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IMPLEMENTING THE CHITWAN DECLARATION OF THE 9<sup>TH</sup> WORLD RANGER CONGRESS: NEXT STEPS FOR THE GLOBAL RANGER COMMUNITY ROHIT SINGH, GUEST EDITOR



# What will it take to professionalize rangers?

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#### Abstract

There have been widespread calls for rangers to be professionalized, culminating in the recommendation for "full professionalization" at the 2019 World Ranger Congress, led by the International Ranger Federation. There have, however, been no consistent definitions of what this process should involve for rangers or what constitutes a professional ranger. We examine here eight widely acknowledged elements of existing professions and review how they apply to the current ranger occupation. These are (1) A recognized sector; (2) Competences and standards measuring professionalism; (3) Certified training and learning; (4) Remuneration, rights, and working conditions; (5) Standards of ethics and conduct; (6) Personal commitment and motivation; (7) Professional organizations and employers; and (8) Professional representative bodies. Overall, while there are examples of progress in all eight aspects of professionalization, there has been no strategic, consistent, and coordinated program for professionalizing the sector. Across much of the world, the occupation is inadequately recognized, poorly resourced and supported, and falling far short of being a respected and appreciated profession. We offer a range of recommendations for building a global professional framework that can be adapted to and adopted at the national and organizational levels to develop a ranger sector that is ready to meet the growing coverage of protected and conserved areas, the diversification of the ranger workforce, and the increasingly complex demands of the work.

#### **Defining the ranger profession**

The need to "professionalize" protected area staff has been increasingly highlighted in recent years, for example in the 2004 Convention on Biological Diversity (CBD) Program of Work on Protected Areas,<sup>1</sup> the Promise of Sydney arising from the 2014 World Parks Congress,<sup>2,3</sup> and the International Union for the Conservation of Nature (IUCN) World Commission on Protected Areas (WCPA) Strategic Framework for Protected Area Capacity Development.<sup>4</sup> With specific reference to rangers, the statutes of the International Ranger Federation (IRF) include an objective to "further the



professional standards of rangers throughout the world"<sup>5</sup> and the Chitwan Declaration from the 2019 World Ranger Congress states that "due to the important role rangers play in protecting natural resources, they should be fully professionalized in the same manner as other critical public sectors tasked with protecting the integrity of the state and ensuring the rule of law." While none of these statements defines precisely what is meant by a "professional" or by "professionalization" in terms of rangers, a number of specific benefits are usually associated with professionalization. These include improved recruitment and retention of staff; improved trust and respect from the public, communities, and other sectors; and working and employment conditions that befit the value and hazards of the work. Overall, professional rangers should be better able to perform the duties required of them, and deliver the conservation and related outcomes expected at the institutional, national, and international levels.

While most people recognize the professions of doctor, police officer, or teacher, the role of

Thai rangers | THOMAS CRISTOFOLETTI / WWF-US

a ranger is not so widely acknowledged. IRF currently defines a ranger as "the person involved in the practical protection and preservation of all aspects of wild areas, historical and cultural sites. Rangers provide recreational opportunities and interpretation of sites while providing links between local communities, protected areas and area administration."

The challenge with defining the occupation and the pathway to professionalization is that ranger roles vary greatly around the world. Besides working in government-managed protected areas, rangers are employed by a wide range of organizations, such as forest services, water management authorities, and non-governmental organizations (NGOs), as well as in privately managed areas. Furthermore, the growing recognition of Indigenous and community conserved areas (ICCAs; Kothari et al. 2012) is revealing that many Indigenous and local community members fulfill functions equivalent to those of conventional rangers. We need to better understand how these new stewards should be considered as both rangers and professionals and how they might fit into processes of professionalization.

Public perceptions of what a ranger is also contribute significantly to how the profession is understood. The shift in the image of rangers from friendly service-based personnel to armed rangers on dangerous patrols on the "frontline" may reflect changing times, but may also be contributing to negative perceptions of rangers and accusations of militarization (e.g. Duffy et al. 2019).

