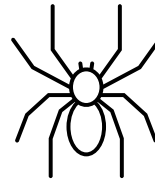


Möglichkeiten der automatisierten, ökologischen Auswertung großer Datenbestände aus DWB heraus am Beispiel der Webspinnen

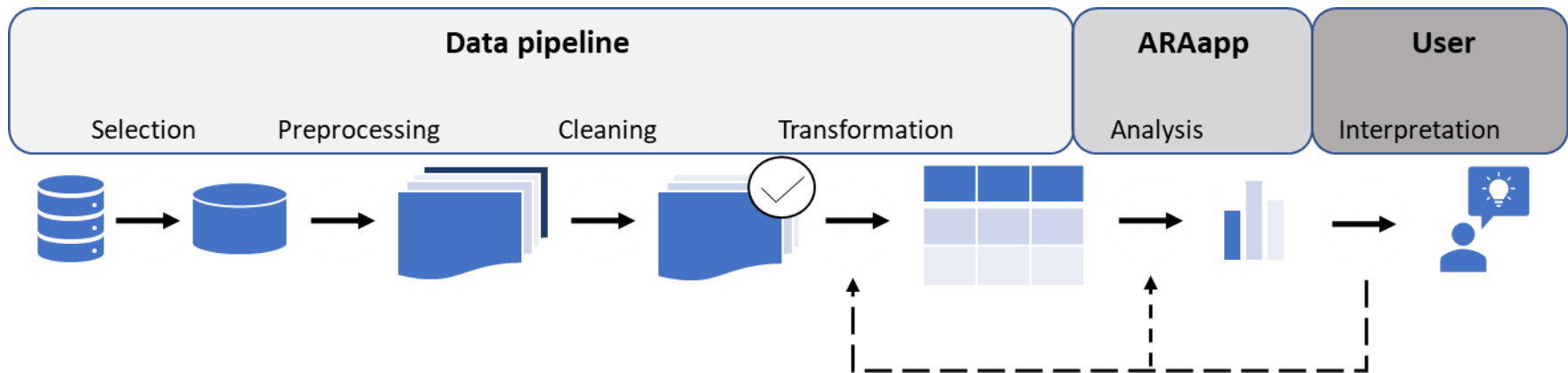


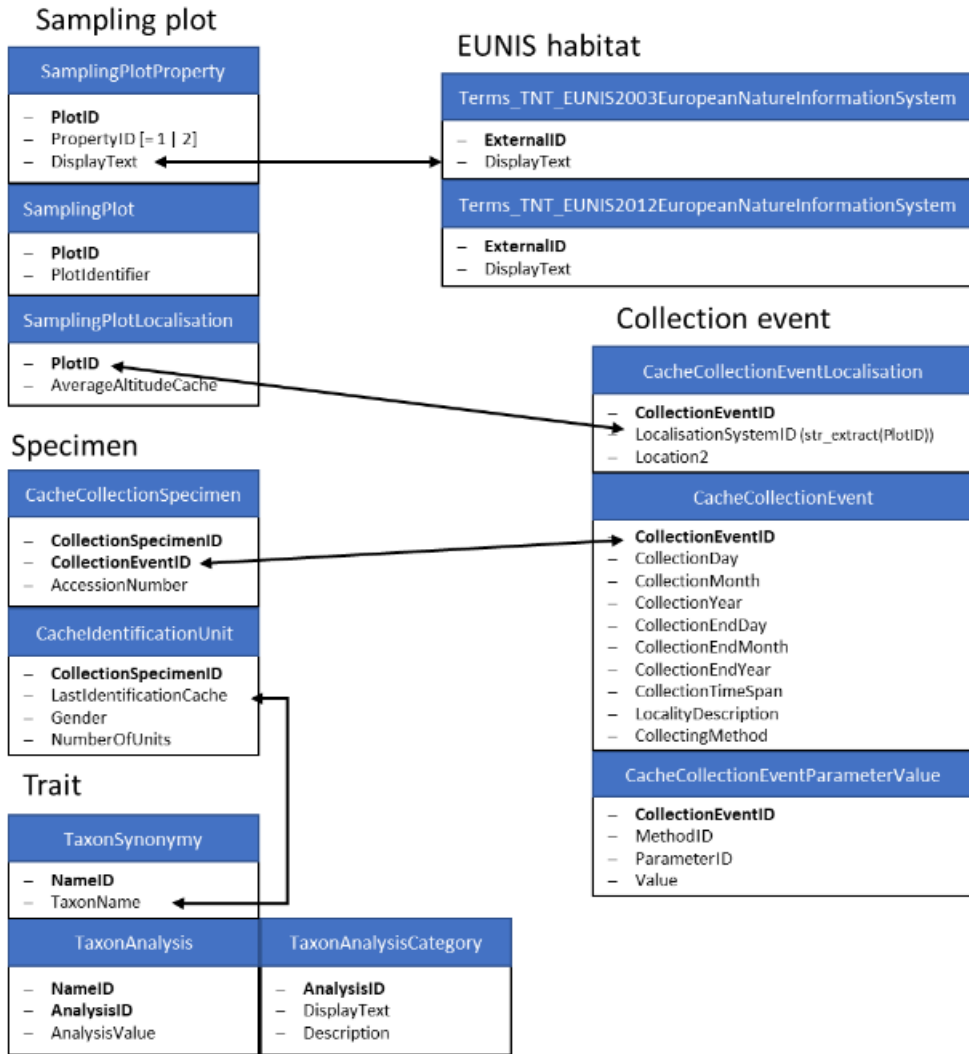
Alexander Bach

Bach, A., Raub, F., Höfer, H., Ottermanns, R., & Roß-Nickoll, M. (2024). ARAapp: Filling gaps in the ecological knowledge of spiders using an automated and dynamic approach to analyze systematically collected community data. *Database*, 2024, baae004.

<https://doi.org/10.1093/database/baae004>

- großflächiges Fehlen des Wissens über ökologische Ansprüche von Arten (Hortal et al. 2015)
 - nur wenige prominente invertebraten Gruppe besser bekannt (z.B.: Lepidoptera)
 - einer der Hauptgründe für den mangelhaften Schutz vieler seltener und/oder bedrohter Spinnenarten (Milano et al. 2011)
- mögliche Lösung: datenbasierter Ansatz (Kelling et al. 2009)
 - Knowledge Discovery in Databases





	Plot1	Plot2	...
Spec1			
Spec2			
...			

	Plot1	Plot2	...
Par1			
Par2			
...			

	Trait1	Trait2	...
Spec1			
Spec2			
...			

<https://aramob.de/de/daten/statistik-tools>

