In My Opinion



Volunteer Field Technicians Are Bad for Wildlife Ecology

AURIEL M. V. FOURNIER, ¹ Arkansas Cooperative Fish and Wildlife Research Unit, Department of Biological Sciences, University of Arkansas, Fayetteville, AR 72703, USA

ALEXANDER L. BOND, RSPB Centre for Conservation Science, Royal Society for the Protection of Birds, The Lodge, Sandy, Bedfordshire SG19 2DL, United Kingdom

ABSTRACT Many advertised field-technician positions sound worthwhile, but have no or very low pay. Although these can be valuable experiences, not paying technicians for their work undermines their professionalism and the professionalism of science as a whole. These unpaid technician positions are available to only the privileged few; and the positions exclude minorities, parents, and other groups who cannot afford to work unpaid. By creating such positions, we prevent everyone, regardless of background, from having a chance to get the field experience they need, and this limits the diversity of voices in wildlife ecology and conservation. We recognize finances are often tight, and there is a long tradition of unpaid work, but these are not valid rationalizations for continuing this practice. Unpaid technicians and internships are bad for science, and the conservation of our natural world. We cannot afford to not pay our technicians. © 2015 The Wildlife Society.

KEY WORDS diversity, field technician, volunteer.

Unpaid technician positions are common within the field of wildlife ecology and conservation, and are detrimental to the diversity of our field. At the same time, technician positions are vital to the careers of biologists because they need to continue to develop their skills as part of their own professional development. If we, as a community, are truly dedicated to diversity in wildlife ecology, employers should compensate technician positions with appropriate pay (Lopez and Brown 2011). Not paying for their work undermines our professionalism, and scientists' ethical standing. We recognize that funding is limited, but limited funding is not an excuse for not paying someone for their work. We are not the first ones to have recognized these problems, but 12 years after Whitaker (2003) made the same points, little has changed.

From the technicians' perspective, unpaid technician positions could be attractive because they give valuable professional experience, and might offer a "foot in the door" for future paid employment (though frequently it does not, especially for minorities; Slade et al. 2013). Unpaid positions in exotic locations can also fulfill a sense of wanderlust prevalent in the conservation community (Lynch 2012). But these justifications can lead to exploitation, and hamper diversity in our profession.

Received: 10 February 2015; Accepted: 21 September 2015

 1E –mail: aurielfournier@gmail.com

When we talk about unpaid internships and technician positions, we are not talking about volunteering for a weekend or the critical role that citizen scientists play in many projects (Silvertown 2009). We are talking about weeks or months of full-time unpaid work, often for so many hours or in such a remote area that taking on a concurrent paying job is impossible. The question of when unpaid work becomes exploitative is not clear-cut and we recognize the immense roll that nonexploitative volunteering has on conservation (e.g., citizen scientists). Students frequently take on field or lab work for credit as part of a degree program which, providing it fulfills the academic goals of the placement and is confined to a reasonable period of time (e.g., equivalent to n classes), is not an exploitative volunteer position, but rather is a degree component. "Compensation" in the form of housing, transportation, and/or food, in lieu of salary, is exploitative because these are benefits (or in some cases, requirements, of the field site), and the technician remains unpaid. How is someone—often with student debt, no outside financial support, a child, a sick parent, an expensive medical condition, any kind of regular life expense, or no family to buy a plane ticket for them—supposed to take these positions?

We systematically examined 4 months of job postings on the Ornithological Societies of North America Bird-Jobs list (https://www.osnabirds.org/Jobs.aspx) and 4 pages of the Texas A&M Job Board (http://wfscjobs.tamu.edu/jobboard/), and categorized the jobs as either 1) paid (>US \$300/month), 2) unpaid (<US\$300/month), 3) pay to work, or 4) pay status unclear. We only examined field-technician

positions, excluding full-time permanent positions and positions that required more than an undergraduate degree. Of the 96 positions surveyed, 38% were either unpaid or pay to work, demonstrating that these positions are common (Table 1). We used US\$300/month as our threshold because we did not feel that positions that paid <US\$300/month were truly paid positions. A US\$300/month position (with housing) in many places would be similar to minimum wage, though there are clearly regional differences.

