Dundurplavas pasture).

### METHOD

Sowing of semi-natural grassland seed mixtures is a method that is already adopted and tested in several European countries as well as in other continents. In Latvia, the method is still new, not used at broader scale. In fact, it is the re-creation of protected habitats.

### SEED MIXTURE

The seed mixture used in September 2021 contains >50 native grassland plant species characteristic for semi-natural grasslands, some of them mainly found in Western Latvia. The seeds were collected in summer 2021, mostly in meadows and roadsides of Kemeru National Park and Abava Valley (W Latvia). Seeds of species marked with \* are in small quantities. The seed mixture may contain an insignificant proportion (<0.01%) of other species occurring in the seed collecting areas. The material is hand-picked, dried at room temperature and then chopped and sorted to ensure there is no undesirable admixture of invasive or aggressive (expansive) native plant species.

The seed mixture contains only species that are not included in the Latvian protected species lists and all of them occur in semi-natural (spontaneously developed, unsown) grasslands. Some of them are considered indicators of semi-natural grasslands (= protected grassland habitats). However, some of these species are becoming rare, as the cover and quality of semi-natural grassland habitats in Latvia are declining.

### THE GOAL

To improve the species diversity in Dundurplava, to promote regeneration of natural grasslands and to try the method of sowing natural grassland seeds in restoring of habitats in a larger area.

## SEED MIXTURE

<b>Acinos arvensis*</b>	pievinē žvirgzdē	<i>Inula salicina</i>	gluosnialapis debesyla
<b>Agrimonia eupatoria</b>	vaistinė dirvuolē	<i>Knautia arvensis</i>	dirvinē buožainē
<i>Angelica sylvestris*</i>	miškinis skudutis	<b>Leontodon hispidus</b>	vienagraižē snaudalē
<i>Anthyllis vulneraria s.l.</i>	paprastasis perluotis	<i>Listera ovata*</i>	kiaušininē dviguonē
<i>Anthoxanthum odoratum</i>	kvapioji gardūnytē	<i>Lysimachia vulgaris*</i>	paprastoji šilingē
<i>Astragalus danicus*</i>	juodadantē kulkšnē (RK– NT)	<i>Lotus corniculatus</i>	paprastasis garždenis
<b>Briza media</b>	kiškio ašarēlēs	<i>Molinia caerulea*</i>	melsvoji melvenē
<b>Carex flacca</b>	melsvoji viksva	<i>Ononis arvensis</i>	šlaitinis dirvenis
<i>Carex flava*</i>	gelsvoji viksva	<i>Origanum vulgare*</i>	paprastasis raudonēlis
<b>Carex panicea*</b>	viksva trainē	<b>Phleum phleoides</b>	stepinis motiejukas
<i>Carlina vulgaris</i>	paprastoji karlina	<b>Pimpinella saxifraga</b>	mažoji ožiažolē
<i>Carum carvi*</i>	paprastasis kmynas	<b>Primula veris</b>	pavasarinē raktažolē
<i>Centaurea jacea</i>	pakrūminē bajorē	<i>Prunella vulgaris</i>	paprastoji juodgalvē
<i>Centaurea scabiosa</i>	didžiagalvē bajorē	<i>Rhinanthus minor</i>	mažasis barškutis
<i>Cynosurus cristatus</i>	paprastoji kietavarpē	<i>Rhinanthus serotina</i>	didysis barškutis
<i>Daucus carota</i>	paprastoji morka	<b>Scorzonera humilis*</b>	pušyninē gelteklē
<i>Filipendula vulgaris</i>	paprastoji vingiorykštē	<i>Selinum carvifolia</i>	kmynalapis kalnasargis
<b>Galium boreale</b>	šiaurinis lipikas	<i>Senecio jacobaea*</i>	pievinē žilē
<b>Galium verum</b>	tikrasis lipikas	<b>Sesleria caerulea</b>	melsvasis mēlitas (RK – VU)
<i>Geum rivale</i>	raudonoji žiogņagē	<b>Succisa pratensis</b>	pievinē miegalē
<b>Helictotrichon pratensis</b> (syn. <i>Helictochloa pratensis</i> )	pievinē poavižē (RK – VU)	<i>Thalictrum minus*</i>	mažasis vingiris
<i>Helictotrichon pubescens</i>	gauruotoji poavižē	<i>Tragopogon pratensis</i>	pievinis pūtelis
<i>Trifolium campestre</i>		<i>Trifolium dubium*</i>	ganyklinis dobilas
<i>Trifolium montanum</i>		<i>Trifolium pratense*</i>	mažasis dobilas
<i>Trifolium dubium*</i>		<b>Trollius europaeus</b>	kalninis dobilas
<i>Trifolium pratense*</i>		<b>Viscaria vulgaris</b>	raudonasis dobilas
<b>Trollius europaeus</b>			paprastasis burbulis
<b>Viscaria vulgaris</b>			paprastoji smaliukē

\* Species represented by a small quantity in the seed mixtures  
**Bold** – indicators of semi-natural grasslands (= protected grassland habitats)

RK – Lietuvos raudonoji knyga (2021)

VU – vulnerable (one of “threatened” categories), status in the latest LT Red Book

NT – near threatened, status in the latest LT Red Book

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