

1 **Submission guidelines for authors and reviewers of *Human–Wildlife Interactions***
2 **manuscripts¹**

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4 **Abstract:** This paper presents details on policies of *Human–Wildlife Interactions (HWI)* and
5 describes procedures for submitting, reviewing, and editing manuscripts. This document includes
6 guidelines for subject matter, manuscript categories, a description of the reviewing and editing
7 process, and details for format and style. An appendix is included for standard abbreviations and
8 symbols. *Human–Wildlife Interactions* is an open-access journal published 3 times per year.
9 Publication notification and distribution are accomplished via email.

10 **Key words:** format, guidelines, manuscript, policy, style

11
12 Publishing a professional paper proceeds most smoothly if authors understand the policy,
13 procedures, format, and style of the outlet to which they are submitting a manuscript. The
14 *Submission guidelines for authors and reviewers of Human–Wildlife Interactions manuscripts*
15 draws heavily from *Guidelines for authors and reviewers of Wildlife Society manuscripts* by
16 Andrews and Leopold (2000), many sections of which remain intact.

17 **General policies**

18 **Submitting the manuscript**

19 Authors should submit their manuscript and all submission information through the
20 online platform at <http://digitalcommons.usu.edu/hwi>.

21 Without completion of the Submission Agreement, the editor-in-chief (EIC) will not
22 initiate review of the manuscript. The statement ensures that data and findings have not been
23 published previously or submitted elsewhere for simultaneous consideration. A paper is

¹These guidelines are typed in proper format for manuscripts submitted to *Human–Wildlife Interactions* with the exception of footnotes, which are not permitted in manuscripts.

24 considered published if it (1) appears in a serial publication abstracted by *Biological Abstracts* or
25 a similar reference volume, (2) appears in a book (including conference proceedings) printed in
26 >500 copies and widely distributed to libraries, or (3) has been published as part of a numbered
27 series by an agency. These guidelines for previous publication are flexible in certain instances,
28 such as technical analyses of findings published previously for lay audiences. Kendall (1981)
29 elaborated on the seriousness of dual publication; *HWI* editors subscribe to his standards.

30 If any portion of the manuscript has been published or reported elsewhere, submit a copy
31 of each report or publication with the manuscript submission. If the manuscript relates to but
32 does not duplicate other publications or manuscripts by the same author(s), submit a copy of
33 each to assist reviewers and editors in assessing the submitted manuscript. Upload all additional
34 files as supplemental materials, and include an explanation of the materials in your cover letter.

35 Theses (M.S.) and dissertations (Ph.D.) do not constitute prior publication and need not
36 be mentioned in the cover letter, but they should be cited in the manuscript (see *Literature cited*
37 *style* below). Similarly, brief abstracts of talks given at meetings do not constitute prior
38 publication. Generally, unpublished reports required by sponsors and not distributed as part of a
39 numbered series (or in other ways that might result in accession by libraries) do not constitute
40 prior publication. Most symposia proceedings are considered publications; however, *HWI* editors
41 will decide to consider such manuscripts on a case-by-case basis. Authors should provide
42 information that bears on ethical and copyright considerations (CBE Style Manual Committee
43 1994:599–600) and other information that might facilitate review and editing.

44 **Page charges**

45 Page charges of \$100 per typeset page are required. Authors must acknowledge
46 acceptance of responsibility for page charges should the manuscript be accepted for publication

47 by completing the Submission Agreement upon initial submission of the manuscript. About 2.5
48 double-spaced Word document pages will equal 1 typeset page.

49 **Reviewing and editing**

50 Upon receipt of a submission, the editorial staff examines the manuscript to determine if
51 it is in the proper style and format and if the subject matter is appropriate. If style and format are
52 seriously flawed, the paper will be returned for revision before being sent to referees. If subject
53 matter is inappropriate, the EIC will return the paper to the author with an explanatory email.

54 **Peer-reviewed manuscripts**

55 The EIC assigns manuscripts that have been accepted for review to an associate editor
56 (AE) and 2–3 qualified referees to review the paper. The EIC considers expertise, affiliation,
57 geographic location, date of last review, and performance on previous reviews when selecting
58 referees.

59 *Double-blind review process.* Authors may choose to submit their paper for double-blind
60 review. If selecting this option, authors should omit names and any other identifying information
61 from the Word document submission, such as shown in the formatting of the title page of this
62 document. However, all author information is required on the submission form for the *HWI*
63 editorial staff. Prior to sending a submission out for review, *HWI* ensures that all author names,
64 affiliations, and email contact information are included in the submission data for easy access by
65 the editors. The reviewers of the submission do not see author information unless this
66 information is included by the authors' choice on the title page of their Word document
67 submission.

68 Referees are emailed a review request and asked to complete their review within 3 weeks.
69 If they are not able to review the manuscript in this period, an alternate reviewer is selected.

70 Despite these measures, it is sometimes necessary to replace delinquent reviewers. It often takes
71 >2 months before the managing editor receives a complete set of reviews.

72 Associate editors are asked to assess reviews and provide a publication recommendation
73 to the EIC within 3 weeks. Occasionally, the EIC or AE judges that referees' comments reveal
74 biases, lack objectivity, are illogical, or otherwise lack merit. In such cases, the editor or AE may
75 proceed with revision despite negative comments from 1 or 2 referees. An alternative opinion
76 from a different referee also may be requested.

77 The EIC will render a decision to the authors via email. Manuscripts returned to authors
78 for revision must be revised and returned to the AE within a reasonable deadline set by the EIC,
79 or the manuscript will be withdrawn from the review process, requiring resubmission for further
80 consideration. If no revision deadline is provided in the decision email from the EIC, an
81 appropriate revision timeframe is 4–6 weeks. Once authors upload their revision and a cover
82 letter explaining the changes made, the AE assesses the revision and provides a recommendation
83 to the EIC within 3 weeks. The EIC will either reject the revision, return it with further revisions
84 needed, or accept it for publication. Sometimes the revision process requires several iterations
85 before the EIC makes a final decision.

86 **Acceptance and rejection policies**

87 Final acceptance of manuscripts is decided by the EIC. The EIC bears final responsibility
88 for the value and quality of materials that appear in *HWI* and makes decisions accordingly. These
89 decisions may differ from referees' comments seen by authors and recommendations made by
90 referees, including the AE. In rare instances, the EIC's decision to accept or reject a manuscript
91 may not agree with the recommendation made by the AE.

92 In rendering a decision, the EIC evaluates the manuscript and comments of the review
93 team. The following are some of the problems that typically result in manuscript rejection: (1)
94 flaws in design or logic that make the results invalid, biased, or questionable; (2) failure to
95 contribute new knowledge; (3) trivial subject matter; and (4) previous publication of the same or
96 closely related material.

97 The author of a rejected manuscript may feel that referees' comments support publication
98 and that the editorial decision was wrong. The author should realize that the EIC receives 2 sets
99 of comments from each referee, 1 open and 1 confidential. The confidential evaluation may
100 reveal weaknesses not mentioned in comments seen by the author. One referee may have
101 discovered weaknesses missed by the other referees. Further, the EIC may identify problems
102 missed by both referees and the AE.

103 *Appeal and resubmission.* The author may question the reasons for rejection by
104 submitting a letter electronically to the EIC, stating their case, and asking for reconsideration.
105 Reconsideration of a rejected manuscript requires a convincing rebuttal letter from the author(s).
106 Authors should not revise and resubmit the manuscript without electronically submitting the
107 letter first. The reconsideration request saves time for the EIC and the author.

