

Large-scale Grassland Restoration Workshop in Debrecen April 2015

Seed-production of herbal wild plants in Saxony - Anhalt



Lychnis viscaria

Oxytropis pilosa

(*Sonchus* sp.)



Seed production

cultivation of: ca
130 to 180
species per year



Geranium pratense

Euphorbia cyparissias

Silene dioica

part of the fields near
Halle/S.

soil: loess and loamy sand

mean precipitation:
ca 450 mm

mean temperature: ca 10°C



Realisation of alternative revegetation - methods

mulch seeding method:
devonian shalestone; national
garden show BUGA Ronneburg



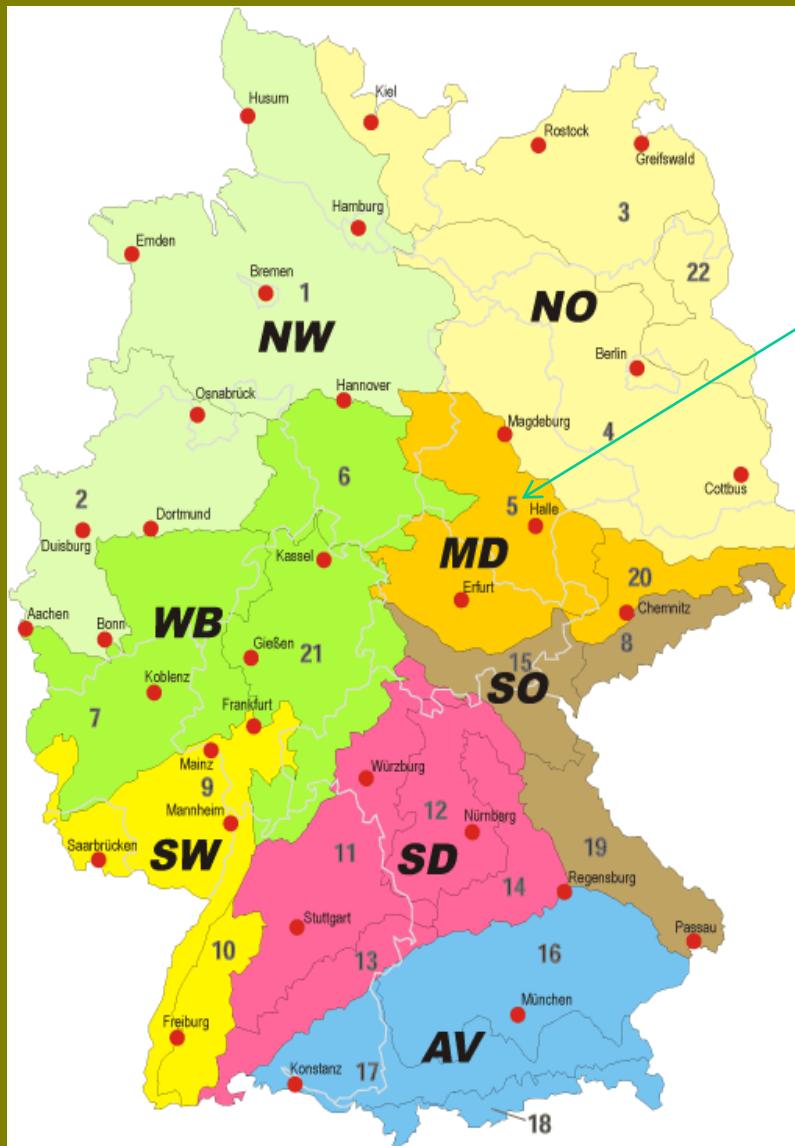
sod-planting: **Calluna vulgaris**;
opencast mine „Goitsche“



