abundance

Column	Type	Null	Definition	Controlled vocabulary
ID_ABUNDANCE	int(11)	No	Primary key	-
ABUNDANCE_TYPE	varchar(100)	Yes	Description of abundance measurement. Foreign key (table: datasets).	Presence/absence; Count; MeanCount; Density.

allrawdata

Column	Type	Null	Definition	Controlled vocabulary
ID_ALL_RAW_DATA	int(11)	No	Primary key	-
ABUNDANCE	float	No	Numerical abundance of species recorded in a sampling event. Abundance of different life stages, sizes or sex pooled.	-
BIOMASS	float	No	Biomass of species recorded in a sampling event. Abundance of different life stages, sizes or sex pooled.	-
ID_SPECIES	int(11)	Yes	Foreign key (table: species). Where no previous entry for a species exists then it is added to the table and number assigned	-
SAMPLE_DESC	varchar(200)	No	A concatenation of relevant fields and information to determine the temporal and spatial features that make each sampling event unique (e.g. 2011_10_5_-7.89_16.988_t2_b for year_month_day_latitude_longitude_transect_quadrat). Each sampling event within a study has a unique character combination defined in SAMPLE_DESC_NAME(sample table)	-
LATITUDE	decimal(10,6)	No	Latitude of record's location in decimal degrees, e.g. -7.89	-
LONGITUDE	decimal(10,6)	No	Longitude of record's location in decimal degrees, e.g. 16.988	-
DEPTH	float	Yes	Depth or elevation of the record's location in meters, e.g. -12	-
DAY	int(11)	Yes	Day of month in figures, e.g. 1 - 31	-
MONTH	int(11)	Yes	Month of year in figures, e.g. 1 - 12	-
YEAR	int(11)	Yes	Year in figures, e.g. 1998	-
STUDY_ID	int(11)	Yes	Foreign key (tables: metadata, contacts, citation1, curation, datasets, methods, site)	-
newID	int(11)	Yes	Foreign key (table: species, speciesV1). New species identifier for version 2 (the original ID_SPECIES is retained in species V1)	-

biomass

Column	Type	Null	Definition	Controlled vocabulary
ID_BIOMASS	int(11)	No	Primary key	-
BIOMASS _TYPE	varchar(100)	Yes	Description of biomass measurement. Foreign key (table: datasets)	Size; Weight; Volume; Cover

contacts

Column	Type	Null	Definition	Controlled vocabulary
ID_CONTACTS	int(11)	No	Primary key	-
STUDY_ID	int(11)	Yes	Foreign key (tables: allrawdata, metadata, citation1, curation, datasets, methods, site)	-
CONTACT_1	varchar(500)	Yes	First point of contact	-
CONTACT_2	varchar(500)	Yes	Second (if any) point of contact. If more than 2 contacts, more are listed here.	-
CONT_1_MAIL	varchar(60)	No	First contact email address	-
CONT_2_MAIL	varchar(60)	Yes	Second contact email address. If more than 2 contacts, more are listed here.	-
LICENSE	varchar(200)	No	License type requested by data providers. Usually this is a Creative Commons (CC0, CC-BY, CC-BY-SA, etc.) or Open Data Commons licence (PDDL, ODC-BY, ODC-BY-SA, etc.), but others are also allowed.	-
WEB_LINK	varchar(200)	Yes	URL of any web links from data providers.	-
DATA_SOURCE	varchar(250)	No	Original data source, preferably a DOI	-

citation1

Column	Type	Null	Definition	Controlled vocabulary
ID_CITATION	int(11)	No	Primary key	-
STUDY_ID	int(11)	Yes	Foreign key (tables: allrawdata, metadata, contacts, curation, datasets, methods, site)	-
CITATION_ID	int(11)	Yes	Foreign key (for bibliography)	-
BIB	text	Yes	Bibtex for given citation	-

curation

Column	Type	Null	Definition	Controlled vocabulary
ID_CURATION	int(11)	No	Primary key	-
STUDY_ID	int(11)	Yes	Foreign key (tables: allrawdata, metadata, citation1, contacts, datasets, methods, site)	-
LINK_ID	int(11)	Yes	ID of any associated datasets	-
COMMENTS	text	Yes	Comments describing any changes introduced during curation. If a script was used, the name of the script is also store here, together with the curator identifier.	-
DATE_STUDY_ADDED	varchar(50)	No	Date in text format - MMM-YY (Jan-17)	-

datasets

Column	Type	Null	Definition	Controlled vocabulary
ID_DATASETS	int(11)	No	Primary key	-
STUDY_ID	int(11)	Yes	Foreign key (tables: metadata, contacts, citation1, curation, allrawdata, methods, site)	-
TAXA	varchar(50)	Yes	Taxa of study	Multiple; Birds; Fish; Mammals; Plants; Amphibians; Reptiles; Invertebrates; Fungi
ORGANISMS	varchar(200)	Yes	Organism of study as described by data providers or in data source	-
TITLE	varchar(450)	Yes	Title of study as provided by contributor, as present in the data source or created to be descriptive of the time-series	-
AB_BIO	varchar(2)	Yes	Identification of whether the study contains abundance, biomass or both	A; B; AB
DATA_POINTS	smallint(6)	Yes	Number of years covered by study	-
START_YEAR	smallint(6)	Yes	First year of study	-
END_YEAR	smallint(6)	Yes	Final year of study	-
CENT_LAT	decimal(10,6)	No	Central latitudinal point of study in decimal degrees- calculated using convex hull (centre point) e.g. 40.5785	-
CENT_LONG	decimal(10,6)	No	Central longitude point of study in decimal degrees - calculated using convex hull (centre point) e.g. -9.87	-
NUMBER_OF_SPECIES	int(11)	Yes	Total number of species in study	-
NUMBER_OF_SAMPLES	int(11)	Yes	Total number of unique sampling events in study	-
NUMBER_LAT_LONG	int(11)	Yes	Total number of unique geographic points (lat/longs) sampled in study	-
TOTAL	int(11)	No	Total number of records within study	-
GRAIN_SIZE_TEXT	varchar(250)	Yes	Size of spatial grain used for each sampling event in text, if available	-
AREA_SQ_KM	double	No	Area of study in square km as from data source, or as calculated using convex hull of sampling locations	-
AB_TYPE	varchar(100)	No	Foreign key (table: abundance)	-
BIO_TYPE	varchar(100)	No	Foreign key (table: biomass)	-
SAMPLE_TYPE	varchar(250)	No	Foreign key (table: sample)	-

