



BIOTA AFRICA Metadatabase

Instructions for filling in the metadata form

- 1) Please, only fill out one form per dataset / database.
- 2) The fields with red marks are mandatory.
- 3) If there are any queries, please contact Dr Gerhard Mucbe,
eMail: gerhard.mucbe@botanik.uni-hamburg.de, Tel: + 49 40 42816395.
- 4) Please, send the dataset to gerhard.mucbe@botanik.uni-hamburg.de or as postal item.

You can copy a metadata dataset and use it as a template for enter new data (e.g. if the entries about the contact person in the new dataset are the same as in any other dataset)

To copy a dataset as template please:

1. Choose a dataset in the overview of metadatabase.
2. Click "Details"
3. In the details view click the link: "Copy dataset as a template". The online form with filled fields will appear. You can change or delete the entries of any fields and save the form content as a new dataset.

Explanations to the individual input fields

Dataset metadata

- **Title:** Enter short title describing the dataset.
- **Description:** Describe the dataset. Here you have enough space to characterize your data. Take this field like the abstract of a publication.
- **Purpose:** State the purpose of the dataset.
- **Main theme(s):** Add one or more keywords describing the dataset. Have in mind that there is also the field 'sub theme(s)'. The combination of these two fields should lead to an appropriate specification limitation for search and find requests. It is possible to choose more than one keyword. The delimiter is the semi-colon. If there isn't an appropriate entry in the list below you may add a new main theme.
- **Subtheme(s):** Add one or more keywords describing the dataset. Have in mind that there is also the field 'main theme(s)'. The combination of these two fields should lead to an appropriate specification limitation for search and find requests. It is possible to select more than one keyword. The delimiter is the semi-colon. If there isn't an appropriate entry in the list below you may add a new subtheme.
- **Biome(s):** Add one or more identifier of biomes to indicate that the dataset contains relevant information about these biomes. It is possible to select more than one keyword. The delimiter is the semi-colon. If there isn't an appropriate entry in the list below you may add a new biome. Example: Woodland; Savanna.
- **Country(ies):** Add a country name to indicate that the dataset contains relevant information about this country. It is possible to note more than one country. The delimiter is the semi-colon. Example: Namibia
- **Administration unit(s):** Add the administration unit to which the contribution belongs. In the different countries there are different terms in use to name the administration units e.g. region, district, province. Therefore we use the abstract term 'Administration unit'. Feel to be free to interpret this in an appropriate way. Have in mind that there is also the field 'Localities' to describe the local level. It is possible to note more than one administration unit. The delimiter is the semi-colon.

- **Locality(ies):** Add the locality to which the dataset belongs. Have in mind that there is also the field 'Administration unit' to describe the level between the country and the local level. It is possible to note more than one locality. The delimiter is the semi-colon.
- **BIOTA Observatory(ies):** Add one or more identifier for the BIOTA Biodiversity Observatory to indicate that the dataset contains relevant information about this site. It is possible to select more than one observatory. The delimiter is the semi-colon. If there isn't an appropriate entry in the list you may add a new observatory. If the data do not belong to an observatory please fill in 'no observatory'.
- **Period(s):** Add the period in which the observation or sampling has been done. It is possible to note more than one period. The delimiter is the semi-colon. Examples: 2004-2006 or June 2006 or May 2001; May 2002; May 2003; May 2005; June 2006.
- **Sampling method(s):** Add the method with which the data were gathered. Feel free to describe your methods with your own wording.

Examples:

