

A view of the global conservation job market and how to succeed in it

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Abstract

The high demand for conservation-based work is creating a need for conservation-focused training of current and future graduate students. While many graduates with tertiary degrees in biology are finding careers outside of academia, many programs and mentors continue to prepare students to follow in the footsteps of their professors. Unfortunately, information regarding how to appropriately prepare for today's job market and find success in conservation careers is limited in detail and scope. This problem is further complicated by

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the differing needs of conservation positions distributed among diverse employers in both economically advanced and developing regions across the globe. To help young scientists identify the tools needed for conservation positions worldwide, we review the current global conservation job market and identify skills required for success in academic, governmental, nonprofit, and private positions. We found that positions in nonprofit organizations are the most abundant, while academic jobs consisted of only 10% of today's job market. The most common skills required across sectors were a strong disciplinary background, followed by analytical and technical skills. Academic postings differed the most from the other postings, emphasizing teaching as a top skill. Non-academic jobs emphasized the need for excellent written and oral communication, as well as project management experience. Furthermore, we found distinct differences across job locations, with postings of developing economies emphasizing language and interpersonal skills, while advanced economic countries positions focused on publication history and technical skills. Our results were corroborated through interviews with current conservation professionals. Finally, we provide a sample list of recommended conservation based training programs. Using the results of this study, young scientists will be better able to tailor their training to maximize success in today's conservation-based job market. Similarly, institutions can apply this information to create educational programs that produce graduates primed for long-term success.

Introduction

With the ushering in of the Anthropocene and depletion of natural resources, the need for conservation-focused work continues to grow (Crutzen & Stoermer 2000; Caro et al. 2011; Corlett 2015). Conservation is now a primary goal of most national governments as demonstrated through the IUCN's implementation of the strategic plan for biodiversity (Aichi Biodiversity Targets, 2016 Convention on Biodiversity) and with 188 countries committing to decreasing carbon emissions at the 2015 IPCC Climate Conference (COP21 Paris

Accepted Article

Agreement). With this extensive commitment to conservation worldwide, the need for well-trained scientists and managers in the field of conservation is at its highest. Despite the increased demand for conservation scientists, conservation-based training has lagged behind and information describing how to receive appropriate training is limited (Jacobson 1990; Graybill et al. 2006; Blickely et al. 2013).

The lack of opportunities for conservation-focused training is particularly problematic in the context of the current academic job market. Availability of traditional academic positions is limited, increasing the importance of other conservation-based careers (Edmonds 2015; Mcdowell 2016; Kolata 2016). Recent work highlighted the “fool’s gold of a PhD” (Mcdowell 2016), with only 1 in 6 new biological science PhD graduates finding a long-term position in academia. Furthermore, 70% of current college faculty are employed part-time or in non-tenure track positions (US Department of Education 2011; Edmonds 2015). Although it is unclear how student career preferences versus the availability of academic positions contribute to the current job market, it is obvious that nonacademic professional appointments are the dominant pathway for today’s students.

With this shift in the job market, student training and extramural experiences must adjust to make students competitively marketable (Muir & Shwartz 2009). Although the call for a revision of conservation-based training is not new (Hale 1962; Jacobson and Robinson 1990; Touval 1994; Martinich et al. 2006), detailed information (e.g. conservation focused courses, internships) regarding how to cross the research-implementation gap (Petri et al. 2013) or collaborate with the public and policy makers (Meffe & Viederman 1995; Brewer 2002) is still lacking (Muir & Shwartz 2009). If successful conservation requires a range of skillsets, then it is imperative that well-informed and focused training begin early to ensure that conservation scientists are equipped to combat Earth’s conservation needs, as well as to finding employment.

Furthermore, due to the global nature of conservation, positions in conservation management and research are often based in countries with varied levels of economic development (hereafter just development). Level of development often has a large impact on a country's strategy and ability to address conservation challenges. For example, countries with developing economies often struggle with a perceived tradeoff between economic growth and conservation (Czech 2008), and may not have sufficient funds to meet conservation needs. Conversely, advanced economies may have more funds available, and are frequently collaborating with the private sector to create positive conservation outcomes (Robinson 2012). These fundamental differences in resources and historic presence of conservation likely necessitate different types of skills and training to succeed as a conservationist. Despite these presumed differences, few resources exist to help young conservation scientists identify the specialized skills or training necessary to succeed across a global market (Jacobson & McDuff 1998; Shaw 2000; Blickley et al. 2013). Properly educating students on how to prepare for international positions and collaborations will increase both their future prospects and the quality of conservation efforts worldwide.

