

Using and managing BEFdata platforms

Workshop at the GFÖ 2012, Lüneburg

Karin Nadrowski

Claas Thido Pfaff

Contents

9:00 - 9:30	Getting to know each other	
9:30 - 9:50	Features BEFdata	
10:00 -	Users and projects	
11:00 -	BEFdata workbook	
12:00 -	Lunch time	
13:00 -	Manage categories	
13:30 -	Console	
14:00 -	Adapting look and feel	
14:30 -	Break	
15:00 -	Backup database	
16:00 -	Update code	
16:30 - 17:00	Feedback	

Live DVD

Features BEFdata

Features BEFdata

- Upload data at primary data level from Excel 2003 workbook
- Manage naming conventions
- Manage data use through paper proposals

Welcome to the Data portal of the BEF-China project.

The data portal presents the data aggregated within the BEF-China project and makes it available to researchers as well as the interested public. For more information on the project itself, go here: www.bef-china.de

The Chinese-European DFG Research Unit "BEF China" (FOR 891) has started a new forest Biodiversity and Ecosystem Functioning (BEF) experiment in subtropical forests in China. The objective of this experiment is to analyze the influence of tree and shrub species diversity on ecosystem functioning and services in one of the most prominent diversity hotspots in the northern hemisphere. The studies are carried out in the border region between the two Chinese provinces Jiangxi and Zhejiang (Xingangshan and Gutianshan). A range of biodiversity and ecosystem variables will be measured to assess community dynamics and its relation to primary productivity, carbon and nitrogen storage, nutrient cycling, and prevention of soil erosion. In parallel, the experimental approach is combined with comparative studies in existing forests.

List of data objects

List of paper proposals

Entry to administrative backend

Data sets

Abundance of Tree and Shrub species in the Comparative Study Plots (CSP) 

Additional study plots for studying genetic diversity of *Castanopsis eyrei* 

Additional Target trees for C N measurements, SP 5 

Additional trees planted in the main experiment at the edge of the treatment plots 

BEF China Experimental Sites Google presentation 

Biomass of four tree species (*Castanea henryi*, *Quercus serrata*, *Schima suberba* and *Elaeocarpus decipiens*) as saplings in the Pilot Experiment 

Biomass of herb layer plants in the CSPs, separated into functional groups 

Blank paper proposal with comments 

Carbon (C) and Nitrogen (N) Concentration (Root, Stem, Twig, Leaf) of 8 target species in the CSPs 

Checking the raw data sheet for naming conventions, an R script 

Climate measurements in the Gutianshan Nature Reserve 

Climate measurements in the Main Experiment 

 Create new Dataset

 List Datagroups

Keywords

abundance acidity actinomycetes
additional trees aeromorphic organic
layer age class air temperature Al
allelic richness allometries altitude
AMF ancestry arbuscular mycorrhizal
fungi aspect bacteria barcode reader
basal area basal diameter base
saturation beetles BEF China BEF
China PIs BEF China projects BEF
China Projects BEF conference 2011
BEF summerschool 2011 below ground
bifurcation point biodiversity
biodiversity biomass biomass

Biomass of herb layer plants in the CSPs, separated into functional groups

USAGE RIGHTS

Data use is restricted to subproject members only. Please contact the PI and ask for usage permission.

DATASET ABSTRACT

Biomass is a proxy for assessing herb layer productivity. In contrast to most traits it is easily practicable and therefore frequently used to describe community structure. The biomass of the herb layer was included all plants that were present in the plots. The biomass of the herb layer was measured in the field at the end of the growing season. Biomass was converted to above-ground production by dividing the biomass by the number of days in the growing season. Biomass was converted to above-ground production by dividing the biomass by the number of days in the growing season. Biomass was converted to above-ground production by dividing the biomass by the number of days in the growing season.

DATASET DESIGN

The CSPs were established in May - June 2008 in the Gutianshan Nature Reserve as well as outside the Nature Reserve. The CSPs have a size of 30 x 30 metres and are exposed to the north. The central plot hold a size of 10 x 10 metres and is situated in the centre. Four 1 x 1 metres plots were systematically chosen positioned outwards the corners of the central plot. The herblayer, i.e. plants below one metre in height, was harvested completely within those 1 m² plots. The harvest only included aboveground biomass.

SPATIAL EXTENT

- Download (state: finished)
 - Regenerate Download
 - Download Eml
 - Add to Cart
 - Edit Metadata
 - Edit Files
 - Approve Data Columns
 - Delete

Last update

2012-08-17 12:57

Comment

Metadata *** of ***

Contact persons



Alexandra Erfmeier

Primary data level

Data columns available in the raw data part of this dataset	
location	
location	BEF research plot name
<i>Data group: BEF research plot name</i>	
Values	
1	
10	
11	
12	
13	
date	
date	Date time information
<i>Data group: Date time information</i>	
Values	
2008-05-15T00:00:00+00:00	
2008-05-16T00:00:00+00:00	
2008-05-27T00:00:00+00:00	

Primary data

- First five unique entries
 - Data columns are nested in data groups

Primary data level

biodiversity ecosystem functioning

befdatachina

Home Projects Staff Data Papers Cart Admin

Datagroup: BEF research plot name

TYPE

category

DESCRIPTION

Research plots o

Datasets

- Additional Target trees for C N measurements, SP 5
- Additional study plots for studying genetic diversity of *Castanopsis eyrei*
- Biomass of herb layer plants in the CSPs, separated into functional groups
- CNS and pH analyses of soils: depth increments of 27 Comparative Study Plot
- CNS and pH analyses of soils: horizonswise from soil profiles of 27 Comparative Study Plot
- CSP Soil profile description: general site information, surface characteristics

Categories

Short	Long	Description
1	CSP01	Comparative Study Plot 01
10	CSP10	Comparative Study Plot 10
11	CSP11	Comparative Study Plot 11
12	CSP12	Comparative Study Plot 12
13	CSP13	Comparative Study Plot 13
14	CSP14	Comparative Study Plot 14
15	CSP15	Comparative Study Plot 15
16	CSP16	Comparative Study Plot 16
17	CSP17	Comparative Study Plot 17
18	CSP18	Comparative Study Plot 18

Primary data level

biodiversity ecosystem functioning
bef data china

Profile Logout

Home Projects Staff Data Papers Cart Admin

Category: 10

LONG

CSP10

DESCRIPTION

Occurrences

ID	Import Value	Columnheader	Dataset
4185865	10	CSP	Additional Target trees for C N measurements, SP 5
5124639	10	location	Biomass of herb layer plants in the CSPs, separated into functional groups
5124640	10	location	Biomass of herb layer plants in the CSPs, separated into functional groups
5124641	10	location	Biomass of herb layer plants in the CSPs, separated into functional groups

Download Sheetcells as CSV

Upload Sheetcells as CSV

Manage naming conventions

- Online
Data group and Category page
- Offline
Reworking and replacing workbooks

Manage naming conventions

biodiversity ecosystem functioning

bef data china

Home Projects Staff Data Papers Cart Admin Profile Logout

Datagroup: BEF research plot name

TYPE
category

DESCRIPTION
Research plots of the Biodiversity - Ecosystem functioning experiment (BEF-China). There are three

Merge names

- Download Categories as CSV
- Upload Categories as CSV
- List Datagroups

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Home Projects Staff Data Papers Cart Admin Profile Logout

Category: 10

LONG
CSP10

DESCRIPTION

Split names

- Download Sheetcells as CSV
- Upload Sheetcells as CSV
- List Datagroups

Manage naming conventions

The screenshot shows the BEFdatachina website with a red header bar. The main menu includes Home, Projects, Staff, Data, Papers, Cart, and Admin. On the right, there are Profile and Logout links. Below the menu, a section titled "Data sets" lists two items: "Abundance of Tree and Shrub species in the Comparative Study Plots (CSP)" and "Additional study plots for studying genetic diversity of Castanopsis eyrei". A red circle highlights the "Create new Dataset" button, which is located in a dropdown menu next to the "List Datagroups" button.