1. standardized data sheet, standardised laboratory methods
2. Soil samples, sieving isolation of VA-spores, identification with morphological and molecular methods, literature, root samples, mycorrhization rate with morphological tools, identification with molecular methods
3. Soil samples, washing method for isolation of fungi, determination with mainly morphological methods, literature
4. Lichen samples, identification with microscopical, chemical and molecular methods, literature
5. Personal observations with data sheets based on SOTER methodologies
6. Personal observations based on self-developed data sheets
7. Personal observations and existing data on observatories
8. Species collection in 4 petridishes, one each for cyanobacteria, green algae, chlorophyll content and C/N content and isotope fractionation; 1 kilogram soil sample for grain size analysis
9. Collection of herbarium specimens or fruits/seeds (diaspores) of species occurring on the Observatories
10. Field observations, observations on herbarium specimens, literature
11. Modified Braun-Blanquet method (cover values in percentage) (according to standardised data sheet)
12. pitfall traps; malaise traps; light traps; singling
13. Sherman traps; pitfall-traps; capture-mark-recapture; collection of voucher specimens
14. Field records, catch and release, collection of species for NMNW collection, collection of tissue for molecular genetical analysis
15. Soil samples, thermobuttons, TDR soil water measurements
16. Collection of seeds, germination tests
17. Soil cores 5 cm deep, 4 cm diameter
18. Seed traps in different structures, sampled once weekly
19. Braun-Blanquet method (cover values in percentage)
20. complete, all households of community
21. transects radially around central waterhole, sampling each 200m

- **Responsible person(s):** Add the name of the person who is responsible for the data. It may be the same person as the contact person but often the persons who have gathered the data are others than the one who has momentarily the access to the data.
- **Regional network(s):** BIOTA AFRICA consists of four regional networks: BIOTA East Africa, BIOTA Maroc, BIOTA Southern Africa and BIOTA West Africa. Choose the name(s) of the regional network(s) in the choice-box to indicate that the dataset has connections to these regions. A multiple choice is possible.
- **Related subprojects / workpackages / topics:** BIOTA AFRICA consists of several subunits. In phase I and II the term 'subproject' was in use, also 'workpackage' as a subunit of subproject. In the ongoing phase III in BIOTA Southern Africa the subunits are named 'workpackages' and in BIOTA West Africa the subunits are 'core topics' and 'topics', see list. Please, add one or more such subunits to indicate that the dataset has connections to these subunits. It is possible to select more than one subunit. The delimiter is the semi-colon.
- **Copyright holder:** Add the name of the person or institution that claims a copyright for the dataset. It is possible to insert more than one holder of a copyright. Please, use the semi-colon as a delimiter.
- **Restrictions of dissemination:** The sidelines of funding offer five categories to characterize the restrictions of dissemination the data. Please, select the category you claim for the data's protection. The categories see below. There the categories are identified with an abbreviation and meaning.
 - (1) *Available:* Readily available taking certain limitations into account (e.g. precision of spatial coordinates, exemption of Red List species)
 - (2) *BIOTA AFRICA:* Readily available exclusively for participants of the BIOTA AFRICA data sharing protocol for a clearly defined time period (please define time period, e.g. temporary protection for PhD or Master projects)
 - (3) *IT-Management:* To be submitted exclusively by IT-Management within a clearly defined period as specified by the Project Coordination Office
 - (4) *Data provider:* Can be obtained upon a special request being addressed to the data provider directly.
 - (5) *Archive:* For a long-term perspective (i.e. 30 years) not suitable for sharing but only for archiving purposes.

Please, select one of the five categories. In the strict sense of the funding sidelines this field is mandatory.
- **Start time of protection:** The sidelines offer a period of protection for a dataset. Please, declare the date from which the protection should be started. In combination with the duration, see field duration of protection, the end can be calculated.
- **Duration of protection:** The sidelines offer a period of protection for a dataset. Please, declare the duration for which the data should be protected. In combination with the start time, the end can be calculated. Please, use one of the following duration entries: 1 year, 2 years, 3 years, 4 years, 5 years, 10 years, 15, years, 20 years, 25 years, 30 years.
- **Rationale / notes:** Please, describe the reason for a claimed protection (necessary if in field category is selected (2), (3), (4) or (5)). Here you can also note the exceptions for category (1) e.g. Red List species.

Data

- **Format:** Add the format in which the data is stored, e.g. MS-Excel. The list contains the common data formats. If the data format of your dataset isn't among the listing you are be asked to add the format.

- **File name(s) / size(s):** Please note the file name of the dataset. This information is important to link this description with the data itself. For data stored in MS-Excel or MS-Access or so only the name of this file is needed. If the data itself consists of more than one file (e.g. dBase-data) we need all names. If you have a collection of many files, e.g. photographs, it is possible to give the name of a folder or a zip-archive. Please, note the size of the respective file besides the file name in kB (Kilobyte), MB (Megabyte), GB (Gigabyte), TB (TeraByte). Example: SouthAllObs.mdb / 150 MB.
- **Software requirements:** If the data needs software to be read please write which one is necessary. The filling of this field is only necessary if it is not common software like the products of MS Office.

