

# **BayVegBase**

Start of a collaborative vegetation  
database as a powerful tool for  
ecological research in Bavaria and  
beyond

## **What is a vegetation plot record (relevé)?**

- documentation of vegetation of an area of c. 1-1000 m<sup>2</sup>
- full plant species list with cover data
- geographic coordinates & year
- structural data
- measured environmental data to different degrees

## **Why are vegetation plots relevant?**

- there are millions of such records, sampled with similar methodology since c. 1910
- they combine small spatial grain size with large spatial extent
- they thus allow addressing species interactions and other ecological questions that are not accessible with pure species distribution data

## **Vegetation-plot databases**

- emerged since c. 1995, to a larger extent since 2005
- globally visible via the **Global Index of Vegetation-Plot Databases** ([www.givd.info](http://www.givd.info)), launched in 2010
- comprehensive national databases in NL (700,000 plots), CZ (120,000 plots), PL (50,000 plots), AT (40,000 plots)

## **Situation in Germany**

- c. 1,000,000 or more relevés exist
- so far no comprehensive national database
- many small to medium private databases
- Mecklenburg-Vorpommern only federal state with a comprehensive regional DB (52,000 plots)

# Status and use of big vegetation-plot databases

## Czech National Vegetation Database

- c. 100 often highly cited papers emerged so far based on these data alone / combined with 1-2 other national DBs

## European Vegetation Archive (EVA;[www.euroveg.org/eva-database](http://www.euroveg.org/eva-database))

- launched spring 2014
- currently c. 1.2 million plots, growing continuously
- 28 projects so far

## Global database sPlot

([www.idiv.de/sdiv/workshops/workshops\\_pool/splot.html](http://www.idiv.de/sdiv/workshops/workshops_pool/splot.html))

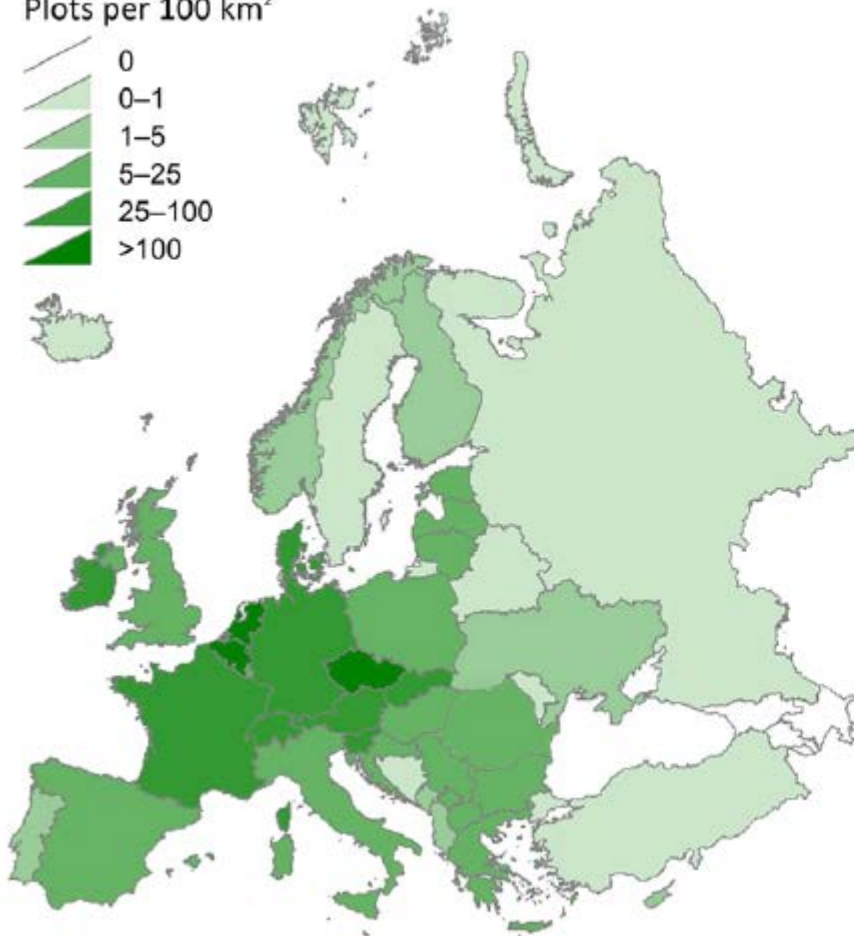
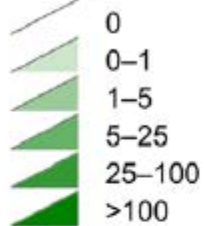
- version 2.0 to be launched in the next weeks
- 1.17 million plots, fixed versions every 12-18 months
- matched with the global trait-database TRY