Our study expands on previous work (Muir & Shwartz 2009; Blickley et al. 2013) to provide insight on how to best prepare for positions in a variety of sectors and countries with differential development. We conducted the first analysis of job announcements for positions in advanced and developing economies to provide a snapshot of the conservation job market. We also assessed the skillsets required by academic, nonprofit, governmental, and private organizations in order to inform students of particular training to pursue. By understanding differences across job sectors and international locations, individuals can tailor their education, extracurricular activities, and resumes to maximize their success. We then conducted interviews with conservation professionals working in a variety of countries to determine how individuals found their current positions, whether skills emphasized in

announcements are truly indicative of the skills required for success, and to identify differences in conservation positions among countries. Finally, we recommend specific programs that are specialized to supplement traditional graduate programs and maximize employment success in conservation fields. Our study is focused towards students and early career scientists, but we expect that understanding nuanced differences across job locations and sectors is universally beneficial for conservation scientists. Furthermore, our study provides administrators, professors, and other mentors with insight on how to tailor their educational opportunities to meet the shifting job market and career interests of their students.

Methods

Job Search

We analyzed 200 conservation based job advertisements (100 US-based and 100 Internationally-based) from January through April 2016. Only positions mentioning tertiary education (Master's or PhD) were used for our analysis. All job advertisements were found on public databases (Appendix S1) and represent a snapshot of the general conservation job market throughout the duration of data collection. Only job announcements that were located by searching the key words conserve or conservation were included in our study. We analyzed announcements in 40 different countries to ensure representation from the global market. We identified 100 US-based positions during the initial 1/3 of the data collection period and, to avoid overly biasing our results towards a single country, we focused all remaining collection efforts on jobs based in other countries. All countries were designated as either having advanced or developing economies using the International Monetary Fund's criteria (IMF 2016).

All job advertisements were categorized into one of four sectors: academic, not-for-profit organization, governmental organization or private industry. General statistics were recorded for each posting (e.g., job location, pay range, educational requirement, Appendix

S1). We then analyzed each job posting to determine the variety and frequency of skills required. Skills were categorized into one of 24 different classes, 19 of which were previously identified during a Graduate Education for Conservation Professionals workshop and outlined by Blickley et al. (2012). To appropriately characterize academic and international positions, we added 5 commonly required skills: Teaching Experience, Publication History, Flexibility, Passion for Organization's Mission, and Physical Requirements (see Table 1). To account for differences in word counts and level of detail in announcements, we normalized skills counts by dividing the number of mentions of an individual skill by the total number of skills in that announcement. All advertisements were analyzed by J. Lucas to ensure consistency in skill classification.

Statistical Analysis

We compared overall job requirements between levels of development and among sectors using PERMANOVA (PCORD, PRIMER 6). Skill requirements were not normally distributed, so we used non-parametric Kruskal-Wallis tests to determine which skills contributed most to differences among sectors and the Wilcox rank-sum test to compare skill requirements between developing and advanced countries (R Core Team 2015). We did not compare sectors for developing countries because there were not enough postings in the market during the study for robust analyses. To account for differences in the length of different job postings, skill counts were relativized by dividing each specific skill by the total number of mentioned skills in an advertisement. Consequently, we used basic Euclidean distance for PERMANOVA. To provide a clear picture of what skills make a competitive candidate within different conservation fields, we identified the five most important skills in each group (bold skills in Table 2) and highlight differences in these skills among sectors and between development types.

Conservation Professional Interviews

To determine whether skills mentioned in job advertisements were reflective of successful conservation scientists, we conducted 20 interviews with current conservation professionals working in 16 countries and distributed among all sectors. We spoke with individuals in a variety of conservation-based positions, with the only requirement being that all interviewees held a Master's degree or higher, in accordance with our job search requirement. The majority (16 of 20) of the individuals we spoke with had experience working in countries with both advanced and developing economies. We located the conservation professionals we spoke with via online searches of publicly available information (e.g., organization websites) using the search term conservation during the spring of 2016. Interviews were conducted either in person, via phone call, or an internet-based video call. Interviews were approved by the University of Oklahoma's Institutional Review Board (Approval #6652).