This paper categorizes eight main elements of professionalization, reviews how these are relevant to the work of rangers, and recommends a pathway towards practical and effective professionalization.

#### 1. A recognized sector

Most professions are characterized by some sort of official recognition, such as inclusion in official national registers of recognized occupations; legal restrictions limiting the practice of a profession to those with required qualifications (e.g., medical doctor) and/or those who are members of a recognized professional body; or official recognition of a trade union or other labor body representing members of the profession. Some countries officially recognize the ranger occupation, others recognize categories of protected area and forestry personnel that include rangers, and in some rangers have union representation. Often, however, there is no official recognition or representation, and many rangers are temporary contract workers without any official status.

# 2. Competences and standards measuring professionalism

Established professions generally define and have systems to certify the competences and standards expected of their members. The ranger sector has taken steps towards this in the past. In 1997, six essential elements of a ranger's skills (the "Losehill Principles") were agreed to at an international seminar (see Box 1).

In 2000, IRF agreed on the "Universal Competences of a Master Ranger" (IRF 2000) with eight main categories:

- 1. Basic ecology and conservation;
- 2. Ensuring ecosystem integrity (resource protection, legislative purpose/framework, and relationship of the protected area to other resources);
- 3. Interpretation, education, and information;
- 4. Relationships with relevant communities and other stakeholders;

#### **Box 1. The Losehill Principles**

All rangers should:

- Have an awareness of international and national designations, wider environmental ethics and sustainable resource management, including the history of national parks and other protected areas and the development of rangers in such areas. A code of ethics for all rangers could be included.
- Have good communication skills including an awareness of the variety of techniques for communicating messages, information and values (field studies, guided walks, role play, earth education, written word).
- Understand the dynamics of and relationships between local landscape, biodiversity and culture, and the resulting conflicts of use.
- Have the knowledge and ability to deal with visitor safety and countryside emergencies.
- Have the ability to survey, monitor and report on the natural resource, as the 'eyes and ears' of the organisation.
- Have knowledge of habitat and facility management techniques, with skills in such techniques as an optional specialism.

- 5. Technology and infrastructure maintenance;
- 6. Emergency responses;
- 7. Office, project, and operational planning; and
- 8. Workplace communication and relations.

Since then, however, these generic competences have not been revised or updated and there is still no widely acknowledged definition of ranger roles.

Rather than attempt to define universal competences for protected area staff (including rangers), Appleton (2016), in the widely used Global Register of Competences for Protected Area Practitioners, listed 300 possible competences that might be required for protected area staff in all roles, and provides guidance for employers to use these to create specific sets of competences and standards to fit the needs of individual staff and teams. From a training perspective, Lotter et al. (2016) provided standards for developing competency-based training for law enforcement rangers.

Until the ranger sector has its own shared framework of standards and competences, securing widespread and consistent recognition of the work rangers do and its value will continue to be challenging.

The impact of professionalization should be measurable in terms of improved performance of protected areas, and significant progress has been made towards more systematic tracking and assessment of performance. Widespread adoption of the Management Effectiveness Tracking Tool (METT; a standard scorecard for measuring 30 aspects of protected area effectiveness)<sup>6</sup> is now enabling better measurement, tracking, and comparison of how protected areas perform. Increasing use of the Spatial Monitoring and Reporting Tool (SMART; a software application that enables rangers to collect, store, communicate, and evaluate data on patrol efforts, patrol results, and threat levels)7 allows for more systematic tracking of performance and evidence-based planning and adaptive management of ranger activities. The Conservation Assured Tiger Standards (CA|TS)<sup>8</sup> provide a framework for

certified quality management of protected areas in tiger range states, while the IUCN Green List of Protected and Conserved Areas (GLPCA)<sup>9</sup> provides a global, independently verified standard for overall protected area performance, based on standards for good governance, sound design and planning, and effective management. Some protected area authorities have adopted the International Organization for Standardization's ISO 9000 and 14000 standards for management.<sup>10</sup> There is, however, currently no tool or scorecard that measures progress towards professionalization.