## European Vegetation Archive (EVA): an integrated database of European vegetation plots

Milan Chytrý, Stephan M. Hennekens, Borja Jiménez-Alfaro, Ilona Knollová, Jürgen Dengler, Florian Jansen, Flavia Landucci, Joop H.J. Schaminée, Svetlana Ačić, Emiliano Agrillo,

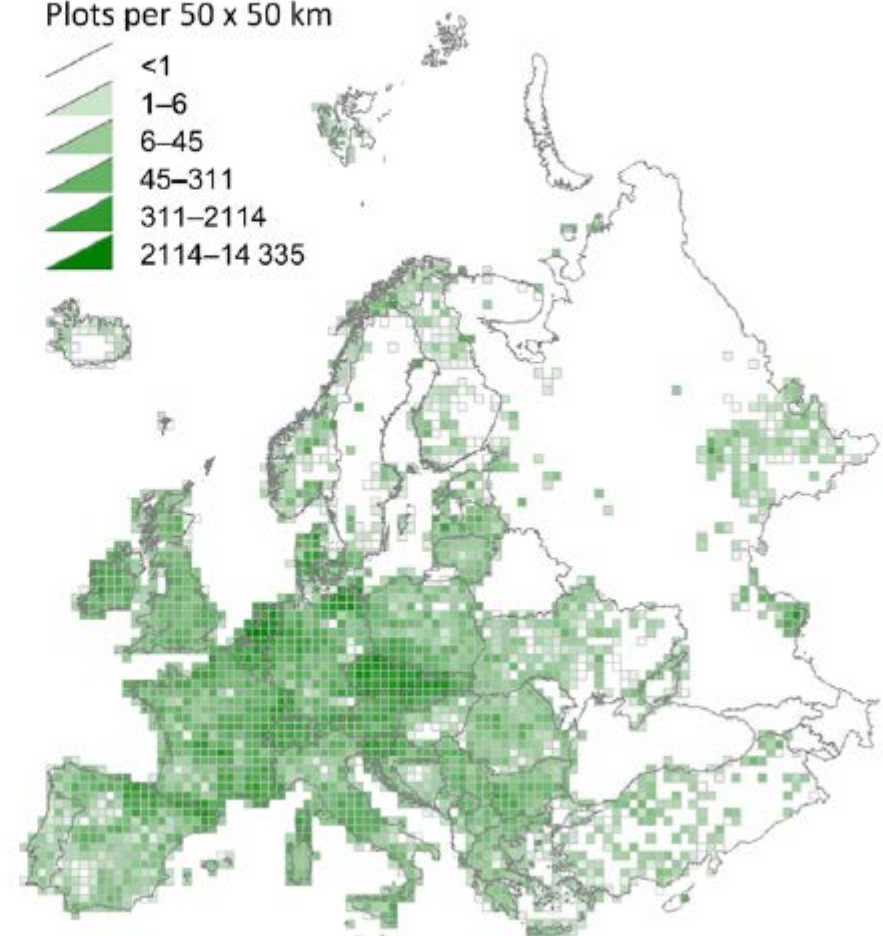
