BIOTRAITS TEMPLATE DESCRIPTION

Fields	Description	Variable codes
OriginalID	Unique ID that separates each thermal response curve (as comes in the original dataset)	
FinalID	Unique ID that separates each thermal response curve (to be assigned manually in the global dataset)	
OriginalTraitName	Trait name as it found in source (e.g. "Chlorophyll a - specific photosynthesis rate" or "max photosynthesis rate" or "net co2 consumption rate")	
OriginalTraitDef	Definition of OriginalTraitName	
StandardisedTraitName	Trait name for comparison: "net photosynthesis rate" / "gross photosynthesis rate" / "respiration rate"	
StandardisedTraitDef	Definition of the StandardisedTraitName	
OriginalTraitValue	Value of the measured trait as found in source	
OriginalTraitUnit	Units of OriginalTraitValue as found in source	
OriginalErrorPos	Positive bound of the error around OriginalTraitValue as found in source	
OriginalErrorNeg	Negative bound of the error around OriginalTraitValue as found in source	
OriginalErrorUnit	Units of ErrorPos and ErrorPos as found in source	*SD* = standard deviation ; *SE* = standard error; *95% CI* = 95% confidence interval; *interquartile range*; *range*
StandardisedTraitValue	Value of the measured trait after unit standardisation (SI)	
StandardisedTraitUnit	Units of StandardisedTraitValue (SI)	
StandardisedErrorPos	Standardised positive bound of the error around StandardisedTraitValue	
StandardisedErrorNeg	Standardised negative bound of the error around StandardisedTraitValue	
StandardisedErrorUnit	Units of StandardisedErrorPos and StandardisedErrorNeg	
Replicates	Number of replicates used to calculate ErrorPos and ErrorNeg	

Habitat	Habitat Type of Consumer	*Terrestrial / freshwater / marine*
Labfield	Experimental location	*Laboratory / field*
ArenaValue	Size of the experimental area (e.g. volume of chemostat)	
ArenaUnit	Units of ArenaValue (e.g. liter, square meter)	
ArenaValueSI	SI value of size of arena where trait performance was measured (ArenaValue in SI units)	
ArenaUnitSI	SI unit of size of arena where trait performance was measured.	*cubic meter; square meter; meter* (when only length of arena was stated)
AmbientTemp	Ambient temperature during experiment (i.e., field or experimental arena)	If NA then see ConTemp or ResTemp
AmbientTempMethod	Method used to measure ambient temperature	*Direct / indirect*
AmbientTempUnit	Units of AmbientTemp	
AmbientLight	Ambient light conditions during experiment	
AmbientLightUnit	Units of AmbientLight	
SecondStressor	Second stressor during experiment (nutrients, CO2, UV, salinity, etc)	
SecondStressorDef	Description of SecondStressor	
SecondStressorValue	Value of SecondStressor	
SecondStressorUnit	Units of SecondStressorValue	
EquilibTimeValue	How much time was given for equilibration of the measured rate to a given temperature	
EquilibTimeUnit	Units of EquilibTimeValue	
ObsTimeValue	How long the measure was taken for at each fixed temperature (e.g. how long was photosynthesis rate measured at a given temperature)	
ObsTimeUnit	Units of ObsTimeValue	
ObsTimeValueSI	ObsTimeValue in SI units	
ObsTimeUnitSI	Units of ObsTimeValueSI	*- second;* *- prey caught* (time taken for ObsTimeValueSI number of prey caught)
ObsTimeNotes	Notes for ObsTimeValue (i.e., time over which experiment was run for measurement of trait performance).	
ResRepValue	How often the resource was replaced	