108 *Accepted manuscripts.* Final versions of manuscripts accepted for publication will be
109 copyedited by the *HWI* editorial office to ensure accuracy and consistency with journal style
110 guidelines. In some cases, the final accepted version of a manuscript will be the EIC's document
111 with track change edits attached to the final decision email to the author. Following acceptance,
112 the *HWI* editorial office will contact the author to ensure that all article materials are finalized
113 and submitted, including author bio information and all image files. The author will receive a
114 PDF page proof once the article is typeset with all required components.

115 Copyright

116 If a manuscript not in the public domain is accepted for publication, authors or their
117 employers must transfer copyright to *HWI*. Publications authored by federal government
118 employees are in the public domain. Manuscript submission implies entrusting copyright (or
119 equivalent trust in public-domain work) to the EIC until the manuscript is rejected, withdrawn, or
120 accepted for publication. If the manuscript is accepted, *HWI* retains copyright.

121 Securing appropriate approval(s)

122 It is increasingly important in today's research community for scientists to ensure that
123 their research activities are conducted such that the welfare of the animals they are studying (e.g.,
124 installing radiotransmitters) or the rights of human subjects (e.g., sending them a survey) is
125 considered. Consequently, it is important that all peer-reviewed and peer-edited manuscripts
126 submitted for publication in *HWI* demonstrate that these concerns have been addressed.

127 Animal care

128 Appropriate documentation that proper animal care and use was applied when using live
129 vertebrate animals for research must be submitted prior to publication. Acceptable means of
130 documentation include an Institutional Animal Care and Use Protocol number (as designated by
131 most U.S. universities), the number of the permit or license issued to hold animals (such as with
132 private breeders), or the equivalent. This policy covers all vertebrate animals, including
133 mammals, birds, reptiles, amphibians, and fish. Documentation will be requested after a
134 manuscript is accepted, and prior to publication.

135 Human subjects

136 Appropriate documentation that proper approval was obtained to perform research
137 involving human subjects (primarily surveys) must be provided. Acceptable means of

138 documentation include a Human Subjects Protocol number (as designated by most U.S.
139 universities) or the equivalent.

140 **Subject matter**

141 *Human–Wildlife Interactions (HWI)* serves the professional needs of the wildlife
142 biologist and manager in the arena of human–wildlife conflicts/interactions, wildlife damage
143 management, and contemporary wildlife management. The intent of *HWI* is to publish original
144 contributions on all aspects of contemporary wildlife management and human–wildlife
145 interactions with an emphasis on scientific research and management case studies that identify
146 and report innovative conservation strategies, technologies, tools, and partnerships that can
147 enhance human–wildlife interactions by mitigating human–wildlife conflicts through direct and
148 indirect management of wildlife and increased stakeholder engagement. Our intent is to promote
149 a dialogue among wildlife professionals concerning contemporary management issues. As such,
150 we hope to provide a repository for wildlife management science and case studies that document
151 and share manager experiences and lessons learned.

152 **Subject areas**

153 The following general subjects are appropriate for *HWI* articles:

- 154 1. *Management*. These articles typically describe the cause and the effects of specific
155 actions, practices, or policies on the management of human–wildlife conflicts, wildlife
156 damage, and related contemporary management issues. As such, we welcome articles on
157 economics, invasive species, endangered or threatened species, human dimensions,
158 nuisance wildlife, over-abundant species, urban wildlife, wildlife damage, and zoonotic
159 diseases. Articles are usually the results of scientific research and/or long-term case
160 studies. These articles sent are typically assigned to an AE and sent out by the managing

161 editor for peer review by 2 anonymous reviewers. Once the reviews are complete, they
162 are sent along with the original article to the AE for a recommendation to the EIC
163 regarding publication merit.

164 2. *Techniques*. Technique articles typically report an evaluation of or improvement upon
165 techniques or tools used frequently in wildlife damage management or contemporary
166 wildlife management. These articles are usually shorter in nature from 3 to 12 double-
167 spaced manuscript pages and are also assigned to an AE and sent out for peer review.

168 3. *Contemporary conservation and policy issues*. This category offers our authors greater
169 flexibility, featuring articles that relate to human–wildlife interactions/conflicts and the
170 impact of human activities on wildlife or their habitats. Contributions on political or legal
171 issues, special topics in human–wildlife conflict management, wildlife management,
172 refinement of state or federal natural resource programs or policies, regional or national
173 surveys of wildlife management programs or policies, social movements affecting
174 wildlife management, and related topics are welcome. The articles are assigned to an AE
175 for peer editing and single review and may be sent out for peer review based on AE
176 recommendations.

177 4. *Philosophy*. These articles explore the principles, logic, and ethics under which guide the
178 professional management of wildlife. The articles are assigned to an AE for peer-editing,
179 single review, and publication recommendation.

180 **Article categories**

181 1. *Research or management articles or notes*. Manuscripts in this category are articles
182 covering the subject areas identified above. Notes are distinct from peer-reviewed articles
183 in that they are shorter in length, have no abstract, and contain no photos or diagrams

184 except when such are essential to illustrate new techniques or tool. Articles and notes
185 focus on aspects of human–wildlife interactions, wildlife conflict management, wildlife
186 damage management, and contemporary wildlife management that can provide new
187 information obtained through scientific research that may assist wildlife professionals and
188 others in management. Notes are shorter than articles and may present new findings
189 based on limited sample sizes or scale.

190 2. *Management case studies*. These articles provide managers with new information to
191 assist managers in enhancing human–wildlife interactions, mitigation human–wildlife
192 conflicts, reducing wildlife damage management, or managing wildlife. The cases studies
193 present data, report observations, and/or summarize experiences documented over time.
194 Unlike management articles or notes, the information reported may not have been
195 obtained through a rigorous experimental design. However, these case studies warrant
196 publication in a peer-reviewed format because of the potential management implications.
197 These articles can include direct and indirect management of wildlife and human
198 dimensions programs or processes.

199 3. *Invited reviews and synthesis articles*. The EIC has the option to solicit articles that
200 review and synthesize important topics that pertain to the scientific foundations of
201 human–wildlife interactions, wildlife damage management, and wildlife conservation
202 policy and management. Invited articles must include a management implications section
203 and are reviewed by an AE and the EIC. They are exempt from page charges.

204 4. *In my opinion*. These articles are essays that explore in detail the underlying values,
205 tenets, and philosophy that guide contemporary wildlife management, wildlife damage,
206 and human–wildlife conflict management. These articles can uncover contemporary

207 dogma, false assumptions and misguided policy, or otherwise stimulate thought and
208 innovation. The EIC may send opinion essays for peer review but also may accept them
209 without doing so.

210 5. *Commentary*. Commentaries are of 2 types: reaction to a previous article in *HWI* or a
211 response to an issue, movement, policy, or program that could impact the wildlife
212 management, wildlife damage management, and human–wildlife interactions. In either
213 case, the manuscript must be well-documented, prepared professionally, and include an
214 abstract. The EIC may accept *Commentary* submissions with or without peer review. This
215 category facilitates the dissemination of emerging information in print in a timely way.

216 6. *Letters to the editor*. Letters to the editor are short articles that address issues relevant to
217 *HWI*. Appropriate topics include comments on recently published manuscripts (and
218 author responses to the comments) or on topics or methods relevant to human–wildlife
219 interactions, wildlife damage management, or the management of wildlife. Letters should
220 be short (~1,000 words) and consist of a short title, author name and address, text, and
221 literature cited if necessary. Letters are selected by the EIC and are not typically subject
222 to peer review, but they may be assigned to an AE for review or a recommendation.
223 Letters are not subject to page charges.

