



DATLife

Variables in the DATLife database organized by data categories

| Category | Variable | Description |
|-------------------|-----------------------|--|
| Taxonomy | <i>Kingdom</i> | |
| | <i>Phylum</i> | |
| | <i>Class</i> | |
| | <i>Order</i> | |
| | <i>Family</i> | |
| | <i>Genus</i> | |
| | <i>Species</i> | |
| | <i>Infraspecies</i> | |
| | <i>Breed</i> | Breed as per author, e.g. genotype in <i>Drosophila</i> , or breed of domestic dogs |
| | <i>Author ge sp</i> | Taxon as mentioned by the author; might be a synonym to an accepted name in the Catalogue of Life (www.catalogueoflife.org) |
| | <i>Common_name</i> | The common English name |
| References | <i>Author</i> | All authors in Harvard style, separated by semicolon |
| | <i>Author_Year</i> | First author and year of publication |
| | <i>Reference</i> | = <i>Author_Year</i> |
| | <i>Reference_type</i> | Book; Book Section; Computer Program; Conference Proceedings; Edited Book; Generic; Journal Article; Online Database; Report; Thesis; Web Page; Pers Comm |
| | <i>Title</i> | |
| | <i>Journal</i> | |
| | <i>Volume</i> | |
| | <i>Issue</i> | |
| | <i>Pages</i> | |
| | <i>Year</i> | |
| | <i>Booktitle</i> | Booktitle |
| | <i>Chapter</i> | Chapter or section of Book |
| | <i>Editor</i> | Editor(s) of publication |
| | <i>Publisher</i> | |
| | <i>PlacePublished</i> | |
| | <i>URL</i> | URL of a website, or the DOI of a publication |

Age-specific mortality

| | |
|--------------------------------|---|
| <i>Page</i> | page with the data in original reference |
| <i>Name</i> | Name of table or graph with data |
| <i>Column</i> | Exact name of the column/graph of data |
| <i>ReferenceID</i> | internal ID of the reference record |
| <i>age_mortality_pdf_ID</i> | internal ID of the pdf containing the data as published. A graph or a table. |
| <i>age_mortality_ID</i> | internal ID of the data, original and recalculated. See Scheuerlein et al. (2017) for details. |
| <i>age_mortality_ID_smooth</i> | internal ID of the data, smoothed. See Scheuerlein et al. (2018) in prep. For details. |
| <i>derived_from_graph</i> | “TRUE” if data were digitized with special software from a graph |
| <i>N</i> | Number of animals in the study |
| <i>N_recaptures</i> | Number of recaptures during the study (individuals might appear more than once) |
| <i>Title</i> | Title of the data in DATLife |
| <i>Type_x</i> | How age was determined: See Scheuerlein et al. (2018) in prep. for details. The following categories apply: age; age from stage; age from stage, known-age individuals; age, follow-up; known-age; known-age, estimated age; time in captive cohort; years since first breeding |
| <i>x_units</i> | The unit of x: days; weeks; months; years |
| <i>Cohort Period</i> | Cohort or period data? See Scheuerlein et al. (2018) in prep. for details. The following categories apply: cohort; period; composite |
| <i>Mortality Type</i> | The type of mortality data. See Scheuerlein et al. (2018) in prep. for details. The following categories apply: recovery; age last recorded; age structure; age structure and population growth age-specific mortality; age-specific survival; age follow-up; ages at death; cohort size; follow-up; hunting bag; risk years and deaths; captive cohort |
| <i>Source column</i> | The name in classical lifetable notation with the data used for recalculation. See Scheuerlein et al. (2018) in prep. for details. The following categories apply: $NxDx$; $Nxmx$; mx ; lx_{real} ; lx_{stand} ; dx_{real} ; dx_{stand} ; $mjux$; $cap_{Lx_{real}}$; $cap_{Lx_{stand}}$. Also see age-specific mortality data. |
| <i>Stage Timezero</i> | The stage where age is zero. The following categories apply: birth/hatch; egg laying; release from cocoon; unknown; metamorphosis; eclosion; age of 2 months; age of 3 months; age of 3.5 months; age of 6 months; capture; first breeding |
| <i>Age left truncation</i> | Minimum age where data are left-truncated. No mortality information is available below that age. For details see Scheuerlein et al. (2018) in prep.. |
| <i>Age right censoring</i> | Maximum age where data are right-censored. No mortality information is available above that age. For details see Scheuerlein et al. (2018) in prep.. |
| <i>Sex</i> | The following categories apply: male, female, both, unknown, na, asexual, hermaphrodite, parthenogens |
| <i>Liberty</i> | The settings where the species was studied: The following categories apply: wild, captive, both, unknown, na |
| <i>Population</i> | The location and country (as ISO alpha-3 code) of the study. |



