Thank you for your interest in submitting a manuscript or article to the National Wildlife Rehabilitators Association for publication. These guidelines illustrate the format NWRA asks authors to use in preparing manuscripts. Following the Author’s Guideline simplifies the process for not only you, the author, but also for reviewers and editors. Please read through these guidelines to ensure you understand and follow recommendations. Please, do not hesitate to contact the NWRA editor if you need assistance.

Full length papers, reports, research notes, case reports, well-referenced abstracts, and expanded outlines are welcome for review and possible publication. Authors may have to modify an oral presentation to better convey ideas in the written format. Verbatim transcripts or simple outlines generally must be expanded and reworked. Electronic submission of manuscripts, graphics, tables, and photos is preferred.

The organization publishes manuscripts and other information related to wildlife rehabilitation, veterinary medicine, and educational programs to help members assist more animals. NWRA does not accept anecdotal stories, unconstructive criticism, or derogatory items.

**SUBMISSION PROCESS**

To submit a paper, please send the completed manuscript to the NWRA editor. Manuscripts can be sent by email as an rtf file in Word Perfect or Microsoft Word (preferred), or can be snail-mailed on a computer disk. Photos and illustrations should be sent in accordance with parameters noted in Guide for Graphic Files below. If necessary, photos also can be sent to the NWRA office in hard copy to be scanned; however, scanned images usually are less clear and do not print well. Please send tables in Microsoft Excel format.

NWRA requires that manuscripts be original and not previously published, copyrighted, or printed elsewhere. If an author copyrights their manuscript, NWRA requires written permission from the author to publish. If a manuscript is under concurrent consideration by another publication, please notify the editor. All manuscripts submitted are reviewed by at least one reviewer, often two reviewers, and manuscripts are returned to authors for suggested revisions. Because writing abilities may vary or an individual may be new to publication, the editor is quite willing to work with authors in preparing manuscripts for publication. All publications are copyrighted by NWRA upon completion to protect both the organization and individual authors work.

**TITLE AND AUTHORS**

The title should be brief, accurate, and clear, and should contain key words. If an organism is mentioned in the title, both the common name and the scientific name (in italics) are given. All authors should be listed with affiliation, city, and state, and post-graduate academic degrees (not Dr. John Public), where applicable (John Public PhD, DVM, etc., without insertion of periods).

Do not capitalize an office or position when used without name (safety officer, project manager, vice president, etc.). The speech was given by President John Public; but John Public is president of NWRA.

**ABSTRACT**

Include an abstract briefly describing the manuscript topic and content. Abstract is placed above manuscript text.

**KEY WORDS**

Include key words, which are placed under the abstract. If desired, the editor can assist in selecting key words.

**BIOGRAPHY**

Please include a short biography, only two or three lines of text, for all authors: current
job/position/organization or experience pertinent to the paper, and if applicable, relationship to NWRA (board member, committee member, Symposium presenter, etc.). Usually, biography information is placed in lower left of first page of published manuscript.

OVERALL STYLE OF MANUSCRIPTS

General Format
Submissions should be typed in Times New Roman (12 point) or Arial font (10 or 12 point). Single–space lines within a paragraph; double–space between paragraphs and major sections; left justify (do not use full justification) all text in manuscript; and avoid using multiple pre-set tabs. Use only a single space after punctuation, including a single space after the sentence ending period and a colon. All publications are printed in black and white (gray scale), thus black and white figures and photographs are preferred. Color photos may be submitted but appear black and white in publication.

Style of Papers
Manuscripts of theoretical science must be written in the scientific style and include the following major subdivisions: abstract, key words, introduction, materials and methods, results, discussion, acknowledgments, and literature cited. Applied science papers are not written in the scientific style and include an abstract, keywords, introduction, subject/content text, summary, and literature cited. In addition, most rehabilitation papers should include natural history, intake procedures, diet, housing, release criteria, and techniques. Avoid use of the first person (I, me, etc.) and substitute with words like ‘the author,’ as well as avoiding use of other individuals by name within the text, except when noting personal communication as a reference.