224 7. *Book, media, product, tool, and technology reviews*. These reviews provide a brief
225 synopsis and commentary on a book, media-based communication, product, tool, or
226 technology relevant to some aspect of the human–wildlife interaction or the management
227 of wildlife. This includes computer programs, models, software, or products or tools that
228 can assist managers in conducting their work. These are sent out to an AE for review and
229 publication recommendation.

- 230 8. *In the news*. This is a special section in each issue of *HWI* that summarizes and shares
231 topics in the news. Topics range from unique observations or incidences involving
232 human–wildlife interactions, wildlife damage management, or wildlife management. This
233 section is designed to disseminate hot topics or issues. The section is usually prepared by
234 an assigned AE or author, but *HWI* welcomes content ideas from our readers.
- 235 9. *Special topics*. This is a special section in *HWI* that contains 6 or more articles that
236 address timely or emerging topics. Articles selected for the special section are assigned to
237 an AE and sent out for peer review. Previous special sections have included papers on
238 urban bear damage, sage-grouse conservation, bird strikes, and invasive species. The EIC
239 invites proposals from authors who are interested in publishing a body of work in a
240 special section. The EIC may also announce a call-for-papers for a special section.
- 241 10. *Awards and recognition*. This is a new addition to *HWI*. We desire to share the
242 accomplishments and recognition received by *HWI* contributors and readers. As such, we
243 will dedicate space in each issue to acknowledge the work and accomplishment of the
244 wildlife professionals. Submissions should be no longer than 2 paragraphs and may
245 include a photograph.
- 246 11. *In memory*. This is a special section in *HWI* dedicated to honor wildlife professionals
247 who have passed away in the recent year. Submission should be limited to <1,000 words,
248 and we encourage submission of a photograph.

249 **Format and style**

250 **Article length**

251 *Human–Wildlife Interactions* considers articles of any length not likely to exceed 15
252 typeset pages (about 40 double-spaced manuscript pages, including tables and figures).

253 Feature formats

254 Contributions to reviews have a format identical to regular articles except that the author
255 name and address section appears at the end of the article. Contributions to *In My Opinion*,
256 *Commentary*, and *Research or Management Articles or Notes* have a format identical to regular
257 articles except that these articles do not have an abstract. Other features may be created or
258 changes may be made to existing features as *HWI* evolves to better address the needs of the
259 wildlife professional.

260 Page format

- 261 1. Double space the text throughout the manuscript. If choosing to include author
262 information on the title page, double space the authors' addresses in addition to the article
263 title, abstract, main body of the text, long quotations within the text, literature citations,
264 footnotes, table titles, table bodies, and figure titles.
- 265 2. Use page numbers and line numbers throughout your submission. This helps reviewers
266 and editors identify areas of the submission during the review process.
- 267 3. Do not break (hyphenate) words on the right margin. Breaks on the right margin can lead
268 to confusion over compound modifiers and dashes that could cause an inappropriate word
269 to appear in print.
- 270 4. Do not justify the right margin.
- 271 5. Use Times New Roman font, 12-point type throughout the manuscript, including title and
272 headings. Times New Roman is preferred because some typographical and mathematical
273 symbols are difficult to distinguish in Courier and other fonts. Do not use all capital
274 letters or small capitals except when references to brand or scientific name require it.
- 275 6. Include only 1 space between sentences, not 2 spaces.

- 276 7. Do not use formatting styles from a style menu, as these will need to be removed
277 manually by the typesetter and result in unnecessary delays in production.
- 278 8. Italicize words or symbols, such as scientific names and mathematical symbols, which
279 should appear italicized in print. However, do not use italic type for emphasis. Instead,
280 qualify terms verbally in the text when it is necessary to do so.
- 281 9. Do not use quotation marks for emphasis. Instead, qualify terms verbally in the text when
282 it is necessary to do so. Quotation marks may, however, be used for clarity to set apart a
283 term or phrase under discussion (e.g., don't use the word "don't" or other contractions)
284 when it would be confusing not to do so.
- 285 10. Use boldface type only for the title, first-, and second-level headings. Do not use bold in
286 text for emphasis. Third-level headings should be indented and italicized, not boldfaced.
- 287 11. Maintain margins of about 2.5 cm (1 inch) on all sides of the page. The 2.5-cm margins
288 allow for notes among reviewer, author, and editor.

289 **Title page**

290 If including author information on the title page of the submission, the corresponding
291 author's address block and email address should appear single spaced (the only exception to the
292 double-spaced-throughout rule) in the upper left corner of the first page of the manuscript.

293 The article title should be ≤ 10 words, but longer titles are acceptable if shorter titles fail
294 to communicate content accurately.

295 Manuscript authors who opted for the double-blind review process will later need to
296 provide a complete address for each author, most likely during the final revision upload of an
297 accepted manuscript. If an author's address has changed since the study was conducted, footnote
298 the name with a numerical superscript positioned outside the comma following the name, and

299 include the author's present address in the footnote and label it, "Present address." For the
300 corresponding author, add the email address at the end of the author's address in the list of
301 authors on the first page of the manuscript. Use U.S. Postal Service abbreviations for states and
302 provinces that appear in addresses with zip codes.

303 The abstract, which appears in peer-reviewed and peer-edited manuscripts, should present
304 a statement of findings in 1 paragraph not to exceed 3% of the length of the text, including the
305 literature cited. It should include the following information:

- 306 1. Problem studied, question answered, or hypothesis tested and justification for study.
307 What was it and why is it important? Indicate new data, ideas, or interpretations used
308 directly or indirectly to manage wildlife.
- 309 2. Pertinent methods. State the methods used to achieve the results summarized in the
310 Results (keep the methods brief unless a new, greatly improved method is being
311 reported).
- 312 3. Results. Highlight the most important results, positive or negative.
- 313 4. Applicability of results. Explain how, where, when, and by whom data or interpretations
314 can be applied to wildlife problems or contribute to knowledge of wildlife science.

315 **Key words**

316 List 4 to 10 key words, in alphabetical order, that best describe major topics in the
317 manuscript. Your key words will help researchers locate your article using abstracting services.
318 In selecting key words, you should consider who would be interested in finding your article and
319 what key works they will be using in their search. Key words will appear immediately after the
320 abstract. Do not capitalize key words unless they are words that require capitalization, such as

321 proper nouns (e.g., Canada goose). Key words should be separated by a comma; however, there
322 is no punctuation after the last key word.

323 **Text pages**

324 If not selecting a double-blind review process, place author name (e.g., Smith, Smith and
325 Jones, Smith et al.) in the upper left corner of all pages following the title page. For all
326 submissions, place page numbers in the upper right corner and add line numbers to the document
327 for use during reviewer and editor feedback.

328 **Headings**

329 As demonstrated in these guidelines, 3 levels of headings are used in *HWI* manuscripts:
330 (1) primary headings are set in bold type and centered, with capital letters for only the first letter
331 of the first word and the first letter of proper nouns; (2) secondary headings are the same font
332 size and style, but are flush left; and (3) tertiary headings (run-in sideheads) are indented as part
333 of a paragraph, italicized, and followed by a period and 1 space. Headings should be worded to
334 accurately reflect content of the sections that follow them. For papers giving the results of
335 management research, traditional headings (i.e., Abstract, Study area, Methods, Results,
336 Discussion) are appropriate. However, more descriptive headings should be used if traditional
337 headings do not effectively identify the content of the section.

338 **Style and usage**

339 *Numbers and units.* Use digits for numbers (e.g., 7, 45). Spell out numbers that are the
340 first word of a sentence or that are used as a noun (e.g., at least twenty escaped). Avoid using
341 introductory phrases such as "A total of...". Spell out ordinal numbers (e.g., first, third) in text
342 and in literature cited, but use digits for adjectives such as 3-fold and 2-way. Use decimals rather

343 than fractions except in equations and instances in which conversion to fractions misrepresents
344 precision.

