

Glimpses of a Grassland



An outpost of sandy steppes at the lower Odra The dry grasslands of the “Gabower Hänge”, Brandenburg, Germany

52.824° N, 14.085° E
50 m a.s.l.

In 1993, I did my Diploma thesis on the “Flora and vegetation of dry grasslands and related plant communities in the Biosphere Reserve Schorfheide-Chorin” in NE Brandenburg. I stayed for half a year in a building of the Biosphere Reserve in a settlement of only a handful of houses amidst a big forest. I explored about 100 dry grassland sites in this conservation area of approx. 1250 km² in size just by bicycle. While the main reasons for the proclamation of this Biosphere Reserve had been its extensive forests, lakes and mires with their large avifauna, actually also the dry grass-

lands there are quite diverse, covering wide edaphic gradients from loamy to sandy and from basic to acidic. Among all the studied grassland sites, the “Gabower Hänge” was one of the most fascinating ones for me. In the following years, I regularly organized vegetation ecology field courses in the Biosphere Reserve, and always this site was one of the highlights. During one of the classes conducted in 2015 we resampled some of my more than 20 year old plots. Interestingly, we found hardly any vegetation change; if at all to the better.



Potentillo arenariae-Stipetum capillatae with *Stipa capillata*, *Scabiosa canescens* and *Hieracium umbellatum*.
Photo: J. Dengler.



Students of the University of Bayreuth sampling EDGG Biodiversity Plots in an extensive stand of the *Armerion elongatae*. Photo: J. Dengler.

So, what makes the “Gabower Hänge” so special that I would count it among the ten most important dry grassland sites in Germany? The site is located just 3 km from the Odra river, in one of the driest parts of Germany, with less than 500 mm of annual precipitation. It is an isolated lobe of a terminal moraine of the Weichselian glaciation that falls steeply towards the former flood plain of the Odra river, nowadays intensively used as arable fields. What a contrast the marginal slopes are with their diverse xerothermic vegetation! While most of them are composed of marl, the “Gabower Hänge” is an exception as it is largely composed of sand. Due to the origin of the sand and the subcontinental climate, the sand has largely a high pH, often above 7. Therefore, one can encounter here some of the largest and best developed stands of the alliance *Koelerion glaucae* as well as of the psammophytic subassociation of the *Potentillo arenariae–Stipetum capillatae* (*Festucion valesiacae*) within Germany here. There are also well-developed stands of the *Armerion elongatae* and dry subtypes of the *Arrhenatherion elatioris*, and locally the *Cirsio-Brachypodium* and the *Corynephorion canescentis*. For some rare subcontinental to continental plant species, the “Gabower Hänge” hosts one of largest populations within Germany, e.g. *Silene chlorantha* and *Scabiosa canescens*. Throughout the seasons, the slopes are full of flowers, from various small annu-

al *Veronica* and *Myosotis* species in spring to *Aster linosyris* and *Dianthus carthusianorum* in autumn. In total, at least 333 vascular plant species as well as 42 bryophyte and 40 lichen species are known from the 80 ha large area. The fauna is also diverse: there are many xerothermic orthopteran, the Sand lizard (*Lacerta agilis*) is common, and one might see the Eurasian hoopoe (*Upupa epops*). While the site is still not formally protected as a nature reserve and the grassland management via sheep grazing did not always work out during the last decades, the “Gabower Hänge” has maintained most of its peculiarity and beauty during the 27 years I have known it. It is certainly an insider tip for grassland lovers!

Further reading

- Hüllbusch, E., Brandt, L.M., Ende, P. & Dengler, J. 2016. Little vegetation change during two decades in a dry grassland complex in the Biosphere Reserve Schorfheide-Chorin (NE Germany). *Tuexenia* 36: 395–412.
- Kratzert, G. & Dengler, J. 1999. Die Trockenrasen der „Gabower Hänge“ am Oderbruch. *Verhandlungen des Botanischen Vereins zu Berlin und Brandenburg* 132: 285–329.

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Dianthus carthusianorum.
 Photo: J. Dengler.



Helichrysum arenarium.
 Photo: J. Dengler.



Veronica dillenii. Photo: J. Dengler.