



EnvEurope Project
Life08 ENV/IT/000399



Data management for ecological data

Status and steps for action 1

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EnvEurope Data Management



Discover available dataset series, datasets and services: a catalogue service allows the user to view and query related meta-data.

View available datasets: an online data access client allows the user to view data (WMS layers or tabular).

Download available datasets: an online data access client allows the user to download data

- Data files
- OGC spatial services (WFS, WCS)
- OGC Sensor Web (SOS)
- Linked Data



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Where are we now?

- Milestones
- Deliverables

Milestones

- M1 New database on available data
 - Deadline: 31.12.2010
 - Result: Data reporting format
- M2 Operational validated database of all data (historical and newly generated)
 - Deadline: 30.09.2012
 - Working steps
 - collection of data with reporting format
 - integration into one database

Deliverables – done

- D1 Report on data stored in the new database
 - Deadline: 30.06.2011
 - Status: done
 - Task: A1.4.4 Establishment of connection and/or upload of existing data from the beneficiaries
 - Involvement: A1 Core Team
 - Content:
 - Data reporting format
 - data model

Deliverables – to be completed

- **D2 Meta database**

- Deadline: 31.12.2011
- Status: open
- Tasks
 - A1.1.4 collection of meta information about the existing datasets
 - A1.1.1b Provide metadata for the available sites
- Involvement: all ABs!
- Content site description
 - SITE: Site description profile
 - Collection of Site Description
- Content dataset description
 - EnvEurope Community Profile Report
 - DEIMS Metadata Editor
 - Content of EnvEurope DEIMS

Upcoming deliverables 30/06/2013

- D3 Best practise guideline for data management of LTER sites and LTSEr platforms
- D4 Guideline for method consistency
- D5 Best practise guideline for quality assurance and quality control for integrated data from LTER sites and LTSEr platforms
- D6 Database on integrated data
- D7 Recommendations on SEIS relevance



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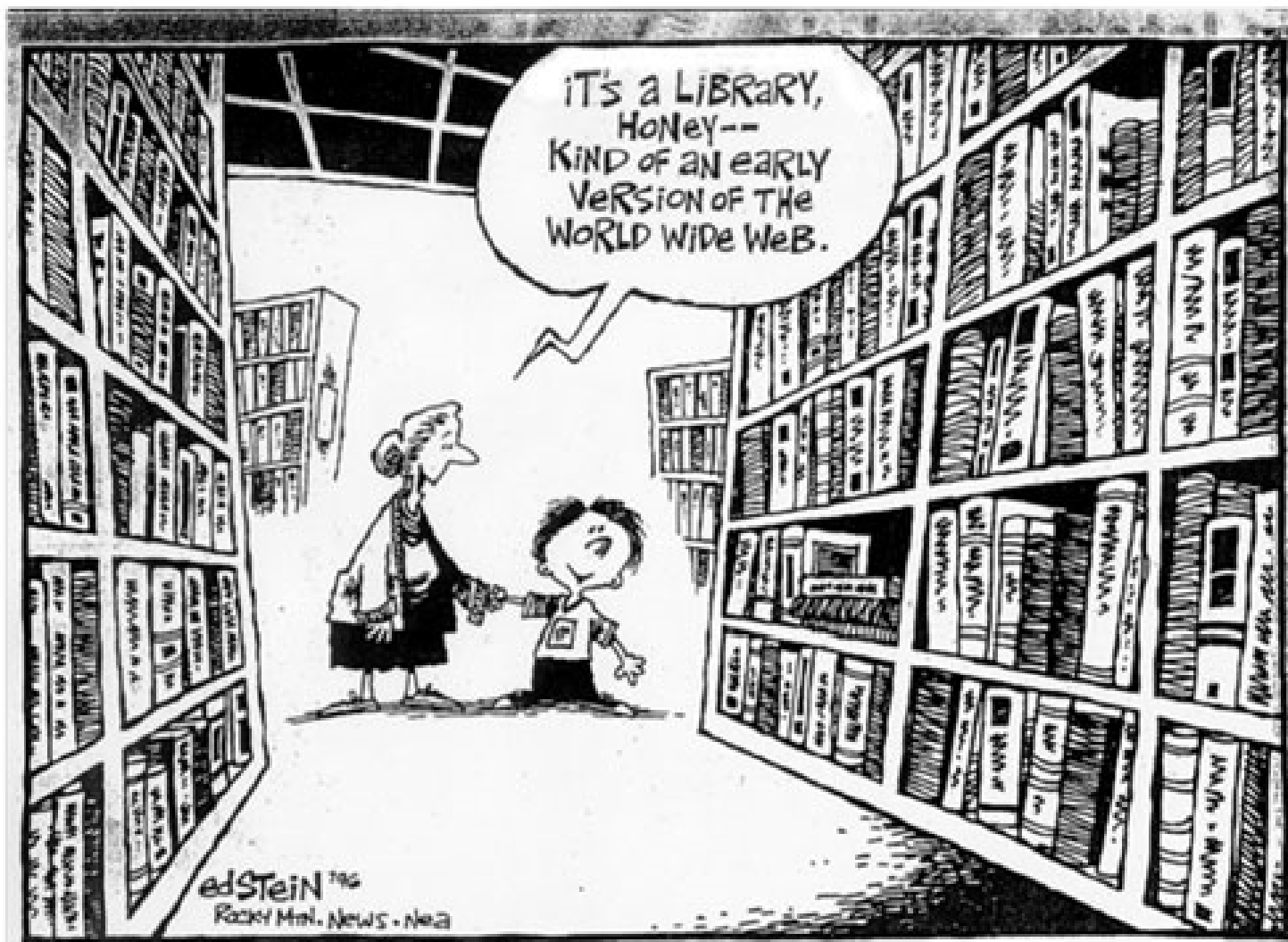