345 When identifying items by number, names should be lowercase (e.g., plot 1, site 5, day
346 3). Use symbols or abbreviations (e.g., %, kg) for measurement units that follow a number,
347 unless the number is indefinite (e.g., thousands of hectares) or is the first word in a sentence.
348 Hyphenate number–unit phrases used as adjectives (e.g., 6-m² plots, 1-year-old males) but not
349 those used as predicate adjectives, i.e., after forms of the verb *to be* (e.g., plots were 3 m²). Insert
350 commas in numbers $\geq 1,000$ (except for pages in books, clock time, or year dates). Do not insert a
351 comma or hyphen between consecutive, separate numbers in a phrase (e.g., 25 2-m² plots). Do
352 not use naked decimals (i.e., use 0.05, not .05). Means and standard errors should not be reported
353 to a decimal place beyond the precision measured in your experiment. Reporting of mean of
354 5.231 indicates that your experiment allowed you to detect the difference between 5.231 and
355 5.232. In most cases, means should not be reported beyond the tenths decimal place (e.g., 5.2).

356 *Times and dates.* Use the 24-hour system (0100 through 2400 hours) in discussions of
357 time. Date sequence is month/day/year (e.g., February 4, 1947). Spell out the names of months
358 except in figures and table bodies, using 3-letter abbreviations without a period. Do not use an
359 apostrophe when referring to an entire decade (i.e., 1940s, not 1940's).

360 *Statistics.* When reporting values, follow the guidelines listed below.

361 1. Values should be taken only to the level that makes sense based on your sample size
362 when reporting in percents, proportions, and means. If you are taking a value to the
363 hundredths place, you are stating that you can measure things that finely and that the
364 difference between values at that level are biologically meaningful (e.g., a mass of
365 455.456 g is really different from the value of 455.457. As a rule-of-thumb, report only

- 366 whole numbers for percents and hundredths place for proportions or means when sample
367 sizes are less than 100. You need a sample size >200 before you can take percents to the
368 tenth place or proportions and means to the thousandths place.
- 369 2. Statistical test values (t , F , χ^2) should be reported to the hundredths place.
- 370 3. P values should be reported to the hundredths place unless the P value is >0.01 . In that
371 case, report it to the first values that is not a zero (e.g., $P = 0.001$, $P = 0.003$).
- 372 4. Italicize Roman letters used in the text as symbols for statistics, tests, or variables (e.g., n ,
373 θ , R , F , t , Z , P ; Appendix A). Do not italicize numbers or names of trigonometric and
374 transcendental functions or certain statistical terms (e.g., \ln , \max ., \min ., SD , and SE).
375 Insert symbols from your word processing program's symbol directory as opposed to
376 creating the symbol with keyboard functions (e.g., chi-square should appear as χ^2 [found
377 in the symbol directory], not X^2 [created with keyboard functions]).
- 378 5. Insert a space on either side of symbols when used as conjunctions in an equation (e.g., n
379 $= 12$, $P = 0.002$), but not when used as adjectives (e.g., >20 observations). Where
380 possible, report exact probabilities (e.g., $P = 0.057$, as opposed to $P > 0.05$). A subscript
381 precedes a superscript (e.g., x_i^3) unless the subscript includes >2 characters (e.g., x^3_{jul}).
- 382 6. Avoid redundant use of the word "significantly" (e.g., "the means differed [$P = 0.016$]").
383 Report results of statistical tests or central tendency as in the following examples: ($t_1 =$
384 2.47 , $P = 0.013$), ($F_{3,12} = 33.10$, $P = 0.01$), ($\chi^2_{10} = 22.1$, $P = 0.029$), or ($\bar{x} = 7.8$, $SE = 3.21$,
385 $n = 46$). Note that the appropriate degrees of freedom are subscripted with the test
386 statistic. P -values >0.001 should be presented as $P \leq 0.001$. (If mean symbol is
387 unavailable on your computer program, simply write the word mean.)

388 *Abbreviations and acronyms.* Metric units, their appropriate prefixes, and abbreviations
389 identified by an asterisk in Appendix A may be used in text. All other abbreviations or acronyms
390 (except DNA) must be defined the first time used in the abstract and also in the text. Do not start
391 sentences with acronyms; do not use an apostrophe with plural acronyms (e.g., ANOVAs).
392 Abbreviations may be used within parentheses, except for state and country names when they
393 form part of organization or agency names (e.g., Mississippi Department of Wildlife, Fisheries,
394 and Parks, not MS Department of Wildlife, Fisheries, and Parks). However, when referring to a
395 federal agency, write the abbreviation (e.g., U.S. Department of Agriculture; U. S. Congress).
396 Use the abbreviation U.S. when it is an adjective (e.g., U.S. laws that apply), but write out
397 United States when it is used as a noun (e.g., in the United States).

398 *Punctuation.* Use a comma before the conjunction in a serial list of >2 items (e.g., red,
399 black, and blue). Use a comma before the conjunction in a compound sentence (e.g., “Use an
400 infrared scope at night, and be sure to record your results.”). Do not hyphenate prefixes, suffixes,
401 or combining forms (e.g., postpartum) unless necessary to avoid misreading. Hyphenate
402 compounds used as adjectives (e.g., 1-m plot, 2-day period, 14-cm dbh).

403 Although the rules for hyphenation are complex, there are a few basic principles:

- 404 1. a phrase containing a participle or an adjective is hyphenated as a compound when it
405 precedes the word modified (e.g., home-range estimation) and is written without a
406 hyphen when it follows the word modified (estimation of home range);
- 407 2. a modifier containing a number is usually hyphenated (e.g., 3-month-old fawn); and
- 408 3. a 2-word modifier containing an adverb ending in -ly is not hyphenated (e.g., publicly
409 owned land). However, excessive use of compound modifiers before nouns makes for
410 difficult reading; they tend to obscure the true subject. Avoid ambiguous use of nouns as

411 modifiers (e.g., wolf researchers, woman hunters). Use prepositions to avoid using nouns
412 as adverbs (e.g., nesting by birds, not bird nesting; hunting with dogs, not dog hunting)
413 and to avoid noun strings exceeding 3 words (e.g., “radiotelemetry locations of dens in
414 fall,” not “fall den radiotelemetry locations”). Avoid using >3 adjectives to modify a
415 single noun.

416 Do not use a slash (/) to indicate "and" or "or" or to express a range; use slash only to
417 indicate "divided by" or "per."

418 Avoid using words in ways other than their standard meanings; only sparingly use quotation
419 marks to imply a special meaning and never to denote emphasis.

420 Trademarks (i.e.,™, ®) should be used at the first mention of a product name, where
421 appropriate, and not thereafter.

422 Closing quotation marks should be placed after periods and commas, but may be placed
423 either before or after other punctuation (CBE Style Manual Committee 1994:177–181). Fences
424 must appear in pairs; however, the sequence varies: use ([]) in regular sentences, use {{()}} in
425 mathematical equations, and use (()) in special cases such as chemical names. Use brackets to
426 enclose something not in the original work being quoted (e.g., insertion into a quotation or a
427 translated title [CBE Style Manual Committee 1994:58–59]).

428 *Enumeration.* Do not number series within a sentence or paragraph (e.g., 4 study objectives)
429 unless some of the clauses or sentences are lengthy or involve complex punctuation. In such
430 cases, place parentheses around the number, e.g., (1), (2), (3). When enumerating lengthy or
431 complexly-punctuated series, place the numbers at the left margin, with periods but no
432 parentheses, and indent run-on lines (see examples under the heading “Subject matter,” above).