BEFdata workbook

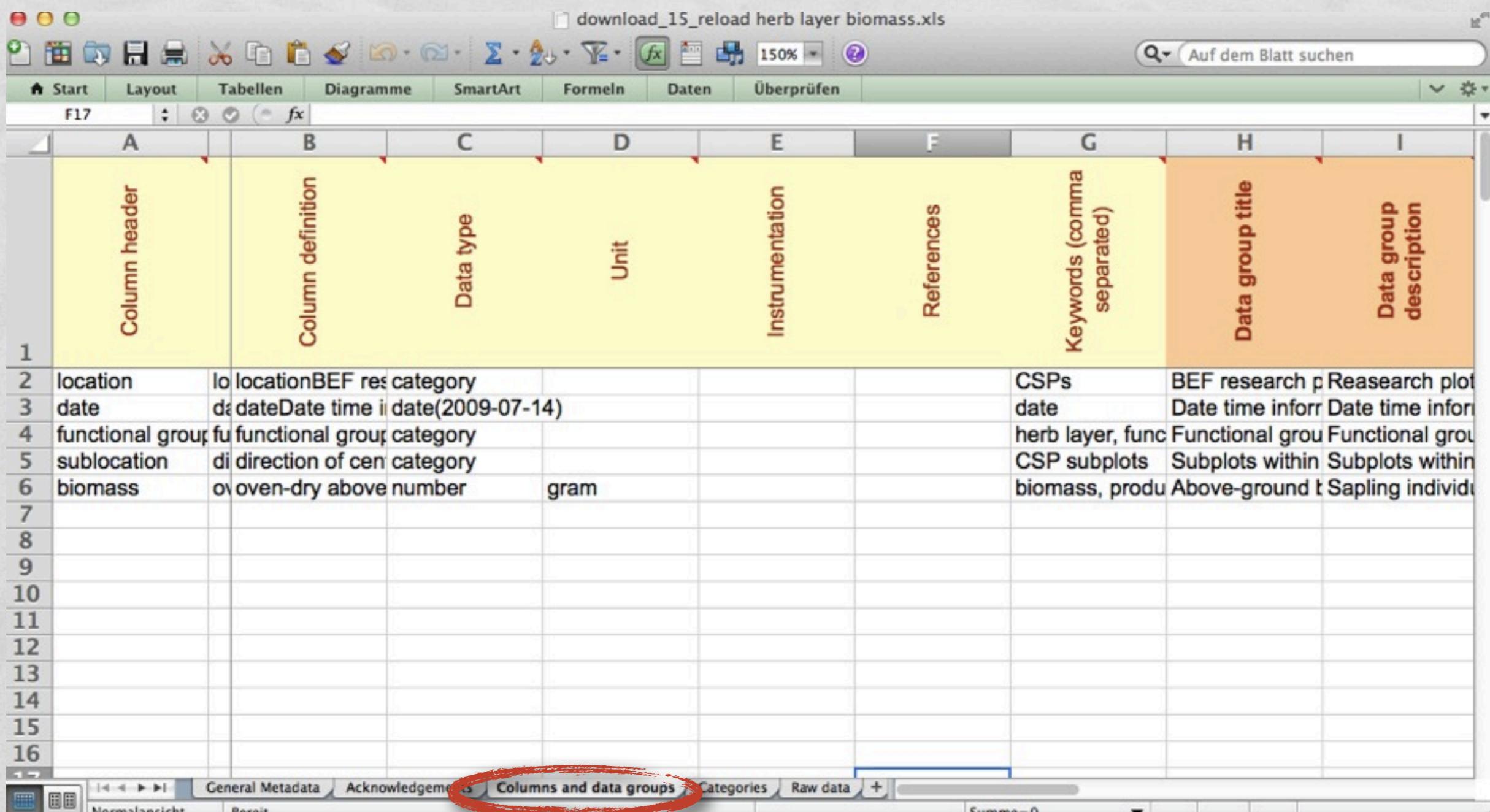
The screenshot shows the BEFdatachina website with a red header bar. The main menu includes Home, Projects, Staff, Data, Papers, Cart, and Admin. On the right, there are Profile and Logout links. The main content area displays the title "Edit files of Biomass of herb layer plants in the CSPs, separated into functional groups". Below the title, there is a section titled "Exchange original data workbook" with a "Choose File" button and a "Data set upload" button. A red circle highlights the "Choose File" button and its placeholder text "no file selected".

The screenshot shows the BEFdatachina website with a red header bar. The main menu includes Home, Projects, Staff, Data, Papers, Cart, and Admin. On the right, there are Profile and Logout links. The main content area displays the title "Biomass of herb layer plants in the CSPs, separated into functional groups". Below the title, there is a download status message: "Download (state: finished)". Underneath it, there is a link labeled "Regenerate Download". A red circle highlights the "Download (state: finished)" message.

Manage naming conventions

	A	B	C	D	E	F
1	location	date	functional group	sublocation	biomass	
2		1	2008-05-15	woody	NE_c	4.827
3		1	2008-05-15	woody	NW_c	0.202000000000005
4		1	2008-05-15	woody	SE_c	1.035
5		1	2008-05-15	woody	SW_c	2.561
6		1	2008-05-15	climber	NE_c	0
7		1	2008-05-15	climber	NW_c	4.539
8		1	2008-05-15	climber	SE_c	1.148
9		1	2008-05-15	climber	SW_c	0.078
10		1	2008-05-15	monocotyl herbs	NE_c	2.295
11		1	2008-05-15	monocotyl herbs	NW_c	0
12		1	2008-05-15	monocotyl herbs	SE_c	0
13		1	2008-05-15	monocotyl herbs	SW_c	0
14		1	2008-05-15	dicotyl herbs	NE_c	0
15		1	2008-05-15	dicotyl herbs	NW_c	10.686
16		1	2008-05-15	dicotyl herbs	SE_c	1.719
17		1	2008-05-15	dicotyl herbs	SW_c	0
18		1	2008-05-15	fern	NE_c	0
19		1	2008-05-15	fern	NW_c	14.327
20		1	2008-05-15	fern	SE_c	0
21		1	2008-05-15	fern	SW_c	0
22		1	2008-05-15	graminaea	NE_c	0
23		1	2008-05-15	graminaea	NW_c	1.545
24		1	2008-05-15	graminaea	SE_c	0
25		1	2008-05-15	graminaea	SW_c	0
26		1	2008-05-15	legume	NE_c	0
27		1	2008-05-15	legume	NW_c	0
28		1	2008-05-15	legume	SE_c	0
29		1	2008-05-15	legume	SW_c	0
30		2	2008-05-16	woody	NE_c	0.161
31		2	2008-05-16	woody	NW_c	0

Manage naming conventions



The screenshot shows a Microsoft Excel spreadsheet titled "download_15_reload herb layer biomass.xls". The spreadsheet has a green header row with columns labeled: Column header, Column definition, Data type, Unit, Instrumentation, References, Keywords (comma separated), Data group title, and Data group description. Below the header, there are six rows of data. Row 2 contains: location, locationBEF res category; date, dateDate time i date(2009-07-14); functional group, functional group category; sublocation, direction of cen category; biomass, oven-dry above number; and gram. Row 3 contains: CSPs, BEF research p Reasearch plot; date, Date time infor Date time infor. Row 4 contains: herb layer, func Functional grou Functional grou. Row 5 contains: CSP subplots, Subplots within Subplots within. Row 6 contains: biomass, produ Above-ground t Sapling individu. Rows 7 through 16 are empty.