The screenshot shows the ARAMOB Exploratory Analysis Tools web application. The interface is divided into a dark blue sidebar on the left and a main content area on the right. The sidebar contains navigation links: 'Welcome', 'Start', 'News', 'FAQ', 'Tools', and 'Trait data'. The main content area features a header with the text 'Welcome to the Exploratory Analysis Tools of the ARAMOB research data repository'. Below the header, there is a section titled 'Community data available for analyses:' which displays three statistics in blue boxes: '1174 Sites' with a globe icon, '661 Species' with a spider icon, and '458.111 Individuals' with a spider icon. Each statistic box is accompanied by a descriptive text block below it, detailing the funding source (DFG), the project name (Semantic enrichment and mobilization of data in distributed repositories for taxonomy and ecology of spiders), the foundation of the data (Diversity Workbench), and the association (Arachnologische Gesellschaft).

ARAapp v1.10

Welcome

Start

News

FAQ

Tools

Trait data

Welcome to the Exploratory Analysis Tools of the ARAMOB research data repository

Community data available for analyses:

1174 Sites

661 Species

458.111 Individuals

Gefördert durch
DFG Deutsche Forschungsgemeinschaft

The ARAMOB Exploratory Analysis Tools were developed within the DFG project *Semantic enrichment and mobilization of data in distributed repositories for taxonomy and ecology of spiders*

More...