ResRepUnit	Units of ResRepValue	
ResRepValueSI	SI value for how often resources were replaced over observation time (same as ResRepValue using SI)	
ResRepUnitSI	SI units for ResRepValueSI	- *not replaced;* - *second;* - *to satiation* (resources replaced sufficiently frequently so that consumer always had access to resources)
Climate	Type of climate where the experiment was run (i.e., temperate, tropical, etc)	
Location	Named geographical location	
LocationType	Type of location:	- *Organism* = where the study organism was collected/cultured from - *Experiment* = where the experiment was conducted (if Location of Organism is not stated) - *Author* = affiliation of corresponding author (if neither Location of Organism nor Experiment is stated)
LocationDate	Date when organism was collected (not experiment conducted)	
CoordinateType	Coordinate Source (Article / Gazetteer)	
Latitude	Of Location	
Longitude	Of Location	
TaxaPresent	Whether one or two taxa are part of the trait measurement and definition. If only a single organism is involved (e.g., metabolic rate, heart rate), it is always listed as a trait for a consumer.	- *consumer* = trait involves a single organism; - *consumer-resource* = trait involves two organisms
TraitMotivation	Type of motivation of the trait (e.g., positive, negative, voluntary, neutral)	
TraitOrg	Level of biological organization of the trait:	- *internal* = processes internal to the organism; - *individual* = processes at the level of individual organisms that include mechanical interactions with the external environment; - *population* = processes for a group of conspecific individuals; - *interaction* = processes involving interaction between two or more species

TraitRelevantTaxa	Taxa (i.e., Consumer or Resource) for which the trait was measured	*consumer; resource*
Consumer	Binomial name of the consumer or lowest taxonomic identity (e.g. binomial name including sub-species or race name)	
ConCommon	Common name of Consumer	
ConWholePart	Specify here if the thermal response corresponds to a whole organism (a tree	
ConWholePartType	Type of consumer	*whole; part; tissue*
ConIDLevel	Minimum taxonomic level to which the consumer was identified (e.g. Kingdo, Class, Species, etc)	
ConKingdom	Kingdom of Consumer	
ConPhylum	Phylum of Consumer	
ConClass	Class of Consumer	
ConOrder	Order of Consumer	
ConFamily	Family of Consumer	
ConGenus	Genus of Consumer	
ConSpecies	Species of Consumer	
ConTrophic	Broad trophic group of consumer, as determined by published literature and expert opinion.	- *carnivore;* - *detritivore;* - *herbivore;* - *omnivore;* - *producer;* - *self* = energy self-supplied (e.g., pupae, egg)
ConTrophicGroup_citation	Source of information where ConTrophic was taken.	
ConType	Type of consumer.	- *alive* = organism alive when trait performance measured; - *dead* = organism dead when trait performance measured; - *artificial* = 'organism' simulated by a physical stimulus (e.g., predator model, prodding, gravity)
ConStage	Life stage of consumer, and sex in parenthesis when available (e.g. Egg, adult, larvae, etc)	
ConThermy	Thermy of consumer.	*ectotherm; endotherm*

ConTemp	Body temperature of Consumer (if this is missing, Ambient temperature) during the experiment	
ConTempUnit	Units of ConTemp	
ConTempMethod	Method of determining ConTemp can be:	- *Direct* = measured directly from within or on the organism - *Inferred (ambient)* = estimated from known ambient temperature - *Inferred (endotherm)* = body temperature relatively constant and estimated from published literature
ConLabGrowthTemp	Temperature at which Consumer was grown in the lab, prior to the start of the experiment (this may be different from ConAccTemp)	
ConLabGrowthTempUnit	Units of ConLabGrowthTemp	
ConLabGrowthDur	Duration for which Consumer was exposed to ConLabGrowthTemp	
ConLabGrowthDurUnit	Units of ConLabGrowthTempDur	
ConAcc	Broad details of how consumer was acclimated (i.e., prior to placement at test temperature), such as if it was captive bred or wild caught.	- *field collected*; - *field collected (at acclimation temperature)* = see ConAccTemp; - *field collected (at test temperature)* = see AmbientTemp or ConTemp; - *captive bred*; - *captive bred (at acclimation temperature)* = see ConAccTemp; - *captive bred (at test temperature)* = see AmbientTemp or ConTemp
ConAccTemp	Temperature (°C) at which consumer was kept prior to placement at test temperature (acclimated). Average temperature used when a temperature range reported in the original study. This is distinct from ConLabGrowthTemp.	
ConAccTempNotes	Notes for ConAccTemp, such as temperature range.	