Where are we now?

- DEIMS Metadata Editor
- EnvThes – common vocabulary
- Data reporting
- Data quality assurance and data quality control



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Deliverables – to be completed

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Dataset metadata

- EnvEurope (LTER-Europe) Metadata Specification for Dataset Level Draft v3.0
- EnvEurope Drupal Ecological Information Management System – DEIMS, version 2.0
- Most comments processed and incorporated
- URL: <http://enveurope.geocatalogue.ise.cnr.it/deims>

EnvEurope DEIMS 2.0

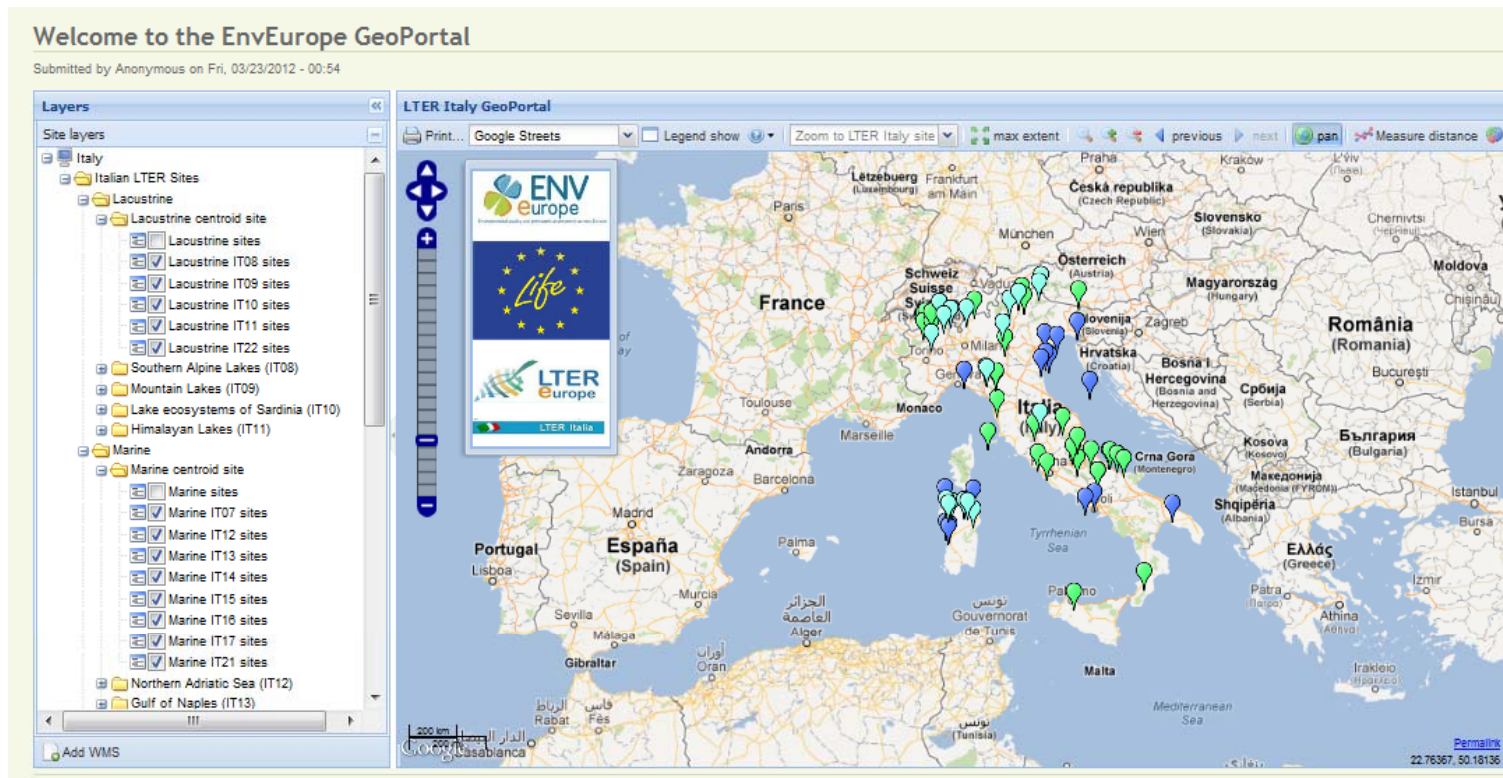


<http://enveurope.geocatalogue.ise.cnr.it/deims>

- Metadata editor
 - EnvEurope dataset, US-LTER dataset, Person
- Discovery
 - Advanced metadata search, Person search
- Geoviewer – EnvEurope GeoPortal

