Keep calm and restore

By Julia-Maria Hermann

Dear friends and supporters of SER Europe:

KEEP CALM AND RESTORE

Why this motto? Because climate change is already happening - but not being able to fully prevent it is not a good reason for doing nothing.

Plus: SER Europe's Iceland conference on “Restoration in the Era of Climate Change” is 200 days away!

To get you in the mood, from this newsletter on, we will feature members’ ecological restoration projects that mitigate climate change or help wildlife
and humans adapt to climate change. We start in this issue with a particularly tasty project developed in the German Saale-Unstrut viniculture region – see below.

Case studies with a particular interest in cost-efficiency may also be featured in EUROSITE’s monthly newsletter. As previously announced, SER Europe and EUROSITE have signed a collaboration agreement and will actively collaborate, among others, on public relations and this year’s dry grassland restoration training course in Hungary – more information below.

Members' featured project

LIFE project VinEcoS

By Anita Kirmer and Sabine Tischew

Optimizing Ecosystem Services in Viniculture facing Climate Changes

LIFE15 CCA/DE/000103, duration 7/2016 – 6/2020
Project team: Jörn Freyer, Dr. Cornelia Häfner (Landgesellschaft Sachsen-Anhalt mbH, project leader), Dr. Fritz Schumann, Jens Eckner (state winery Kloster Pforta), Prof. Dr. Sabine Tischew, Dr. Anita Kirmer, M.Sc. Annika Schmidt, M.Sc. Lea Schubert (Anhalt University of Applied Sciences), Christoph Scheibert, Joachim Sommer (JENA-GEOS®-Ingenieurbüro)
Website: www.life-vinecos.eu

Background

With an annual rainfall of 500 mm, the Saale-Unstrut region is one of the driest areas in Germany. During the last decade, the frequency of heavy rainfall alternating with extensive dry periods has increased considerably. Within the course of global warming, a further rise of extreme weather events is expected, leading to higher erosion risks as well as to elevated water stress of vine plants. Within this LIFE project, we aim to develop climate-adapted management measures in vineyards, contributing to the protection and enhancement of biological diversity and increasing important ecosystem
services. Beginning in 2016, demonstration trials have been installed in vineyards of the state winery Kloster Pforta (Saxony-Anhalt/Germany).

**Selected actions and first results**

Focusing on the development of multifunctional seed mixtures containing regional wild plants for erosion protection and biodiversity enhancement, two seed mixtures (48 wild plant species each) were sown on the Köppelberg vineyard (near Bad Kösen) in August 2016. The vegetation should ensure erosion control and allow vehicle crossing for vineyard work. In using local ecotypes of wild plants, an optimal adaptation to regional soil and climate conditions is guaranteed. For comparison to the usual practice, one variant contained a commercial ryegrass-clover-mix. All mixtures were sown in a block design with four replicates in August 2016.

By 2017, overall plant species number on the Köppelberg trial had increased by 60% compared to 2016. On the plot level (8 m²), mean plant species number increased from 8 (commercial) in 2016 to 9 (commercial), 33 (wild plant mix1), and 30 (wild plant mix2) in 2017. Total vegetation cover of wild plant and commercial variants is quite similar but in the latter, cover of non-legume forbs was four times lower. Birds and wild bees showed no differences between the trial and an adjacent control vineyard in the first year, but **butterflies are more abundant** on the trial vineyard (6-8 species) compared to the control vineyard (2 species).

By using **sheep grazing as management tool**, we want to test if grazing can be an alternative management strategy in steep vineyards. Sheep grazing should reduce biomass of inter-rows and vine plants. In November 2016, we sowed a seed mixture containing 48 regional wild plant species in the Saalhauser vineyard (near Bad Kösen). We installed one grazing and one mulching variant in a block design with three replicates. Grazing variants in the vineyard were grazed in two intervals with three ewes and seven lambs of the breed Merinolandschaf: first mid-June to mid-July, second end-July to mid-August. For three days, sheep activities were recorded 1-minute-intervals from sun-rise to sun-set.

Preference for grasses and herbs was a little higher for lambs (80% of grazing time) compared to ewes (70% of grazing time). Ewes were eating vine leaves more often (27%) compared to lambs (19%). At the beginning of August, when grapes are beginning to ripen, the sheep spent about 1-3% of their time eating grapes, but the overall damage was low. In 2018, grazing will start earlier to avoid grape damage completely. **Grazed variants showed higher species number and higher total cover than mulched variants.** Up to now, butterflies and wild bees showed a tendency to be more abundant on grazed sites compared to mulched sites.

**Outlook**

Effects of different methods for re-vegetation and management of inter-rows in vineyards will be compared concerning their impact on biodiversity and selected ecosystem services. In a second step, we will include the expected
climate change in the equation, calculating the advantages of climate-adapted management measures in vineyards with cost-benefit-analyses. The results will be used to develop an Agri-environmental scheme for vineyards.

This project is co-financed by the European Union.

From left to right: Sheep grazing with Meînolandschaf in the Saalhäuser vineyard, and wild plant communities with *Papaver argemone* and *Anthemis tinctoria* on the Köppelberg vineyard, in 2017

**Dear reader: The stage is yours!**

Next time around, this could be where YOU present YOUR restoration project. Show us how you make this world a better place. Mail to juliamaria.hermann[at]gmail.com.