DIVERSITY WORKBENCH

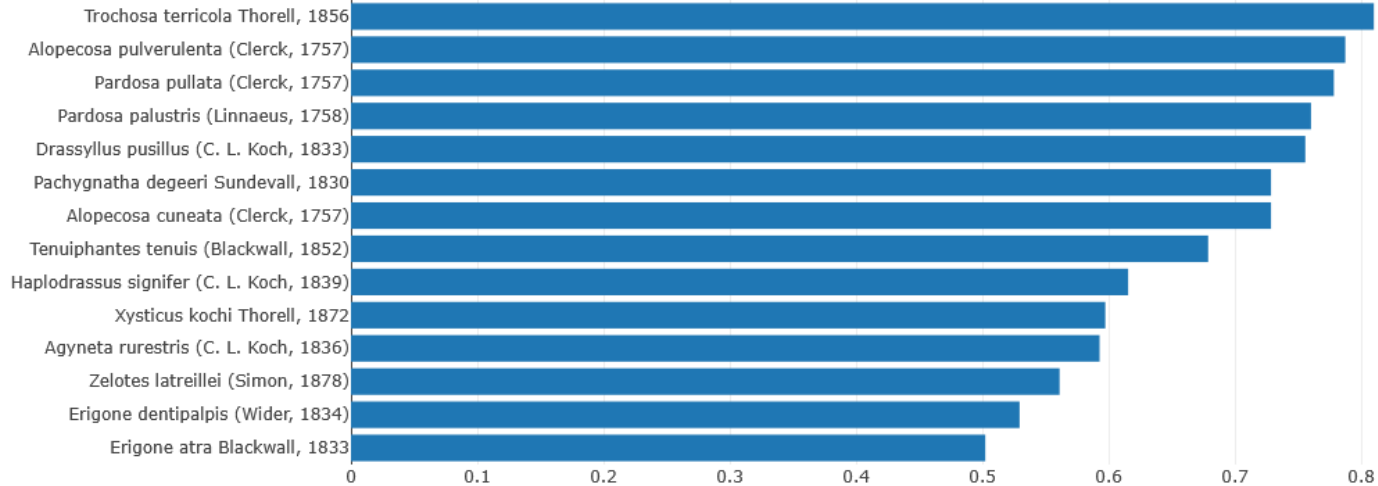
The foundation of the data utilized in the project stems from the research data that was mobilized, enriched, and subsequently stored in the Diversity Workbench. virtual research environment.

More...

The Arachnologische Gesellschaft is a German association that aims to foster scientific exchange regarding the taxonomy, biology, and ecology of arachnids located within Central Europe.

More...

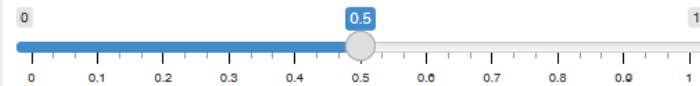
Companion species of *Xysticus cristatus* (Clerck, 1757)



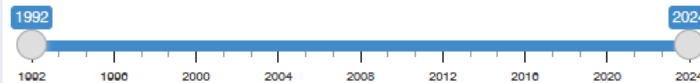
Xysticus cristatus (Clerck, 1757) was found in 267 of 1124 sites.

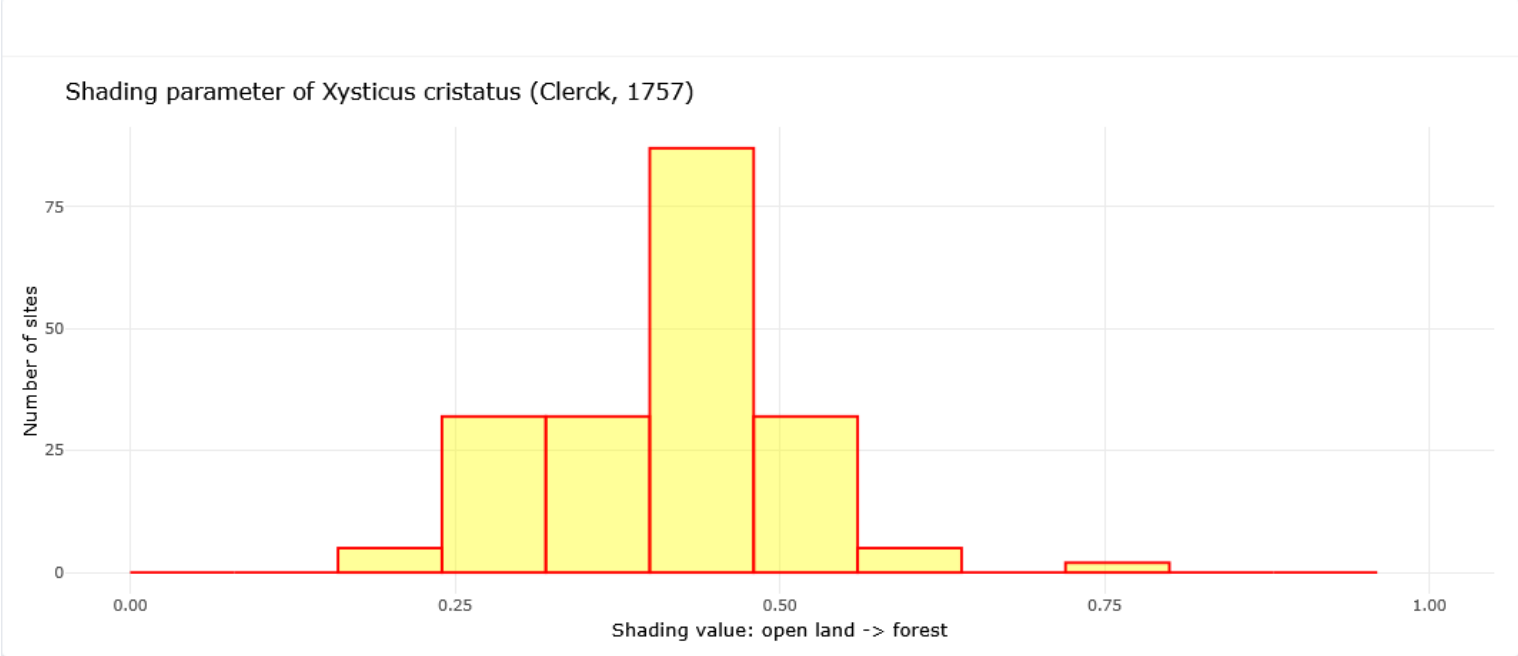
[Download coenosis data](#)