	Column header	Column definition	Data type	Unit	Instrumentation	References	Keywords (comma separated)	Data group title	Data group description
1									
2	location	locationBEF res category				CSPs	BEF research p Reasearch plot		
3	date	dateDate time i date(2009-07-14)				date	Date time infor Date time infor		
4	functional group	functional group category				herb layer, func	Functional grou Functional grou		
5	sublocation	direction of cen category				CSP subplots	Subplots within Subplots within		
6	biomass	oven-dry above number	gram			biomass, produ	Above-ground t Sapling individu		
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									

Manage naming conventions

The screenshot shows a Microsoft Excel spreadsheet titled "download_15_reload herb layer biomass.". The ribbon tabs include Start, Layout, Tabellen, Diagramme, SmartArt, Formeln, Daten, and Überprüfen. The formula bar shows "A17 location". The table has columns labeled A through I. Column A is "Column header", B is "Category short", C is "Category long", and D is "Category description". Rows 1 through 23 contain data: location, Category short, Category long, Category description. Row 17 is highlighted with a blue selection border. The "Categories" tab in the ribbon is circled in red.

	Column header	Category short	Category long	Category description				
1								
2	location	1 1	CSP01	Comparative Study Plot 01				
3	location	10 10	CSP10	Comparative Study Plot 10				
4	location	11 11	CSP11	Comparative Study Plot 11				
5	location	12 12	CSP12	Comparative Study Plot 12				
6	location	13 13	CSP13	Comparative Study Plot 13				
7	location	14 14	CSP14	Comparative Study Plot 14				
8	location	15 15	CSP15	Comparative Study Plot 15				
9	location	16 16	CSP16	Comparative Study Plot 16				
10	location	17 17	CSP17	Comparative Study Plot 17				
11	location	18 18	CSP18	Comparative Study Plot 18				
12	location	19 19	CSP19	Comparative Study Plot 19				
13	location	2 2	CSP02	Comparative Study Plot 02				
14	location	20 20	CSP20	Comparative Study Plot 20				
15	location	21 21	CSP21	Comparative Study Plot 21				
16	location	22 22	CSP22	Comparative Study Plot 22				
17	location	23 23	CSP23	Comparative Study Plot 23				
18	location	24 24	CSP24	Comparative Study Plot 24				
19	location	25 25	CSP25	Comparative Study Plot 25				
20	location	26 26	CSP26	Comparative Study Plot 26				
21	location	27 27	CSP27	Comparative Study Plot 27				
22	location	3 3	CSP03	Comparative Study Plot 03				
23	location	4 4	CSP04	Comparative Study Plot 04				

Manage data use

Comparative study plot (CSP) information to be shared with all BEF-China scientists 

Competition of tree saplings -Pilot- Biomass of target saplings - biomass allocation to constituents 

Competition of tree saplings -Pilot- Biomass of target saplings - biomass allocation to strata 

Conference 2011 Program and zipped Lectures 

Corrected tree tags on the CSP trees and tree size measures from 2010. 

CSP basal area before and after the snowbreak event in 2008 

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Home Projects Staff Data Papers  Cart Admin

Profile Logout

Added Thickness, mass and C and N pools of the forest floor litter layer (CSPs) to cart.

litter biomass

Thickness, mass and C and N pools of the forest floor litter layer (CSPs) 

Manage data use

Dataset cart

Comparative study plot (CSP) information to be shared with all BEF-China scientists 

Thickness, mass and C and N pools of the forest floor litter layer (CSPs) 

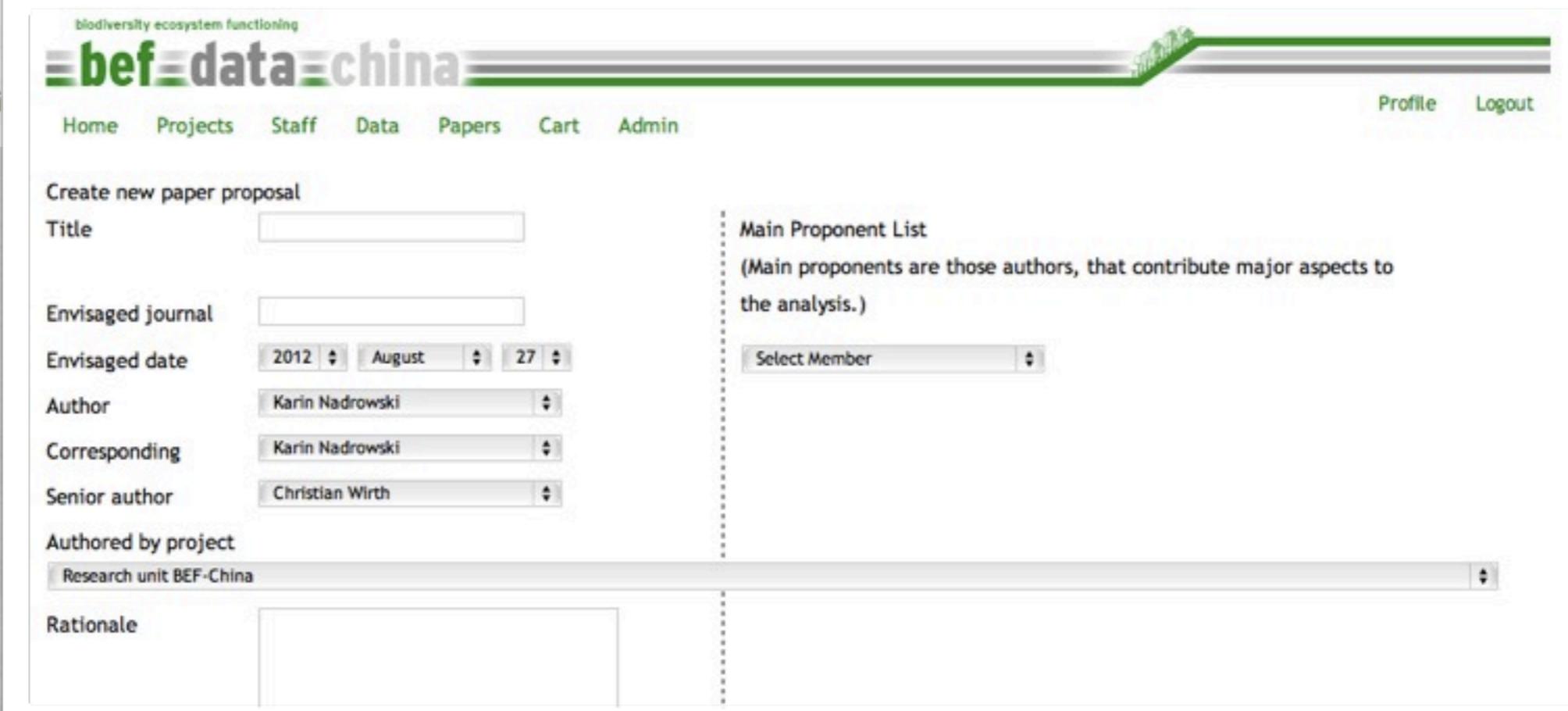
Coarse woody debris (CWD): Collection of data on dead wood with special regard to snow break 