on-site threshing:
Arrhenateretum near Halle



Origin of basic seeds and production-areas



Frößnitz



Collection of basic seeds



From wet meadows *Cirsium oleraceum*



... to steppe - plains *Stipa capillata*



Cultivation of young plants



Campanula patula spring 2015
sowing autumn 2014



Lychnis flos-cuculi
sowing august 2014 after 3 month

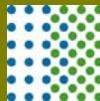


Cultivation of young plants



Ranunculus auricomus sowing autumn 2012, germination autumn 2014

Covering of with expanded clay as evaporation protection



Cultivation systems



Single Plants *Hippocrepis comosa*



Rows *Valeriana off., Ranunculus acris*



Small scale beds



Large scale beds >0,5 ha/species





Harvest

**Hypochoeris
radicata:** with
garden vacuum



...Fragaria with a special comb

**Ripening process: field dried
Verbascum lychnitis**

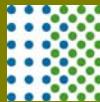
...or slow in the store



Separation and clearing treatment



**Thresher with dust extracting plant and different-mesh screens.
Applied to 90% of our seed production.**



Separation and clearing treatment

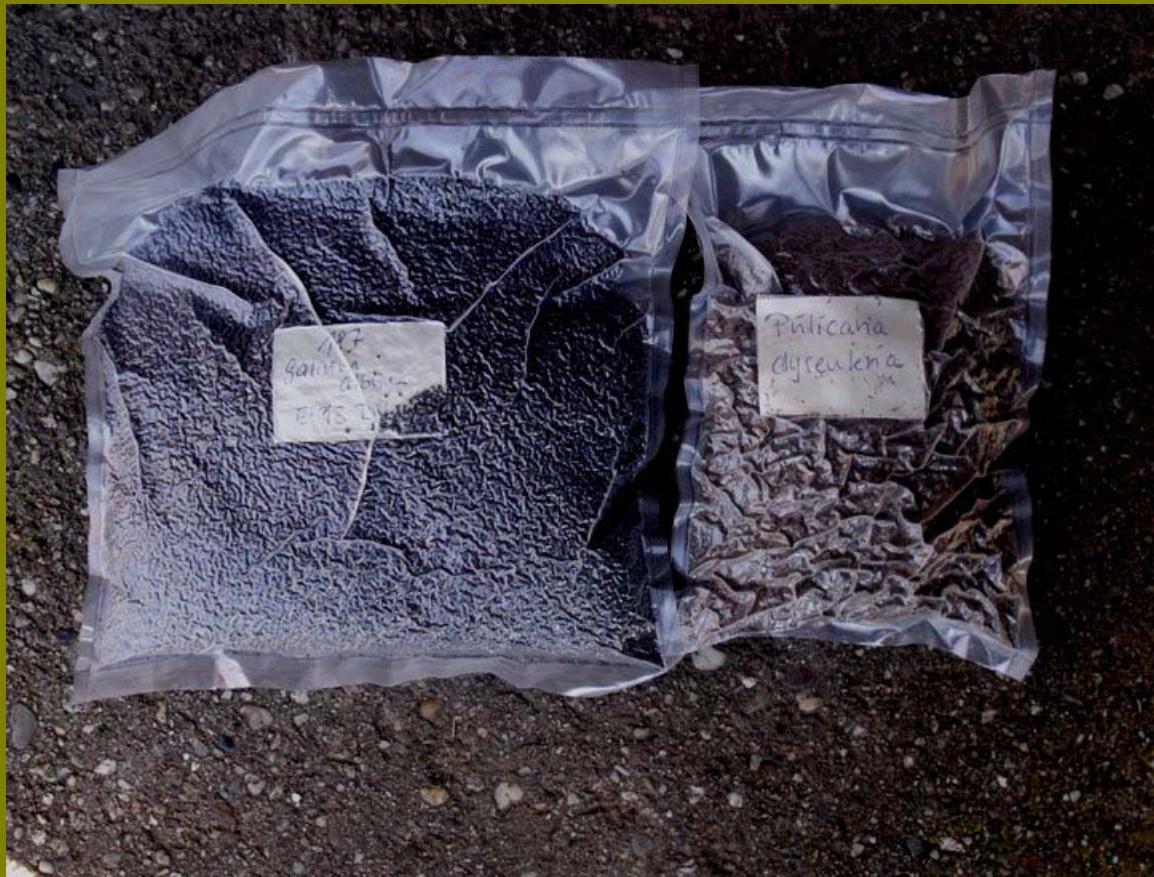


Manual operated sieves and such as used in different machines

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Long-term storage (few years)