Age-specific mortality

| | |
|--------------------|--|
| <i>YearStart</i> | Year when study was started |
| <i>YearEnd</i> | Year when study was terminated |
| <i>Comment</i> | |
| <i>EmbargoDate</i> | Internal use only: Date before data cannot go online |

Age-specific mortality data

See Scheuerlein et al. (2018) in prep. for details, formulas and calculations

| | |
|-------------------------|--|
| <i>age_mortality_ID</i> | internal ID of the data, original and recalculated. |
| <i>x</i> | age |
| <i>x_units</i> | The unit of x : days; weeks; months; years |
| <i>n</i> | Length of the interval in units of x_units |
| <i>ax</i> | average x_units lived in the interval by those that died in the interval |
| <i>cap_Nx</i> | Number of individuals alive at the start of the interval |
| <i>cap_Dx</i> | Number of individuals that die in the interval |
| <i>mx</i> | Central death rate per individual in the interval |
| <i>lx_real</i> | Actual number of individuals left alive at age x |
| <i>lx_stand</i> | Individuals left alive at age x standardized to 1 |
| <i>dx_real</i> | Actual number of individuals dying between ages x and $x+n$ |
| <i>dx_stand</i> | Individuals dying between ages x and $x+n$. The sum of all dx_stand is 1. |
| <i>px</i> | Probability that an individual alive at age x dies before age $x+n$ |
| <i>qx</i> | Probability that an individual alive at age x survives until age $x+n$ |
| <i>mjux</i> | Hazard or death-rate of individuals in the interval |
| <i>cap_Lx_real</i> | individual-years lived between ages x and $x+n$; = recorded age structure |
| <i>cap_Lx_stand</i> | standardized cap_Lx_real . The sum of all cap_Lx_stand is 1. |
| <i>ex</i> | life expectancy at age x |
| <i>smoothed</i> | <TRUE> if data are smoothed (see Scheuerlein et al. 2017 for details), <FALSE> if not |



Age-specific fertility

| | |
|--------------------------------|--|
| <i>Page</i> | page with the data in original reference |
| <i>Name</i> | Name of table or graph with data |
| <i>Column</i> | Exact name of the column/graph of data |
| <i>ReferenceID</i> | internal ID of the reference record |
| <i>age fertility pdf ID</i> | internal ID of the pdf containing the data as published. A graph or a table. |
| <i>age fertility ID</i> | internal ID of the data, original and recalculated. See Scheuerlein et al. (2017) for details. |
| <i>age fertility ID smooth</i> | internal ID of the data, smoothed. See Scheuerlein et al. (2018) in prep. for details. |
| <i>derived_from_graph</i> | “TRUE” if data were digitized with special software from a graph |
| <i>N</i> | Number of animals in the study |
| <i>Title</i> | Title of the data in DATLife |
| <i>Type_x</i> | How age was determined: See Scheuerlein et al. (2018) in prep. for details. The following categories apply: age; age from stage; age from stage, known-age individuals; age, follow-up; known-age; known-age, estimated age; time in captive cohort; years since first breeding |
| <i>x_units</i> | The unit of x: days; weeks; months; years |
| <i>Fertility Type</i> | The category of fertility data. See Scheuerlein et al. (2018) in prep. for details. The following categories apply: <ul style="list-style-type: none"> cap_Fx (= N offspring / N mothers) cap_Fx_bud (= N vegetative offspring / N parents) cap_Fx_fem (= N daughters / N mothers) cap_Fx_part (= N parthenogenetic offspring / N mothers) cap_Rx (= N offspring reaching maturity / N mothers) cap_Rx_fem (= N daughters reaching maturity / N mothers) |
| <i>Fertility Observed</i> | The fertility actually observed. The following categories apply: births observed; reproductive output; reproductive output daughters only; eggs; follicles in ovary; matings observed; recruitment |
| <i>Sex</i> | The following categories apply: male, female, both, unknown, na, asexual, hermaphrodite, parthenogens |
| <i>Liberty</i> | The settings where the species was studied: The following categories apply: wild, captive, both, unknown, na |
| <i>Population</i> | The location and country (as ISO alpha-3 code) of the study. |
| <i>YearStart</i> | Year when study was started |
| <i>YearEnd</i> | Year when study was terminated |
| <i>Comment</i> | |
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DATLife

Age-specific fertility data

| | |
|-------------------------|--|
| <i>Age fertility ID</i> | See Scheuerlein et al. (2018) in prep. for details, formulas and calculations internal ID of the data |
| <i>x</i> | age |
| <i>x_units</i> | The unit of x: days; weeks; months; years |
| <i>Fertility</i> | fertility data |
| <i>smoothed</i> | <TRUE> if data are smoothed (see Scheuerlein et al. 2017 for details), <FALSE> if not |