#### 3. Certified training and learning

Professions generally have associated systems of training and certification, linked to their competences and standards. Ranger training is slowly progressing from project-driven, one-off training courses to more sustained professional development. Permanent institutions are providing more consistent and relevant vocational training courses (e.g., in South Africa, Argentina, and India), some ranger services have developed their own internal training programs (e.g., in Kenya, Croatia, and Nepal) while some NGOs focus exclusively on ranger training. The (free) online training programs offered by IUCN's Program on African Protected Areas and Conservation (PAPACO) now include ranger-relevant modules,11 while the LEAD Ranger program<sup>12</sup> aims to deliver "industry best-practice training over a multi-year period to the future leaders of conservation." Despite this progress, surveys show that most rangers still are inadequately trained. Too much ad hoc and shortterm training still takes place, and investment in training is often not reinforced through continuous learning in the workplace. It is also a concern that several new training organizations have emerged offering unregulated and sometimes questionable programs of military-based training for antipoaching rangers (GRAA 2017).

Little progress has been made on certification (apart from in areas such as tourist guiding). The Western Indian Ocean Certification of Marine Protected Area Professionals (WIO-COMPAS) program has established a successful professionalization scheme linking competences, training, and performance-based certification.<sup>13</sup> Some training providers are able to provide institutionally or nationally validated certificates, but there is no widespread system of certification or equivalence of qualifications.

#### 4. Remuneration, rights, and working conditions

Providing adequate pay and working conditions demonstrates that employers respect and support their staff as professionals and that they are committed to professional performance. Recent surveys (WWF and Ranger Federation of Asia 2016; WWF and TRAFFIC 2016; Global Wildlife Conservation 2018) show that working conditions and equipment are often inadequate and that many rangers are underpaid and/or paid late. To some extent, being a committed professional involves making the best of less-than-ideal situations, but persistently inadequate working conditions are likely to increase the potential for unprofessional performance and conduct. It is widely assumed that a professional is someone who is paid for their work, but many protected and conserved areas rely on skilled volunteers to support and even lead their ranger work. Indigenous and local community members engaged in "ranger-equivalent" work may possess all the attributes of a professional ranger and deserve recognition in any framework of professionalization. Volunteers and traditional stewards therefore should not be excluded from any frameworks for professionalizing ranger work.

#### 5. Standards of ethics and conduct

Professions generally define the overall ethical principles that underpin their work and establish standards for how members should conduct themselves. The Standing Rules of IRF state that "the International Executive Committee of IRF is to establish and maintain a Code of Conduct." To this end, delegates at the first World Ranger Congress (Zakopane, Poland, 1995) agreed to



Argentinian rangers | EMILIO WHITE

develop an international code of ethics for rangers (Halainen 1995), leading to a first draft (Chetwin 1996). Various ranger organizations have since developed their own codes of conduct (see for example Henson et al. 2016), but to date no general codes have been agreed upon.

Given the accusations against rangers in some countries for human rights abuses (Warren and Baker 2019), the development and adoption of clear codes and guidance should be a priority. This will help prevent future occurrences, determine appropriate and transparent responses when problems occur, and establish and maintain the professional image of rangers.

Even with codes in place, ranger employers and supporters may struggle to ensure observance and to take appropriate action if they are breached. Little guidance is available on how to uphold codes of conduct and ethical good practice in the challenging environments where many rangers work. An exception is the recent online course for rangers on human rights<sup>14</sup> developed by the NGO Ranger Campus (as part of the LEAD Ranger program).

#### 6. Personal commitment and motivation

The term "professional" implies a high degree of personal dedication. Rangers are often expected to demonstrate exceptional commitment, but overworked and tired staff are more likely to make mistakes and exploited staff may be more likely to behave unprofessionally.

Spira et al. (2019) found that in the African park they studied overall motivation in rangers was low, but that it could be improved through (*inter alia*) "higher salaries, more promotion opportunities, better recognition from the wildlife authority and other state services, positive performance incentives, better security, improved living conditions, and more support from the judicial system."