methods

Column	Type	Null	Definition	Controlled vocabulary
ID_METHODS	int(11)	No	Primary key	-
STUDY_ID	int(11)	Yes	Foreign key (tables: allrawdata, metadata, citation1, contacts, datasets, curation, site)	-
METHODS	text	Yes	Detailed sampling design description as present in source, as provided by data contributors or as confirmed to dataset curator by providers	-
SUMMARY_METHODS	varchar(500)	Yes	Short description of method, e.g. plots, transects	-

originalSpecies

Column	Type	Null	Definition	Controlled vocabulary
ID_SPECIES	Int(11)	No	Primary key	
origSpecies	varchar(100)	Yes	Species name from the original records (BioTIME v1)	
newID	int(11)	No	Foreign key (table: species)	

sample

Column	Type	Null	Definition	Controlled vocabulary
ID_SAMPLE	int(11)	No	Primary key	-
SAMPLE_DESC_NAME	varchar(200)	Yes	Descriptor of how SAMPLE_DESC was defined for each study, so a list of the concatenated information that described each unique sampling event that occurred in each study (e.g. year-month-day_latitude-longitude-transect-quadrat)	-

site

Column	Type	Null	Definition	Controlled vocabulary
ID_SITE	int(11)	No	Primary key	-
STUDY_ID	int(11)	Yes	Foreign key (tables: metadata, contacts, citation1, curation, allrawdata, methods, datasets)	-
REALM	varchar(11)	Yes	Realm of site	Marine; Terrestrial; Freshwater
CLIMATE	varchar(20)	Yes	Climate of site	Tropical; Temperat; Polar; Polar/temperate; Temperate/tropical; Global
GENERAL_TREAT	varchar(200)	Yes	Description of treatment (if any). Most times only control/not manipulated sites are retained.	-
TREATMENT	varchar(200)	Yes	Treatment levels including control (if any)	-
TREAT_COMMENTS	varchar(250)	Yes	Description of each treatment level (if any)	-
TREAT_DATE	varchar(100)	Yes	Dates when treatments were applied (if any)	-
CEN_LATITUDE	decimal(10,6)	Yes	Central latitudinal point of study in decimal degrees- calculated using convex hull (center point) e.g. 40.5785	-
CEN_LONGITUDE	decimal(10,6)	Yes	Central longitude point of study in decimal degrees - calculated using convex hull (center point) e.g. -9.87	-
HABITAT	varchar(100)	Yes	Description of habitat as provided by data source, e.g., small ponds, coastal, small woodland etc.	-

PROTECTED_AREA	varchar(50)	Yes	Presence of protected areas as indicated in data source, i.e. not based on global layers	TRUE; FALSE; MixedSpatial; MixedTemporal;MixedSpatialTemporal
AREA	float	Yes	Area of study in square km as from data source, or as calculated using convex hull of sampling locations	-
BIOME_MAP	varchar(20)	Yes	Biome as listed on WWF site	Deserts and xeric shrublands; Tropical and subtropical moist broadleaf forests; Tropical and subtropical dry broadleaf forests; Tropical and subtropical coniferous forests; Temperate broadleaf and mixed forests; Temperate coniferous forest; Boreal forests / Taiga; Tropical and subtropical grasslands, savannas and shrublands; Flooded grasslands and savannas; Montane grasslands and shrublands; Tundra; Mediterranean forests, woodlands and scrubs; Mangroves, Large river ecosystems, Large river headwater ecosystems; Large river delta ecosystems; Small river ecosystems, Small lake ecosystem; Xeric basin ecosystems; Polar ecoregions; Temperate shelf and seas ecoregions; Temperate upwelling; Tropical upwellings; Tropical coral; Multiple.

species

Column	Type	Null	Definition	Controlled vocabulary
newID	Int(11)	No	Primary key	
GENUS	varchar(100)	No	Genus if recorded, use NA where resolution is coarser than genus	-
valid_name	varchar(100)	No	Valid name as listed either using *taxize* or *worms* packages from R, this is given as the highest resolution possible (so ideally species e.g. *Gadus morhua*)	-
family	varchar(100)	No	Family if recorded, use NA where resolution is coarser than family	-
order	varchar(100)	No	Order if recorded, use NA where resolution is coarser than order	-
class	varchar(100)	No	Class if recorded, use NA where resolution is coarser than class	-
phylum	varchar(100)	No	Phylum if recorded, use NA where resolution is coarser than phylum	-
kingdom	varchar(100)	No	Kingdom, should never be NA, at least unknown taxon is used	-
package	varchar(100)	No	R package used, worrms or taxize, otherwise manual where online databases of taxonomic classifications (e.g. WORMS, Avibase) were used	-
resolution	varchar(100)	No	Resolution of highest available classification	-
taxon	varchar(100)	No	Taxonomic group	Birds; Fish; Mammals; Plants; Amphibians; Reptiles; Invertebrates; Fungi; Multiple