Tree size in the CSPs in 2008 and 2009 

CNS and pH analyses of soils:

Biomass of herb layer plants i

 Create new paper proposal
from cart



The screenshot shows a web application interface for managing dataset proposals. At the top, there's a navigation bar with links for Home, Projects, Staff, Data, Papers, Cart, and Admin. On the right side of the header, there are Profile and Logout links. Below the header, the main content area is titled "Create new paper proposal". It contains several input fields and dropdown menus:

- Title: A text input field.
- Envisaged journal: A text input field.
- Envisaged date: A date picker set to 2012-08-27.
- Author: A dropdown menu showing "Karin Nadrowski".
- Corresponding: A dropdown menu showing "Karin Nadrowski".
- Senior author: A dropdown menu showing "Christian Wirth".
- Authored by project: A dropdown menu showing "Research unit BEF-China".
- Rationale: A large text area for writing rationale.
- Main Proponent List: A section with a descriptive text and a "Select Member" dropdown menu.

Manage data use

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Home Projects Staff Data Papers Cart Admin

Global Mini Proposal Information

Title	Workflow on carbon stock analysis
Initial title	Workflow on carbon stock analysis
Envisaged journal	PLOS ONE
Envisaged date	2012 December 27
Author	Claas-Thido Pfaff
Corresponding	Claas-Thido Pfaff
Senior author	Karin Nadrowski
Authored by project	Z2e Integrated data management and synthesis
Rationale	On an exemplary analysis of the carbon stocks of the comparative study sites along the diversity and successional age gradient, we perform an meta analysis on the workflow itself. We define number, complexity, and purpose of workflow steps and discuss this in the light of automating workflows and integrating knowledge

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Home Projects Staff Data Papers Cart Admin

Root mycorrhizal fungi in the CSPs [edit](#)

RATIONAL

Original question was: - root mycorrhizal fungi along a successional gradient The question is, if we change the focus, to avoid overlap with Chen Guo. The idea is that we take the soil microbial activity and biomass information by spec move the focus to functionality, compare it with lipid fractions

Current Board State is: final

Its allowed to download files, present now list of download actions

[CSP microclimate data](#)

[Comparative study plot \(CSP\) information to be shared with all BEF-China scientists](#)

[Soil lipid biomass and relative abundance from 12 CSPs, overview](#)

[Soil lipid biomass and relative abundance from 12 CSPs, individual lipid fractions](#)

Manage data use

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Home Projects Staff Data Papers Cart Admin

Paper Proposals

[Create new Paperproposal](#)

Published

- Schuldt, A., Zhou, H., Assmann, T. (2009): Integrating highly diverse invertebrates into broad-scale analyses of cross-taxon congruence across the Palaearctic. doi:10.1111/j.1600-0587.2009.05973.x. Palaearctic. Ecography.
- Bachmann, D., Both, S., Bruelheide, H., Ding, B., Gao, M., Härdtle, W., Scherer-Lorenzen, M., Erfmeier, A. (2010): Functional trait similarity of native and invasive herb species in subtropical China - environment-specific differences are the key. Experimental and Environmental Botany.
- Bauhus, J. (2010): Near-Infrared Reflectance Spectroscopy to predict species composition in tree fine-root mixtures. doi:10.1007/s11104-010-0325-2. Plant and Soil .
- Bauhus, J., Scherer-Lorenzen, M. (2010): The influence of mixed species tree plantations on the nutrition of individual species: a review. doi:10.1093/treephys/tpq035. Tree Physiology.
- Geißler, C., Kühn, P., Shi, X., Scholten, T. (2010): Estimation of throughfall erosivity in a highly diverse forest ecosystem using sand-filled splash cups. doi:10.1007/s12583-010-0132-y . Journal of Earth Science.
- Lang, A., Bruelheide, H., Geißler, C., Härdtle, W., Nadrowski, K., Schuldt, A., Yu, M., von Oheimb, G. (2010): Tree morphology responds to neighbourhood competition and slope in species-rich forests. doi:10.1007/s12583-010-0135-5 . Journal of Earth Science.

Manage data use

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Home Projects Staff Data Papers Cart Admin

Profile Logout



Jessica Gutknecht

Phone: + 49 (0) 345-558 5255

Email: jessica.gutknecht@ufz.de

Url: <http://www.ufz.de/index.php?de=18165>

Datasets

Laboratories introduction, rules, forms, log files

Soil lipid biomass and relative abundance from 12 CSPs, individual lipid fractions

I'm not sure how to name the PLFA methods, there should be more information on how the data was obtained and how it can be interpreted. What does the abundance mean? Isn't it a biomass measure? Can the abundance matrix be used for community composition and diversity indices?

Soil lipid biomass and relative abundance from 12 CSPs, overview

Project short name must come from portal -- I removed the lipid data from this dataset to put it in the

Projects

SP13e Biomass and activity of the soil microbial community as a function of biodiversity and erosion potential in subtropical forests (Principal investigator)

New Integrated Litter Experiment (2nd Principal investigator)

- Users
- Projects

Manage data use

Paper proposal submissions

PUBLISHED

Wu, Y., T., Both, S., Böhnke, M., Geißler, C., Gutknecht, J., Kühn, P., Nadrowski, K., Scholten, T., Wubet, T., Buscot, F. (2012): Relationships between soil microorganisms, plant communities and soil characteristics in Chines subtropical forests. doi 10.1007/s10021-012-9533-3. *Ecosystems* (10021_2012_9533).

IN PREPARATION

He, L., Buscot, F., Guo, L., Gutknecht, J., Nadrowski, K., Pietsch, K., Wirth, C., Wu, Y., T., Wubet, T., Liang, Y.: Root mycorrhizal fungi in the CSPs.

Wu, Y., T., Buscot, F., Gutknecht, J., Kühn, P., Trogisch, S., Wubet, T.: Forest age and plant community features influence diversity and structure of the soil fungal community in a Chinese subtropical forest.