Surveys on rangers' perceptions in Asia (WWF and RFA 2016), Africa (WWF and TRAFFIC 2016), Central America (Global Wildlife Conservation 2018) and Latin America (WWF and Global Wildlife Conservation 2019) identified the three most common demotivating factors as low and/or irregular pay, dangerous working conditions, and poor facilities and infrastructure. The three most motivating factors were enjoyment of ranger work, closeness to nature, and having an exciting job.

Ranger motivation is also affected by the stressful nature of the work (Tan 2018); Belecky et al. (2019) state that "it would be reasonable to expect posttraumatic stress disorder (PTSD) is a reality for many rangers."

#### 7. Professional organizations and employers

Professional individuals need to function in effective, professional organizations. Organizational issues raised by rangers and other protected area staff include:

- Official systems and processes that restrict timely and effective work;
- Resource shortages;
- Inadequate working and employment conditions, for example pay, infrastructure, equipment, and resources for safe, sustainable work (Belecky et al. 2019);
- Lack of competence-based standards and processes for recruitment, performance review, and professional advancement (Appleton et al. 2017);
- Restricted or unfairly allocated access to training and professional development (Appleton et al. 2017);
- High turnover of personnel, often linked to political changes or funding fluctuations;
- Issues of equity, inclusion, and diversity that limit opportunities for many individuals (Smith et al. 2017);
- Discrimination against women and, specifically, gender-based violence (Castañeda Camey et al. 2020); and
- Corruption, collusion, and nepotism (UNODC 2019).

Government agencies tend to be slower than NGOs in addressing these challenges, as they are constrained by central policies, resource shortages, and high staff turnovers. An IUCN-WCPA (2017) workshop identified four main conditions for effective government protected area organizations:

- Organizations with structures and systems that allow them to manage, collaborate, and adapt to change effectively;
- Proactive, confident, and collaborative individuals who deliver effectively and inspire others;
- Organizations engaged in diverse and productive partnerships; and
- Organizations that are responsive to the needs of a society that understands and supports conservation goals.

The organization African Parks<sup>15</sup> has pioneered a public–private partnership model for protected area management in 19 parks in 11 countries in Africa. In these areas, African Parks maintains full responsibility for management, while remaining accountable to the government, which is the owner and which determines overall policy. This enables establishment of common high standards of training, professonalism, and performance beyond the capabilities of individual protected area agencies, but does rely on African Parks securing adequate funding to maintain these standards.

#### 8. Professional representative bodies

Most established professions have at least one officially recognized representative body that provides a framework of standards, certification, conduct, and occupational best practice. IRF fulfills some of the functions of a full professional association, but is not mandated to impose professional standards, qualifications, or certification on rangers and ranger employers. Even if it did have such a mandate, differences in legislation, qualifications frameworks, types of ranger, and types of employer would make a centralized system very hard to impose, and the costs of certification, verification, and monitoring would be excessive. Ranger associations at the regional and national levels have varying constitutions and mandates, but none acts as a professional association analogous to those representing other professions.

An international professional organization could, therefore, play a vital role in leading the development of professional standards, tools, and activities; encouraging and inspiring national ranger organizations to adopt them; lobbying for improvements that enable improved professionalism; and acting as a representative "spokes-organization" of the ranger profession.

#### Working towards "full professionalization"

Proposed increases in coverage of protected and conserved areas to 30% of the planet (CBD 2020) will require a commensurate increase in numbers of skilled rangers. Continued diversification of governance, stewardship, and management approaches in these areas will stretch current norms around what rangers are and what they do, encompassing members of Indigenous and local communities conducting ranger-equivalent tasks. Meanwhile, interest in rights-based approaches to natural resource management is likely to increase, and, in response to alleged abuses, there will be increased scrutiny of ranger operations and stronger expectations that ranger behavior and leadership be just, accountable, and transparent.

"Full professionalization" of the ranger sector will require action with respect to the aspects of professionalization examined here. But it will also require approaches that embrace the diversity of ranger roles, ranger employers, and systems of governance that are found in protected and conserved areas.