DEIMS: EnvEurope GeoPortal

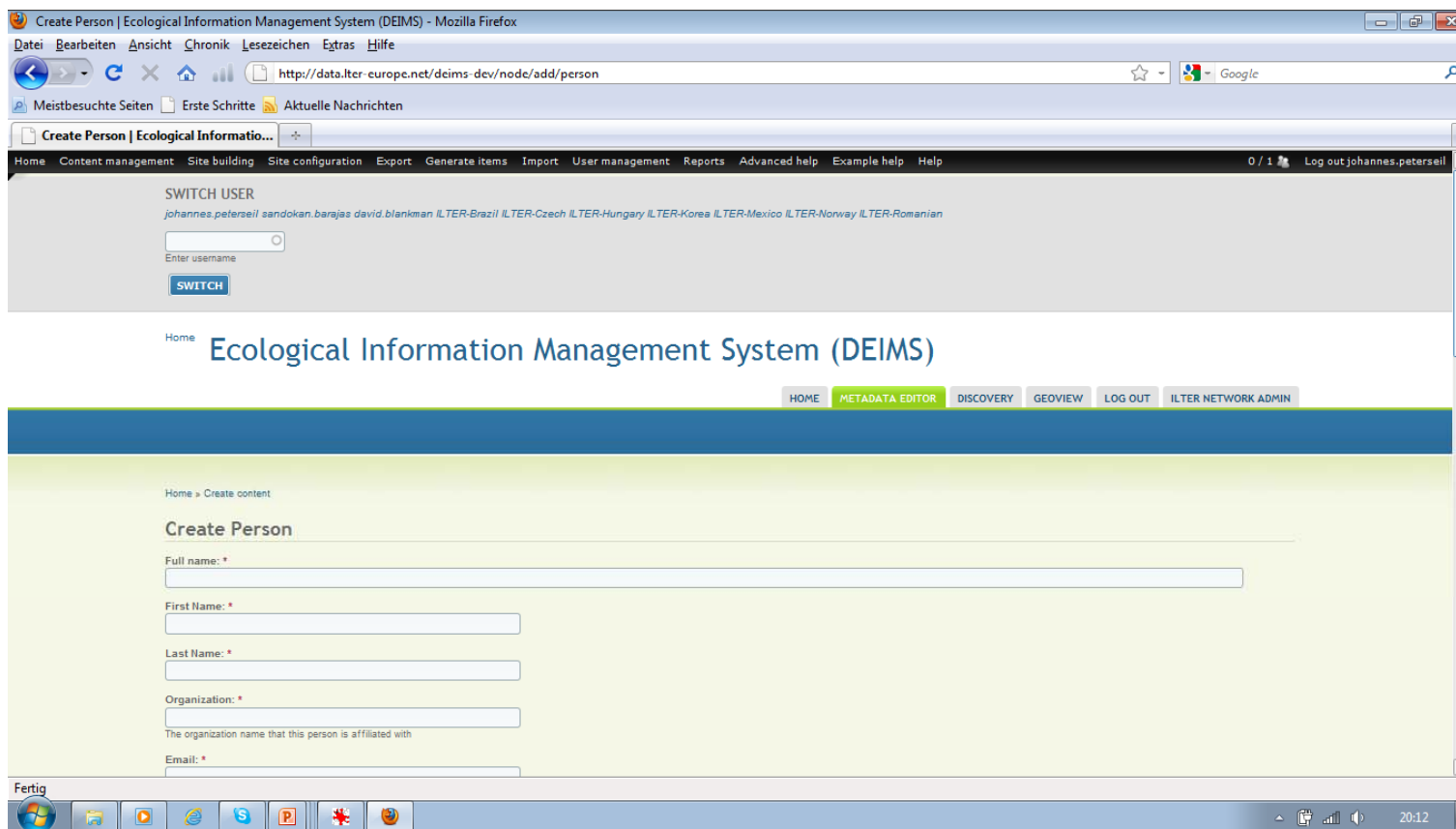
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- Under development – with data from LTER Italy
- Providing site information for EnvEurope site network based on the collected metadata for the site description