Interviews consisted of 12 questions (Appendix S2) that pertained to the current position the individuals were in as well as their graduate school training and previous experience in conservation positions. We recorded all interviewee responses in writing and skills mentioned by conservation professionals were classified into the same categories used for analyzing job postings (see above). We characterized the frequencies that skills were mentioned using descriptive statistics (i.e., percentages, Microsoft Excel).

Results

Through the first four months of 2016, we identified 200 conservation-focused job advertisements including 26 academic positions (21_{advanced}, 5_{developing}), 42 governmental (40_{advanced}, 2_{developing}), 101 at nonprofits (67_{advanced}, 34_{developing}), and 31 private (27_{advanced}, 4_{developing}). Nonprofit jobs were more than twice as common as other positions, whereas all other sectors were similar. This pattern was more exaggerated for developing countries (76% nonprofit) than for advanced economic nations (43% nonprofit).

Job postings: key skills

The skills required for conservation positions differed between advanced and developing countries (Table 2; PERMANOVA: $F_{1,192}=2.73$, $p = 0.007$). Conservation positions required different levels of qualifications for some traditionally academic skills; job postings in economically advanced countries emphasized analytical and technical skills ($W = 4166$, $p = 0.041$), a background in the specific science discipline ($W = 4316$, $p = 0.014$), and publications ($W = 3904$, $p = 0.041$) more than in developing countries. Job postings from advanced economies also included written communication as a top five skill, but it was relatively less important in developing countries. By contrast, international experience was the only skill that was more important for jobs in developing countries ($W = 1129$, $p < 0.001$). Job postings in developing nations also emphasized interpersonal skills relatively more than advanced economies (Table 2).

Although there were general differences between development types, most conservation job postings emphasized the same five skills. First and foremost, a general disciplinary background in scientific theory was the most sought-after skill (Table 2). Similarly, 66% of all postings required a background in a specific scientific field of study, and this skill was particularly important to governmental and private jobs ($H_3 = 25.94$, $p < 0.001$). With the exception of academia in countries with advanced economies ($H_3 > 19.43$, $p < 0.001$), the same three other skills rounded out the top-five required skills for conservation-based jobs: 1) excellent written communication, 2) project management experience, and 3) analytical/technical skills (Table 2).

Requirements for academic positions in advanced economic countries were distinct from other sectors. Apart from a background in both the general and specific discipline of interest, academic postings emphasized teaching experience ($H_3 = 66.18$, $p < 0.001$), fundraising (6.2% of skills mentioned per announcement; $H_3 = 14.54$, $p = 0.002$), and

publications (4%; $H_3 = 7.11$, $p = 0.068$) among the top five required skills (Table 2).

Teaching experience differed the most from other sectors; it comprised 16% of all academic skill requirements but was <1% for all other sectors. Three skills were missing from all academic postings: 1) the ability to complete tasks, 2) conflict resolution skills, and 3) multitasking. These omissions are notable because the other three sectors omitted no skills.

Among the other three sectors in advanced economic countries, nonprofit organizations required a greater variety of skills compared to other sectors. In particular, nonprofit organization postings emphasized a suite of different communication and leadership skills. Nonprofit postings emphasized oral communication more than academic postings ($H_3 = 8.90$, $p = 0.031$), and a passion for conservation more often than both academic and governmental postings ($H_3 = 14.38$, $p = 0.002$). They also listed program ($H_3 = 14.02$, $p = 0.002$) and personnel leadership ($H_3 = 13.47$, $p = 0.004$) more than private positions, and outreach experience ($H_3 = 9.99$, $p = 0.019$) more than both private and governmental jobs. Finally, international experience ($H_3 = 13.77$, $p = 0.003$) and the ability to work independently ($H_3 = 11.31$, $p = 0.01$) were emphasized more by nonprofit organizations than by governmental positions.