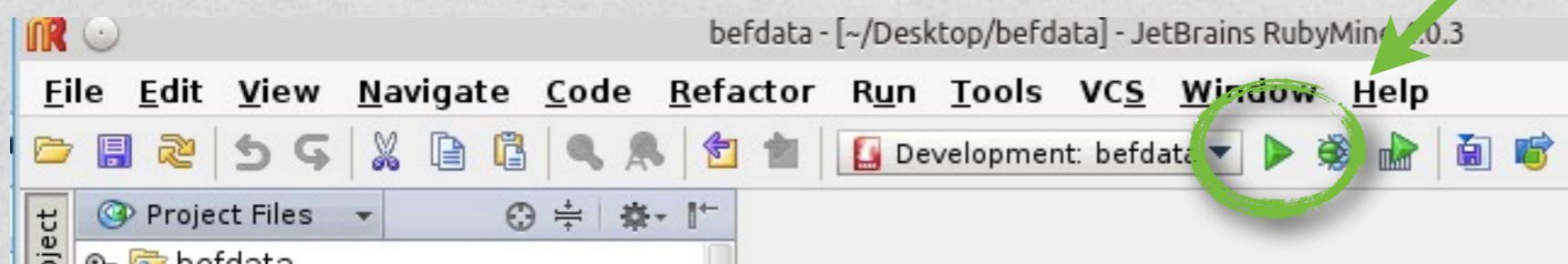
Users and Projects

Live DVD

- Start the Live DVD
- Enable Internet connection

Start Platform

- Open Rubymine
- Start the development server



- Open browser at localhost:3000

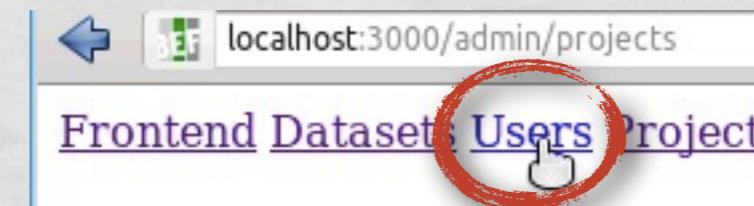
Add Users

- Project “Diversity”
 - PI is Carly Peterson
 - Student is Rebecca Smith
 - Login: admin pw:test

[Projects](#) [Staff](#) [Data](#) [Papers](#) [Cart](#) [Admin](#)

Successful!

Welcome to the Data portal of the BEF-China project


[Frontend](#) [Datasets](#) [Users](#) [Projects](#) [Datagroups](#) [Datacolumns](#) [Keywords](#) [Categories](#) [Freeformats](#) [Paperproposal](#)

Users

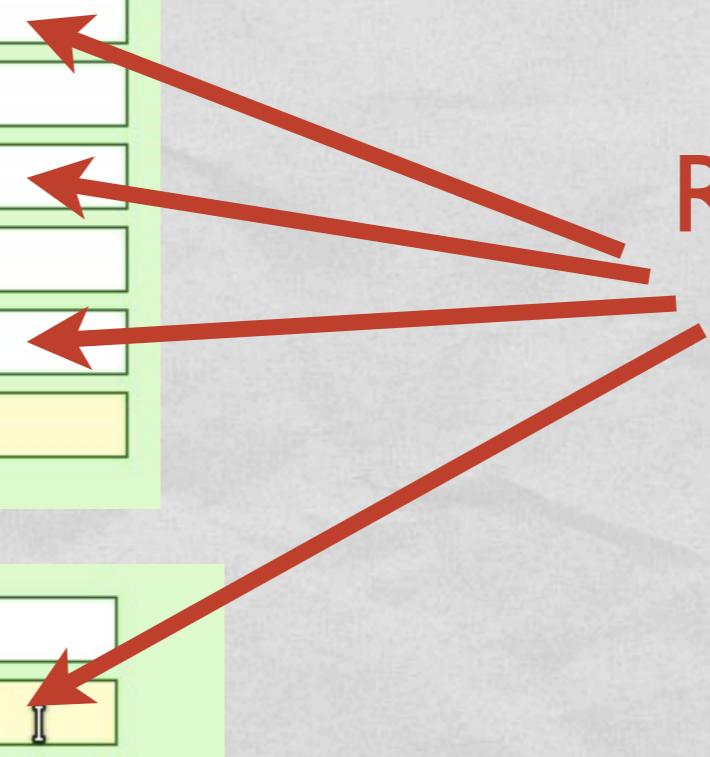
Id	Avatar	Firstname	Lastname	▲ Roles without objects	Roles with objects	Edit	Show
				admin	owner of Dataset with id: 1		
1		Admin	Admin			Edit	Show

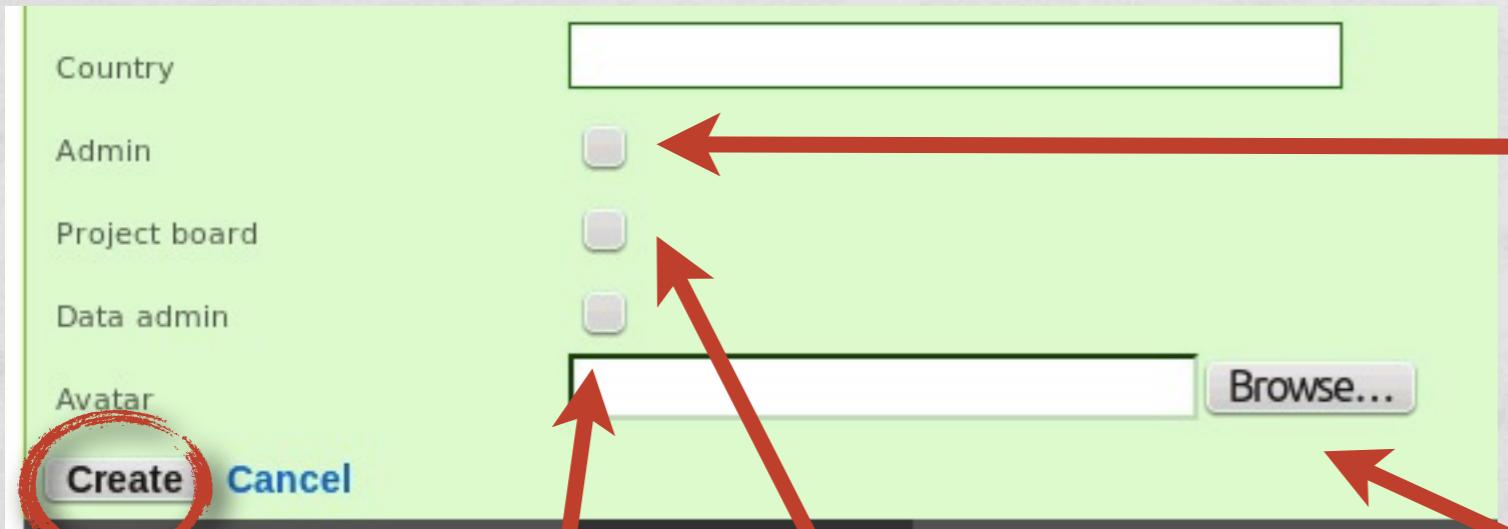
1 Found

Create User

Firstname	<input type="text" value="Carly"/>
Middle names	<input type="text"/>
Lastname	<input type="text" value="Peterson"/>
Salutation	<input type="text"/>
Login	<input type="text" value="cpeterson"/>
New Password (Leave this blank to keep old password)	<input type="password" value="*****"/>

Url	<input type="text"/>
Email	<input type="text" value="peterson@some.university.exp"/>
Institution name	<input type="text"/>