433 *Species plurals.* When discussing a group of animals in a study, use the plural form (e.g.,
434 “We collected data about alligators in Louisiana.”, not “We collected data about alligator in
435 Louisiana.”). When speaking of a species in general, use the singular form and add “the” (e.g.,
436 “Very few studies have been conducted on the alligator, and more research is needed.”). Also,
437 remember that data is a plural noun and requires an appropriate verb (e.g., the data are).

438 **Common and scientific names**

439 Do not capitalize common names, except words that are proper names (e.g., Florida
440 panthers [*Puma concolor*], Canada goose [*Branta canadensis*]). Scientific names (in italics, in
441 parentheses) should follow the first mention of a common name, except in the title. Scientific
442 names should be given the first time a species is mentioned in the abstract and again the first
443 time it is mentioned in the text. Abbreviate genus names with the first letter when they are
444 repeated within a few paragraphs, provided the meaning cannot be confused with another genus
445 with the same first letter.

446 Do not use subspecies names unless it is essential, and omit the taxonomic author's name.
447 Use "sp." (not italicized) to indicate species unknown and use "spp." for multiple species. Use
448 the most widely accepted nomenclature in cases where disagreement occurs. Refer to the most
449 current edition of the American Ornithologists' Union check-list of North American birds or the
450 American Ornithologists' Union Birds of North America website
451 (<http://bna.birds.cornell.edu/BNA>) as general references for North American bird species. For
452 mammals, use Nowak (1991), Wilson and Reeder (2005), or the Smithsonian Institution's
453 Mammal Species of the World website (<http://nmnhgoph.si.edu/msw>). Please note that websites
454 cited as sources should be limited; however, those listed above may be used to check scientific
455 names. There is no single reference source for North American plants; however, we recommend

456 citing the most widely accepted regional flora reference (e.g., in northwestern states, Hitchcock
457 and Cronquist 1973). Do not include scientific names of domesticated animals or cultivated
458 plants unless a plant is endemic or widely escaped from cultivation or is a variety that is not
459 described adequately by its common name.

460 **Measurement units**

461 Use Systeme Internationale d'Unites (SI) units and symbols. Avoid using English units in
462 parentheses. However, the following non-SI units are permitted:

463 Area: hectare (ha) in lieu of 10^4 m².

464 Energy: calorie (cal) in lieu of Joule (J).

465 Temperature: Celsius (°C) in lieu of Kelvin (K).

466 Time: minute (min), hour (hr), day (do not abbreviate), etc., in lieu of seconds (sec).

467 Volume: liter (L) in lieu of dm³.

468 **Citing literature in text**

469 In most cases, you should reference citations parenthetically at the end of a sentence:
470 Mallard brood survival was greater in the wettest years (Rotella 1992). Published literature is
471 cited chronologically (e.g., Jones 1980, Jones and White 1981). For works with >2 authors, use
472 "et al." after the first author's name (e.g., Jones et al. 1982). Do not separate the author and date
473 by a comma, but commas to separate a series of citations. Citations in a series should be put in
474 chronological order. For citations with the same year, use alphabetical order within the
475 chronological order (e.g., Jones 1980, Brown 1991, Monda 1991, Rotella 1991, Allen 1995). If
476 citations in a series have >1 reference for the same author(s) in the same year, designate the years
477 alphabetically (in italic type) and separate citations with semicolons (e.g., Jones 1980*a, b*;
478 Hanson 1981; White 1985, 1986). Do not give >4 citations in the text to reference a specific

479 issue or scientific finding. For a direct quotation, cite author and year, followed by a colon and
480 page number(s), e.g., Manfredo et al. (1996:54) defined human dimensions as "an area of
481 investigation which attempts to describe, predict, understand, and affect human thought and
482 action...."

483 Cite documents that are cataloged in major libraries, including theses and dissertations, as
484 published literature. These citations include symposia, proceedings, and U.S. government reports
485 that have been widely distributed (see *Literature cited style*). All other documents, including
486 information obtained from websites, should be cited as unpublished data in the text only.

487 **Citing unpublished sources in text**

488 If references are not easily available or are not widely distributed they should be cited in
489 text only. This includes reports that are not published or widely distributed, manuscripts that
490 have not yet been accepted for publication, and personal communications and observations.

491 These references should be cited in text as follows:

- 492 • Personal communication: (J. G. Jones, National Park Service, personal communication)
- 493 • Unpublished report: (D. F. Timm, Alaska Department of Fish and Game, unpublished
494 report) or (E. J. Jones, North Carolina State University, unpublished report)
- 495 • Unpublished data (including manuscripts in review): (D. F. Brown, Arizona Game and
496 Fish Department, unpublished data)
- 497 • Unpublished data from websites (avoid if possible): (www.berrymaninstitute.org, April 4,
498 2005, unpublished data)

499 You should avoid overusing unpublished information. Not only are such references not as
500 credible as published literature, but overuse of such citations will make your text cumbersome
501 and difficult to read.

502 **Literature cited**

503 Type the citations double spaced, immediately following the text, not on a new page.
504 Spell out all words in the literature cited (i.e., do not use abbreviations). However, the following
505 3 exceptions are allowed in the literature cited and parenthetically in the text: (1) U.S. for United
506 States and as the country at the end of a citation, when it should appear as USA; (2) Inc. (for
507 incorporated) when it is part of a company name; and (3) D.C. for District of Columbia (no space
508 between letters). USA is the only country abbreviation allowed; all others should be written out.

509 The citations should be alphabetized by authors' surnames, regardless of the number of
510 multiple authors for the same publication. Within alphabetical order, the sequencing is
511 chronological. Use upper- and lowercase letters (typing all capital letters complicates editing
512 names such as DeGraaf and van Druff). Use 2 initials (where applicable) with one space between
513 each initial. If citations have >1 reference for the same author(s) in the same year, differentiate
514 the publications alphabetically and add *a*, *b*, *c* (in italics) etc. after the year for each entry (see the
515 Kendall entry in the sample Literature cited below). Always write out all author names, even for
516 multiple citations by the same author(s).

517 Following is a list of examples to guide you in formatting the literature cited section of
518 your manuscript. Please refer to a recent issue of the *HWI* for more examples. Please note that
519 websites as references should be limited. Whenever possible, rather than Internet sources, cite
520 the original sources (i.e., a hard or paper copy). However, many authoritative statistical records
521 or reference sources (e.g., U.S. census figures or the American Ornithologists' Union Birds of
522 North America website) are now posted on the Internet and are acceptable for citation.

523 In formatting Literature cited entries, use the word-processing ruler to create hanging
524 indents, not tabs or space bar.

525 **Book—general format**

526 McCullough, D. R. 1979. The George Reserve deer herd: population ecology of a K-selected
527 species. University of Michigan, Ann Arbor, Michigan, USA.

528 Miller, K. V., and L. Marchinton. 1995. Quality whitetails: the why and how of quality deer
529 management. Stackpole, Mechanicsburg, Pennsylvania, USA.

530 *Note:* Do not write the total number of pages at the end of book citations.

531 **Book with >1 edition**

532 Smith, R. L. 1974. Ecology and field biology. Second edition. Harper and Row, New York, New
533 York, USA.

534 *Note:* As in text, write out all ordinal numbers (e.g., Second edition, Third edition, etc.).

535 *Note:* For publishers, do not include words like Company, Incorporated, Limited, Press,
536 or Publishing (e.g., Harper and Row, not Harper and Row Publishers), except when citing
537 university presses (e.g., Yale University Press), which often are a separate entity.

538 **Book with >1 volume**

539 Palmer, R. S. 1976. Handbook of North American birds. Volume 2. Yale University Press, New
540 Haven, Connecticut, USA.