Documentation

For each dataset there exists usually a description of fields and definitions. In the fields listed below you can specify the available documentation.

- **Format:** For each dataset there exists usually a description of fields and definitions. Here you are asked to specify the format of this documentation.
- **File name(s):** Please, write here the name of the documentation file.
- **Status:** Select in the list one of the category describing the status of the documentation. (1) complete; (2) in process; (3) need to be updated; (4) not available
- **Notes:** Note additional information about the documentation of the dataset.
- **Related publications:** Often there are publications in which the dataset and its usage are described. In this field you can name those publications. You may insert more than one publication. Use the template:

Smith, J.; Taylor, M.; Baker, P. J.: Title, place and year of publication.

Dataset contact

- **Organisation:** Add name of your organisation.
- **Contact person:** The contact person has specific knowledge about the data and is the one who can be asked when a scientist want to use the data. Please, add surname, first name, academic title, and position in the fields below.
 - **Surname:** Add the surname of the contact person.
 - **First name:** Add the first name of the contact person.
 - **Academic title:** Add the academic title of the contact person. Examples: Dr., Prof., MSc
 - **Position:** Add the position of the contact person. Examples: Subproject leader, Database manager
 - **Country:** Add the country of the contact person. Example: Germany.
 - **City/Town:** Add the city or town of the contact person. Example: Hamburg
 - **Postal code:** Add the postal code of city or town of the contact person. Example: D-22609
 - **Postal address:** Add the postal address (street, box). Example: Ohnhorststrasse 18
 - **Telephone:** Add the telephone number of the contact person. Example: +49 (0) 40 42816395
 - **Fax:** Add the fax number of the contact person. Example: +49 (0) 40 42816261
 - **eMail:** Add the e-mail address of the contact person. Example: gerhard.muche@botanik.uni-hamburg.de

- **Website address:** Add the website address of your organization or department.
Example: <http://www.biota-africa.org>, see 'Participants'.
- **Update done by** Please note your name. This may be important if you are not the contact person.

List of keywords

Main themes

(Please add further keywords if necessary)

Agriculture; Air; Biodiversity; Climate; Conservation; Degradation; Desertification; Ecosystem; Environment; Fauna; Fire; Fisheries; Flora; Forestry; Fresh water; Health; Industry; Land; Land use; Marine; Mining; Natural History Collections; Pollution; Socio-economics; Soil; Terrestrial; Tourism; Water; Restoration

Subthemes

(Please add further keywords if necessary)

Abundance; Air quality; Aliens; Amphibian; Biodiversity; Biomass; Bird; Carbon cycling; Carbon dioxide; Cash crops; Cloud cover; Deforestation; Demography; Disease; Domestic; Drought; Drug/alcohol abuse; Economic growth; Education; Electricity use; Energy cost; Erosion; Export/Import; Fallows; Farming; Fertilizer use; Fire characteristics; Fishery permits; Floods; Food yields; Forest; Frequency; Fruit; Fruit types; Fuel; Fuel sales; Game; Game farms; Game reserves; Gold; Grain; Groundwater; Grassland; Grazing; Ground water; Habitats; HIV-AIDS; Household; Housing; Humidity; Hunting; Income; Industrial effluent; Industry; Insect; Interest rates; Invasive; Invertebrate; Iron; Uranium; Irrigation; Job creation; Jobless growth; Lake; Life expectancy; Landfill sites; Literacy; Lifestock; Living standards; Maize; Malaria; Mammal; Medical plants; Methane; Micro-organisms; Migration; Morbidity; Mortality rates; Natural disasters; Nitrogen cycling; Nitrous oxide; Nutrien cycling; Nutriens; Ozone; Parklands; Pesticide use; pH; Photographs; Photosynthetic types; Platinum; Poaching; Population census; Protected areas; Railways; Rainfall; Remote sensing; Reptile; Reservoirs; Respiratory disease; Restoration; River; Roads; Rural; Salinity; Sanitation; Satellite images; Sediment; Smog; Smuggling; Solar radiation; Soil characteristics; Species richness; Spider; Stocking rates; Temperature; Thicket; Timber; Tuberculosis; Unemployment; Use of agro chemicals; UVB radiation; Vegetation structure; Vertebrate; Waste; Water contamination; Water cost; Water quality; Water requirements; Water runoff; Water use; Wetland; Wildlife management; Wind; Air temperature; Rain; Relative humidity of air; Wind speed; Wind direction; Wetness;