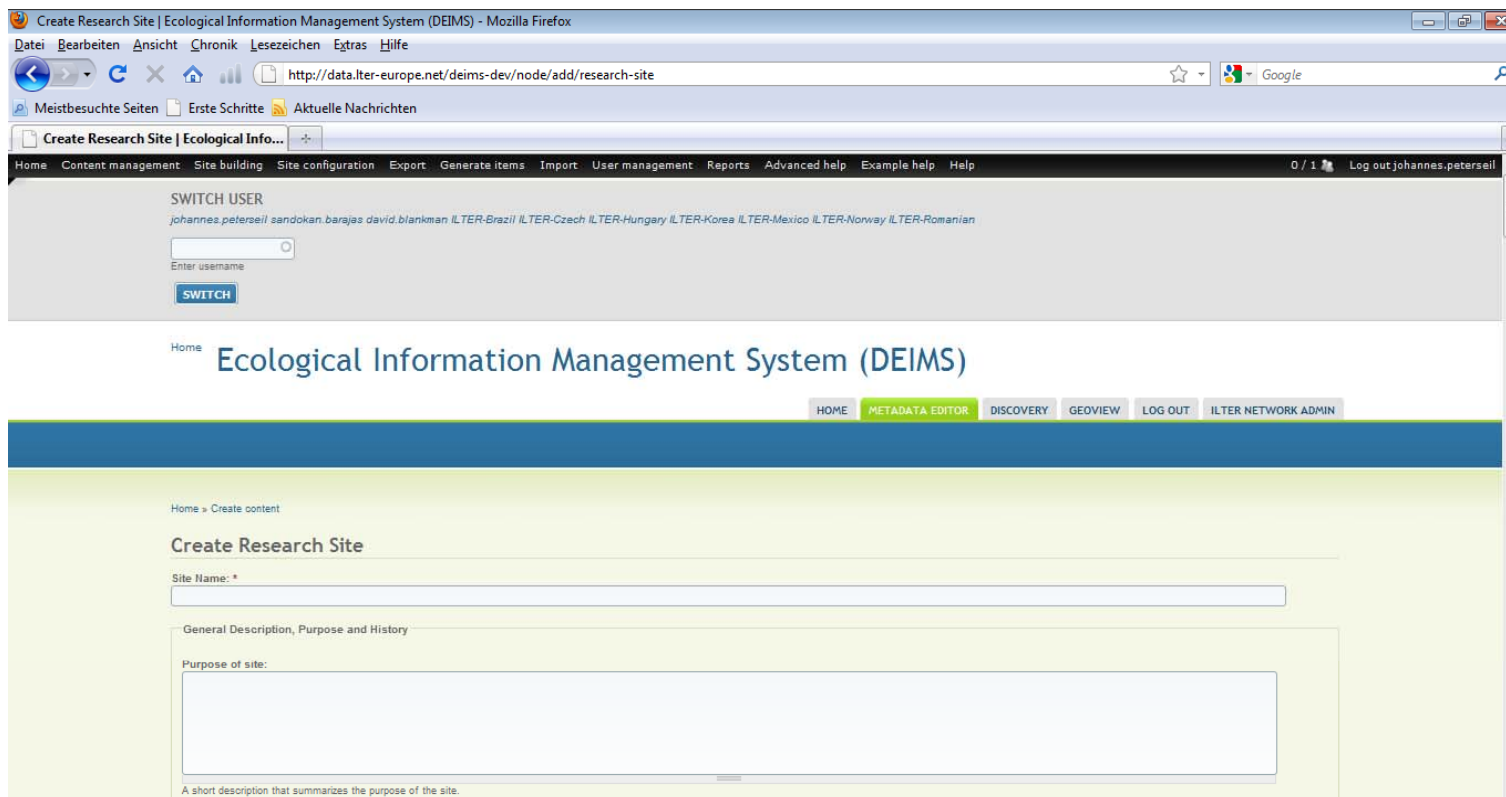
DEIMS: Person module



The screenshot shows the 'Create Person' page of the Ecological Information Management System (DEIMS). The browser window title is 'Create Person | Ecological Information Management System (DEIMS) - Mozilla Firefox'. The address bar shows the URL 'http://data.iter-europe.net/deims-dev/node/add/person'. The page has a navigation menu with links like Home, Content management, Site building, Site configuration, Export, Generate items, Import, User management, Reports, Advanced help, Example help, and Help. A 'SWITCH USER' section is visible with a dropdown menu showing users like 'johannes.petersell', 'sandokan.barajas', 'david.blankman', and others. Below this is a 'Create Person' form with fields for 'Full name', 'First Name', 'Last Name', 'Organization', and 'Email'. The 'Organization' field has a hint: 'The organization name that this person is affiliated with'. The page footer shows the time '20:12' and the status 'Fertig'.

- Allow the description of persons (e.g. site manager)

DEIMS: Site description



The screenshot shows a web browser window with the URL <http://data.lter-europe.net/deims-dev/node/add/research-site>. The page title is "Create Research Site | Ecological Information Management System (DEIMS)". The interface includes a navigation menu with options like Home, Content management, Site building, Site