---

**We live. We learn!**

**New! Easy access to Restoration Evidence**

By Claire Wordley

Restoration is not easy to achieve. To put back habitats where they have been lost, recreate functioning ecosystems, and attract key species to return takes a lot of hard work, and doesn’t always turn out as planned. That’s why the [Endangered Landscapes Programme](https://www.endangeredlandscapes.org.uk), in collaboration with [Conservation Evidence](http://www.conservationevidence.com), has launched a new website to help conservationists find scientific evidence about restoration strategies in just a few clicks. [Restoration Evidence](http://www.conservationevidence.com) presents the information from conservationevidence.com that is relevant to restoration, making it easier for restoration managers to see what works to restore habitats.

All the papers relating to a particular intervention (such as rewetting peatlands or scattering mosses) are collected and summarised, helping you to work out the likely effects of undertaking that intervention. So far the website has information on **439 different actions that you could take to restore biodiversity and ecosystem processes to peatlands, shrublands and forests**, and the biodiversity that lives there, with plans to add many more
habitats over the coming years (wetlands and grasslands are already underway).

So if you’re keen to undertake evidence-based restoration (and why wouldn’t you be?) then head on over to restorationevidence.org and make restoration more effective!

Lakenheath Fen Restoration, from left to right: A sluice to manage water levels; Removing and burning willow scrub (both photos: Claire Wordley); “Grazers” (photo: Alfredo Romero-Munoz).

Want more?

The European Commission recently launched two knowledge-sharing platforms: https://www.oppla.eu/ (ecosystem services and natural capital, fed by over 60 research institutes) and https://www.think-nature.eu/ (nature-based solutions).

Communicated by Kris Declerq.

Best practice in management and restoration of European dry grasslands

SER Europe Summer School on Ecological Restoration 2018

By Melinda Halassy

The SER Europe Summer School 2018 is an intensive 5-day program (20-24 August) focusing on the management and restoration of dry grassland habitats in Europe, many of which are under Natura2000 protection. The summer school will be held in Hungary. It is organized by the MTA Centre for Ecology, and is the first workshop to be held under the auspices of SER Europe and EUROSITE. The program includes both theoretical aspects and practical issues related to the state, threats, management and restoration of dry grasslands with a special focus on Natura2000 areas. The course is aimed at site managers, ecologists, students and policy makers and will provide participants with state-of-the-art information during field visits and lectures. The language will be English. The course will provide a framework for intensive exchange between participants and lecturers. For further information see: www.restorationcourse.okologia.mta.hu
Want more?

Webinars on peatland and boreal forest restoration
Reijo Hokkanen and Kaisa Junninen of Parks & Wildlife Finland will share their expertise on restoration of two major northern ecosystems on March 8, 2018 and June 20, 2018. Save the dates, and check in at SER International: http://www.ser.org/news/383648/2018-Webinar-Series.htm

REVER – Up to date on restoration in France

By Elise Buisson

REVER Workshop upcoming
The French-speaking annual restoration workshop will be held on April 4th and 6th, 2018 in southern France (Tour du Valat, Camargues, Arles). The first day will be dedicated to Mediterranean Quarry Restoration. The second and third days are open to talks of all kinds of ecosystems and issues linked with ecological restoration. Friday afternoon April 6th will take you to the wetlands and abandoned salt ponds of the Camargue. For more information, please visit: https://rever9.sciencesconf.org/

Restoration in France
REVER board members recently published a paper on the issues and solutions to promote ecological restoration in France. With several European countries...
In planning to create their own network in the coming years, we thought that insights from current practice would be helpful. To read the article, please go to: doi: 10.1111/rec.12643

Report: Workshop LANDCARE, Lisbon, Portugal

By Cristina Beseler Soto

The International workshop “TRAINING IN LAND DEGRADATION AND REHABILITATION: CURRENT CHALLENGES AND NEW EDUCATIONAL RESOURCES”, was held the 26-27 October, 2017, at Instituto Superior de Agronomia, University of Lisbon, Portugal. The event, with around one hundred participants registered, included students, researchers, managers, practitioners, and enterprises. Oral sessions during the morning of first day covered the main challenges for training in land degradation and rehabilitation across different ecosystems and were discussed from the diverse viewpoints of scientific societies (SER, CIREF), public administration and academia.

In the afternoon, innovative training tools and the impact outputs of the LANDCARE project were presented by project partners and students participating in the international courses and internships offered by this Erasmus+ programme.

A full day field trip on the 27th allowed for in-situ discussions on the challenges of land degradation and rehabilitation in several protected areas of the Setubal Peninsula, a region experiencing multiple anthropogenic pressures such as increasing urban expansion from Lisbon metropolitan area. The itinerary included guided visits to spots showing coastal erosion and forest management, wetland conservation and quarry rehabilitation activities within the highly sensitive Natural Park of Arrábida.

Download Book of Abstracts, Field Trip Guide and Workshop Presentations in the multiplier section of: http://www.landcare.es
Your good deed of the day
Help Europe’s Bees and Wild Pollinators!

By Matt Shardlow, BUGLIFE

Bees and other pollinators are essential to feeding the population and maintaining a healthy countryside. Declines in bees, butterflies, moths, hoverflies and other pollinating insects have been occurring across Europe and action is urgently required to address the issues and start to reverse the declines – we want bees, butterflies, moths and hoverflies back everywhere!

The European Commission have started to develop a new ‘Pollinator Initiative’ – this has the potential to change how the Common Agricultural Policy works and to massively improve pesticide regulation, but the Commission and EU politicians need to see how much the citizens care about bees and pollinators so that the ‘Pollinator Initiative’ is given adequate priority and resources.

Please fill in the consultation form
and let the EU know we all want our bees back!

CLICK HERE TO SUPPORT WILD BEES