(a) Plot density by countries

Plots per 100 km<sup>2</sup>



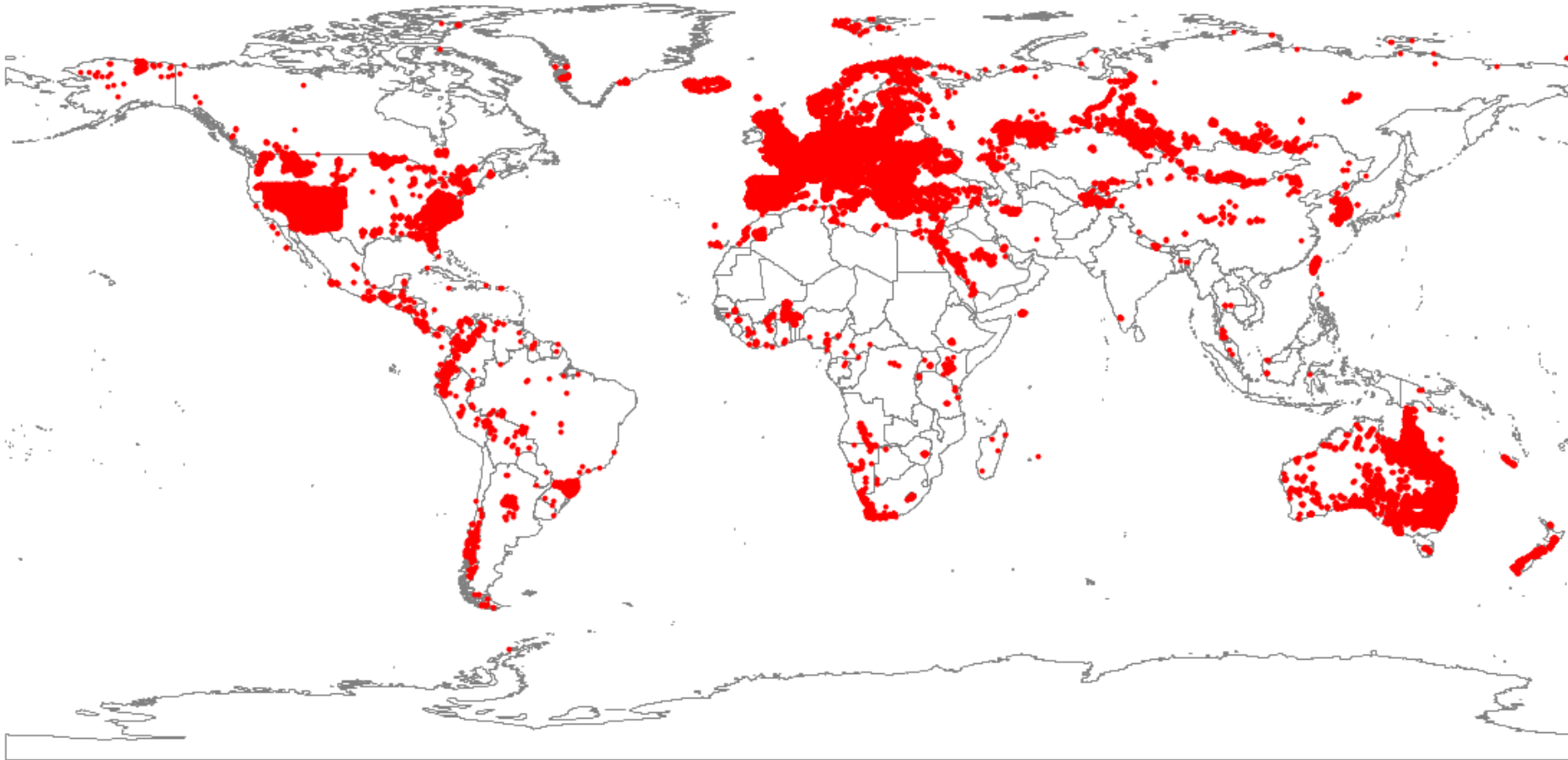
(b) Plot density in 50 x 50 km cells

Plots per 50 x 50 km





# sPlot



## BayVegBase: concept and status

**“Foundation meeting” this week in Freising:** Dr. Hagen Fischer (TUM), Prof. Jörg Ewald (HSWT), Prof. Jürgen Dengler (UBT)

