



## Author Guidelines

### Submission Procedure

In order to submit items online and to check the status of their submissions, authors are required to [register](#) with the journal and to login. Authors are kindly requested to submit their manuscript *only* through the online submission module, and to read also [Focus and scope](#) which includes further relevant information.

The online manuscript submission process is broken into the following steps:

- **Step 1:** Specifying the manuscript type, completing the submission check-list;
- **Step 2:** Specifying the author(s) names, contact information, specifying the submission title, abstract, keywords, and other metadata;
- **Step 3:** Uploading the submission file (see below for details on how to prepare it);
- **Step 4:** Uploading supplementary files (see below for details) and associated metadata;
- **Step 5:** Final verification of the submitted files and submission confirmation.

The author interface for each of these steps includes details on how to enter the information required.

### Organizing your submission

#### General notes

Manuscripts submitted to **ZooKeys** must be divided into separate files to allow processing by our software. Manuscripts should have figures and/or tables embedded in the text. If the manuscript file is becoming too large, the embedded figures may be replaced with such of lower resolution/size. At the same time, original (full-resolution) figures in one of the accepted graphics file-formats (see below) or large dataset-tables *must* be submitted also as **supplementary files** (Step 4 in the Submission procedure). These may be compressed (if possible) in order to reduce bandwidth during upload.

In case of very large-sized files (5 MB and more) of figures (i.e. colour plates), you may submit them *only* as **supplementary files**, while mentioning in the body text where the file must be placed during formatting. Please, also note that the **maximum file-size** that may be uploaded through our online submission system is **20 MB**.

Before attempting an online submission, please separate your submission into the following file types:

#### Submission file:

- Review version of the manuscript in PDF with all figures embedded; the file size of the review version should not exceed **15 MB**.

### Supplementary files:

- Text of the manuscript ([Rich Text format](#) or [OpenDocument format](#)) with tables included; figures should not be embedded in the text file;
- Figures (each figure is an individual graphics file in one of the following major graphic file formats: **EPS, TIFF, JPEG, PNG, GIF, BMP**);
- Equations (each figure is an individual image file in one of the above mentioned graphic file formats);
- Appendices (most formats: text-only appendices must be in [Rich Text format](#) or [OpenDocument format](#)).

The majority of word processing programs will save to Rich Text format, while OpenDocument may be produced by the [free and open source OpenOffice.org](#) office suite. Any of the above mentioned graphic file formats should be adequate for most non-animated figures. If you are unable to save in one of these formats, or experience any other technical problems with your submission, please contact the **ZooKeys** editorial office at [click to reveal@pensoftonline.net](mailto:clicktoreveal@pensoftonline.net)

### Presubmission Enquiries

We encourage authors to submit a presubmission enquiry to one of the journal editors responsible for the particular taxonomic group/subject before making a full submission. The purpose of a presubmission enquiry is to solicit rapid initial feedback on the potential suitability of a manuscript for the journal. Presubmission enquiries may be sent also to the Editorial Office at [click to reveal@pensoftonline.net](mailto:clicktoreveal@pensoftonline.net)

### Title

The title of the article should be in sentence case (only scientific, geographic or person names should be capitalized, i.e. *Elater ferrugineus* L., Germany etc.), and should include an accurate, clear and concise description of the reported work, avoiding abbreviations.

### Authors and Affiliations

Provide the first names or initials (if used), middle names or initials (if used), surnames, and affiliations department, university or organization, city, state/province (if applicable), and country - for all authors. One of the authors should be designated as the corresponding author. It is the corresponding author's responsibility to ensure that the author list, and the summary of the author contributions to the study are accurate and complete. If the article has been submitted on behalf of a consortium, all consortium members and affiliations should be listed after the **Acknowledgements** section.

### Abstract, Acknowledgements and Keywords

Please have your abstract, and keywords prepared and ready to input directly into the submission interface, either by typing them in or cut-and-paste.