Biomes

(Please add further keywords if necessary)

Woodland; Savanna; Steppe; Desert; Succulent Karoo; Fynbos; Oromediterranean belt; Irano-turanian steppe; Pre-saharan semi-deserts; Saharan desert

Subunits of BIOTA AFRICA

(Please add further keywords if necessary)

S01 Remote sensing; S02 Soil science; S11 Socio economy; S09 Integrative modelling; S08 Dragonflies; S06 Botany; S05 Biological soil crusts; S03a Mycorrhiza and soil fungi; S10 Arthropods; S04 Lichens; S03b Rust fungi; S12 Zoology; DS&T 01 Ecological status of Aloe pillansea; DS&T 02 Impact of land use; DS&T 03 Biodiversity hotspots; DS&T 04 Clay mineralogy; DS&T 05 Anthropogenic climate change; DS&T 06 West Coast fog; DS&T 07 Archival landscape photographs; DS&T 09 Modis data products ; DS&T 10 Communal rangelands; S&T 11 Literature database; DS&T 08 Tierberg Karoo Research Centre; W01 Remote sensing; W02 Biodiversity management concepts; W03 Biodiversity of Africa in the global context; W04 Sustainable land use; W06 Arthropods; W08 Amphibian-indicator system; W09 Functional biodiversity; W11 Phytodiversity dynamics; E01 Rain forest; E02 Remote sensing; E03 Regeneration of tropical upland trees; E04 Montane rainforests; E07 Dragonflies;

E08 Frogs; E10 Pollinators; E11 Avian diversità; E13 Socio economy; E14 Rural livelihood; E15 Capacity building.

Biodiversity observatories BIOTA South Africa:

S01 Mile 46; S02 Mutompo; S03 Sonop 903; S04 Toggekry-Omatako; S05 Otjiamongombe West 44; S06 Okamboro Ovitoto 55; S09 Niko reserve; S08 Niko grazing; S10 Gellap Ost 3; S11 Nabaos 7; S12 Karios-Fish River Canyon; S16 Wlotzkasbaken - Mile 14; S17 Alpha; S18 Koeroegap Vlakte; S20 Numees; S21 Groot Derm - Yellow Dune; S22 Quaggasfontein 478 (Soebatsfontein); S24 Leliefontein 624 (Paulshoek); S25 Remhoogte 416 (Rooiwal); S26 Flaminkvlakte 111 (Goedehoop); S27 Luiperskop 211 (Ratelgat); S28 Moedverloren 208; S29 Roscherpan Nature Reserve; S31 Riverlands; S32 Elandsberg; S33 Cape of Good Hope - Cape Peninsula; S34 Kleinberg; S35 Gobabeb; S36 Ganab; S37 Rooisand; S38 Claratal; S39 Narais; S40 Duruchaus; S41 Sandveld; S42 Ogongo 1;

Biodiversity observatories BIOTA West Africa:

Tai National Park; Lamto Reserve; Comoé National Park; Dano/ Bontioli NP; Ouahigouya; Gorom Gorom; Boutenga/ Gonsé; Fada N'Gourma; Pendjari National Park; Pehunco

Biodiversity observatories BIOTA Maroc:

Ameska (IMS), Argioun (ARG), Bou Skour (BSK), El Miyit (EMY), Jebel Bani (JHB), Lac Iriqui (IRK), Taoujgalt (TAO), Tizi -n- Tounza (TZT), Tizi El Fugani (TIC), Trab Labied (TRL)

If there is no relation between the dataset and the observatories, please type 'no observatory'.

Data format

(Please add further keywords if necessary)

ArcView; ASCII; BIOTABase; CSV; dBaseIII; GIF; IMG; JPG; MS-Word; MS-Excel; MS-Access; MS-SQL; MySQL; Specify, TIFF; TurboVeg, VisualPlants