Required



Admin
- edit all files
- add users
- add projects

Avatar
- add a picture
of the user

Project board
- approves paper proposals
- sees metadata quality comments

Saves
the user

Data admin
- download all files
- edit categories in primary data

Users

Search Create New

Id	Avatar	Firstname	Lastname	▲ Roles without objects	Roles with objects	Edit	Delete	Show
2		Carly	Peterson			Edit	Delete	Show
1		Admin	Admin	admin	owner of Dataset with id: 1	Edit	Show	

3 Found

Firstname

Rebecca

MiddleNames

Lastname

Smith

Salutation

Login

rsmith

New Password
(Leave this blank to keep old password)

New Password Confirmation

Email

smith@some.university.exp

Users

Search Create New

Id	Avatar	Firstname	Lastname	▲ Roles without objects	Roles with objects	Edit	Delete	Show
3		Rebecca	Smith			Edit	Delete	Show
2		Carly	Peterson			Edit	Delete	Show
1		Admin	Admin	admin	owner of Dataset with id: 1	Edit	Show	

3 Found



Add Project

- Project “Diversity”, shortcut “sp01 diversity”

File Edit View History Bookmarks Tools Help

BEF-China Admin: datasets - index Evernote Web

localhost:3000/admin/datasets

Frontend Datasets Users **Project** Datagroups

DataSets

Id	Title	Filename
1	How to fill a BEFdata Workbook	befdata_workb

1 Found

Frontend Datasets Users Projects **Datagroups** Datacolumns Keywords Categories Freeformats Paperproposal

Projects

Search Create New

Id	Shortname	Name
		No Entries

Projects

Create Project

Shortname

Name

Description

Comment

Accepted roles (Hide)

Name	Users
pi	Admin Admin
co-pi	Carly Peterson
postdoc	
phd student	
student	Rebecca Smith
technician	

Create Another Role | - select - Add Existing

Create **Cancel**

phd student

Name	Users
Admin Admin	
Carly Peterson	
Rebecca Smith	

Create Another Role | - select - Add Existing

Projects			Search	Create New
Id	Shortname	Name		
1	sp01 diversity	Tree diversity in subtropical forests	Edit	Delete
1 Found				

EXPLORE



The screenshot shows a user interface for a data management system. At the top, there is a navigation bar with several items: 'Frontend' (which has a green circle and a hand cursor icon over it), 'Datasets', 'Users', 'Projects', and 'Datagr...'. Below the navigation bar, the word 'Projects' is displayed in a large, bold, dark font. Underneath 'Projects', there is a table with two columns: 'Id' and 'Shortname'. The table contains one row with the value '1' in the 'Id' column and 'sp01 diversity' in the 'Shortname' column. To the right of the table, there is a small upward arrow icon and the word 'Name'. At the bottom left of the table area, the text '1 Found' is visible.

Id	Shortname	Name
1	sp01 diversity	Tree div

1 Found

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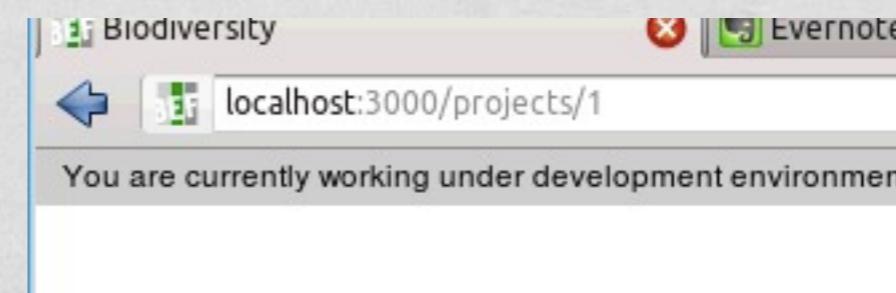
Home Projects Staff Data P

Welcome to the Data po

The data portal presents the data aggregate information on the project itself, go here: [www.befchina.org/projects/1](#)

Projects

Tree diversity in subtropical forests



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bef data china

Home Projects Staff Data Papers Cart Admin Profile Logo

Tree diversity in subtropical forests (sp01 diversity)

We are interested in how diversity emerges in subtropical forests

Carly Peterson
(Principal investigator)

Rebecca Smith
(PhD student)

DIVERSITY

localhost:3000/users/2-Carly_Peterson

You are currently working under development environment.

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Carly Peterson

Projects

Tree diversity in subtropical forests
(Principle investigator)

Data base

~/Desktop/befdata/config/database.yml

The screenshot shows a desktop environment with several windows open. In the center is the pgAdmin III application, which is a graphical interface for managing PostgreSQL databases. A modal dialog box titled "New Server Registration" is open, showing fields for server properties like Name, Host, Port, Service, Username, and Password. Two red arrows point from the "Username" and "Password" fields in the pgAdmin dialog to the corresponding "username" and "password" entries in the database configuration file shown in the terminal window below. The terminal window displays the contents of the file `~/Desktop/befdata/config/database.yml`, specifically the `development:` section. This section contains database settings for PostgreSQL, including the host, port, encoding, database name (`teamcity_befdata_dev`), pool size, and credentials for the user `teamcity`. The password is obscured by a red circle. The pgAdmin interface also includes an "Object browser" window on the left and a status bar at the bottom indicating "Retrieving details on server".

```
#production:
#  adapter: postgresql
#  host:
#  port: 5432
#  encoding: unicode
#  database:
#  pool: 5
#  username:
#  password:

#Unfortunately rails rake test does a
#so we have to define this and on team
#running tests without RAILS_ENV=test
development:
  adapter: postgresql
  host: localhost
  port: 5432
  encoding: unicode
  database: teamcity_befdata_dev
  pool: 5
  username: teamcity
  password: test_database_teamcity

# Warning: The database defined as "te
database.yml]
```

Data base

The screenshot shows the pgAdmin III interface with three main panes:

- Left Pane:** Object browser for the database "teamcity_befdata_dev". It lists Catalogs (2), Extensions (1), Schemas (1) (with public selected), Collations (0), Domains (0), FTS Configuration, and FTS Dictionaries.
- Middle Pane:** Object browser for the "public" schema. It lists Tables (26) (with users selected), Functions (7), Sequences (22), and Trigger Functions (0). The "users" table is expanded to show columns: id [PK] serial, login character varying, email character varying, and crypt character varying.
- Right Pane:** Edit Data - localhost (localhost:5432) - pgAdmin III. This pane displays the contents of the "users" table:

	id [PK] serial	login character varying	email character varying	crypt character varying
1	1	admin	em@i.ls	1d7
2	2	cpeters	petersor	c90
3	3	rsmith	smith@sc	4c4
*				

A red circle highlights the "grid" icon in the toolbar of the middle pane, and a red arrow points from it to the "grid" icon in the toolbar of the right pane, indicating a relationship or feature connection between the two.