There are 3 main rationalizations for hiring unpaid technicians, none of which we feel are valid. The first rationalization is financial; it is simply too expensive to hire n field technicians at x/hr to accomplish the required work. Conversely, though, if there is not money to collect the data correctly, handle the animals ethically, or pay the analytical lab to run the samples, these tasks are not completed. It therefore follows if there is no money for technicians' salary, then the project will not have technicians.

The second rationalization is precedent. Tradition is not an excuse for bad behavior of any kind. Traditionally, scientists have eschewed ethical considerations of research (Rollin 2006, Crozier et al. 2015), purposefully excluded women and minorities (Lariviere et al. 2013, Cho et al. 2014), and neglected basic field safety (Sasse 2003, Gochfeld et al. 2006); yet, we recognize that these practices are no longer appropriate. Failing to provide an adequate wage for project technicians may have been prevalent in the past, but is hardly justification for continuing to do so.

The third rationalization is "it could be worse." Pointing at others' technicians who are worse off is not an excuse for treating one's own technicians poorly. In the most extreme cases, prospective technicians must pay to work. That is not how employment should work, it takes advantage of young scientists, and it prevents many of them from even considering the opportunity offered (Cranford et al. 2003). Pay-to-work positions represent the most extreme end of a broken system that begins with wages below legislated minima, and progresses to labor provided with no compensation, or at a loss. The system is clearly broken, and requires a concerted and united effort by the entire community to fix it.

Unpaid technician positions create a sharp class divide, do not promote diversity, and disproportionately affect minorities because only the already privileged are able to be unpaid for lengths of time (Gregory 1998, Cranford et al. 2003, Curiale 2010, Lightman and Gingrich 2012, Fink 2013). These class divides affect minorities (Girard and Smith 2013), women (Menéndez et al. 2007), parents (Girard

Table 1. Classification of 96 contract or term positions in wildlife ecology and conservation from the Bird-Jobs and Texas A&M job boards in 2015 by degree of compensation.

Type of position	Frequency	Percentage
Paid (>US\$300/month)	52	54
Unpaid (<us\$300 month)<="" td=""><td>28</td><td>30</td></us\$300>	28	30
Pay to work	8	8
Unclear	8	8

2010), and other groups who do not have the means to go unpaid for lengths of time (e.g., Shuey and Jovic 2013). These are precisely the groups whose perspectives we need in wildlife ecology and conservation biology, and whose importance we frequently discuss (Lopez and Brown 2011). The ability to go unpaid bears no relationship to the technician's abilities or dedication, or skills required of a scientist (Gregory 1998). If we value diversity and professionalism in wildlife and conservation biology, we have to back it up with paid technician positions. As U.S. Vice President Joe Biden has often remarked: "Don't tell me what you value. Show me your budget, and I'll tell you what you value" (New York Times 2008).

We are shooting ourselves in the foot by excluding these groups of people from getting into science. The challenges we face now, and the ones that will arise in the future, will require creativity and diverse perspectives to solve; and we should act to ensure that we include everyone as part of our professional community.

The first step in addressing this problem is a change of mindset. When designing a new project, one must budget for staff. These technicians should be paid, and their salaries must be included in grant applications. This may require a change in perspective from some funding agencies, some of which do not fund salaries. This lack of willingness to fund technicians is part of the problem, and more flexibility by funding agencies in what costs are allowable is needed. We recognize that similar to many issues in wildlife ecology and conservation, the underlying problem is financial. Our reliance, as a community, on full-time underpaid labor should be thought about and discussed, and we need more scientists to make a commitment to stop the cycle.

When we create unpaid full-time positions, we exclude the very people we are trying to recruit into science. We are creating a sharper class divide within our field and excluding minorities when we do not pay our technicians. Unpaid technician positions are bad for science. They are bad for the conservation of our natural world. They are bad for society. In a field that desperately requires greater diversity of gender, race, sexual orientation, and economic status, we cannot afford to not pay our technicians if we want things to change.

ACKNOWLEDGMENTS

Forms of this piece were originally posted on *The Lab and Field* (https://labandfield.wordpress.com/2013/01/14/why-volunteer-field-techs-are-a-bad-idea/, and at https://aurielfournier.github.io/unpaid-intern/), and we thank numerous colleagues and readers for sharing their thoughts. The opinions expressed are not necessarily those of our employers. Comments from T. McGlynn, M. Boone, Associate Editor Susan Ellis-Felege, and two anonymous reviewers improved previous drafts.

