

EDITORIAL

How to be Impactful

We are being increasingly called upon to judge how impactful the work of various individuals is to the scientific and professional communities. At universities we are asked to judge how impactful the publications of our colleagues are when they come up for promotion and tenure; on faculty search committees we are asked to judge how impactful the various candidates will be if hired; and as Editors-in-Chief (EIC) we are constantly evaluating how impactful a particular manuscript will be when deciding on acceptance.

Here we want to talk about being impactful. But first we will talk about that awfully sounding word we used 4 times in the first paragraph. Is impactful really a word? Some say “no,” for example:

Many people in business and education like to speak of things that have an impact as being “irnpactful,” but this term does not appear in most dictionaries and is not well thought of by traditionalists. Use “influential” or “effective” instead (taken from “Common errors in English usage” by Paul Brians, <http://wsu.edu/~brians/errors/errors.html#errors>).

So, it does not appear that impactful is even a word. However, further searching revealed the following:

Commonly used in advertising, impactful refers to campaigns or executions with a positive effect on consumer perception or awareness (even if the opinion held is not positive). Advertising impact is commonly measured through advertising effectiveness research (from Prnewswire.com).

But is it in a dictionary? We did not do a thorough search, but we did locate this from Webster's New Millennium™ Dictionary of English, Preview Edition (v 0.9.6):

We have impactful defined as “having a great impact or effect.” So, it seems, impactful is rising to the level of a real word after all.

Well, based on the previous definition and comment, it seems that scientists are not the only folks who create words through frequent use; and hence jargon becomes a real word.

At Morrison's university there are no specific guidelines on how one measures impact other than to ask that a candidate for hiring, promotion, and retention has, indeed, had an impact on his or her profession. And, that this impact be at a national or international level. As such, the number of publications, amount of research dollars generated, score on student evaluations of teaching, and other activities are not a good measure of impact. Rather, the candidate must be evaluated based on the impact their work has had on

students or the profession. This is probably a good way to address merit, but the difficult part is actually quantifying it. Many university faculty believe that obtaining, say, a grant from the National Science Foundation or even publishing a paper in *Science* proves one's worth as a scientist. Perhaps it does by some measure but not to the university administrators when they ask to show the *impact* of that work.

Many federal and state agency research scientists undergo periodic evaluations to assess their stature in the field and impact of their work. Consultations, presentation, publications and the like are important, but sheer numbers are meaningless if they have no impact. Impact can be measured in various ways, but the bottom line is how research results are being used and how the finding made a difference to the resource. Users can be policymakers, land managers, landowners, other scientists, members of public interest groups, and industry. Scientists must demonstrate exactly how their research is used to demonstrate impact, and that must be validated by the users themselves.

So how do we measure impact? Here is a simple example to illustrate the problem inherent in measuring impact. Some years ago Morrison and coworkers conducted work on a small (approx. 12-g), wetland inhabiting, endangered rodent. We substantially changed the way the animal was managed because of some rather basic telemetry work. This telemetry work was made possible by earlier workers who struggled with determining how to attach these small (<1 g) radios without harming the animals; and going further back we would have to acknowledge the people who determined how to trap this species safely in very wet conditions.

So, how do we measure the impact across this series of studies in the simple scenario we provided above? We offer that we cannot, because we can really never know how one specific project will fit into the overall scheme we call the gathering of knowledge. Now let us bring this back to the issue of publishing papers. Referees and editors often comment that a study was nicely done and the manuscript was well written and focused. Often, there is really nothing of consequence to offer, other than to recommend rejection because the work is “unlikely to have much impact on the profession.” So, the manuscript on trapping in wet environments is rejected, because only people trapping in wet environments will care. But is that true? Setting aside our scenario where the trapping study lead to enhanced opportunity for recovery of an endangered species, are there not lessons in that work to be learned for all people doing rodent trapping? Trap deaths are a constant problem; perhaps insulation for wetland settings can be applied to other environments. What about bait? Traps in dry environments often get wet through dew and other

environmental sources of water (and it does rain in most places).

