#### OPINION

## The Importance of Publishing, No Matter How Small

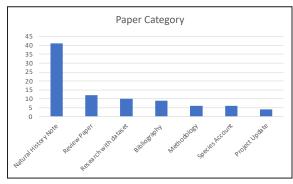
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recently read Jeff Alvarez's paper, "Dear fellow biologists, please share your observations, we need them" (Alvarez 2022), and was struck by how similar our publication philosophies aligned. He stated that there are always data gaps in the natural history of wildlife species, and biologists may not realize that the strange behavior or dietary item may not be published in the literature.

While working on my bachelor's degree at CSU, Stanislaus, I enrolled in BIOL 4010: Research and Technical Writing with Dr. Dan Williams in the spring of 1997. The biggest assignment that essentially determined our grade was to write a species account. He gave us a copy of his Mammalian Species account on the Giant Kangaroo Rat (Dipodomys ingens; Williams and Kilburn 1991) and explained that we should model our account after these mammalian accounts. It looked like a daunting task, but I tackled it with enthusiasm. During this same semester I enrolled in ZOOL 4650: Field Study: Wood Duck with Dr. Pamela Roe. I thought that I would score some major points by writing my account on the Wood Duck (Aix sponsa) which could also be used in the Wood Duck field course. Dr. Williams explained during lecture how to look up scientific papers in the school library and how to use search programs on the school computers, such as Lexis Nexus and printed publications like Biological Abstracts. As I was collecting and photocopying papers for my Wood Duck account (Roe and Clark 1997), I came across a quaint little paper entitled, "Wood Duck nest on a Muskrat house" (McIlquham and Bacon 1989). The paper was only four paragraphs long and detailed the odd circumstances of a Wood Duck nesting in such a strange place. I thought, "This is incredible and very much suited to my short attention span." The epiphany: scientific publications didn't need to be lengthy, and short notes such as this nesting observation could be published if the journal allowed scientific notes. Prior to finding that paper, I was under the impression that scientific papers were written by professors or Ph.D. students conducting huge research projects with robust data sets. Now I knew that natural history observations were welcomed-even if they had a sample size of "one" or could not be tested or repeated.

Over the years, I took on the challenge of keeping natural history observations in mind as I conducted wildlife surveys and live trapping sessions. In fact, it was a natural history observation that led me to the *Sonoran Herpetologist.* Dr. C.J. Randel and I were running several diurnal small mammal trapping grids in the Mojave Desert in 2006 along Highway 178 between Ridgecrest and Trona. It was a good year for herps, and we saw lots of reptile activity on our grids. The traps had cardboard A-frame shades positioned over them, and a Sidewinder (Crotalus cerastes) took advantage of the cozy location to extend its predation activity period. Dr. Randel thought the use of the shade structure by the Sidewinder was novel enough for publication, so he drafted a manuscript describing Sidewinder predation behaviors and submitted it to Herpetological Review. The reviewers at Herpetological Review, however, didn't feel the observation was novel enough but suggested that we submit the paper to the Sonoran Herpetologist. Roy Averill-Murray was the editor at the time, and he accepted the paper (Randel and Clark 2007). I read through the Sonoran Herpetologist website and enjoyed reading the older issues, noting that there were many interesting natural history publications. Eventually, I became editor in 2009 after Roy Averill-Murray moved on. I have always appreciated the Natural History Notes section of the Sonoran Herpetologist and am thrilled when someone submits a short note on some sort of strange reptile or amphibian observation.

I've written many natural history notes over the past 26 years, and I think that these notes are my greatest contribution to the literature. Figs. 1 and 2 break down my publications by manuscript type (natural history note, review article, methodology, etc.) and taxa (mammals, birds, invertebrates, etc.). Like Jeff Alvarez, I also



**Fig. 1.** Breakdown of 91 publications by category. Forty-five percent of the papers are natural history notes.

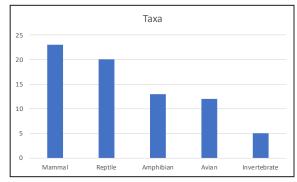


Fig. 2. Breakdown of publications by taxa.

Like Jeff Alvarez, I also highly encourage biologists to keep good field notes while they observe wildlife. Many of the behaviors we see in the field may have never been published and may fill a data gap we didn't even realize existed.

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*Acknowledgments*—I thank Sue Hagen and Erin Whitfield for their comments and feedback on the manuscript. The celebration of A.R. Wallace's 200<sup>th</sup> birthday was an inspiration for this work (*See* "Remembering Wallace." *Nature Ecology & Evolution* 7, 1 [2023]. *https://doi.org/10.1038/s41559-022-01972-z*).

### Literature Cited

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# *Sonoran Herpetologist* Information for Contributors

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*Sonoran Herpetologist* accepts manuscripts on diverse topics in herpetology, with emphasis on conservation, education, and research involving amphibians and reptiles of Arizona and Mexico. We welcome submissions for Local Research News, Natural History Notes, Research Articles, Book Reviews, and letters to the editor. In addition, we encourage essays or other unique contributions that do not fall within these regular categories. Submissions will not be peerreviewed, but they may be peer-edited.

Local Research News articles update our readers on current research on amphibians and reptiles in the Sonoran Desert region. These articles need be only a few paragraphs long and do not need to include data, specific localities, or other details. Emphasis should be on how science is being applied to herpetological questions. Natural History Notes include photographs and descriptions of noteworthy or unusual behavior of amphibians and reptiles observed in the wild. Notes can feature information such as diet, predation, community structure, interspecific behavior, or unusual locations or habitat use. Research Articles are longer papers that may include analysis of collected data or other information. Inclusion of photos and figures recommended. News and Notes are usually short news articles and announcements of interest specifically for members of the Tucson Herpetological Society. Style and format of these articles are flexible (see recent issues of Sonoran Herpetologist for examples). Book Reviews can be submitted on any recently published book on a herpetological or ecological / conservation topic. Books about the herpetofauna of Arizona and northern Mexico are preferred. Submit manuscripts electronically to Howard Clark, Editor (editor.sonoran.herp@gmail.com). Consult the Editor prior to submitting a paper if you have doubts as to its suitability.

#### Style and Formatting

**Title** – The article title should be followed by the list of authors. Each author should include their affiliation/address as shown below. Include an email address for the corresponding author.

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**Main Body** – Manuscripts submitted as feature-length articles (>2000 words) should typically consist of the following sections: Introduction (no heading), Methods, Results, Discussion, Acknowledgments, Literature Cited, and Figure Legends. Style and format of shorter contributions are informal.

Use a single space after a period. Use metric units, followed by English conversions in parentheses. Date format is: day, month, year (e.g., 13 October 2003). Use 24-h times (e.g., 1301 h, not 1:30 PM).

Scientific and English/Spanish names should generally follow Crother et al. (2008) and Liner and Andreu (2008). If the author prefers to use a different scientific name, particularly a different generic name, please include (in parentheses) the name given in the applicable reference above. Use italics for Latin names, and capitalize common names. We generally recommend use of the English/Spanish names with scientific name in parentheses for the first reference; for example: Desert Tortoise (*Gopherus agassizii*), with English/Spanish name in subsequent text. We welcome submissions for Local Research News, Natural **History Notes**, **Research Articles**, **Book Reviews**, and letters to the editor. In addition, we encourage essays or other unique contributions that do not fall within these regular categories. **Submissions** will not be peerreviewed, but they may be peeredited.