Private and governmental position requirements were similar in economically advanced countries. These two sectors mentioned the same eight skills the most in their job postings and, in total, these skills composed 79% and 82% of all skills mentioned in private and governmental postings, respectively. Specifically, these sectors emphasized general and specific disciplinary scientific knowledge, written and oral communication skills, networking experience, interpersonal skills, project management experience, and analytical/technical skills (primarily GIS experience). No minor skills were mentioned more often in these postings than in postings for other sectors.

Interview Results

We spoke with 20 conservation professionals across all sectors, working across 16 countries. The majority of individuals (16 of 20) had experience working in both advanced economic and developing countries. All professionals had tertiary degrees and had been in their current positions ranging from less than one year to almost 20. Roughly half of the individuals we spoke to (9 out of 20) found their current position through online postings like the ones we examined. The other half found their positions through networking or within-organization promotions.

We found that 85% of our interviewees began graduate school knowing they were interested in pursuing conservation based work. However, just less than half of the professionals we spoke with took conservation-focused classes while in graduate school, generally because the classes were not offered. Some of the individuals gained experience by collaborating with conservation organizations while in school, however the vast majority (17 of 20) did not receive conservation-based training until after graduating. When asked which courses they wish they would have taken more of while in school, the top responses were business/project management (40%) and statistics courses (20%).

In accordance with our job posting results, the number one recommended skill from conservation professionals was a strong general discipline in science. The top non-disciplinary skills recommended by professionals were interpersonal skills (60% frequency) and strategic thinking/problem solving abilities (50% frequency). Professionals frequently emphasized (45%) the need for individuals to keep long-term goals in mind, with positive mindsets through adversity. Although only one individual specifically emphasized the importance of previous experience working in the biome or country of interest, 50% of our interviewees identified experience with a language or culture as an important component of them gaining their current position. In contrast to our job announcements results, only one

conservation professional explicitly mentioned project management as one of the top three skills required for successfully conducting work in conservation.

Discussion

Our study provides the first description of the global conservation job market and highlights the wide range of available positions. Our finding that only 10% of the available positions in conservation are in academia supports previous work and suggests that traditional tenure-track positions for graduates are limited (Kolata 2016; McDowell 2016). Therefore, it is critical that students are aware of alternative career routes early on, so they can tailor their training to be successful in the labor market. Making students aware of the current job market can be a collaborative experience, with academic advisors, non-academic professionals, and students communicating early on about future career goals and how to maximize their experiences during graduate training.

In general, the top mentioned skills across all sectors were similar and are relatively accessible to obtain while in graduate school. Furthermore, most of the top skills required across sectors were consistent with previous studies (Blickley et al 2013). Mastering both general and specific scientific disciplines is the primary goal of graduate school. Similarly, mastering an analytical tool, such as Geographic Information Systems (GIS), is one way to make yourself marketable across sectors. The importance of analytical skills has increased in importance over a five-year period (Blickley et al. 2013), demonstrating a potential shift in what is expected for conservation professionals.

Despite some similarities, our analysis emphasizes the difference in skill sets across sectors. For students interested in continuing in academia, teaching experience is one of the top skills to develop throughout their education, along with publishing in peer-reviewed journals and acquiring funding (Table 2, Muir & Schwartz 2009). However, if students plan to move outside of academia, we recommend that they focus their time on gaining experience

Accepted Article

in business and project management, and developing interdisciplinary skills. We acknowledge that teaching is often an important source of income for graduate students, but emphasize that there may be alternative ways to support students. Some schools are beginning to incorporate paid internships with external organizations as a way to supplement student income (e.g. University of Pittsburgh; NSF GRIP; University of Missouri, St. Louis). These programs provide meaningful conservation-based training and they can lead to important networking benefits for the student's future. While some schools are providing this training, the results of this study indicate that more universities should expand non-traditional programs such as these to prepare students for conservation positions.

We find some distinct differences between the job markets of advanced and developing economies. One of the more striking differences is how important international, cultural, and language-based experience is for working in countries with developing economies (Table 2). If students are interested in working in a specific country long-term, it would be beneficial for them to conduct their dissertation research within their country of interest. This suggestion is supported by how frequently conservation professionals attributed experience working in the country of application as a key factor in them gaining their position. We also found that interpersonal skills were more frequently required of developing economy positions (Table 2). Therefore, encouraging international collaborations early on in an individual's career may be one of the best ways to prepare them for the future international job market. Advanced economic nations frequently emphasized skills that are accessible in most graduate programs, e.g. technical/analytical skills, publication history and written communication. However, depending on the sector of interest, supplemental training will likely maximize an individual's chance in obtaining a position in conservation.