Exercise

- Add new users and project and inspect the database

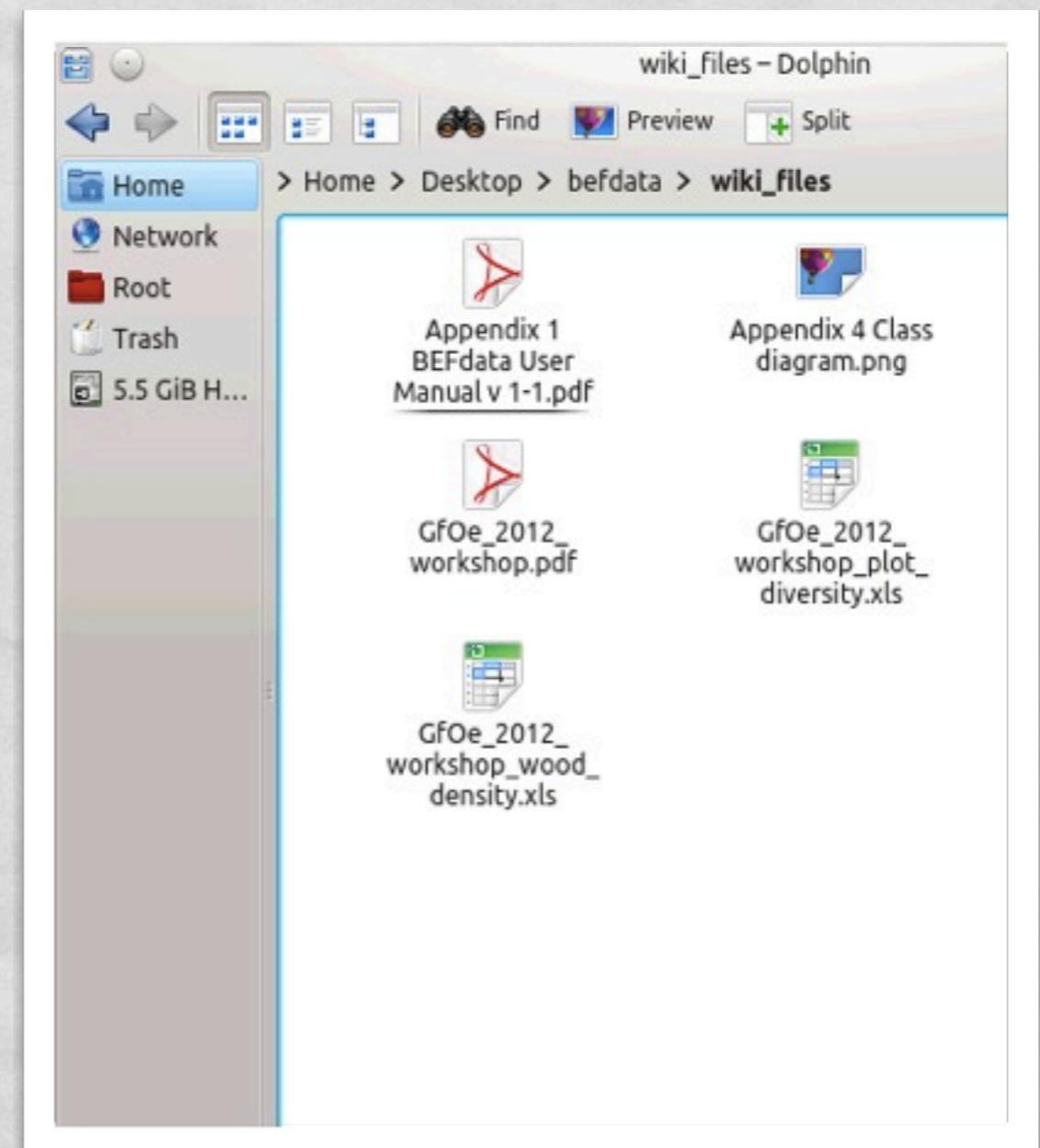
12	Project	sp03 traits
13		
14	Data set owners	
15	Given Name	David
16	Surname	LeBrun
17	e-mail	Helge Tinner
18		

- Check out how adding avatars change look and feel!

BEFdata workbook

Two example workbooks

- Plot diversity
- Wood density



Plot diversity

- Check out the dataset!
- General metadata
- Acknowledgements
- Data groups
- Categories
- Primary data

Befdata Live from DVD (Snapshot 1) [Running] - Oracle VM VirtualBox	
Machine View Devices Help	
File Edit View Insert Format Tools Data Window Help	
B16	Arial 11 B i U E
3	Title: Title of this piece of raw data.
4	Plot diversity
5	
6	Abstract: Abstract for this piece of raw data. Short introduction and background and the scientific question, short site, data information. Working circumstances during data acqu
7	Shannon diversity of the study plots
8	
9	Additional comments on this data set
10	In the original data, the plots are named differently from the ones in this dataset.

Plot diversity

- How many plots?
- What is displayed?
- Which plot has highest diversity?

Upload plot diversity

The screenshot shows two pages of the BEF-data-china Data portal. The top page is the main Data portal landing page with a red circle around the 'Data' menu item. The bottom page is a 'Create a new dataset page' with a red circle around the 'Option A: Create from Excel workbook' section and another red circle around the 'EXCEL WORKBOOK' file input field.

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Welcome to the Data portal of the BEF-C

The data information

Profile L

↑ Create new Dataset

List Datagroups

Keywords

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Create a new dataset page

Option A: Create from Excel workbook

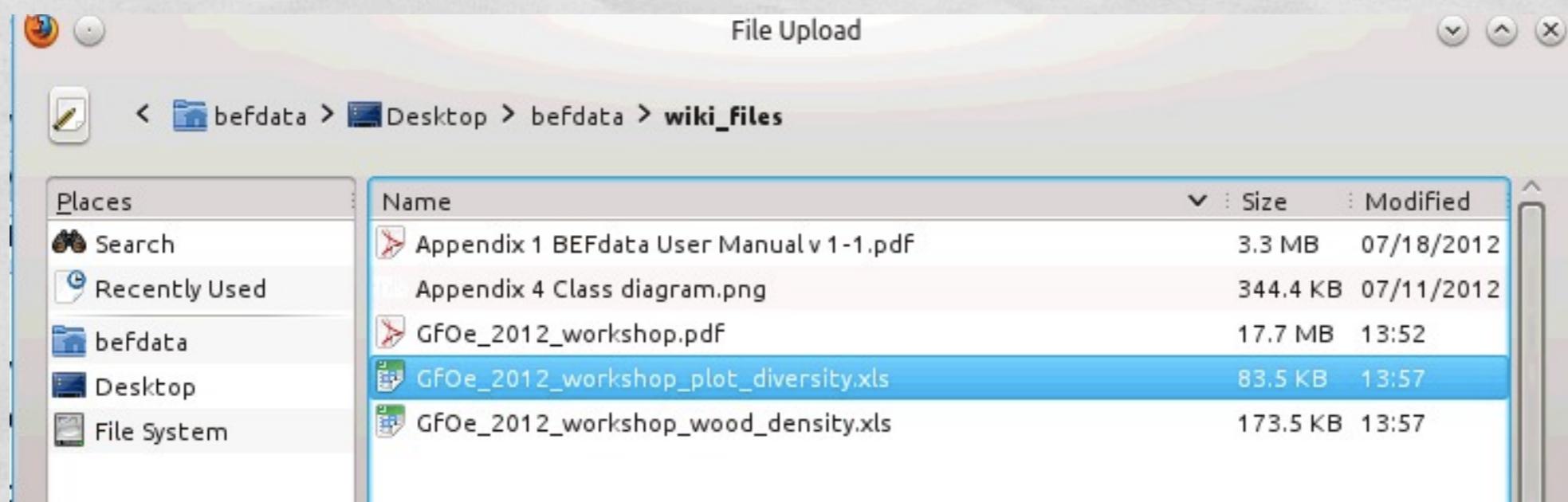
All data and metadata is imported automatically from the workbook including metadata and the underlying Excel workbook can be cl

Need Help? If you want to create your own workbook for upload from scratch you can download the [empty excel template file](#). Documentation and examples can be found [here](#).