ConAccTime	Time consumer spent at ConAccTemp. Every attempt was made to obtain a value, and where necessary text descriptions of time were converted to second (e.g., "few" or "several" = 3, "couple" = 2).	
ConAccTimeNotes	Notes for ConAccTimeNotes (e.g., entire life)	
ConAccTimeUnit	Units of ConAccTime.	*seconds*
ConOrigTemp	Temperature (°C) at which consumer was originally adapted. Average temperature given when a temperature range reported in the original study.	
ConOrigTempNotes	Notes for ConOrigTemp, such as temperature range.	
ConOrigTime	Time consumer spent at ConOrigTemp. Every attempt was made to obtain a value, and where necessary text descriptions of time were converted to second (e.g., "few" or "several" = 3, "couple" = 2).	
ConOrigTimeNotes	Notes for ConOrigTempTime (e.g., entire life)	
ConOrigTimeUnit	Units of ConOrigTime.	*seconds*
ConSize	Size of Consumer	
ConSizeUnit	Units of ConSize	
ConSizeType	What ConSize is referring to (e.g. "Ash-free dry weight")	
ConSizeSI	Size of Consumer in SI units	
ConSizeUnitSI	Units of SizeSI	
ConDenValue	Value of Consumer density (e.g. 10 individuals per square meter)	
ConDenUnit	Units of ConDenValue (e.g. individual m^-2)	
ConDenTypeSI	Type of SI units of ConDenValueSI	- *individual*; - *kilogram (dry body mass);* - *kilogram (wet body mass);* - *liter;* - *to satiation* = resource density above what consumer could fully consume (relevant for ResDenTypeSI, see below)
ConDenValueSI	Same as ConDenValue in SI units	

ConDenUnitSI	Units for ConDenValueSI	- *arena;* - *square meter;* - *cubic meter;* - *meter* = when only length of arena was stated (see ArenaUnitSI)
ConMassValueSI	SI value of consumer mass as obtained from original source or estimated from other published literature (see Dell et al. (2011) for further details).	
ConMassUnitSI	SI unit of ConMassValueSI.	- *kilogram (wet body mass)* = wet mass of entire body of consumer; - *kilogram (wet tissue mass)* = wet mass of tissue of consumer (e.g., excluding shell for gastropods)
ConTimeTestTemp	Time consumer spent at test temperature (see AmbientTemp, ConTemp, or ResTemp) prior to start of the experiment over which trait performance was measured (i.e., ObsTime is zero).	
ConTimeTestTempNotes	Notes for ConTimeTestTemp, such as range of time.	
ConTimeTestTempUnit	Units of ConTimeTestTemp.	
ConTimeTestTempSI	Same as ConTimeTestTemp using SI units	
ConTimeTestTempUnitSI	Units of ConTimeTestTempSI	*seconds*
Resource	Binomial name of the resource or lowest taxonomic identity (e.g. binomial name including sub-species or race name), Or if the resource is a non-living resource, its name (e.g. "Co2" "N2")	
ResCommon	Common name of Resource	
ResIDLevel	Minimum taxonomic level to which the resource was identified (e.g. Kingdo, Class, Species, etc)	
ResKingdom	Kingdom of Resource	
ResPhylum	Phylum of Resource	
ResClass	Class of Resource	
ResOrder	Order of Resource	
ResFamily	Family of Resource	
ResGenus	Genus of Resource	

ResSpecies	Species of Resource	
ResTrophic	Broad trophic group of resource, as determined by published literature and expert opinion.	- *carnivore;* - *detritivore;* - *herbivore;* - *omnivore;* - *producer;* - *self* = energy self-supplied (e.g., pupae, egg)
ResTrophicGroup_citation	Source of information where ResTrophic was taken.	
ResType	Type of resource.	- *alive* = organism alive when trait performance measured; - *dead* = organism dead when trait performance measured; - *artificial* = 'organism' simulated by a physical stimulus (e.g., predator model, prodding, gravity)
ResStage	Life stage of resource, and sex in parenthesis when available (e.g. Egg, adult, larvae, etc)	
ResThermy	Thermy of resource.	*ectotherm; endotherm*
ResTemp	Body temperature of Ronsumer (if this is missing, Ambient temperature) during the experiment	
ResTempUnit	Units of ResTemp	
ResTempMethod	Method of determining ResTemp can be:	- *Direct* = measured directly from within or on the organism - *Inferred (ambient)* = estimated from known ambient temperature - *Inferred (endotherm)* = body temperature relatively constant and estimated from published literature
ResLabGrowthTemp	Temperature at which Resourecr was grown in the lab, prior to the start of the experiment (this may be different from ResAccTemp)	
ResLabGrowthTempUnit	Units of ResLabGrowthTemp	
ResLabGrowthDur	Duration for which Resource was exposed to ResLabGrowthTemp	