To be successful in today's job market, students must take command of their education early on in their program. This may require looking outside of their departments

and institution to diversify their training. We recommend that students speak with conservation professionals early in their education to identify the sector that best fits their goals. While our analysis focused on students pursuing tertiary degrees, our suggestions are applicable to individuals ranging from undergraduate through early career scientists. Furthermore, instructors and mentors can use our results to better prepare their students. By teaching skills tailored to the future goals of their students, graduate programs can maximize post-graduate job placement. Similarly, by providing avenues for students to conduct internships and collaborate with professionals in a range of sectors, graduate programs will increase their production of well-prepared conservation scientists. Ultimately, the skillsets defined here will enable students and programs to adjust their training to meet the needs of the current job market and have the greatest long-term success.

Examples of programs

We provide a sample list of programs for individuals interested in conservation at various points in their career. Each program is specialized for conservation biology, and was recommended by conservation professionals. We stress that this is not an exhaustive list, but instead is provided as a starting point for individuals looking for conservation based training.

Graduate Programs

- **Cornell University, Zoology and Wildlife Conservation and Department of Natural Resources**

Ithaca, New York, 14853-6401

<http://www.vet.cornell.edu/bbs/Research/ZoologyWildlifeConservation.cfm>

<https://dnr.cals.cornell.edu/>

- **Duke University, Nicholas School of the Environment**

9 Circuit Drive, Box 90328, Durham, NC 27708

<https://nicholas.duke.edu/about>

- **Imperial College, Department of Life Sciences**

Imperial College Silwood Park Campus, Buckhurst Rd, Ascot SL5 7PY, UK

www.imperial.ac.uk/life-sciences/postgraduate/masters-courses/msc-in-conservation-science/

- **James Cook University, Conservation Biology**

1 James Cook Drive, Townsville, QLD 4811

www.jcu.edu.au/courses-and-study/courses/master-of-science-in-tropical-biology-and-conservation

- **University of California Davis, Wildlife, Fish and Conservation Biology**

Department

1088 Academic Surge, One Shields Avenue, Davis, CA 95616-8627

<http://wfc.ucdavis.edu/>

- **University of Florida, Wildlife Ecology and Conservation**

110 Newins-Ziegler Hall, PO Box 110430, Gainesville, FL 32611

<http://www.wec.ufl.edu/grad/>

- **University of Georgia, Integrative Conservation Ph.D. Program**

321 Holmes-Hunter Academic Building, UGA, 101 Herty Dr., Athens, GA
30602

<http://icon.uga.edu/>

- **University of Maryland, Sustainable Development and Conservation Biology**

1210 Biology Psychology Building, College Park, MD 20742

<http://www.cons.umd.edu/>

- **University of Texas A&M, Applied Biodiversity Science**

216 Old Heep Bldg., 2258 TAMU, College Station, TX 77843-2258

<http://biodiversity.tamu.edu/>

- **University of Washington, Center for Conservation Biology**
Box 351800, University of Washington, Seattle, WA 98195-1800
<http://conservationbiology.uw.edu/>
- **University of Wisconsin, Nelson Institute for Environmental Studies**
550 North Park Street, 70 Science Hall, Madison, WI 53706-1491
<http://nelson.wisc.edu/>
- **Yale School of Forestry and Environmental Studies**
195 Prospect Street, New Haven, CT 06511
<https://environment.yale.edu/>

Postdoctoral Programs

- **AAAS Science and Policy Fellowship**
<http://.aaas.org/page/fellowships>
- **James Smithson Fellowship**
<http://smithsonianofi.com/fellowship-opportunities/james-smithson-fellowship-program/>
- **The San Diego Zoo Institute for Conservation Research Postdoctoral Fellowship**
<http://institute.sandiegozoo.org/opportunities/postdoctoral-fellowships>
- **Smith Fellowship**
<http://conbio.org/mini-sites/smith-fellows>
- **United Nations University Post-Doctoral Program**
<http://ias.unu.edu/en/about/fellowships>