Non–scientific style
Research Notes and Case Reports. These are brief accounts detailing treatments, reporting cases, illustrating techniques, and presenting valid research data or observations. They may be divided into some or all of the sections listed above in the overall style of manuscripts section.
Abstracts and Outlines. Previously published work may be submitted as a detailed abstract supported by a well–referenced Literature Cited section. Procedures or techniques may be presented in expanded outline form supported by a good Literature Cited section. The outline should consist of full and grammatically correct sentences, not phrases or abbreviated text.

Scientific style
Abstract. The abstract precedes the introduction and conveys the main points of the paper. It should present the objective(s) of the work, meaningful facts (not generalities), and main conclusions. Include a short list of key words at the end of the abstract.
Introduction. State the topic(s) or problem(s) briefly, describe what is known about the topic or problem, and the reason for presenting findings.
Materials and Methods. Describe general materials and methods once. Materials and methods for a particular experiment should be deferred to the appropriate place. Be clear and explicit about relevant details.
Results. Present the results or findings in a logical rather than a chronological order. Use subheadings for clarity.
Discussion and/or Conclusion. If no discussion is needed, do not discuss. If discussion is required, cover the implications of the findings or relate them to major problems or areas in the field. Offer suggestions or conclusions if appropriate.

LITERATURE CITED
This is the second most important source of information a paper provides to readers. Complete literature citations (including page numbers if applicable) make information more accessible to the reader. References cited in the text are shown by giving both the author’s last name(s) and the year of publication in parentheses (example below).
For the Literature Cited list at the end of the paper, references are listed alphabetically and chronologically by the author’s last name. Use only initials for authors’ and editors’ first and middle names. The first listed author’s first (and middle) name initials follow the last name (Davis, M. P.). Subsequent authors’ first (and middle) name initials precede the last name (M. P. Davis). Place a period and a single space after each initial. Include the following in this order: author’s name(s)[period], year of publication[period], name of article or book[period], editor’s name(s) if any in parentheses[period], name of
It is necessary to provide complete reference information. Authors are responsible for the accuracy of the reference list. Ensure that all references cited in the text also appear in the Literature Cited section. References that were used but not cited may be listed in the same format under the heading Recommended Reading. Do not list a reference unless it has been published or accepted for publication, so the name of the journal/source can be given. Do not place a full website page link within the text; website references are handled in the same manner as publication references (Gosling 2005). Website references are shown below for clarity. For further information on compiling this list, see The Chicago Manual of Style (The University of Chicago Press: Chicago, IL), available in most libraries or for purchase online.

Do not underline anything. Give first and last pages of journal articles. Indicate the author(s) of the article as well as the editor(s) of the publication. Include the publisher’s name, city, state or province, and country, if other than the US. Use the standard two–letter abbreviation for US states.

Examples of Reference Citations within Text
Single references (Jones 1988) (Smith and Jones 2002) (Kalien et al 1970) [Note no punctuation in et al] Semicolon between multiple references (Smith 2005; Jones 1988; Smith and Jones 2002)

Examples of Style for Literature Cited

Thesis

Book

Journal Article

Articles from Edited Publications [Note: provide the volume number followed by a colon (:), one space, then page numbers; if there is no volume, provide the page numbers (Pp. xx–xx), followed by the word ‘in,’ followed by the publication title].


Proper Citation for NWRA Publications


Electronic Material
Do NOT place full web addresses in text; treat as a book/paper reference (AVMA 2010) with listing in
Literature Cited and full web access shown there. Website references are enclosed in less than/more than (< >) arrowheads, without spaces: <abcd@efghi.org>. Do NOT use live links in manuscripts or in Literature Cited and remove underline if remaining.

**CD–ROM**

**Journal Article on the Internet**

**Monograph on the Internet**

**Homepage/Web site**

**Personal Communication**
Unpublished work or personal communications received by an author should be noted in the text in parentheses as a personal communication and should include the source’s name, professional affiliation, city, and state/province. Quotation marks usually are not necessary. Personal communications should not be included in the Literature Cited section.