Vacuum bag sealed basic seed and small amount rare seeds prepared to store in the refrigerator



The big Five – enemies of the wild seed producer



Liking:

Dianthus sp.,

Tragopogon sp.,

**Ranunculus sp.
(Knospen),**

Filipendula vulg.,

Lythrum salicaria,

**Plantago sp. and many
other species.**



The big Five – enemies of the wild seed producer



Liking:
**different roots
(voles)**
**big sized seeds for
instance *Agrimonia* sp.**
(Harvest mice)



The big Five – enemies of the wild seed producer



Liking:

Almost every new
cropped plants



The big Five – enemies of the wild seed producer



Liking:

***Knautia* sp.**

***Scabiosa* sp.**

***Cirsium* sp.**

***Centaurea* sp.**

***Sanguisorba* off.**

***Tragopogon* sp.,**



The big Five – enemies of the wild seed producer



**Nummerous species
liking:
in the store all big
sized seeds**



Revegetation consulting

Two examples of site-specific seed mixtures

Gattung/Art	TKG	Samen/m ²	g/m ²
Armeria maritima	1,400	100	0,140
Corynephorus canescens	0,100	500	0,050
Dianthus carthusianorum	0,850	50	0,043
Dianthus deltoides	0,190	100	0,019
Deschampsia flexuosa	0,430	200	0,086
Calluna vulgaris	1,600	100	0,160
Festuca brevipila	0,800	500	0,400
Festuca ovina	0,300	500	0,150
Galium verum	0,500	30	0,015
Hieracium pilosella	0,130	200	0,026
Hypochoeris radicata	0,700	30	0,021
Leontodon hispidus	1,400	40	0,056
Jasione montana	0,120	200	0,024
Papaver argemone	0,150	30	0,005
Petrorhagia prolifera	1,300	20	0,026
Potentilla argentea	0,110	30	0,003
Sedum acre	0,040	150	0,006
Sedum rupestre	0,050	100	0,005
Sedum telephium	0,040	100	0,004
Silene otites	0,200	50	0,010
Thymus serpyllum	0,150	200	0,030
Trifolium arvense	0,400	100	0,040
Trifolium campestre	0,500	50	0,025
Veronica officinalis	0,100	100	0,010
Viola tricolor	0,540	30	0,016
Helichrysum arenarium	0,100	300	0,030
Summen:		3810	1,400

Sandy grassland

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Gattung/Art	TKG	Diasporen/m ²	g/m ²
Achillea millefolium	0,200	100	0,02
Agrimonia eupatoria	22,800	3	0,0684
Agrostis gigantea	0,080	300	0,024
Alopecurus pratensis	0,750	200	0,15
Anthoxanthum odoratum	0,700	100	0,07
Arrhenatherum elatius	2,700	100	0,27
Campanula patula	0,020	500	0,01
Dactylis glomerata	1,000	50	0,05
Daucus carota	1,000	40	0,04
Dipsacus fullonum	3,000	5	0,015
Festuca nigrescens	0,800	100	0,08
Festuca pratensis	0,800	50	0,04
Festuca rubra	1,100	50	0,055
Galium album	0,600	30	0,018
Heracleum sphondylium	5,500	50	0,275
Holcus lanatus	0,400	50	0,02
Inula britannica	0,300	200	0,06
Lathyrus pratensis	11,000	5	0,055
Leucanthemum vulgare	0,400	30	0,012
Phleum pratense	0,400	200	0,08
Poa pratensis	1,320	300	0,396
Ranunculus repens	2,000	30	0,06
Rumex acetosa	0,550	20	0,011
Selinum carvifolia	1,000	20	0,02
Silaum silaus	2,500	10	0,025
Silene alba	0,810	10	0,0081
Silene flos-cuculi	0,150	200	0,03
Tragopogon pratensis	7,000	20	0,14
Trifolium pratense	1,800	30	0,054
Summen:		2803	2,1565