External Training

- **Conservation Leadership Program**
<http://www.conservationleadershipprogramme.org/>
- **Conservation Training Online Programs**

<https://www.conservationtraining.org/>

- **Emerging Wildlife Conservation Leaders**

<http://wildlifeleaders.org/>

- **NSF Integrate Graduate Education and Research Traineeship**

<https://www.nsf.gov/crssprgm/igert/intro.jsp>

- **Short Course Conservation and Society, University of London**

<http://www.soas.ac.uk/courseunits/>

- **Smithsonian-Mason School for Conservation**

1500 Remount Road, Front Royal, VA 22630

<http://smconservation.gmu.edu/>

- **Wildlife Conservation Society's Biodiversity Conservation Professional Certificate Program**

<http://wildlife.org/learn/professional-development-certification/certification-programs/>

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Table 1: List of definitions and key words for each skill category used to examine and classify job postings.

Source	Skill	Definition	Key Words 20
1	General Disciplinary	knowledge of general scientific principles, theories	science, principle
2	Teaching experience	experience teaching, building course curricula	teach*, course
1	Fundraising, monetary	experience applying for grants, raising money, or managing budgets	budget, grant
1	Specific Disciplinary	knowledge of a specific ecosystem, organism or certified training	fauna, location,
1	Inter-, Multidisciplinary	experience working across traditional boundaries between academic disciplines or schools of thought	multidisc*, cross
2	Publications	experience publishing scientific work in peer reviewed journals	peer review, publish*
1	Outreach Communication	ability to translate scientific principles to broad audience	public, present*, outreach
1	Interpersonal Skills	successful at working within groups, variety of individuals	partner*, collaborator*, team
1	Oral Communication	ability to speak publically, lead presentations	present, oral
1	Written Communication	ability to communicate effectively through written form	write, report
1	Personnel Leadership	experience managing and leading individuals to accomplish specific projects, goals	manag*, lead*, motivate
2	Flexibility	ability to move and work in diverse locations, inconsistent scheduling	move, schedule
1	Program Leadership	Experience managing and leading an organization, developing program mission	lead*, organiz*, design
2	Physical	ability to physical accomplish particular tasks	physically, carry, hike
1	Analytical/Technical/IT Skills	competency analyzing data using basic or specific software	GIS, Word, software
1	Networking	ability to identify and coordinate work with individuals across a variety of fields and mindsets	partner*, collab*, network*
1	Independent	ability to conduct work, accomplish tasks independently	independ*, self*
1	Project Management	ability to manage projects, tasks	manag*, implement

1	Field Experience	previous experience working in field, outdoor setting	field, outdoor
1	Complete Tasks	ability to meet deadlines and finish projects	complet*, time manag*
1	International Experience	experience working internationally, multilingual abilities	language, internation*
1	Conflict Resolution/ Negotiation	ability to negotiate and resolve conflict with diverse stakeholders to advance the mission of an organization	conflict, negotiat*
1	Multitasking	ability to managing multiple projects simultaneously	Multiple
2	Passion for Mission, Work	demonstrates passion or deep interest in mission of company or project	passion, commitment

- Source refers to Blickey et al. 2012 (1) or originated by authors (2).
- * represents the root of common key words

Table 2: Skills as the average (\pm standard error) percentage of skills mentioned in each job posting. The skills are separated into economically advanced and developing countries, and divided by sector within the advanced country grouping. Skills are in bold if they were among the top five skills mentioned within a sector. Superscript letters denote similarity among sectors and “*” indicates differences exist, but we lacked statistical power to identify specific differences among sectors.