EXCEL WORKBOOK

Browse...
Submit

Choose file



Need Help? If you want to create your own workbook for upload from scratch you can download the [empty excel template file](#). Documentation and examples can be found [here](#).

EXCEL WORKBOOK

/home/befdata/Desktop/befdat [Browse...](#)

Submit

General metadata

Owners

Select Member ▾

 Rebecca Smith

 Admin Admin

 Carly Peterson

Remove Admin from owners

ACCESS RIGHTS

Check the box below to enable all members on the site (logged in members) or the interested readers of the page) to download the metadata, data (if applicable), and attached files of your dataset.

Free for public

Check the box below to allow logged in members of all projects to download the metadata, data (if applicable), and attached files of your dataset.

Free for members

Download rights:
default: only owner
public: anybody
members: logged in users
project: users associated to owning project

General metadata

staff pages.

Comment

In the original data, the plots are named differently from the density file.

- admin
- owner
- project PI
- project board



Deutsche

UNIVERSITÄT LEIPZIG



General metadata uploaded

The screenshot shows a web application interface for 'bef-data-china'. At the top, there's a navigation bar with links for Home, Projects, Staff, Data, Papers, Cart, Admin, Profile, and Logout. Below the navigation, the title 'Plot diversity' is displayed under a 'DATASET ABSTRACT' section. The abstract describes 'Shannon diversity of the study plots'. A large gray box contains the text 'Data columns available in the raw data part of this dataset'. Under this box, there's a 'plot' section with a detailed description of the CSP in the Nature ReserveBEF research plot name. To the right of this main content area, there's a sidebar with several download options: 'Download (state:)', 'Regenerate Download', 'Download Eml', 'Add to Cart', 'Edit Metadata', 'Edit Files', and 'Approve Data Columns'. The 'Approve Data Columns' option is circled in red.

- Reload page if download state is empty
- Background worker always generates downloads
- No data added yet
- Approve data columns

Approve columns

Approve Plot diversity

We have sufficient information to automatically approve the following 2 columns:

Approve all

Click on the column name below to approve the column attributes.

plot diversity

APPROVE THE DATA GROUP

- Batch approval if datatype is filled out
- Red color: not approved yet
- Orange color: invalid values present
- Green color: everything validated

Approve Plot diversity

Click on the column name below to approve the column attributes.

plot diversity

APPROVE INVALID VALUES

- Plot names were not defined

Approve columns: alternatives

- Download, provide category description, re-upload dataset
- Accept categories as is
- Modify categories on the approval page

plot 8

plot 9

plot 9

Approve

The invalid values have been successfully approved

Approve Plot diversity

Click on the column name below to approve the column attributes.

plot diversity

Data columns available in the raw data part of this dataset

plot

name of the CSP in the Nature ReserveBEF research plot nameResearch plots of the Biodiversity - Ecosystem functioning experiment (BEF-China). There are three main sites for research plots in the BEF Experiment: Comparative Study Plots (CSP) in the

diversity

short: shannon diversity

Data group: *Taxonomic biodiversity*

Values

0.05297216892635759

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Datagroup: BEF research plot name

TYPE

category

Datasets

Plot diversity

Categories

Short ▾ Long ▾ Description ▾

plot 1	plot 1	plot 1
plot 10	plot 10	plot 10

Exercise

- Check out changes in the database: datasets, categories, sheetcells
- Upload the other dataset
- What happens in with the categories of the “research plots” Datagroup?

Thanks !

- Color AE2B21

Primary data level

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Data sets

- Abundance of Tree and Shrub species in the Comparative Study Plots (CSP)
- Additional study plots for studying genetic diversity of *Castanopsis eyrei*
- Additional Target trees for C N measurements, SP 5
- Additional trees planted in the main experiment at the edge of the treatment plots
- BEF China Experimental Sites Google presentation
- Biomass of four tree species (*Castanea henryi*, *Quercus serrata*, *Schima suberba* and *Elaeocarpus decipiens*) as saplings in the Pilot Experiment
- Biomass of herb layer plants in the CSPs, separated into functional groups
- Blank paper proposal with comments
- Carbon (C) and Nitrogen (N) Concentration (Root, Stem, Twig, Leaf) of 8 target species in the CSPs
- Checking the raw data sheet for naming conventions, an R script
- Climate measurements in the Gutianshan Nature Reserve
- Climate measurements in the Main Experiment

[Create new Dataset](#)

[List Datagroups](#)

Keywords

abundance acidity actinomycetes
additional trees aeromorphic organic
layer age class air temperature Al
allelic richness allometries altitude
AMF ancestry arbuscular mycorrhizal
fungi aspect bacteria barcode reader
basal area basal diameter base
saturation beetles BEF China BEF
China PIs BEF China projects BEF
China Projects BEF conference 2011
BEF summerschool 2011 below ground
bifurcation point biodiversity
biodiversity biomass biomass

Primary data level

BEF research plot
name

category

Research plots of the Biodiversity - Ecosystem functioning experiment (BEF-China). There are three main sites for research plots in the BEF Experiment: Comparative Study Plots (CSP) in the Gutianshan Nature Reserve, having a size of 30x30m², measured on the ground. Main Experiment plots have a size of 1 mu, which is about 25x25m² in horizontal projection. Pilot Study Plots have a size of 1x1 m². Research plots on the main experiment have a "p" in front of their IDs and then a 6 digit code: Plots in the main sites A and B are named according to their position in the original spreadsheet, in which they were designed. They consist of 6 digits: _1st digit_: Site (1:A, 2:B), _digit 2and3_: southwards row: as in spreadsheets the rows are named from the top to the bottom; _digit 4 and 5_: westward column: as in the original spreadsheet, but the letters are converted to numbers (A=01, B=02); _6th digit_: indicator, if the plot has been shifted a quarter mu. Example: "p205260": "p" means that this is a plot that is specified. "2" means, that we are at site B. Now the coordinates of the south - west corner: "0526". Since "e" is the fifth letter of the alphabet, this is Plot E26. The last digit "0" means that this plot was not moved by a quarter of a Mu, as some sites in Site A. The 6th digit can also indicate the subplot within the plot. "5", "6", "7", "8" indicate the northwest, northeast, southeast, and southwest quarter plot respectively.

The screenshot shows a web interface for managing data groups. At the top, there's a navigation bar with links for Home, Projects, Staff, Data, Papers, Cart, Admin, Profile, and Logout. The main content area has a title 'Datagroup: BEF research plot name'. Below it, there are sections for 'TYPE' (set to 'category') and 'DESCRIPTION' (containing the explanatory text about the plot naming scheme). To the right, there's a sidebar with three buttons: 'Download Categories as CSV', 'Upload Categories as CSV', and 'List Datagroups'.

Research plots of the Biodiversity - Ecosystem functioning experiment (BEF-China). There are three