#### Recommendations

Based on the findings of this paper and those of Peersman and Rogers (2017), the ranger sector should develop and communicate a vision of professionalization that:

- Creates a valued occupational identity.
- Promotes and defends common shared values and high standards of conduct and practice among rangers and ranger organizations.
- Advocates for and explores means for diversifying the ranger profession in terms of:
  - Equality of access to ranger occupations (e.g., for women and minorities);

- Recognition of alternative entry routes (for people without statutory qualifications); and
- Inclusion of different types of rangers and ranger bodies that perform professional duties, but that do not conform to conventional norms of the "ranger profession."
- Interacts with other professional bodies in protected area management and other sectors.
- Provides a common global framework for professional practice (competences, standards, codes, curricula, etc.), that can be adapted to local contexts.
- Builds and shares knowledge in a range of accessible ways, providing a forum for dissemination and exchanges of professional knowledge, experience, and good practice.
- Is inclusive, embracing the growing diversity of rangers and ranger work, and working in formats and languages that enable widespread accessibility by rangers.

To work towards this, we offer the following specific recommendations for the global ranger community and its supporters.

# A recognized sector: defining the profession and professionalization for rangers

- Create a clear, inclusive universal definition of a "ranger" (plus sub-definitions for specific roles and specializations), emphasizing service and focusing on positive as well as controlling roles.
- Seek to redefine the image of rangers and narratives regarding them by:
  - Focusing on the service aspect of ranger work, presenting a balanced image of ranger roles (crime prevention, human and ecosystem health, maintaining vital ecosystem services, protecting local and Indigenous people and cultures, fighting fires, enabling visitation, etc.)
  - Adopting language that promotes ranger work as that of skilled professionals and builds public respect.

#### Standards of ethics and conduct

• Define a universal global ethical framework

and code of conduct for rangers, to be adopted by the International Ranger Federation, its members, coalition members, employers, donors and NGOs.

- Prepare a 'safeguarding' guide to assist employers and supporters in preventing and addressing breaches of the code of conduct and mistreatment of vulnerable individuals and groups.
- Promote learning programs on human and Indigenous rights.

# Competences and standards measuring professionalization

- Define a new set of broad generic competences for rangers (inspired by the Losehill Principles and the eight universal competences from 2000) and associated, more detailed competences for generic ranger jobs (referring to Appleton 2016; Lotter 2016).
- Prepare guidance on establishing national systems for occupational standards and vocational qualifications for rangers.
- Promote national and regional planning for comprehensive capacity-building programs and prepare guidelines for developing capacity-building plans.
- Research the range of available training related to the global competences and encourage providers to fill the gaps.
- Explore options for accreditation by IRF of courses, curricula, and training providers.
- Encourage alternative methods of learning for rangers (e.g., communities of practice, exchanges, online learning, etc.).

Remuneration, rights, and working conditions

- Define minimum generic standards for rangers' pay, and working and employment conditions.
- Lobby for widespread adoption of these standards among all employers, NGOs, and donors.
- Continue to survey and report on employment and working conditions.

#### Professional organizations and employers

• Conduct detailed surveys into organizational capacity and standards with respect to ranger

employers and supporters, identifying critical gaps and needs.

- Define minimum standards for employers or supporters of rangers and lobby for their widespread adoption.
- Embed new standards in global and regional initiatives for improving protected area performance (e.g., CA|TS, GLPCA etc.)

#### Personal commitment and motivation

- Create and encourage positive media coverage of ranger work and ranger issues.
- Create, fund, and publicize more awards for rangers.
- Establish a global ranger online community.
- Promote exchange programs to share knowledge, experience, and common values and standards.
- Provide employers and leaders with guidance and training on motivational techniques and good practice.