Frequency limit value to plot companion species



Sampling years:





***Xysticus cristatus* (Clerck, 1757)** was found in 195 of 745 sites.

[Download parameter score data](#)

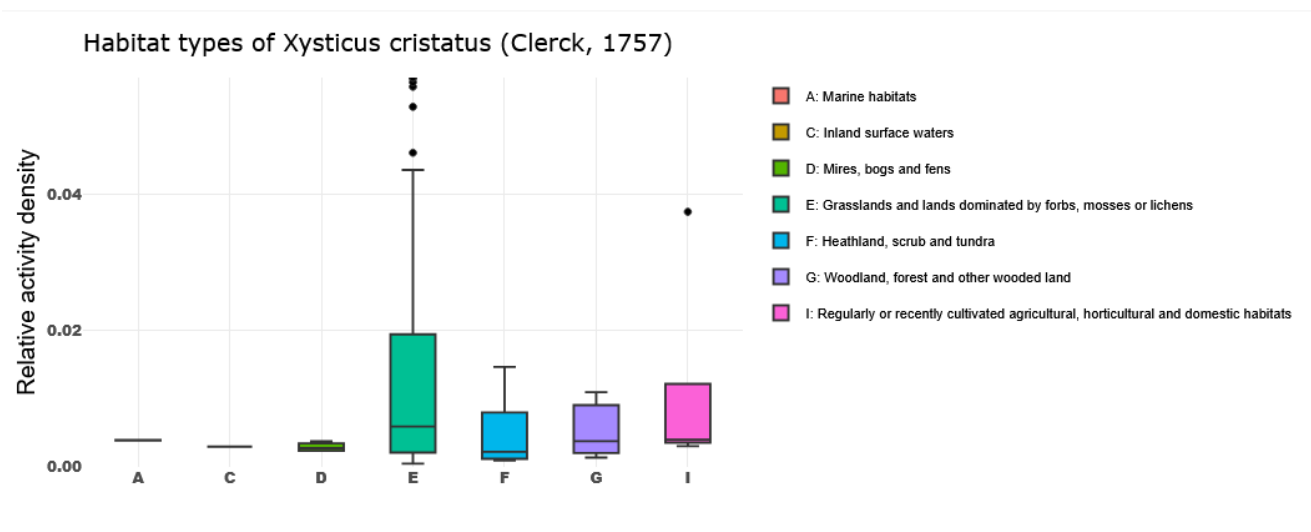
Show relative activity density on site scores

Gradient

Shading Moisture

Bin width

0 0.08 1



Class	Sites with presence value	Total Sites	Frequency
A	2	2	100%
C	1	6	16.7%
D	4	13	30.8%
E	168	298	56.4%
F	6	15	40%
G	6	368	1.6%
H	0	9	0%
I	10	34	29.4%
Total	197	745	26.4%