configuration, Export, Generate items, Import, User management, Reports, Advanced help, Example help, and Help. A "SWITCH USER" section allows switching between different users. The main content area is titled "Ecological Information Management System (DEIMS)" and contains a "Create Research Site" form. The form has a "Site Name" field and a "General Description, Purpose and History" section with a "Purpose of site" text area. A short description of the site is also visible.

<http://data.lter-europe.net/deims-dev/>

- Implementation of the site description developed in EnvEurope for the available sites

DEIMS EnvEurope 2.0

Next steps to be done:

- **Testing phase** has to be launched for dataset already collected or to be collected within the EnvEurope project
- **Metadata entry** for provided datasets
- To incorporate site level description and establish a link with data set level description
- To establish password policy for partners - options
 - Site level
 - Network level
- CSW Service implementation (EML/ISO19115)



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EnvEurope Thesaurus

https://secure.umweltbundesamt.at/envThes/en/hierarchical_concepts.html

EnvEurope Thesaurus

[Hierarchical listings](#) [Alphabetical listings](#) [Collections](#) [Search](#) [About](#)

Concepts

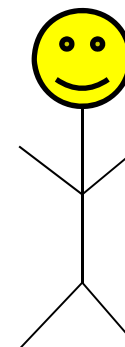
Please select one of the Concept listed below.