John Smith (Wild Bird Rescue, Inc., City, ST, personal communication) feels this cage construction and size is inadequate.

This cage construction and size are inadequate. (John Smith, Wild Bird Rescue, Inc., City, ST, personal communication).

**RECOMMENDED READING**
If the author has additional sources of related literature that are not directly cited in the paper but would be of use to the reader, they should be listed under the heading Recommended Reading, immediately following the Literature Cited. Recommended Reading references listed follow the same format used in Literature Cited.

**ACKNOWLEDGEMENTS**
Acknowledgments appear at the end of the paper, immediately before the Literature Cited section and should be brief. It is appropriate to acknowledge sponsors/grantors of research and any non–authors who contributed to the content of the paper.

**FINE POINTS OF STYLE**

**PUNCTUATION AND FONT EFFECTS**

**Hyphens and Dashes**
A hyphen is the shortest length dash-like symbol (-) and is on the computer keyboard.
An eNdash is the middle length dash-like symbol (–) and is found under Insert tab.
An eMdash is the longest length dash-like symbol (—) and is found under Insert tab.

**Do NOT use hyphens anywhere within the manuscript**; insert an eNdash at every point a hyphen would be used: page number range (22–25), hyphenated names (red–bellied woodpecker), phone numbers, any hyphen in website addresses or home pages, and similar.
Use eMdashes for breaks and/or emphasis within text, not a series of hyphens or dashes: “..a word of caution—always approach the ....”
**Do NOT place spaces on either side of an endash, slash, or emdash.**

**Italics**
Italics are used for the following:
Scientific name of species (genus and species only)
Book, journal, or publication names/titles in literature cited
Use italics, not bold or underline, to place emphasis on a word or phrase.

Punctuation
When punctuating a series or listing a sequence of items, place a comma before ‘and’ and ‘or.’ (The list of species admitted includes turtles, salamanders, birds, and mammals. The animals were netted, marked, weighed, and released.)
Single vs. double quotation marks: use double quotations ONLY for a direct quote, such as conversation; use single quotation marks for noting a special term, slang-like words, or similar.
Spaces: only one space after punctuation, including sentence end period and colon.
Do not use spaces before or after forward slash: ‘and/or’ NOT ‘and / or’
Quotation/inch marks: make sure quotation marks (“”) and inch (hatch) marks (“”) are used appropriately.

Bold and Underline
As a rule authors should not use either bolded or underlined font in manuscripts.
Paper title and separation headings within paper (i.e., Introduction, Materials and Methods, Conclusion, Literature Cited, etc.) are the only places where font is bolded.
Neither bolded nor underlined text or words are used for emphasis; word is italicized for emphasis.

SCIENTIFIC AND COMMON NAMES
Use all lower case letters unless a proper name is included in the common name of a species. Examples: great horned owl, Canada goose, white–tailed deer, moose, Wilson’s petrel, Swainson’s hawk.

Scientific Nomenclature
Genus and species names are italicized, with the first letter of the genus name capitalized. Always provide the common name and scientific name (scientific enclosed in parentheses) of all wildlife mentioned in the paper’s title and text in first use. Example: black duck (Anas rubripes), eastern grey squirrel (Sciurius carolinensis), American robin (Turdus migratorius). Once the common and scientific name has been noted initially, it is appropriate to use only the common name thereafter. When referring repeatedly to a recurring genus and species, the first mention of an organism must be spelled out (for example, Escherichia coli). Any further mention of this organism may be presented as E. coli.
If an organism has been identified only to the level of genus, designate the genus (in italics) followed by either sp. (singular) or spp. (plural) without italics. Example: Three new nematodes, one Habronema sp. and two Triodontophorus spp., were identified.
Higher taxa, such as family, order, class, etc., are not italicized or underlined. However, the first letter of each word should be capitalized. Example: Aves = class, Anseriformes = order, and Anatidae = family. Example: The white-tailed deer (Odocoileus virginianus [genus and species]) is a member of the class Vertebrata, the order Mammalia, and the family Artiodactyla. Moose and elk are also members of this class, order, and family, but have different genus and species names.