Mesic grassland



Revegetation consulting

Drying tolerance dependent on plant – density and substrate
Bromus sterilis after 3 month without water supply



ca 100 plants/m²

ca 300 plants/m²

ca 3000 plants/m²

Substrate:

Sand

Loess



Revegetation consulting

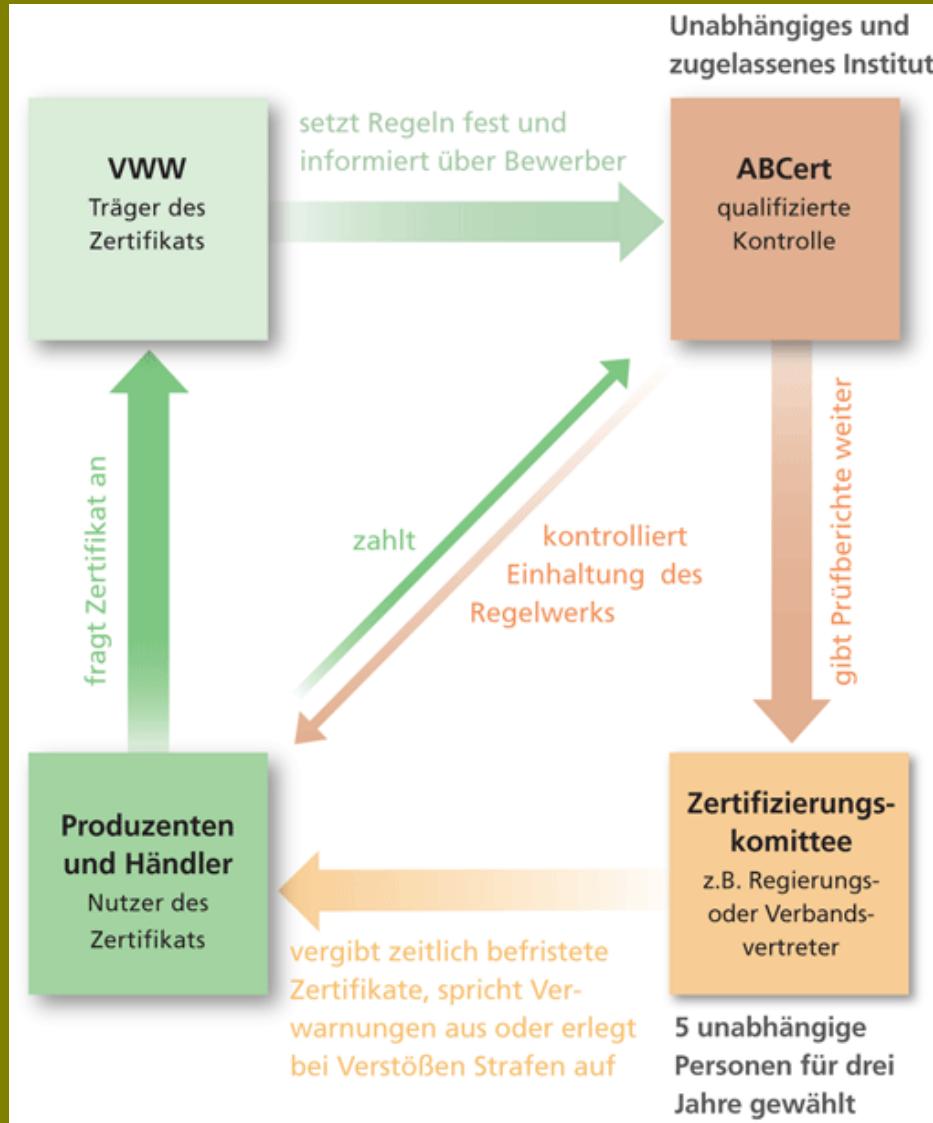


The perfect meadow created by Albrecht Dürer

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Zertifizierte Produktion und Handel



Informationen:
www.natur-im-vww.de