Stage-specific survival

| | |
|------------------------|--|
| <i>ReferenceID</i> | internal ID of the reference record |
| <i>Survival</i> | the probability of surviving the time given in <i>Per N Days</i> |
| <i>Per N Days</i> | the number of days associated with <i>Survival</i> |
| <i>Ann Survival</i> | the probability of surviving one year |
| <i>Cohort Period</i> | Cohort or period data? See Scheuerlein et al. (2018) in prep. for details. The following categories apply: cohort; period; composite |
| <i>Stage</i> | stage of the lifecycle. The following categories apply: nest; adult survival breeding season; adult survival non-breeding; adult survival unspecified; juveniles survival unspecified; larval survival; survival from birth metamorphosis to sexual maturity; survival from conception to birth; egg; life expectancy at birth; pupa; subadult |
| <i>Recapt Modelled</i> | was recapture probability modelled? The following categories apply: true; false; unknown |
| <i>N</i> | Number of animals in the study |
| <i>N Recaptures</i> | Number of recapture events |
| <i>C Hat</i> | Measure of goodness of fit in mark-recapture studies. See Scheuerlein et al. (2018) in prep. for details |
| <i>Sex</i> | The following categories apply: male, female, both, unknown, na, asexual, hermaphrodite, parthenogens |
| <i>Liberty</i> | The settings where the species was studied: The following categories apply: wild, captive, both, unknown, na |
| <i>Population</i> | The location and country (as ISO alpha-3 code) of the study. |
| <i>YearStart</i> | Year when study was started |
| <i>YearEnd</i> | Year when study was terminated |
| <i>Comment</i> | |
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DATLife

Maximum lifespan

| | |
|----------------------------|--|
| <i>ReferenceID</i> | internal ID of the reference record |
| <i>Max Lifespan</i> | maximum observed (and published) lifespan of a taxon in years |
| <i>N Max Lifespan</i> | N individuals with known lifespans: the one with the reported <i>Max Lifespan</i> is one of them. See Scheuerlein et al. (2018) in prep. for details. |
| <i>Conf N Max Lifespan</i> | confidence in the estimate of N Max Lifespan. The following categories apply: estimated; information; unknown |
| <i>Dead Alive</i> | was Max Lifespan reported from a dead or a live individual? The following categories apply: dead; alive; unknown |
| <i>Pot_Max_Lifespan</i> | The <i>Max Lifespan</i> that could have been potentially observed, given the specific conditions of the study. For example, <i>Max_Lifespan</i> in a ringing study that has been going on for 25 years cannot exceed the age of 25, the <i>Pot_Max_Lifespan</i> in this case |
| <i>Stage Timezero</i> | The stage where age is zero. The following categories apply: birth/hatch; egg laying; release from cocoon; unknown; metamorphosis; eclosion; age of 2 months; age of 3 months; age of 3.5 months; age of 6 months; capture; first breeding |
| <i>Sex</i> | The following categories apply: male, female, both, unknown, na, asexual, hermaphrodite, parthenogens |
| <i>Liberty</i> | The settings where the species was studied: The following categories apply: wild, captive, both, unknown, na |
| <i>Population</i> | The location and country (as ISO alpha-3 code) of the study. |
| <i>YearStart</i> | Year when study was started |
| <i>YearEnd</i> | Year when study was terminated |
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DATLife

Age maturity

| | |
|-----------------------|--|
| <i>ReferenceID</i> | internal ID of the reference record |
| <i>Maturity Age</i> | age at sexual maturity in years |
| <i>Stage Timezero</i> | The stage where age is zero. The following categories apply: birth/hatch; egg laying; release from cocoon; unknown; metamorphosis; eclosion; age of 2 months; age of 3 months; age of 3.5 months; age of 6 months; capture; first breeding |
| <i>Maturity Type</i> | The following categories apply: first individual with external signs of adulthood; age at first estrus; age at first spermatogenesis; first adult mating behavior observed; age at first pregnancy; first birth observed; age at first fatherhood; age at first oviposition; unknown; release from cocoon; birth/hatch; egg laying; eclosion |
| <i>Maturity Value</i> | The following categories apply: mean; median; minimum; maximum; unknown |
| <i>Sex</i> | The following categories apply: male, female, both, unknown, na, asexual, hermaphrodite, parthenogens |
| <i>Liberty</i> | The settings where the species was studied: The following categories apply: wild, captive, both, unknown, na |
| <i>Population</i> | The location and country (as ISO alpha-3 code) of the study. |
| <i>YearStart</i> | Year when study was started |
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