Now, we understand that no journal can publish every well-conducted study that it receives because budgets are not unlimited. Although The Wildlife Society (TWS) requires that authors provide "page charges," the amount required does not cover all of the costs of publication. Perhaps we should change the name from "page charges" to "publication contribution." But as EIC of the *journal of Wildlife Management (JWM)*, we have strived to not become the judge of impactfulness (well, if impactful is a word, why not this?) of a study. Rather, we have chosen to judge the rigor of the work as a primary measure of acceptance, and let the issue of impact be judged at a later time. The bottom line is that the impact of a study cannot be judged by whether or not the work is published in this *journal* or any other. Impact depends on how your research is used; how it is used by managers; how it is used by scientists; or how it is used to set policy. Solid work needs to be published. Yes, we must create a prioritization of what gets published, and that is a discussion for perhaps the next editorial. But if we base our editorial decisions on rigor (i.e., can we believe what you say), then we will leave it to the TWS membership to press the officers and Council to allocate all the funds needed to publish all of the good work. TWS has been good about this to date, so this is not a veiled attempt to start a letter writing campaign. We have not matched our acceptance rate with any budgetary constraints applied by TWS, and we hope no *JWM* editor ever does. Other journals-including some of what you might call our main competitors-expressly use the issue of impact in deciding on acceptance. It occurs to us that such a procedure could result from cognitive shortcuts and errors of which the decision makers are (obviously) not aware. Or perhaps editors of those journals have a certain omnipotence that we lack to anticipate impact of a paper before it happens. (Of course, rigor is another ambiguous, can-of-worms term. What is rigorous to me may not be rigorous to you. But any work that has obvious deficiencies in sampling or analysis will be judged "not rigorous" and thus have little positive impact.)

So, just some thoughts on how we judge manuscripts. We trust this was impactful.

Update on Status of the Journal

In many previous editorials we have described for you the reasons why the journal developed a backlog of accepted but unpublished papers, and why journal issues were coming out behind schedule. The good news is that the bad news appears-at least as of this writing-to be behind us. TWS Council made the decision to appropriate additional funds to clear out the backlog of papers waiting to be published.

We did fall a bit behind in the production schedule because of the need to add papers to issues we have already completed (we thought), but that was a short-term issue. As such, we are now pleased to report that the only backlog of papers will be that necessary to allow us to plan for the next 1-2 issues. Thus, once a paper is accepted it will be quickly content-edited by our staff, checked by an editor, and sent along to production. Volume 71 will represent the largest number of pages ever published by *JWM*. We appreciate the patience shown by authors during this process.

In this Issue

If a reader cannot find something of interest in this issue then he or she has a very narrow view of the world. The nearly 50 papers represent a cross section of work ranging from a study on survival of pelagic loggerhead turtles (a fascinating read even if you do not study turtles) to predation on moose by European brown bears. We begin with a Commentary from a member of the self described old school on the status and direction of wildlife study; we welcome a discussion of this topic in a future issue. A series of papers on techniques includes studies on the use of dogs to survey forest carnivores, evaluation of Global Positioning System collars, and identification of sea otters from nose scars. Human Dimensions is represented by 3 articles: examination of deer management strategies by landowners, access for bowhunting in suburbs, and insights on funding wildlife work.

We hope that readers will at least scan through all of these articles because they all contain study designs, sampling methods, analytical procedures, and applications for management that address wildlife science in some manner.

Thanks

We want to give special thanks to the continuing efforts of our lead editorial assistant, Carly Johnson. Carly took the lead role in managing the transition to the new *journal*, including the identification and training of new staff. She is also coming up with many streamlined ways to manage your submissions, including processing through AllenTrack. Carly is assisted by Angela Hallock, Dawn Hanseder, and Anna Knipps, who are also essential components of what keeps the editorial process moving forward.

We also want to recognize the continuing efforts of our Associate Editors, who continue to handle the review process with efficiency, rigor, and good professional judgment. And, of course, we acknowledge the many referees who form the backbone of the peer review process.

-William M. Block and Michael L. Morrison
Editors-in-Chief