LITERATURE CITED

Cho, A. H., S. A. Johnson, C. E. Schuman, J. M. Adler, O. Gonzalez, S. J. Graves. J. R. Heubner, D. B. Marchant, S. W. Rifai, I. Skinner, and E. M. Bruna. 2014. Women are underrepresented on the editorial boards of

- journals in environmental biology and natural resource management. PeerJ 2:e542. https://dx.doi.org/10.7717/peerj.542
- Cranford, C., J. Leah, F. Vosko, and N. Zukewich. 2003. Precarious employment in the Canadian labour market: a statistical portrait. Just Labour 3:6–22.
- Crozier, G. K., D. Albrecht, and I. Schulte-Hostedde. 2015. Towards improving the ethics of ecological research. Science and Engineering Ethics 21:577–594.
- Curiale, J. 2010. America's new glass ceiling: unpaid internships, the Fair Labor Standards Act, and the urgent need for change. Hastings Law Journal 61:101–128.
- Fink, E. M. 2013. No money, mo' problems: why unpaid law firm internships are illegal and unethical. University of San Francisco Law Review 47:2–25.
- Girard, M. 2010. Effects of non-standard work on the work-family balance: a literature review. McGill Sociological Review 1:46–58.
- Girard, M., and M. Smith. 2013. Working in a regulated occupation in Canada: an immigrant-native born comparison. Journal of International Migration and Integration 14:219–244.
- Gochfeld, M., C. D. Volz, J. Burger, S. Jewett, C. W. Powers, and B. Friedlander. 2006. Developing a health and safety plan for hazardous field work in remote areas. Journal of Occupational and Environmental Hygiene 3:671–683.
- Gregory, D. L. 1998. The problematic employment dynamics of student internships. 12 Notre Dame Journal of Law Ethics and Public Policy 12:227–264.
- Lariviere, V., C. Ni, Y. Gingras, B. Cronin, and C. R. Sugimoto. 2013. Global gender disparities in science. Nature 504:211–213.
- Lightman, N., and L. G. Gingrich. 2012. The intersecting dynamics of social exclusion: age, gender, race and immigrant status in Canada's labour market. Canadian Ethnic Studies 44:121–145.

- Lopez, R., and C. H. Brown. 2011. Why diversity matters. The Wildlife Professional. 5:20–27.
- Lynch, P. 2012. Wildlife & conservation volunteering: the complete guide. Second edition. Brandt Travel Guides, St. Peter, Buckinghamshire, United Kingdom.
- Menéndez, M., J. Menach, C. Muntaner, M. Amable, and P. O'Campo. 2007. Is precarious employment more damaging to women's health than men's? Social Science and Medicine 64:776–781.
- New York Times. 2008. Biden's remarks on McCain's policies. 15 Sep 2008. http://www.nytimes.com/2008/09/15/us/politics/15text-biden.htm. Accessed 3 Aug 2015.
- Rollin, B. E. 2006. The regulation of animal research and the emergence of animal ethics: a conceptual history. Theoretical Medicine and Bioethics 27:285–304.
- Sasse, D. B. 2003. Job-related mortality of wildlife workers in the United States 1937-2000. Wildlife Society Bulletin 31:1015-1020.
- Shuey, K. M., and E. Jovic. 2013. Disability accommodation in nonstandard and precarious employment arrangements. Work and Occupations 40:174–205.
- Silvertown, J. 2009. A new dawn for citizen science. Trends in Ecology and Evolution 24:467–471.
- Slade, B., Y. C. Luo, and D. Schugurensky. 2013. The experiences of immigrants who volunteer to access the labour market: pushing the boundaries of 'volunteerism'. Pages 101–114 in F. Duguid, K. Mündel, and D. Schugurensky, editors. Volunteer work, informal learning and social action. The Knowledge Economy and Education Series. Volume 1. Sense, Rotterdam, The Netherlands.
- Whitaker, D. M. 2003. The use of full time volunteers and interns by natural-resource professionals. Conservation Biology 17:330–333.

Associate Editor: Ellis-Felege.