### Body Text

All papers must be in English, checked by a native English-speaking colleague. Write with precision, clarity, and economy: use the active voice and first person whenever appropriate. If at all

possible, avoid the use of parenthetical comments and italics or bold for emphasis. **ZooKeys** discourages the use of quotation marks except for direct quotations, words defined by the author, and words used in unusual contexts. Short quotations should be embedded in the text and enclosed in double quotation marks (""). Long quotations should be on a separate line, italicized, but without quotation marks. Single quotation marks are to be used only for a quotation that occurs within another quotation. Use either British/Commonwealth or American English provided that the language is consistent within a paper.

### Spacing, Fonts, and Page Numbering

Single-space all material (text, quotations, figure legends, tables, references, etc.). Separate paragraphs with a blank line. Use a 12-point font (preferably Times New Roman or Arial).

### Capitals

should only be used for first letters of sentences, first letters proper names and first letters of specific words (e.g. tables, figures, experiments, behaviour patterns) that should be emphasized; small capitals for words that should be printed in capitals (e.g. ANOVA, MANOVA).

### Underlining/Italicization

Please italicize scientific names, long direct quotations and the symbols for all variables and constants (except Greek letters in the text), such as p, F, U, T, N, r, but not for SD (standard deviation), SE (standard error), DF (degrees of freedom) and NS (non significant). Symbols in Illustrations and equations should be italic to match the text. Italics should rarely be used for emphasis (no italics for: e.g., i.e., et al., etc., cf.). Do not underline text.

### Abbreviations

Abbreviations should be followed by '.' unless the abbreviation is written with the last letter of the original word at the end position (thus: i.e. - e.g. - cf. - etc. but eds - Dr - edn) - measures (such as mm cm m s l) without '.'.

### Footnotes

Avoid footnotes in the body text of your manuscript; most footnote material can be incorporated in the text for the benefit of readers and editors. Additionally, footnotes are not handled well by our journal software, and their inclusion may result in a failed submission. Footnotes below tables are acceptable; instead of numbers, please use (in order): †, ‡, §, |, ¶, #, ††, ‡‡, §§, ||, ¶¶, ##.

### Units

Use the International System of Units (SI) for measurements. Consult Standard Practice for Use of the International System of Units (ASTM Standard E-380-93) for guidance on unit conversions, style, and usage. When preparing text and figures, note in particular that (1) SI requires the use of the terms mass or force rather than weight; (2) when one unit appears in a denominator, use the solidus (/); for two or more units in a denominator, use negative exponents; and (3) use a capital L as the symbol for litre.

## Statistics

Use leading zeroes with all numbers, including probability values (e.g.,  $P < 0.001$ ). For every significant F-statistic reported, provide two df values (numerator and denominator). Whenever possible, indicate the year and version number of the statistical software used.

## Web (HTML) links

Authors may include links to other Internet resources in their article. This is especially encouraged in the reference section. When inserting a reference to a web-page, please include the **http://** portion of the address.

## Headings and subheadings

Main headings: The body text should be subdivided into different sections with appropriate headings. Where possible, the following standard headings should be used. These headings must appear on a single line by themselves, and be capitalized (first letter capital). Please do not number headings or subheadings.

- **Introduction** - The motivation or purpose of your research should appear in the Introduction, where you state the questions you sought to answer, and then provide some of the historical basis for those questions.
- **Methods** - Provide sufficient information to allow someone to repeat your work. A clear description of your experimental design, sampling procedures, and statistical procedures is especially important in papers describing field studies, simulations, or experiments. If you list a product (e.g., animal food, analytical device), supply the name and location of the manufacturer. Give the model number for equipment used. Supply complete citations, including author (or editor), title, year, publisher, and version number, for computer software mentioned in your article.
- **Results** - Results should be stated concisely and without interpretation.
- **Discussion** - Focus on the rigorously supported aspects of your study. Carefully differentiate the results of your study from data obtained from other sources. Interpret your results, relate them to the results of previous research, and discuss the implications of your results or interpretations. Point out results that do not support speculations or the findings of previous research, or that are counter-intuitive. You may choose to include a Speculation subsection in which you pursue new ideas suggested by your research, compare and contrast your research with findings from other systems or other disciplines, pose new questions that are suggested by the results of your study, and suggest ways of answering these new questions.
- **Conclusion** - This should state clearly the main conclusions of the research and give a clear explanation of their importance and relevance. Summary illustrations may be included.
- **References** - The list of References should be included after the final section of the main article body. A blank line should be inserted between single-spaced entries in the list.