ResLabGrowthDurUnit	Units of ResLabGrowthTempDur	
ResAcc	Broad details of how resource was acclimated (i.e., prior to placement at test temperature), such as if it was captive bred or wild caught.	- *field collected*; - *field collected (at acclimation temperature)* = see ResAccTemp; - *field collected (at test temperature)* = see AmbientTemp or ResTemp; - *captive bred*; - *captive bred (at acclimation temperature)* = see ResAccTemp; - *captive bred (at test temperature)* = see AmbientTemp or ResTemp
ResAccTemp	Temperature (°C) at which resource was kept prior to placement at test temperature (acclimated). Average temperature used when a temperature range reported in the original study.This is distinct from ResLabGrowthTemp.	
ResAccTempNotes	Notes for ResAccTemp, such as temperature range.	
ResAccTime	Time resource spent at ResAccTemp. Every attempt was made to obtain a value, and where necessary text descriptions of time were converted to second (e.g., "few" or "several" = 3, "couple" = 2).	
ResAccTimeNotes	Notes for ResOrigTempTime (e.g., entire life)	
ResAccTimeUnit	Units of ResAccTemp.	*seconds*
ResOrigTemp	Temperature (°C) at which resource was originally adapted. Average temperature given when a temperature range reported in the original study.	
ResOrigTempNotes	Notes for ResnOrigTemp, such as temperature range.	
ResOrigTime	Temperature (°C) at which resource was at before lab growth. Average temperature given when a temperature range reported in the original study.	
ResOrigTimeNotes	Notes for ResOrigTempTime (e.g., entire life)	
ResOrigTimeUnit	Units of ResOrigTime.	*seconds*
ResSize	Size of resource	
ResSizeUnit	Units of ResSize	
ResSizeType	What ResSize is referring to (e.g. "Ash-free dry weight")	

ResSizeSI	Size of resource in SI units	
ResSizeUnitSI	Units of SizeSI	
ResDenValue	Value of resource density (e.g. 10 individuals per square meter)	
ResDenUnit	Units of ResDenValue (e.g. individual m^-2)	
ResDenTypeSI	Type of SI units of ResDenValueSI	- *individual*; - *kilogram (dry body mass)*; - *kilogram (wet body mass)*; - *liter*; - *to satiation* = resource density above what resource could fully Ressume (relevant for ResDenTypeSI, see below)
ResDenValueSI	Same as ResDenValue in SI units	
ResDenUnitSI	Units for ResDenValueSI	*arena; square meter; cubic meter; meter* = when only length of arena was stated (see ArenaUnitSI)
ResMassValueSI	SI value of resource mass as obtained from original source or estimated from other published literature (see Dell et al. (2011) for further details).	
ResMassUnitSI	SI unit of ResMassValueSI.	- *kilogram (wet body mass)* = wet mass of entire body of resource; - *kilogram (wet tissue mass)* = wet mass of tissue of resource (e.g., excluding shell for gastropods)
ResTimeTestTemp	Time resource spent at test temperature (see AmbientTemp, ResTemp, or ResTemp) prior to start of the experiment over which trait performance was measured (i.e., ObsTime is zero).	
ResTimeTestTempNotes	Notes for ResTimeTestTemp, such as range of time.	
ResTimeTestTempUnit	Units of ResTimeTestTemp.	
ResTimeTestTempSI	Same as ResTimeTestTemp using SI units	
ResTimeTestTempUnitSI	Units of ResTimeTestTempSI	*seconds*
PhysicalProcess	First classification of physical process (ej. Foraging Time, Angular Velocity, Metabolic Efficiency)	
PhysicalProcess_1	Second level of physical process classification (ej. Interaction, Life history, Reproduction)	

PhysicalProcess_2	Third level of physical process classification (ej. Population density, Life history, body movement)	
CitationID	Full citation of source (typically a published paper)	
Citation	DOI number for each citation	
DOI	Is the data published or not	*True/False*
Published	Figure or table from Citation from which data were extracted	
FigureTable	Clarification notes of data-logger (e.g. are the different thermal responses collected from a particular study	
Notes	For treatments not captured by this data sheet?)	
SubmittedBy	The person who input the data into the datasheet	
ContributorEmail	E-mail address of the person who input the data into the datasheet	
ManualCheck	*The entry has been manually checked or not*	*Yes/No*