541 **Book with >1 publisher**

542 Sowls, L. K. 1955. Prairie ducks: a study of their behavior, ecology, and management. Stackpole,
543 Harrisburg, Pennsylvania, USA, and Wildlife Management Institute, Washington, D.C.,
544 USA.

545 **Book with editor as author**

546 Temple, S. A., editor. 1978. Endangered birds: management techniques for preserving threatened
547 species. University of Wisconsin Press, Madison, Wisconsin, USA.

548 **Book reprint**

549 Leopold, A. 1933. Game management. 1946, Reprint. Scribner's, New York, New York, USA.

550 **Chapter within a book**

551 Fite, E. 1994. The environmental protection agency's avian pesticide assessment model. Pages
552 519–530 in R. J. Kendall and T. E. Lacher, editors. Wildlife toxicology and population
553 modeling integrated studies of agroecosystems. CRC, Boca Raton, Florida, USA.

554 **Theses and dissertations**

555 Brelsford, M. A. 1991. Effects of grazing by wapiti on winter wheat and winter rapeseed, and the
556 effects of simulated wapiti use on winter wheat in northern Idaho. Thesis, University of
557 Idaho, Moscow, Idaho, USA.

558 Tacha, T. C. 1981. Behavior and taxonomy of sandhill cranes from mid-continental North
559 America. Dissertation, Oklahoma State University, Stillwater, Oklahoma, USA.

560 *Note:* Use the word Thesis to denote Master of Science (M.S.) or Master of Arts (M.A.)
561 and Dissertation for Doctor of Philosophy (Ph.D.).

562 **Journal—general format**

563 Miller, M. R. 1986. Molt chronology of northern pintails in California. Journal of Wildlife
564 Management 50:57–64.

565 Steigers, W. D., Jr., and J. T. Flinders. 1980. A breakaway expandable collar for cervids. Journal
566 of Mammalogy 61:150–152.

567 *Note:* Issue numbers are included only if pages of each issue are numbered separately.

568 **Journals in press—year and volume known**

569 Zelenak, J. R., and J. J. Rotella. 1997. Nest success and productivity of ferruginous hawks in
570 northern Montana. Canadian Journal of Zoology 75: in press.

571 *Note:* "In press" indicates the manuscript is officially accepted for publication. Those still
572 being considered for publication should be cited in the text as unpublished data.

573 **Journals in press—year and volume unknown**

574 Giudice, J. H., and J. T. Ratti. In press. Biodiversity of wetland ecosystems: a review of status
575 and knowledge gaps. Bioscience.

576 *Note:* These references are cited in text as (Giudice and Ratti, in press).

577 **Symposia and proceedings—complete volume**

578 DeGraaf, R. M., technical coordinator. 1978. Proceedings of a workshop on management of
579 southern forests of nongame birds. U.S. Forest Service, General Technical Report SE-14.

580 **Symposia and proceedings—individual article**

581 Dickson, J. G. 1978. Forest bird communities of the bottomland hardwoods. Pages 66–73 in R.
582 M. DeGraaf, technical coordinator. Proceedings of a workshop on management of
583 southern forests of nongame birds. U.S. Forest Service, General Technical Report SE-14.

584 **Symposia and proceedings—part of a numbered series**

585 Kroll, J. C. 1994. These were the good old days: a new paradigm for white-tailed deer
586 management. Proceedings of the Annual Southeastern Deer Study Group 17:20–21.

587 **Symposia and proceedings—not part of a numbered series—complete volume**

588 McAninch, J. B. 1995. Urban deer: a manageable resource? Proceedings of the Symposium of
589 the 55th Midwest Fish and Wildlife Conference. North Central Section of The Wildlife
590 Society, St. Louis, Missouri, USA.

591 **Symposia and proceedings—not part of a numbered series—individual article**

592 Stout, S. L., and R. Lawrence. 1996. Deer in Allegheny Plateau forests: learning the lessons of
593 scale. Pages 92–98 *in* Proceedings of the 1995 Foresters Convention. Society of
594 American Foresters, Portland, Maine, USA.

595 **Government publication**

596 Lull, H. W. 1968. A forest atlas of the Northeast. U.S. Forest Service, Northeastern Forest
597 Experiment Station, Upper Derby, Pennsylvania, USA.

598 **Government publication—part of a numbered series**

599 Anderson, D. R. 1975. Population ecology of the mallard: V. Temporal and geographic estimates
600 of survival, recovery, and harvest rates. U.S. Fish and Wildlife Service, Resource
601 Publication 125.

602 **Government publication—agency as author**

603 National Research Council. 1977. Nutrient requirements of poultry. Seventh edition. National
604 Academy of Science, Washington, D.C., USA.

605 *Note:* Cite in text as National Research Council (1977) or, if it appears in parentheses,
606 cite as (Natl. Res. Counc. 1977).

607 **Newspaper, newsletter, and magazine articles**

608 Associated Press. 1997. Feathers could fly over dove hunting. Columbus Dispatch. December
609 28, 1997; section E:15.

610 Eisler, P., and J. T. Buckley. 1996. Voters to get a shot at hunting laws. USA Today. April 25,
611 1996; section A:4.

612 Hogan, M. 1997. Political season as important as hunting season. Safari Times 9(8):18.

613 Jones, D. M. 1997. Protecting animals at the ballot box. Mainstream, Animal Protection Institute.
614 Spring: 24–27.

615 Jones-Jolma, D. 1993. The fight to reform trapping in Arizona. *The Animals' Agenda*. March–
616 April:20–24.

617 *Note:* Citing from newspapers, newsletters, and magazines generally is discouraged but
618 may be acceptable only in certain circumstance (e.g., in papers dealing with public
619 perceptions).

620 **Internet sources**

621 FAA. 2008. National wildlife strike database select, Federal Aviation Administration,
622 Washington, D.C., USA, <http://www.wildlife.pr.erau.edu/databast/select_iv.php>.
623 Accessed March 10, 2010.

624 Prukop, J., and R. Regan. 2002. The value of the North American model of fish and wildlife
625 conservation. International Association of Fish and Wildlife Agencies, Wildlife
626 Resources Policy Committee, white paper. Orion: The Hunter's Institute,
627 <<http://huntright.org/heritage/conservation.aspx>>. Accessed March 10, 2010.

628 *Note:* Format for Internet sources is: *author or organization, date, title of web page,*
629 *sponsor of web page or publisher, location of publisher (city, state, country), web*
630 *address, date last accessed.*

631 **Court cases**

632 Cite complete title and year of case in text only.

633 **Tables and figures**

634 Tables generally require more effort from the editorial staff than other parts of a
635 manuscript because of incorrect formatting (Table 1). Write complete titles (double-spaced) so a
636 reader can understand the table without referring to the text. The title should include names of

637 characteristics and organisms measured, measurement unit(s) in parentheses, places, and dates.

638 Avoid >1 sentence, and use footnotes to explain details if necessary.

639 Submit only essential tables and figures. Often tables overlap with presentation in the text
640 or the information can be included easily in the text, taking up less space on the typeset page. Do
641 not present the same data both in a table and a figure. Number tables and figures independently.
642 In the text, limit reference of tabular data to highlights of the most important information. In
643 most cases, reference tables and figures parenthetically. Avoid statements such as "The results
644 are shown in Tables 1–4." Prepare line drawings only for data that cannot be presented as clearly
645 in a table. For general guidance, see CBE Style Manual Committee (1994:677–693).