Where possible, the standard headings should be used in the order given above. Additional headings may be used and modifications to these heading suggestions are permissible.

**Subsection headings:** Lower order headings (e.g. *Field study* and *Simulation model or Counts, measurements and Molecular analysis*), should be left-justified, italicized, and lower-case except for the initial letter of the first word which should be upper-case. All lower headings must appear on a line by themselves.

### Citations within the text

Before submitting the manuscript, check each citation in the text against the **References** to ensure that they match exactly. Delete citations from the list if they are not actually cited in the text of the article. Citations in the text should be formatted as follows: (Smith 1990) or (Smith et al. 1998, Brock and Gunderson 2001, Felt 2006).

### References

It is crucial to properly format the references, because all references will be linked electronically as much as possible to the papers they cite. You can include a **DOI** number for the full-text article as an alternative to or in addition to traditional volume and page numbers. Please use the following style for the reference list:

#### Published Papers:

Polaszek A, Alonso-Zarazaga M, Bouchet P, Brothers DJ, Evenhuis NL, Krell FT, Lyal CHC, Minelli A, Pyle RL, Robinson N, Thompson FC, van Tol J (2005) ZooBank: the open-access register for zoological taxonomy: Technical Discussion Paper. *Bulletin of Zoological Nomenclature* 62: 210-220.

#### Accepted Papers:

Same as above, but "in press" appears instead the year in parentheses.

#### Electronic Journal Articles:

Mallet J, Willmott K (2002) Taxonomy: renaissance or Tower of Babel? *Trends in Ecology and Evolution* 18 (2): 57-59. doi:10.1016/S0169-5347(02)00061-7.

#### Paper within conference proceedings:

Orr AG (2006) Odonata in Bornean tropical rain forest formations: Diversity, endemism and applications for conservation management. In: Cordero Rivera A (Ed) *Forest and Dragonflies. Fourth WDA International Symposium of Odonatology, Pontevedra (Spain), July 2005*. Pensoft Publishers, Sofia-Moscow, 51-78.

#### Book chapters:

Mayr E (2000) The biological species concept. In: Wheeler QD, Meier R (Eds) *Species Concepts and Phylogenetic Theory: A Debate*. Columbia University Press, New York, 17-29.

#### Books:

Goix N, Klimaszewski J (2007) *Catalogue of Aleocharine Rove Beetles of Canada and Alaska*. Pensoft Publishers, Sofia-Moscow, 166 pp.

#### Book with institutional author:

International Commission on Zoological Nomenclature (1999) *International code of zoological nomenclature. Fourth Edition*. London: The International Trust for Zoological Nomenclature.

#### PhD thesis:

Dalebout ML (2002) *Species identity, genetic diversity and molecular systematic relationships among the Ziphiidae (beaked whales)*. PhD thesis, Auckland, New Zealand: University of Auckland.

#### Link/URL:

BBC News: Island leopard deemed new species. <http://news.bbc.co.uk/> [accessed 3.VI.2008]

#### Citations of Public Resource Databases:

It is highly recommended all appropriate datasets, images, and information to be deposited in public resources. Please provide the relevant accession numbers (and version numbers, if appropriate). Accession numbers should be provided in parentheses after the entity on first use. Examples of such databases include, but are not limited to:

- Zoobank ([www.zoobank.org](http://www.zoobank.org)),
- Morphbank ([www.morphbank.net](http://www.morphbank.net)),

- Genbank ([www.ncbi.nlm.nih.gov/Genbank](http://www.ncbi.nlm.nih.gov/Genbank)),
- BarCode ([www.barcodinglife.org](http://www.barcodinglife.org))

Providing accession numbers allows linking to and from established databases and integrates your article with a broader collection of scientific information. Please list all accession numbers directly **after the References**.

All journal titles should be spelled out completely and should **not** be in italics. In the titles of articles, capitalization of the common names of organisms and the spellings of all words should agree exactly with that used in the original publication.