#### **Strengthening the International Ranger Federation**

Finally, to promote and harmonize professionalization across the sector, IRF needs to strengthen its position as a professional representative body of rangers in order to:

- Lead many of the professionalization initiatives recommended in this paper;
- Become the "owner" and guardian of global standards and codes of practice;
- Become the first point of contact for information on rangers, providing comments, spokespeople, and information;
- Promote representation by rangers on protected and conserved area management and governance bodies; and
- Represent ranger interests in international bodies and gatherings and in collaboration with other sectors.

#### Endnotes

- https://www.cbd.int/protected/pow/learnmore/ intro/#element3
- 2. https://www.iucn.org/theme/protected-areas/ about/promise-sydney
- 3. https://www.worldparkscongress.org/wpc/

sites/wpc/files/documents/docs/Cross%20 Cutting%20Theme%20-%20Capacity%20 Development%20%28English%29.pdf

- 4. https://portals.iucn.org/library/node/45827
- 5. https://www.internationalrangers.org/wpcontent/uploads/IRF\_Statutes\_2006.pdf
- **6.** www.protectedplanet.net/c/protected-areasmanagement-effectiveness-pame
- 7. https://smartconservationtools.org
- https://tigers.panda.org/news\_and\_stories/ stories/what\_is\_ca\_ts/
- 9. https://www.iucn.org/theme/protected-areas/ our-work/iucn-green-list-protected-andconserved-areas
- 10. www.dolomitipark.it/en/page.php?id=618
- 11. https://papaco.org/moocs
- 12. https://leadranger.org
- 13. www.wio-compas.org
- 14. http://courses.leadranger.org/human-rights-eng
- 15. www.africanparks.org

#### References

Appleton, M.R. 2016. A Global Register of Competences for Protected Area Practitioners. Gland, Switzerland: IUCN.

Appleton, M.R., A. Ioniță, and E. Stanciu. 2017. Pathways to Professionalization: Developing Individual and Organisational Capacities for Protected Area Management. Lessons from Eastern Europe. Bonn, Germany: BfN.

Belecky, M., R. Singh, and W. Moreto. 2019. *Life on the Frontline* 2019: *A Global Survey of the Working Conditions of Rangers*. Gland, Switzerland: WWF.

CBD [Convention on Biological Diversity]. 2020. Zero Draft of the Post-2020 Global Biodiversity Framework. Open-ended working group, Second meeting, Kunming, China, February 24–29, 2020. www.cbd.int/doc/c/efb0/1f84/ a892b98d2982a829962b6371/wg2020-02-03-en.pdf

Chetwin, C. 1996. IRF Draft International Code of Ethics for Rangers. *Ranger: Journal of the Association of National Park Rangers* 12(4). Duffy, R., F. Massé, E. Smidt, E. Marijnen, B. Büscher, J. Verweijen, M. Ramutsindela, T. Simlai, L. Joanny, and E. Lunstrum. 2019. Why we must question the militarisation of conservation. *Biological Conservation* 232: 66–73. https://doi.org/10.1016/j.biocon.2019.01.013

Global Wildlife Conservation. 2018. *Ranger Perceptions: Central America*. Austin, TX: Global Wildlife Conservation.

GRAA [Game Rangers' Association of Africa]. 2017. Media statement: The use of military and security personnel and tactics in the training of Africa's rangers. www.gameranger.org/news-views/mediareleases/170-media-statement-the-use-of-militaryand-security-personnel-and-tactics-in-the-trainingof-africa-s-rangers.html

Halainen, B. 1995. Report from Zakopane: The First World Ranger Congress. *The George Wright Forum* 12(4): 8–13.

Henson, D.W., R.C. Malpas, and F.A.C. D'Udine. 2016. *Wildlife Law Enforcement in Sub-Saharan African Protected Areas—A Review of Best Practices*. Occasional Paper of the IUCN Species Survival Commission no. 58. Cambridge, UK, and Gland, Switzerland: International Union for Conservation of Nature.

International Ranger Federation. 2000. Addendum to the Resolution of the Third World Congress of the International Ranger Federation, September 10–17, 2000, Kruger National Park, South Africa.