646 Tables and figures should be self-explanatory; avoid references to the text, and be sure
647 the title includes the species or subject of the data and where and when the data were collected.
648 In rare cases, titles or footnotes of tables and figures may be cross-referenced to avoid repeating
649 long footnotes or the same data. However, this violates the "self-explanatory" rule and should be
650 avoided, if possible. Tables and figures should be included on separate sheets at the end of the
651 text rather than inserted within the written text of the document. In addition, they should be
652 included within the document and not uploaded as separate supplemental document files so that
653 reviewers and editors only need to download one document with all submission components. The
654 managing editor will contact authors of accepted manuscripts to request finalized figure images,
655 which may be submitted to the editorial office either via email at hwi@usu.edu or through the
656 USU Big File Transfer system at <https://bft.usu.edu/>.

657 **Tables**

658 *Constructing tables.* Do not prepare tables for small data sets (those containing many
659 blank spaces, zeros, repetitions of the same number or those with few or no significant data);

660 include such data in the text. For data that must be shown in a table, items that provide the most
661 important comparisons usually read vertically, not horizontally.

662 Tables should be created using the table function of the word processing software. Do not
663 use tabs or spaces to create tables. Put only 1 row of text in 1 row of cells, and never use a
664 multiple-text column format within a table.

665 *Table titles.* Table titles should provide information succinctly in the following sequence:
666 (1) name of the characteristic that was measured (e.g., weight, age, density), (2) measurement
667 unit or units in parentheses (e.g., cm, No./ha, M:100 F, %), (3) name of species or other entity
668 measured (e.g., "of white-tailed deer"), and (4) location(s) and date(s) of study. Keep in mind
669 that each part of the sequence can include >1 item (e.g., "Carcass and liver fat [%] and adrenal
670 and kidney weight [mg] of white-tailed deer in Ohio and Michigan, 1975").

671 Avoid beginning the table title with puff words (e.g., The..., Summary of..., Comparisons
672 between...) and words that can be presented parenthetically as symbols or abbreviations (e.g., %).
673 Symbols such as *n* and % in the table title seldom need repetition in table headings. Do not use
674 abbreviations in table titles, except within parentheses. However, use standard abbreviations and
675 symbols (Appendix A) in the table body.

676 *Rules.* The lines printed in tables are called "rules," and they should be used according to
677 the following *HWI* standards:

- 678 1. Do not use vertical rules in tables. Each table should contain at least 3 rules—1 below the
679 title, 1 below the column headings, and 1 at the bottom.
- 680 2. Use rules that straddle subheadings (straddle rules) within column headings.
- 681 3. Do not use rules to show summation. Use "Total" or its equivalent in the row heading.

682 4. Do not use rules to join the means in multiple-range tests. Use Roman uppercase letters
683 instead of rules (e.g., 12.3A^a, 16.2A, 19.5B) where the superscript "a" references a
684 footnote, such as "^a Means with the same letters are not different ($P < 0.10$)". Uppercase
685 letters may be used in a similar way to reference the relationship of data among columns.
686 Use straddle rules liberally to join related columns and reduce verbiage. Label columns to
687 avoid unnecessary print in the data field. For example, instead of " $\bar{x} \pm SE$," label \bar{x} and SE as
688 separate columns so that \pm need not be printed. Similarly, label sample size columns " n " instead
689 of using numbers in parentheses in the data field.

690 *Table headings.* Keep column- and row-heading words or symbols (e.g., %, n , SE) out of
691 the data field. Type the main headings flush left, and indent their subheadings.

692 *Data field.* In the data field, do not use dashes (which are often misused to mean "no
693 information") or zeros, unless the item was measured and 0, 0.0, or 0.00 correctly reports the
694 measurement. If no information is available, leave a blank space. Also, respect digit significance
695 in all numbers, particularly percentages. Do not use percentages where n is <26 , except for 1 or 2
696 samples among several others where n is >25 . Where the number of significant digits varies
697 among data in a column, show each datum at its precision level (i.e., do not exaggerate
698 precision). For P values, do not use >3 digits past the decimal, and do not list $P = 0.000$; the
699 proper form is $P \leq 0.001$.

700 Never include naked decimal points in the data field. In other words, all decimal points
701 should be surrounded by a number (e.g., 0.05, 1.00, etc.).

702 *Footnotes.* For footnote superscripts, use asterisks (*, **, etc.) for probability levels and
703 lowercase Roman (not italic) letters for other footnotes. Place letters alphabetically in the

704 following sequence: (1) title, (2) left to right in the table, and (3) down the table. Be certain that
705 each footnote character in the title and table matches the explanation written below the table.

706 Left-justify run-on lines of footnotes. Use footnotes liberally to reduce cluttering the title
707 and table with details.

708 Keep in mind that the most common errors in tables are single spacing, incomplete titles,
709 naked decimal points, misalignment of table columns, and ambiguous or unnecessary characters
710 in the data field. Being aware of these problems beforehand may save you time during the review
711 and the revision process.

712 **Figures**

713 Editors of *HWI* encourage the use of full-color line drawings, photographs, or other
714 illustrations that improve communication. Lettering in figures should be sentence case (i.e.,
715 mixed-case letters) and must be >1 mm tall when the figure is reduced. Suggestions for preparing
716 high-quality illustrations can be found in Allen (1977) and the CBE Style Manual (1994:693–
717 699). Provide all figures and photos that you intend to include in your article along with your
718 original manuscript submission. Photos are considered figures and, as such, should include
719 captions, such as those described below. Electronic figures should be embedded in the Word
720 document submission rather than uploaded as separate supplemental content. The managing
721 editor will contact authors of accepted manuscripts to finalize the images for publication and to
722 specify how to submit image files.

723 *Figure captions.* Type all figure captions on one page and label each figure. Figure
724 captions tend to be longer than table titles. The caption may be several sentences long and
725 include brief suggestions for reading and interpreting the figure. If appropriate, include a

726 statement of credit at the end of the caption (e.g., "Photo by R. Dolbeer.", or "Photo courtesy
727 U.S. Fish and Wildlife Service.").

728 *Figure submission.* Figures will be published in color as submitted in final form.

729 Although figures can contain or rely on color for interpretation, please consider developing
730 figures that meet the needs for colorblind readers. Use color-safe combinations, including green
731 and magenta, turquoise and red, yellow and blue, or other accessible color palettes. Avoid using
732 combinations such as green and red, green and brown, blue and purple, green and blue, light
733 green and yellow, blue and gray, green and gray, and green and black. Incorporate textures and
734 patterns into graphs and maps to facilitate understanding without becoming a distraction in figure
735 design.

736 Do not embed graphics or photos in a word processing program for final submission of
737 the images to *HWT*. The most desirable formats for figures include, in order of preference: tif,
738 jpg, Postscript (eps, ps, prn), PowerPoint (ppt, pps), and Excel chart (xlc). Contact the editorial
739 office if you have questions regarding formats.

740 Line drawings and photos must be high-quality and easily reproducible. Hand-drawn
741 lines and lettering are not acceptable for line drawings. We recommend professional preparation
742 of line drawings. When preparing figures, please keep in mind that components of the figure
743 (including lettering) must be of sufficient size and clarity to be legible after its reduction to fit the
744 size of *HWT*'s published page. Often a figure or graph will be reduced to 1 or slightly more than
745 1 column. Recommended font is sans serif, such as Arial or Helvetica. Use mixed case in all
746 instances within figure text, with the exception of capitalizing all formal names or acronyms.

747 Photos and slides that are submitted electronically should be high resolution, preferably
748 300 ppi (i.e., pixels per inch). When taking photos using a digital camera, set the camera to the

749 highest resolution possible. Line drawings and graphs should be at a resolution of 1200 ppi.,
750 saved as a tif file, and sent to the *HWI* editorial office via email or through the USU Big File
751 Transfer system at <https://bft.usu.edu/>.