Skill Category	Developing Countries	Economically Advanced Countries				
	All Sectors	All Sectors	Academic	Government	NGO	Private
Specific Disciplinary	6.8^x (0.7)	12.3^y (1.1)	7.4^{ac} (2)	19.6^b (2.2)	7.3^a (1)	17.8^{bc} (3.4)
General Disciplinary	18.4 (1)	19.3 (1.1)	29.3^a (4.7)	20.8^{ab} (2.9)	15.6^b (0.9)	18.4^{ab} (2)
Project Management	7.8 (0.6)	7.0 (0.6)	1.8 ^a (1.3)	6.9^b (1.2)	7.2^b (0.8)	10.6^b (1.7)
Interpersonal Skills	7.1 (0.6)	5.2 (0.4)	3.7 (1.2)	4.2 (0.8)	6.1 (0.6)	5.8 (1.2)
Field Experience	1.3 (0.4)	1.1 (0.3)	0.5 (0.5)	1.1 (0.5)	1.1 (0.4)	1.4 (0.7)
Written Communication	5.8 (0.4)	6.8 (0.4)	3.2 ^a (1.2)	6.8^{ab} (0.8)	7.6^b (0.5)	7.6^b (0.9)
Program Leadership	2.4 (0.3)	2.1 (0.3)	2.5 ^{ab} (1.1)	1.3 ^{ab} (0.5)	3.2 ^a (0.6)	0.2 ^b (0.2)
Networking	4 (0.4)	4.6 (0.4)	2.5 (1.1)	4.5 (0.9)	5.6 (0.7)	4.1 (0.9)
Personnel Leadership	3.2 (0.3)	3.2 (0.4)	3.2 ^{ab} (1.1)	2.2 ^a (0.6)	4.5 ^b (0.6)	1.5 ^a (0.5)
Analytical, Technical Skills	5.3 ^x (0.6)	8.9^y (0.8)	3.5 ^a (1.8)	13.3^b (2)	7.4^{ab} (1.1)	10.1^b (1.5)

Oral Communication	4.1 (0.3)	5.5 (0.4)	3.4 ^a (1.2)	5.5 ^{ab} (0.7)	6.5 ^b (0.6)	4.7 ^{ab} (0.8)
Outreach	1.3 (0.2)	2.4 (0.3)	2.6 ^{ab} (1.3)	2 ^{ab} (0.6)	3.3 ^a (0.5)	0.5 ^b (0.3)
Independent	3.2 (0.4)	2.3 (0.3)	2.2 ^{ab} (1.3)	1.1 ^a (0.4)	3 ^b (0.5)	2.5 ^{ab} (0.8)
Fundraising	5.1 (0.6)	3.7 (0.4)	6.2^a (1.7)	1.6 ^b (0.6)	4.8 ^a (0.7)	1.9 ^{ab} (0.7)
Complete Tasks	1.6 (0.2)	1.7 (0.3)	0 ^a (0)	1.6 ^{ab} (0.5)	2.4 ^b (0.4)	1.8 ^{ab} (0.7)
Multidisciplinary	1.1 (0.3)	1.2 (0.3)	3.8 (1.5)	0.6 (0.3)	1 (0.3)	0.6 (0.3)
International Experience	9.7^x (0.6)	1.7 ^y (0.3)	0.7 ^{ab} (0.5)	0.8 ^a (0.6)	2.9 ^b (0.6)	0.8 ^{ab} (0.5)
Flexibility	2.9 (0.4)	2.5 (0.4)	1.5* (1.1)	1.8* (0.8)	2.9* (0.5)	3.5* (1.1)
Conflict Resolution, Negotiation	0.4 (0.1)	0.6 (0.1)	0 (0)	1 (0.4)	0.7 (0.2)	0.2 (0.2)
Multitasking	1.1 (0.2)	0.7 (0.1)	0 ^a (0)	0.2 ^a (0.1)	1.2 ^b (0.3)	0.8 ^{ab} (0.4)
Teaching experience	3.2 (0.7)	2.6 (0.6)	16^a (3.2)	0.2 ^b (0.2)	0.7 ^b (0.3)	0.5 ^b (0.4)
Passion for Conservation	3.5 (0.5)	1.8 (0.3)	0.6 ^a (0.6)	0.4 ^a (0.3)	2.6 ^b (0.5)	2.9 ^{ab} (0.9)
Publications	0.2 ^x (0.1)	1.4 ^y (0.3)	4.1 (1.4)	1.4 (0.6)	0.7 (0.3)	1.1 (0.6)
Physical	0.7 (0.2)	1.4 (0.3)	1.4 (1.1)	0.9 (0.4)	2 (0.6)	0.6 (0.4)