ABBREVIATIONS
Names of agencies or organizations and word combinations that recur frequently in the text may be abbreviated as an acronym, provided that first use of this combination is spelled out in full. Example: The American Veterinary Medical Association (AVMA) has found capture myopathy (CM) is a commonly occurring condition of mammals following trapping and transportation. CM was first described in a Hunter’s hartebeest (Alcelaphus sp.) in South Africa.
1. State names: spell out in paper title; abbreviate in text, address listings, product manufacturer notes, and references cited
2. First instance of each abbreviation must be spelled out within ( ); thereafter use abbreviation only.
3. Miles per hour or kilometers per hour: m/h or km/h (standard for scientific papers).
4. Percent is spelled out except when included in parenthetical numbers: Only 45 percent of those contacted replied or Only 43 individuals (67.19%) replied.
5. Generally speaking, all words are spelled out. An exception is when a symbol (such as &) or abbreviation is part of a proper name, a product name, or organization: Procter & Gamble
6. Do NOT italicize: e.g., i.e., Ibid, spp., etc.

Acronyms
1. Spell out in first usage
2. Plural is NWRAs not NWRA’s unless possessive
3. USFWS, not USF&WS
4. Do not use periods in most standard acronyms
5. US and USA; state names DE, AK, MN, etc.
6. USFWS, NWRA, AVMA
7. PhD, DVM, VMD
8. PO Box, not P.O. Box or P. O. Box
9. LRS or lactated Ringer’s solution (Ringer’s is a proper possessive noun in this use)

DATE, TIME, MEASUREMENT, AND NUMBER USE

Date and Time
Use scientific format and spell out dates: 22 January 2004, not January 22, 2004 or 1/22/04
No apostrophe when plural (1990s, not 1990’s)
Time indicator should be written as numeral+small caps, no space between numeral and AM or PM (7AM, 8PM)

Measurement
1. Put space between the number and its unit of measurement: 5 in or 5 m
2. use periods after abbreviated measurements
3. If English measures are used, also give metric measurements and vice versa; usually give metric measurement first, English in ( ) second.
4. Do not use periods after abbreviated measurements
5. Example of dimensions: 37 x 24 x 20 in (93 x 60 x 45 cm) (length x width x height or depth)
6. Some standard conversions: 1/8=0.125; 1/4=0.25; 3/8=0.375; ½=0.5; 5/8=0.625; 3/4=0.75; 7/8=0.875
7. Always include a leading zero for quantities less than 1 (0.345, not .345)
8. Example formula representation: Bodyweight (g) x 15 ml/100 g = fluid quantity (ml)

Use only standard abbreviations for units of measure and do NOT use periods. (i.e., mg, g, kg, ml, cc, m, km, in, ft, C, F).
1. For temperature abbreviations (C or F), use capital letters as from proper nouns; most other unit abbreviations use small letters, exceptions: long ton LT, metric ton MT, kilowatt kW, etc.
2. If a number is spelled out, spell out the unit of measurement. If abbreviation is used for unit of measure, the quantity should be represented by an Arabic numeral.
3. Do not add an s to an abbreviation to show a plural (i.e., 3 lb for a dollar, not 3 lbs for a dollar).
4. The single hatch mark ’ (not the same as a quotation mark) can stand for foot or a geographical minute. The double hatch mark “ can stand for inch or geographical second (a second of longitude or latitude). So 5’6” would mean five feet, six inches; 42° 24’54” N would mean 42 degrees, 24 minutes, 54 seconds North
5. Since the metric system uses standard prefixes (centi, milli, kilo,etc.) most metric abbreviations can be determined easily; for example, cl would be centiliter.
6. The Greek letter µ (mu) is often used to show the prefix micro, especially in scientific publications. For example, µg would be the same as mcg, and µl would be microliter. When by itself, µ stands for micron. mµ means millimicron, and µµ means micromicron (a millionth of a micron).