IUCN-WCPA [International Union for Conservation of Nature-World Commission on Protected Areas] Task Force on OECMs. 2019. *Recognising and Reporting Other Effective Area-based Conservation Measures.* Gland, Switzerland: IUCN.

IUCN-WCPA. 2017. Building institutional capacity in government conservation and protected area organisations. Workshop report.

www.bfn.de/fileadmin/BfN/ina/Dokumente/ Tagungsdoku/2017/Vilm\_organisational\_workshop\_ jan\_2017\_Final\_Report\_barrierefrei.pdf Kothari, A., C. Corrigan, H. Jonas, A. Neumann, and H. Shrumm, eds. 2012. *Recognising and Supporting Territories and Areas Conserved By Indigenous Peoples and Local Communities: Global Overview and National Case Studies*. CBD Technical Series no. 64. Montreal: Secretariat of the Convention on Biological Diversity, ICCA Consortium, Kalpavriksh, and Natural Justice.

Lotter, W.D., K. Roberts, R. Singh, K. Clark, C. Barlow, R. de Kock, K. Steiner, D. Mander, M. Khadka, M. and J. Guerrero. 2016. *Anti-poaching in and around Protected Areas: Training guidelines for Field Rangers*. Best Practice Protected Area Guidelines Series no. 01. Leongatha, Victoria, Australia: International Ranger Federation.

Mitchell, B.A., S. Stolton, J. Bezaury-Creel, H.C. Bingham, T.L. Cumming, N. Dudley, J.A. Fitzsimons, D. Malleret-King, K.H. Redford, and P. Solano. 2018. *Guidelines for Privately Protected Areas*. Best Practice Protected Area Guidelines Series no. 29. Gland, Switzerland: IUCN.

Moreto, W.D., J.M. Gau, E.A. Paoline, R. Singh, M. Belecky, and B. Long. 2017. Occupational motivation and intergenerational linkages of rangers in Asia. *Oryx*, 53(3): 450–459. https://doi.org/10.1017/S0030605317001041

Peersman, G., and P. Rogers. 2017. *Pathways to Advance Professionalization within the Context of the Australasian Evaluation Society*. Melbourne, Australia: ANZSOG/Better Evaluation.

Pitkin, B. 1995. Protected Area Conservation Strategy Training Needs and Opportunities among PA Managers in Eastern Central and Southern Africa. Washington, DC: . Biodiversity Support Program.

Ricci, G. 2018. Achieving protected area performance through certification of individuals: A how-to guide for developing certification programs. Unpublished 2018 Draft IUCN Technical Guide. Scherl, L. M., and A.J. O'Keeffe. 2016. *Capacity Development for Protected and Other Conserved Areas in the Pacific Islands Region: Strategy and Action Framework* 2015–2020. Gland, Switzerland: IUCN.

Sheppard, D. 2004. Editorial. Parks 14(2).

Spira, C., A.E. Kirby, and A.J. Plumptre. 2019. Understanding ranger motivation and job satisfaction to improve wildlife protection in Kahuzi–Biega National Park, eastern Democratic Republic of the Congo. *Oryx* 53(3): 460–468. https://doi.org/10.1017/S0030605318000856

Tan, J. 2018. Rangers face a 'toxic mix' of mental strain and lack of support. *Mongabay*, May 24. https://news.mongabay.com/2018/05/rangers-face-a-toxic-mix-of-mental-strain-and-lack-of-support

Warren, T. and K. Baker. 2019. WWF funds guards who have tortured and killed people. *Buzzfeed*, March 4. www.buzzfeednews.com/article/ tomwarren/wwf-world-wide-fund-nature-parkstorture-death

WWF [World Wide Fund for Nature]. Tigers Alive Initiative and the Ranger Federation of Asia. 2016. In *Ranger Perceptions: Asia*. Gland, Switzerland: WWF.

WWF and Global Wildlife Conservation. 2019. *Ranger Perceptions: Latin America*. Gland, Switzerland: WWF.

WWF and TRAFFIC Wildlife Crime Initiative. 2016. *Ranger Perceptions: Africa*. Gland, Switzerland: WWF.

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