Provide the publisher's name and location when you cite symposia or conference proceedings; distinguish between the conference date and the publication date if both are given. Do not list abstracts or unpublished material in the References. They may be listed in the text as personal observations (by an author of the present paper), personal communications (from others), or unpublished x, where x = data, manuscript, or report; provide author names and initials for all unpublished work and abstracts. When possible, include URLs for articles available online through library subscription or individual journal subscription. URLs should not be included for articles that are posted on an author's website, unless it is a software or language program that is not available by any other means and is integral to the paper.

### Illustrations and Figures

Figures and illustrations (maximum file-size is 20 MB) are accepted in the following graphic file formats:

- **EPS** (preferred format for diagrams)
- **TIFF** (resolution at least 300dpi)
- **PNG** (preferred format for photos or images)
- **JPEG** (preferred format for photos or images)
- **GIF**
- **BMP**

If unable to provide figures in one of the above graphics file formats, or if unable to **keep the file-size below 20 MB**, please, contact the Editorial Office at [click to reveal@pensoftonline.net](mailto:clicktoreveal@pensoftonline.net)

### Figure legends

The legends should be included in the main manuscript text file immediately following the references, rather than being a part of the figure file. For each figure, the following information should be provided: Figure number (in sequence, using Arabic numerals - i.e. Figure 1, 2, 3 etc.); short title of figure (maximum 15 words); detailed legend, up to 300 words.

**Please note that it is the responsibility of the author(s) to obtain permission from the copyright holder** to reproduce figures or tables that have previously been published elsewhere.

### Tables

Each table should be numbered in sequence using Arabic numerals (i.e. Table 1, 2, 3 etc.). Tables should also have a title that summarizes the whole table, maximum 15 words. Detailed legends may then follow, but should be concise.

Smaller tables considered to be integral to the manuscript can be pasted within the text, in portrait format (note that tables on a landscape page must be reformatted onto a portrait page or submitted as additional files). These will be typeset and displayed in the final published form of the article.

Such tables should be formatted using the 'Table object' in a word processing program to ensure that columns of data are kept aligned when the file is sent electronically for review; this will not always be the case if columns are generated by simply using tabs to separate text. Columns and rows of data should be made visibly distinct by ensuring the borders of each cell display as black lines. Commas should not be used to indicate numerical values. Colour and shading should not be used.

Larger datasets can be uploaded separately as additional files. Additional files will not be displayed in the final, published form of the article, but a link will be provided to the files as supplied by the author.

Tabular data provided as additional files can be uploaded as an Excel spreadsheet (.xls), as an OpenOffice.org Calc (.ods) or comma separated values file (.csv). As with all files, please use the standard file extensions.

### **Additional files**

Online publishing allows occasions where an author wishes to provide data sets, tables, video files, or other information as additional information. These files can be uploaded in Step 4 of the manuscript submission process.

The maximum file size for additional files is 20 MB each, and files must be virus-scanned on submission.

Any additional files will be linked into the final published article in the form supplied by the author, but will not be displayed within the paper. They will be made available in exactly the same form as originally provided.

If additional material is provided, please list the following information in a separate section of the manuscript text, immediately following the tables (if any):

- File name
- File format (including name and a URL of an appropriate viewer if format is unusual)
- Title of data
- Description of data

Additional data-files should be referenced explicitly by file name within the body of the article, e.g. 'See additional file 1: Movie1 for the original data used to perform this analysis'.

Ideally, file formats for additional files should not be platform-specific, and should be viewable using free or widely available tools. The following are examples of suitable formats.

- Additional documentation:
  - PDF (Adobe Acrobat)
- Animations:
  - SWF (Shockwave Flash)
- Movies:
  - MOV (QuickTime)
  - MPG (MPEG)
- Tabular data:
  - XLS (Excel spreadsheet)
  - CSV (Comma separated values)

As with figure files, files should be given the standard file-extensions. This is especially important for Macintosh users, since the Mac OS does not enforce the use of standard file-extensions. Please also make sure that each additional file is a single table, figure or movie (please do not upload linked worksheets or PDF files larger than one sheet).