To abbreviate most square and cubic units where used as length, width, and depth type measurements, add the exponent ² for square and exponent ³ for cubic. For example, m² means square meter, and mm³ means cubic millimeter. When using this notation, use it consistently: Use cm² rather than cc for cubic centimeter. In contrast, square or cubic units used as with liquids or medical terms would be noted as cc. Such as a 3–cc syringe, 0.5 cc of medication given, etc.

Standard scientific notation: word per is represented by a virgule (slash) km/h = kilometers per hour.
Place an endash between an Arabic numeral and unit of measure when the unit modifies a noun (3 ml of vaccine were given; a 3–ml dose of vaccine was administered).

Numbers
Use the Arabic numerals 1 through 9 only when the numbers are associated with a scientific unit of measurement (3 ml, 5 g, 9 cc). Use Arabic numerals (10, 12, 23, etc.) for all numbers 10 and over, unless first word of sentence when number is spelled. Spell out numbers less than 10 in all other cases (three owls, five cages, nine patients). Spell out numbers less than 10 when used with units of time (three days, five
months, seven weeks). In a series with numbers both less than and greater than 10, use numerals for all (3 birds and 45 mammals were admitted).

1. Use ‘to’ between numbers (1 to 9) in text; use endash if numbers are within parentheses (1–9) or with page numbers (P. 150–154).
2. Temperature format: 100° to 102°F or 100 to 102 degrees F. Give Celsius in parenthesis (or vice versa).
3. Physical quantities are written in Arabic numerals: distance, length, area, volume, mass, pressure, dates, page numbers, figures, or table numbers.
4. Phone numbers: (800, 866, 877, etc.) US toll free phone numbers do not work from Canada or internationally. Whenever possible, include the standard phone number (not free) as well.
5. Use decimal numbers instead of fractions (0.5 ml instead of .5 or ½ mil).
6. Spell out ‘percent’ when used in text; use the % sign within parenthetical numbers: Total response was 22 percent of surveys mailed or 43 (22%) responded.

PHOTOGRAPHS, FIGURES, CHARTS, GRAPHS, AND TABLES

Guide for Graphic Files

1. Digital photographs should be taken using a camera with at least 3 million pixels (3MP), preferably 5MP or more; choose the highest resolution camera setting; if any post-processing is done using computer software, choose the options that will produce the highest resolution and largest jpg file size. See the discussion of jpg files.
2. Large, high-resolution jpegs are preferred (Jay-Peg: Joint Photographic Experts Group file compression standard; also called jpg). Images should be at least 4 by 6 inches in size, with resolution of at least 250 to 300 dpi (dots per inch, also called bits per inch [bpi] or pixels per inch [ppi]). This combination should produce a compressed jpg computer file of at least 400 KB in size.
3. pdfs (Adobe Portable Document Format standard) reproduce well if they are large, high-resolution files like the jpgs described above. Note that some software programs will default exported pdf files to low-resolution—program documentation should be consulted to discover how to generate high-resolution files.
4. bmps (bit-mapped graphics files) reproduce well if they are large, high-resolution files.
5. InDesign, PageMaker, and Quark Express files reproduce well if they are large, high-resolution files.
6. Scanned documents often do not work well, since they typically exhibit fuzzy text and multiple little specks in the background. Scans may be used if there is no other alternative; scans should be highest resolution possible.
7. Tables work best if they are generated in Microsoft Excel and submitted as individual files with descriptive file names.
8. Word and WordPerfect documents work well if the files are text only; embedded documents in these files do not import well.

Figures and Photographs

High resolution, digital images are preferred, but if unable to provide, high quality figures can be scanned if authors provide them. All publications are printed in black and white (gray scale), thus black and white figures and photographs are preferred. Color photos may be submitted but appear black and white in publication. Please note that scanned images do not reproduce in publications as well as original images. Do not include photos or figures within the text of the manuscript.