Quantitative measure

Relative activity density

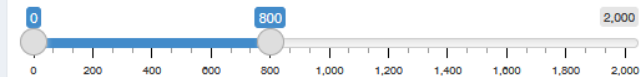
EUNIS class

All

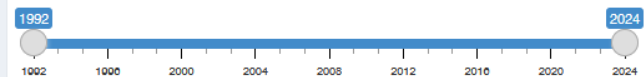
Habitat Level

1st Level 2nd Level 3rd Level 4th Level

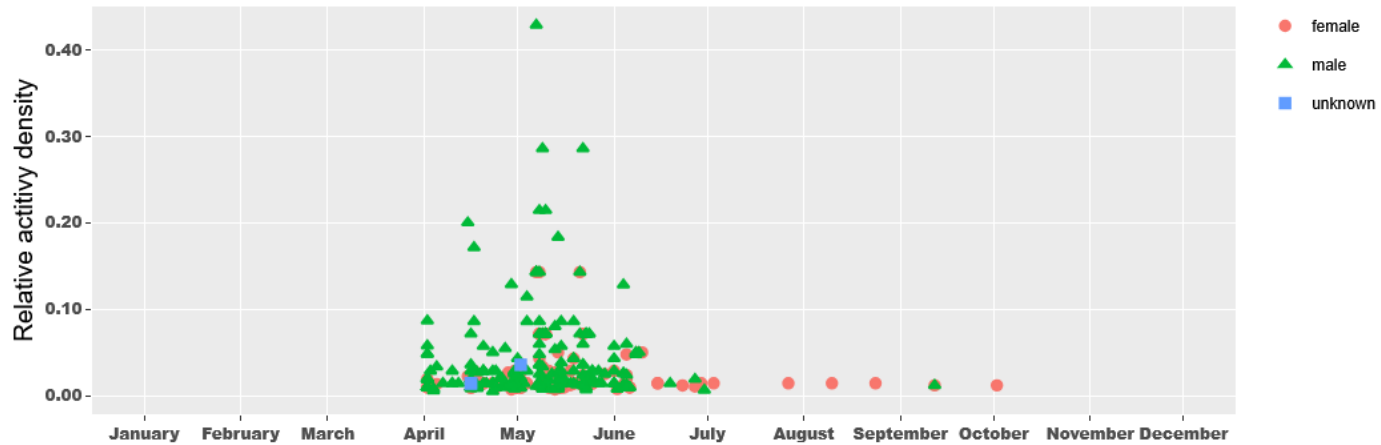
Limit data sampling to vertical meters:



Sampling years:



Phenology of *Xysticus cristatus* (Clerck, 1757)



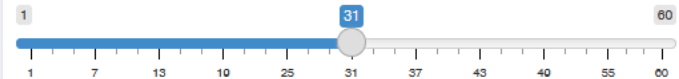
Xysticus cristatus (Clerck, 1757) was found in 133 of 620 sites.

[Download phenology data](#)

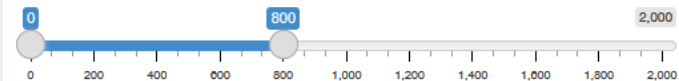
Quantitative measure

Relative activity density

Maximum collection days between two emptying periods:

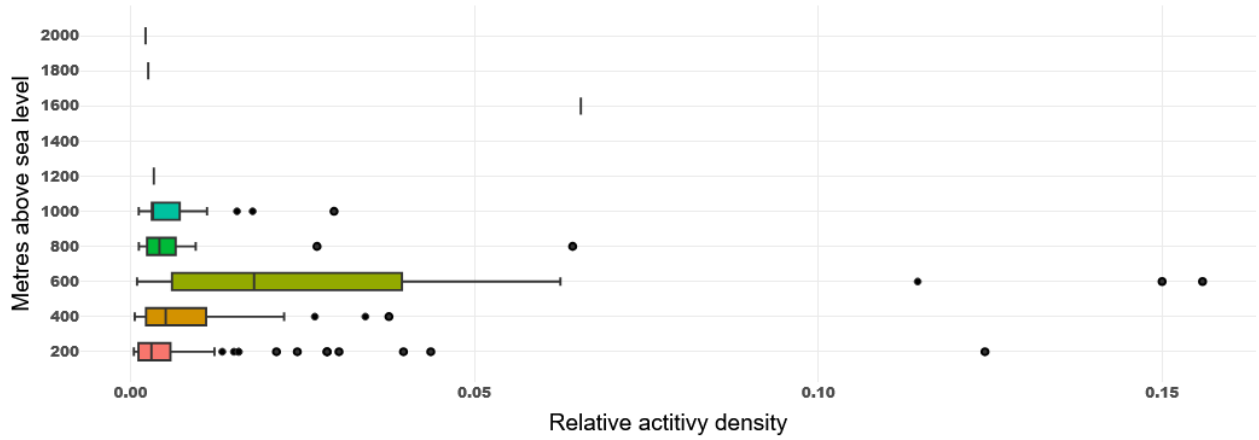


Limit data sampling to vertical meters:



Expert options

Vertical distribution of *Xysticus cristatus* (Clerck, 1757)



Vertical Class	Sites with presence value	Total Sites	Frequency
0	3	6	50%
200	72	194	37.1%
400	51	197	25.9%
600	60	211	28.4%
800	16	173	9.2%
1000	19	215	8.8%
1200	1	28	3.6%
1400	0	6	0%
1600	1	18	5.6%
1800	1	68	1.5%
2000	1	65	1.5%

Quantitative measure

Relative activity density

Download Altitude Data