- CO2 surface flux
- Ecosystem Structures
- ☐ Eunis habitats
 - ☐ Coastal habitats
 - ☐ Constructed, industrial and other artificial habitats
 - ☐ Grasslands and lands dominated by forbs, mosses or lichens
 - ☐ Alpine and subalpine grasslands
 - ☐ Dry grasslands
 - ☐ Inland salt steppes
 - ☐ Mesic grasslands
 - ☐ Seasonally wet and wet grasslands
 - ☐ Mediterranean short humid grassland
 - ☐ Mediterranean tall humid grassland
 - ☐ Moist or wet eutrophic and mesotrophic grassland
 - ☐ Moist or wet oligotrophic grassland
 - ☐ Sub-mediterranean humid meadows
 - ☐ Sparsely wooded grasslands
 - ☐ Woodland fringes and clearings and tall forb stands
 - ☐ Habitat complexes
 - ☐ Heathland, scrub and tundra
 - ☐ Inland surface waters
 - ☐ Inland unvegetated or sparsely vegetated habitats
 - ☐ Marine habitats
 - ☐ Mires, bogs and fens

Keyword set

Controlled
Vocabulary

EnvEurope
Metadata System
Data services

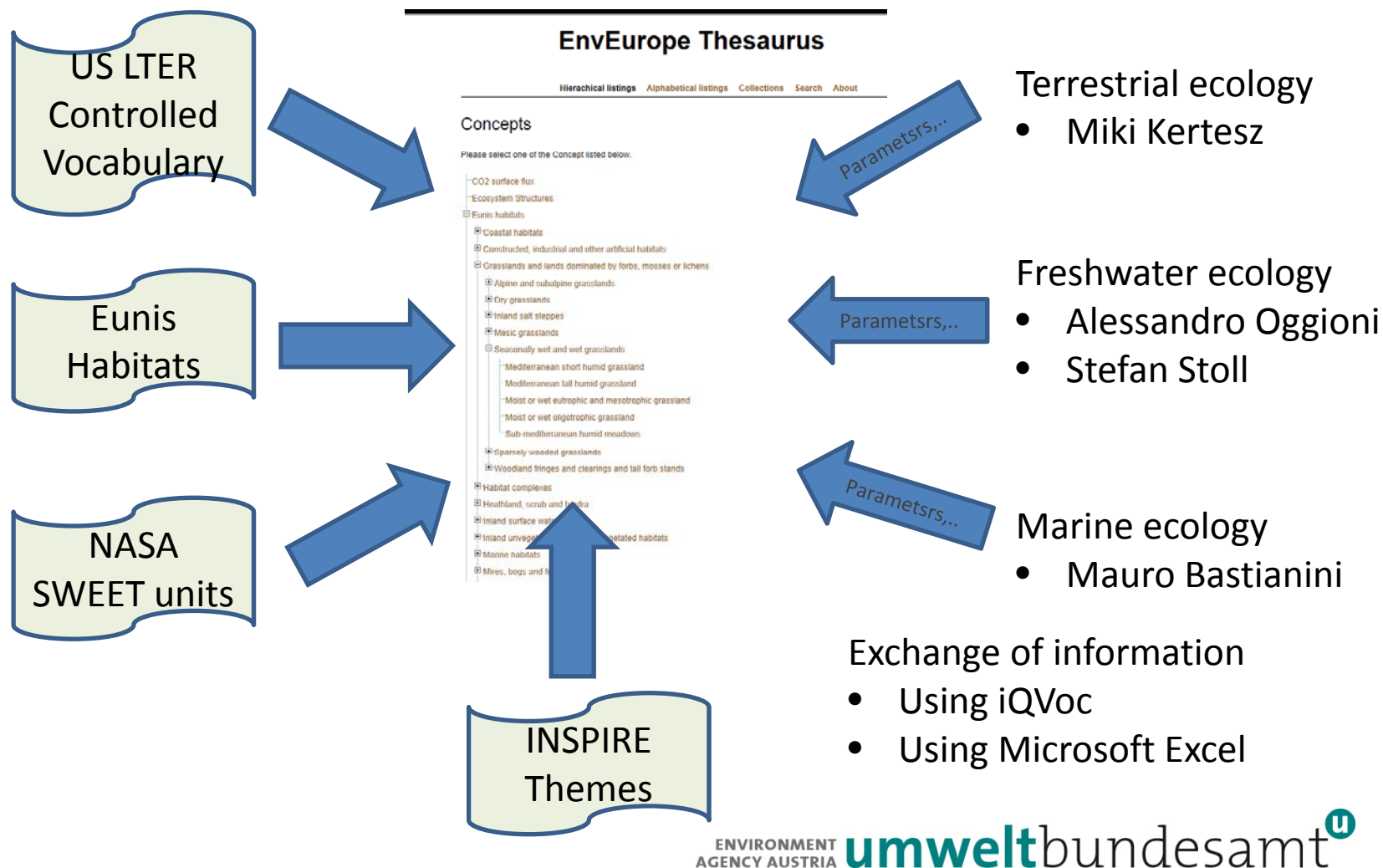


EnvEurope

EnvEurope Components

https://secure.umweltbundesamt.at/envThes/en/hierarchical_concepts.html

EnvEurope Working Groups



Links to other Thesauri

GEMET
(EEA – INSPIRE)

INSPIRE Themes

EUNIS Habitats
(EIONET)

EuroVoc
(European
Comission)

SKOS / RDF Standard

EnvEurope Thesaurus

[Hierarchical listings](#) [Alphabetical listings](#) [Collections](#) [Search](#) [About](#)

Concept: acid rain

https://secure.umweltbundesamt.at/envThes/USLterCV_10 (Turtle, RDF/XML)

Main

Broader terms
pollution « substances

Narrower terms
-

Assigned collections
• US LTER Controlled Vocabulary

Definitions
-

Labels

Preferred labels
(English) acid rain

Concept mappings

Close Matches
-

Exact Matches
http://en.wikipedia.org/wiki/acid_rain, <http://www.eionet.europa.eu/gemet/concept/51>,
<http://linkeddata.ge.imati.cnr.it:2020/resource/EARTH/76160>,
http://aims.fao.org/aos/agrovoc/c_15933, <http://eurovoc.europa.eu/4165>