**Involvement of other key players in Bavaria  
planned/initiated:** LWF, LfU, Univ. Regensburg

### **Starting point**

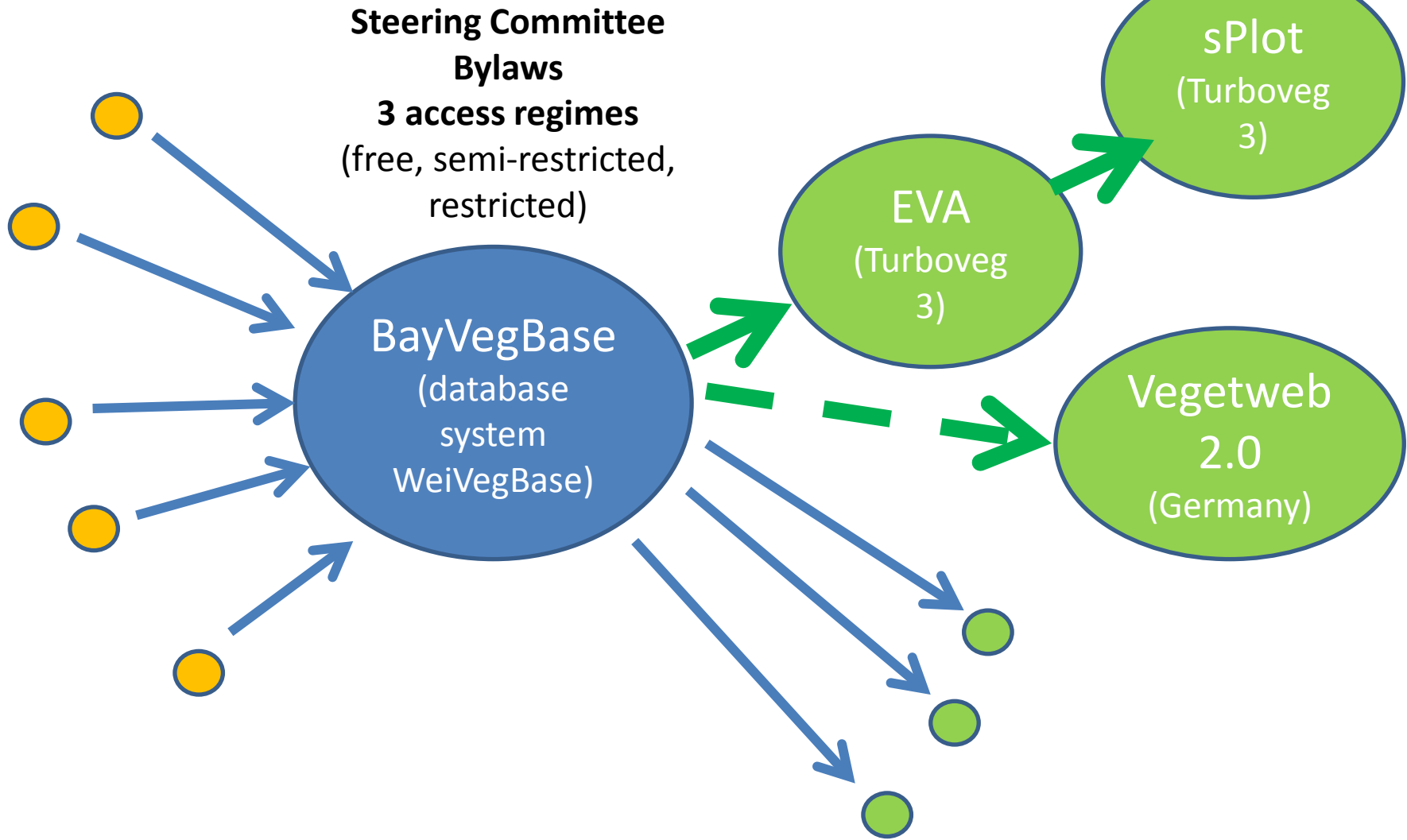
- WeiVegBase (15,000 plots) of Hagen Fischer developed mainly in LWF projects (mainly forests and mires)

### **Organisation**

- Steering Committee
- Bylaws (regulate data contribution and data use)

# Contributors

# Users





## Potential benefit for BayCEER and BayCEER groups

- **Direct access to Bavarian data for research projects:**
  - Hydrological niche
  - Invasion
  - Ecological Services
  - ...
- **Indirect benefit as contributors to BayVegBase**
  - Access to EVA and sPlot data (according to their Rules)
  - Co-authorship offers from BayVegBase, EVA and sPlot projects
- **Visibility through key role in establishing an important research tool for ecological research**
- **Long-term preservation and provision of vegetation-plot data sampled in projects and theses at UBT**

## Next steps

- **General: Bylaws, Steering Committee and data flows are in preparation...**
- **in Bayreuth: Hiwis will soon be employed through**  
1000 € Anschubfinanzierung (Dengler/Engelbrecht/Steinbauer)  
c. 5,000-10,000 € other sources (Dengler)
- **Tasks of Hiwis in Bayreuth**
  - creating overview of existing data
  - contacting data owners
  - preparation of digital data, digitisation of paper data
  - georeferencing

> we will concentrate on data of grasslands and other open habitats and those at UBT, U Erlangen and U Würzburg

## Your potential contributions

- Identification of data sources (theses, reports) & promoting the project among potential data providers
- Help with getting access to unpublished data or to get digital versions of published data
- Finding suitable Hiwis
- Active help with feeding the database
- Ideas for using the data
- Potentially role in the coordination team of the project (to have someone from Bayreuth to fill my function when I am leaving UBT)