If sending hard copy photographs or drawings, identify each figure on the back with the author’s name and the figure number. Always indicate the top of the picture on the back of photographs. Write lightly in a corner so as not to mar the photo. Tissue paper placed between prints prevents ink from bleeding between photographs when mailed.

Keep the lettering style and size consistent among figures. Number photographs and tables separately and provide concise and descriptive captions with numbers that correspond to number on photograph or figures. Indicate within the text (Photo 1, Figure 2) where these items should appear.

1. Capitalize and spell out ‘figure’ in captions and in text, (Figure 1); do not use ‘see’ in ( ) with figure.
2. Provide photo captions for figures submitted; indicate with which figure the like numbered caption should appear.
3. A listing of numbered and identified photo captions in Word format may be used.
   a. Figure 1. Squirrel pre-release cage showing habitat setup.
   b. Figure 2. Nestlings shown in properly sized and prepared substitute nest.
4. Keep the lettering style and size consistent among figures.
Tables, Graphs, and Charts
Tables should be prepared and submitted individually in Microsoft© Excel format with proper identification, well planned and concise, and be referenced in the text (Table 1 or Tables 1 and 2). Do not include graphs, charts, or tables within text of the manuscript itself. Charts and graphs should have lines, cross-hatching, dots, etc., in lieu of various colors so that columns or other key examples are distinguishable in only black and white format. Tables can be as large as 9 inches (height) x 7 inches (width), but any tables wider than 7 inches are rotated 90 degrees to fit on the page in landscape format. It is important to indicate where tables should appear within the manuscript. Graphs and charts should have letters, lines, and details that are high resolution and of a size that is legible on the final printed page. Keep the lettering style and size consistent among tables. Provide the sizes of the samples (n=4, n=13). Combine data where possible. Table titles or headings should be complete enough for data to be understandable without referring to the text. Capitalize and spell out ‘table’ in captions and in text (Table 1); do not use ‘see’ in ( ) with table. Table captions/titles go above the table.

PRODUCTS
Provide full product name and name, city, and state of manufacturer. Use the standard two-letter code for US states. Trademark or registered symbols must be shown. Also note if product line, manufacturer name, or similar product information is trademarked or registered and insert where applicable. Examples: Clavamox® (Pfizer Animal Health, New York, NY), Tegaderm™ (3M Health Care, St. Paul, MN). Mazuri® Exotic Canine Diet (PMI Nutrition®, Henderson, CO).
1. Trademark and registered symbols are superscripted (e.g., Clavamox®, Tegaderm™)
2. Generic drug or chemical names (e.g., amoxicillin or sodium hypochlorite [bleach]), do not require manufacturer/city/state
3. Brand names (Amoxi–Drops, Clorox) require manufacturer/city/state; abbreviate state name with standard two–letter abbreviation

MISCELLANEOUS
1. Avoid use of first or second person and pronouns (I, me, he, she, they, etc) within the text. Use phrases such as ‘follow the guidelines’ instead of ‘you should follow the guidelines’ and ‘the author feels’ instead of ‘I feel.’
2. Do not use contractions. Spell out the words (will not, not won’t; they are, not they’re, etc.)
3. If a note is inserted in text, capitalize first letter only, and do not italicize text of note. Words note, editor’s note, etc., are bold and italicized. (Author’s note: An ounce of prevention is worth a pound of cure.) or (Editor’s note: An ounce of prevention is worth a pound of cure.).
4. Releasable and nonreleaseable: use ‘non’ before releaseable, which means not, rather than ‘un,’ which means to reverse
5. Use word email, unless first word in sentence, then capitalized, not E-mail or e-mail.
6. Use the terms ‘wildlife rehabilitation’ and ‘wildlife rehabilitator’ instead of ‘rehabilitation’ and ‘rehabilitator’ in paper titles and the first time these terms are used in the text. Never use the non-word ‘rehabber’ or similar shortened versions of these words.

For more details on general style (including tables and figures), consult a recent volume of the NWRA Wildlife Rehabilitation Bulletin or check The Chicago Manual of Style (The University of Chicago Press: Chicago, IL), available in most libraries or for purchase online and in bookstores.