Related Matches
-

Broader Matches
-

Narrower Matches
-

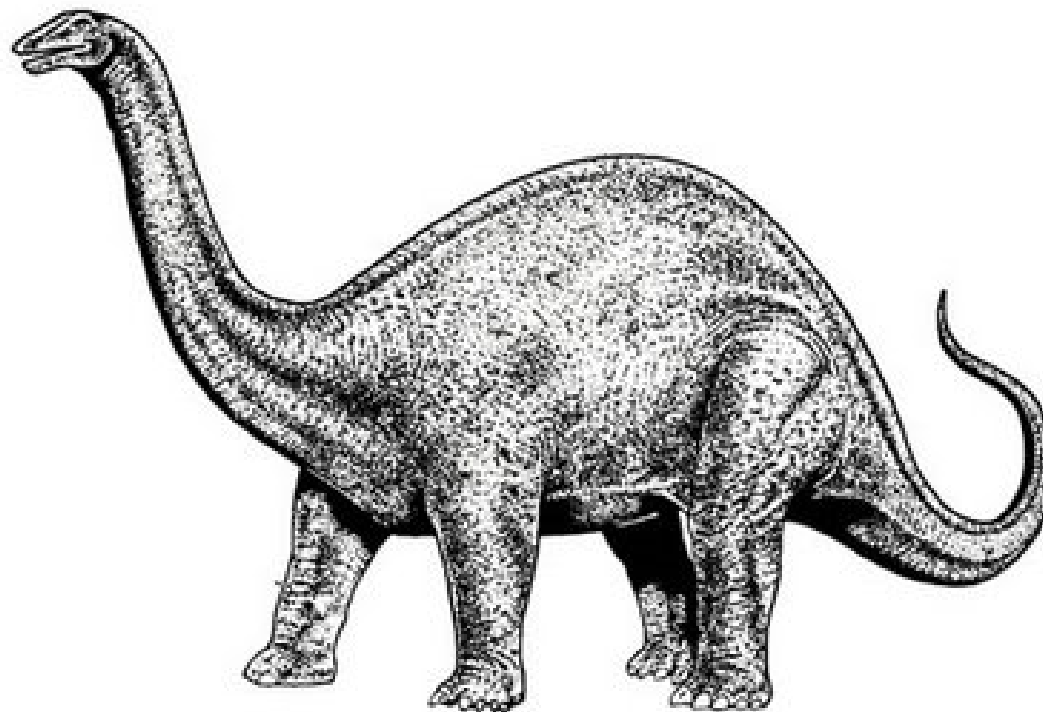
Wikipedia

EARTH
(CNR)

AGROVOC
(FAO)

??????

Completeness – Relations – Definitions - Translations



having great vocabulary didn't save the

THESAURUS

from extinction / eradication / extirpation



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Request on data reporting and data flow ...

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Data reporting: General idea

- Urgent need of data (e.g. projects)
- Provide an easy format for data exchange
 - for bio-geochemical data as well as for biological data
 - for different sampling intervals and aggregation levels (e.g. monthly average data)
 - Which can be easily extended (e.g. new parameters are required)
 - Which contains all information to use the data right now (even part of the metadata → will be separated / solved later)
- Evaluation of existing data reporting formats and select the useful parts of it
 - UNECE ICP Integrated Monitoring
 - UNECE ICP Forest
 - UNECE ICP Waters

Data reporting: Format

[illegible]

Excel file



Site Manager

- LTER_Europe_Fachseht
- ftp_private
- EmiEurope_DataCollection

Site Name
EmiEurope_DataCollection

Host / IP / URL
ftp.univieffondement.at Advanced

Username
KJL295_2 Anonymous

Password
Don't save password

Port 21 **Timeout** 60 **Retries** 2 Retry On

☒ **PKSV** ☐ **Use Proxy**

Connection
FTP

SSL Options
☒ **SSL Settings** ☒ **SSL Transfer** ☒ **Use SSL**
☐ **Use SSL** ☐ **Windows SSL**

Comments

New Site New Category Connect Cancel Close

FTP repository

Data reporting: Status

	Observations	AIR	PREC	BIOCOM	SOIL	SOILWAT	WATER	Files
Bulgaria	254	0	1	0	0	0	1	2
Finland	41	0	0	0	0	0	1	1
Germany	2039	0	0	1	0	0	1	1
Hungary	743	0	0	0	0	0	1	1
Italy	27	1	0	1	0	0	0	2
Lithuania	1200	1	1	0	0	0	1	1
Poland	16081	0	0	4	0	1	1	6
Romania	205	0	0	1	0	0	0	1
Spain	497	1	0	1	2	0	0	3
Sweden	9312	1	0	1	1	1	1	1
	30399	4	2	9	3	2	7	19

- Status 2012-05-17

- Problems with the upload of data?
- More time needed? Task not clearly defined?
- Started to integrate the data into a common database.

Quality assurance/Quality control

- Collection of quality assurance and quality control procedures from the beneficiaries
 - started
 - already some replies from beneficiaries and ICP Forest, ICP Integrated Monitoring, other networks to address?
- Compilation and development of a best practise guideline as a result from EnvEurope
 - Contribution to the reports
 - D4 Guideline for method consistency
 - D5 Best practise guideline for quality assurance and quality control for integrated data from LTER sites and LTSE platforms
 - any volunteers?



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We Want YOU!

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AGENCY AUSTRIA **umwelt**bundesamt^u

We want you ...



- Test of EnvEurope DEIMS 2.0
 - Volunteers 06/2012 → Tomas Kliment
- Metadata description of existing and newly generated datasets within EnvEurope
 - All beneficiaries → 06/2012
- Providing general and project data sets for A3
 - All beneficiaries → 06/2012
- Work together on a common vocabulary for long term ecological research and monitoring
 - Check for completeness
 - Provide definitions and relations
 - Provide translations
- Best practise on QA/QC of long term datasets
 - Task leader and contributors
- Technical meeting 09/2012 Place?



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