## International Code for Zoological Nomenclature

**ZooKeys** will publish papers only strictly following the rules of the 4th edition of the *International Code of Zoological Nomenclature*. To assure this, authors are advised to follow the recommendations below.

### General

Each **first mentioning** of an animal species name within the text must be provided with author(s)' name(s). **Year of publication** of animal species is recommended to be given in taxonomic revisions with providing full referencing of original description in the list of references.

### New names

Each new name should contain a standardized header line, which should always include the following: the rank, the new indicator, the name and the **author(s)**.

Examples:

- Genus *X-us* Smith, new genus;
- *X-us albus* Smith, Jones & Peters, new species

For **new genus-group names**, a “etymology” statement should be required and include the gender of the name.

For **new species-group names**, a “etymology” statement should be required and that should clearly state what the epithet is following (ICZN Art. 11.9, but also Art. 11.3). That is, whether the epithet is an 1) adjective or participle in the nominative singular; 2) noun in the nominative singular ... 3) a noun in the genitive case ... 4) an adjective used a substantive in the genitive case or 5) an arbitrary combination of letters (ICZN Art. 11.3).

### Previously published names

For a **previously published name**, please, add the **year**. Also use the parentheses convention for subsequent combinations.

### Type designation

For **family group names** no type line is really necessary as all family group names are derived/based on their type genus. We recommend a single type line as: Type-genus: *Musca* Linnaeus, 1758

For **genus group names**, the needed information is the **type-species** and what kind of fixation/designation was made and in some cases by whom. The name of the type species should always be given in its original combination with author and year. If the type species is now considered a junior synonym, then the epithet with its author and year should be given. The kind of fixation should follow directly from the International Code of Zoological Nomenclature (see Articles 68 & 69; original designation, monotypy, absolute tautonymy, Linnaean tautonymy, subsequent monotypy, subsequent designation).

Example:

- *Sympycnus* Loew  
Type-species: *Porphyrops annulipes* Meigen, 1824 by subsequent designation of Coquillett (1910: 610) = *pulicarius* Fallen, 1823

For **species-group names**, there are two pieces of type information that are needed:

- the **statement of type locality** – that is, the exact place the primary type came from; we require **both** a statement of the place (from largest to smallest geographical/political units) as well as geographical coordinates, especially if authors are describing a new species;
- also, **depending on the biology of the species**, other “locality” information should be included – for example, **if a parasite**, then information on **the host** (its name) and **where** on host the parasite came from, etc.

An example, of what will be a type locality:

- Type-locality: USA, Virginia: Fairfax County, Kingstowne, 38° 46'N 77° 07'W

Then a statement of the **type specimen** is needed. That is, the important information about the type specimen that identifies it. This would be a separate statement about the type, what labels it has (quote them), what is its preparation (very important for fossils), and, now required, where is it deposited (organization name, city).

Examples:

1. for a **new species** of fly:
  - Holotype male, pinned with genitalia dissected in microvial, with labels as follows: “USA. VA. Fairfax / Kingstowne / 38 46'N 77 07'W / 12 Oct 2003 / BJ & FC Thompson” “USNM ENT 00033805” [Code 49 barcode], “HOLOTYPE / *Xylota* / *x-us* / Thompson [red handwritten label].
2. for a **previously described species** of fly:
  - Lectotype male, pinned ... [details, then] here designated to fix the concept of *X-us albus* Jones and to ensure the universal and consistent interpretation of the same. Or ... [details then] by designation of Smith (1976: 999)

### Single species descriptions

Descriptions of single species will only be considered if they form part of a work of broader importance (e.g. key or revision of the species in a wide region; revision of the particular species group; separation of widespread cryptic species), or are of particular scientific importance e.g. disease vector, representative of a new genus, sister-group of a large clade), or are exceptional in some respect (e.g. species in danger of extinction, large extension of the geographical range of a higher taxon).

Hence, a standard description of a single species in a separate paper SHOULD ideally consist of the following three components: (1) differential diagnosis, (2) discussion on relationships, as well as on ecological and biological observations (when available), and (3) an identification key to closest relatives, or respective species-group, or (sub-)genus.

(revision 20100721)