752 Photos must have sharp focus, high tonal contrast, and a reference scale if size is
753 important to the purpose of the illustration. Sets of 2 to 4 related photos may be presented as 1
754 figure if they are the same width. Label photos that will appear in the same figure as A, B, C, and
755 D for reference in the caption and in text. Cropping often improves composition of photos. An
756 emailed statement of permission by the photographer for *HWI* to use the photos should
757 accompany submissions.

758 *Text in figures.* Text used within figures should be sentence case (mixed-case), Roman
759 (not italic) type, unless these special attributes are essential to the meaning of the text, as in
760 mathematical terms (e.g., n , N , etc.) and most metric units (kW, m, etc.). Use standard
761 abbreviations (Appendix A) in the figure body, but not in the figure caption. Identify any unusual
762 symbols used in a legend within the figure (preferred) or in the figure caption.

763 *Acknowledgments.* The acknowledgments appear immediately before the literature cited
764 section and should be brief. All acknowledgments should include the first initial (or 2 initials
765 where appropriate) and the last name of individuals acknowledged. Wording should be simple,
766 without qualifying adjectives. A. Ballard provided valuable assistance in preparing the
767 appendices for this revision. D. Minnis provided assistance with reviewing drafts. We thank L.
768 Andrews and B. Leopold for allowing us to use sections of their 2000 guidelines for WSB in
769 compiling *Guidelines for authors and reviewers of Human–Wildlife Interactions manuscripts*.
770 The associate editor, reviewers, and sometimes the editor-in-chief of *HWI* are frequently

771 included in this section as a standard procedure during the final copyedit of accepted
772 submissions.

773 **Literature cited**

774 Allen, A. 1977. Steps toward better illustrations. Allen, Lawrence, Kansas, USA. American
775 Ornithologists' Union. 1977. Check-list of North American birds. Seventh edition. Allen,
776 Lawrence, Kansas, USA.

777 CBE Style Manual Committee. 1994. Scientific style and format: the CBE manual for authors,
778 editors, and publishers. Sixth edition. Council of Biological Editors, Cambridge
779 University Press, New York, New York, USA.

780 DeBakery, L. 1976. The scientific journal: editorial policies and practices. C. V. Mosby, St.
781 Louis, Missouri, USA.

782 Guthery, F. S. 1987. Guidelines for preparing and reviewing manuscripts based on field
783 experiments with unreplicated treatments. *Wildlife Society Bulletin* 15:306.

784 Guthery, F. S., N. E. Koerth, and D. E. Capen. 1988. Guidelines for authors and reviewers of
785 *Wildlife Society Bulletin* manuscripts. *Wildlife Society Bulletin* 16(1, Supplement).

786 Hitchcock, C. L., and A. Cronquist. 1973. *Flora of the Pacific Northwest*. University of
787 Washington Press, Seattle, Washington, USA.

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790 Kendall, R. L. 1981. Dual publication of scientific information. *Transactions of the American*
791 *Fisheries Society* 110:573–574.

792 Kendall, R. L. 1985a. Role of the U.S. government in aquaculture. Pages 83–104 *in* Proceedings
793 of the 1983 International Association of Fish and Wildlife Agencies Meeting, September
794 13, 1983, Milwaukee, Wisconsin, USA.

795 Kendall, R. L. 1985b. Toxic substances in the aquatic environment. Pages 42–56 *in* Papers from
796 the American Fisheries Society Symposium, September 24, 1982, Hilton Head, South
797 Carolina, USA.

798 Nowak, R. M. 1991. Walker's mammals of the world. Volumes 1 and 2. Fifth edition. Johns
799 Hopkins University Press, Baltimore, Maryland, USA.

800 Ratti, J. T., and L. W. Ratti. 1988. Manuscript guidelines for the Journal of Wildlife
801 Management. *Journal of Wildlife Management* 52(1, Supplement).

802 Ratti, J. T., and L. A. Smith. 1998. Manuscript Guidelines for the Journal of Wildlife
803 Management. *Journal of Wildlife Management* 62(1, Supplement).

804 Reidel, S. and Crowder, H. 1999. Wildlife Society Bulletin guidelines for manuscripts: 1998
805 revision of guidelines for authors and reviewers of Wildlife Society Bulletin manuscripts.
806 *Wildlife Society Bulletin* 26: 657–690.

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808 geographic reference. Second edition. Smithsonian Institution, Washington, D.C., USA.

809 Wilson, D. E., and D. M. Reeder, editors. 2005. Mammal species of the world: a taxonomic and
810 geographic reference. Third edition. Smithsonian Institution, Washington, D.C., USA.

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812 (Note: Most of the citations used as examples in the text do not appear in the Literature cited.)

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Table 1. Format and style guidelines for tables accompanying manuscripts submitted to *Human–Wildlife Interactions*.

Item	Style rule
Abbreviations	Use standard abbreviations.
Capitalization	Capitalize only the first letter for a column heading or phrase within a table.
Column heads	Required for each column. Do not submit tables with unlabeled columns.
Footnotes ^a	Use alphabetical superscripts, except for footnotes specifying probability levels.
Spacing	Double-space throughout, including the title and footnotes.

^aThe first line of a footnote is indented (2 spaces). The remaining lines are flush left with the left margin and double-spaced. See the subheading for footnotes under the Tables heading above.

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Table 2. Example of correct format of tables accompanying manuscripts submitted to *Human–Wildlife Interactions*.

Site	Animal group			
	Avian		Mammalian	
	Insectivorous	Carnivorous	Insectivorous	Carnivorous
Xeric	5	3	2	4
Mesic	7	5	1	3
Hydric	12	7	5	8

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Appendix A. Abbreviations commonly used in tables, figures, and parenthetical expressions. Only those metric units and their appropriate prefixes identified by an asterisk (*) may be abbreviated in text^a. A blank means do not abbreviate.

Term	Abbreviation or symbol	Term	Abbreviation or symbol
amount	amt	logarithm, base 10	log ₁₀
approximately	approx	logarithm, base e	log _e or ln
average	avg.*	male	M
calorie	cal*	maximum, minimum	max., min.
Celsius	°C*	meter	m*
chi-square	χ^2	metric ton	t
coefficient	coeff	mile	mi
coefficient of		minute	min
correlation, simple	r	month	
multiple	R	month names	Jan, Feb, ...
determination, simple	r ²	more than	>*
multiple	R ²	number (of items)	No.
variation	CV	observation	obs.
confidence interval	CI	parts per billion	ppb*
confidence limits	CL	parts per million	ppm*
day		percent	%*
degrees of freedom	df	population size	<i>N</i>
diameter	diam	probability	<i>P</i>
diameter breast height	dbh	range	
experiment	exp.	sample size	<i>n</i>
female	F	second	sec
<i>F</i> -ratio	<i>F</i>	Spearman rank correlation	<i>r</i>
gram	g*	square	sq
gravity	g	standard deviation (s)	SD
hectare	ha*	standard error	SE
height	ht	Student's <i>t</i>	<i>t</i>
Hotelling's <i>T</i> ²	<i>T</i> ²	temperature	temp
hour(s)		versus	vs.
Joule	J*	volt	V*
kilocalorie	kcal*	volume	vol.
lethal concentration, 50%	LC ₅₀	watt	W*
lethal dose, median	LD ₅₀	week	
less than	<*	weight	wt
limit	lim	Wilcoxon test	<i>T</i>
liter	L*	year	yr
		Z-statistic	Z*

816 ^a All standard meter-based measurement units can be abbreviated in text when they appear after

817 a number (e.g., mm, cm, km, etc.).