



Employment conditions of public sector rangers: A major under-addressed problem

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Abstract

This paper addresses the current state of knowledge around a variety of employment indicators that would fall under the designation of “ranger employment welfare.” Although limited, the information presented here paints a disturbing picture of the current state of ranger employment, one characterized by low levels of benefit and high exposure to danger and risk. Both the processes of the International Labour Organization and the content of the recently agreed-upon Chitwan Declaration are addressed throughout this piece. The concluding section provides a set of recommendations, which are principally directed at two groups: the government agencies that employ most rangers, and those non-governmental organizations that seek to improve ranger employment conditions and effectiveness.

Introduction

The hundreds of thousands of individuals who work worldwide as rangers play an indispensable role protecting the biodiversity and ecosystem services that sustain human life on Earth. Their work is critical towards determining the success or failure in achieving the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs). SDG 14 (“Life Below Water”) and SDG 15 (“Life on Land”) are most clearly and directly impacted by the work of rangers, especially the realization of Targets 14.2 (“sustainably manage and protect marine and coastal ecosystems”), 14.5 (“conserve at least 10 per cent of coastal and marine areas”), 15.5 (“reduce the degradation of natural habitats, halt the loss of biodiversity and ... protect and prevent

the extinction of threatened species”), and 15.7 (“end poaching and trafficking of protected species of flora and fauna”). Many more SDGs are either directly or indirectly linked to rangers. This should not come as a surprise when the mandate of rangers to protect the environment is recognized in combination with the interplay between a healthy environment and the fulfillment of human rights (Knox 2017).

Against this context, the focus of this white paper is in many ways most concerned with SDG 8 (“Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”) and its Target 8.8, particularly the “promotion of safe and secure

working environments for all workers.” Grounded in international human rights law, the SDGs highlight opportunities and obligations to advance the realization of labor rights. Of a number of human rights related to SDG 8, the *right to just and favorable conditions of work* is likely most directly applicable to the discussion here.

Until recently, the employment welfare of rangers had been largely ignored in the literature. As noted by Duffy (2019):

... many aspects of ranger experiences remain understudied, including: How do rangers regard the use of tracking technology, which monitors their movements during the working day? What are the implications of such workplace surveillance for labour relations? Are rangers paid adequately and on time? Do rangers feel they have the right equipment, and are there sufficient and appropriate pathways through the profession? What are their other options for employment? What kinds of pressures do their families face? Addressing these questions requires thorough and sustained research from the social sciences, and could benefit from developing an analysis which is more firmly anchored in debates about labour relations rather than conservation *per se*.

As of early 2020, the vast majority of available quantitative evidence regarding ranger employment welfare and working conditions comes from a publication (Belecky et al. 2019) released shortly after the above quote was published, which addresses most of the ranger labor-specific issues listed. Through both global and regional analysis, it publishes the results from 6,241 responses to a 197-question ranger survey delivered and collected by WWF and its partners across 28 countries (covering 465 conservation sites) between 2016 and 2019.

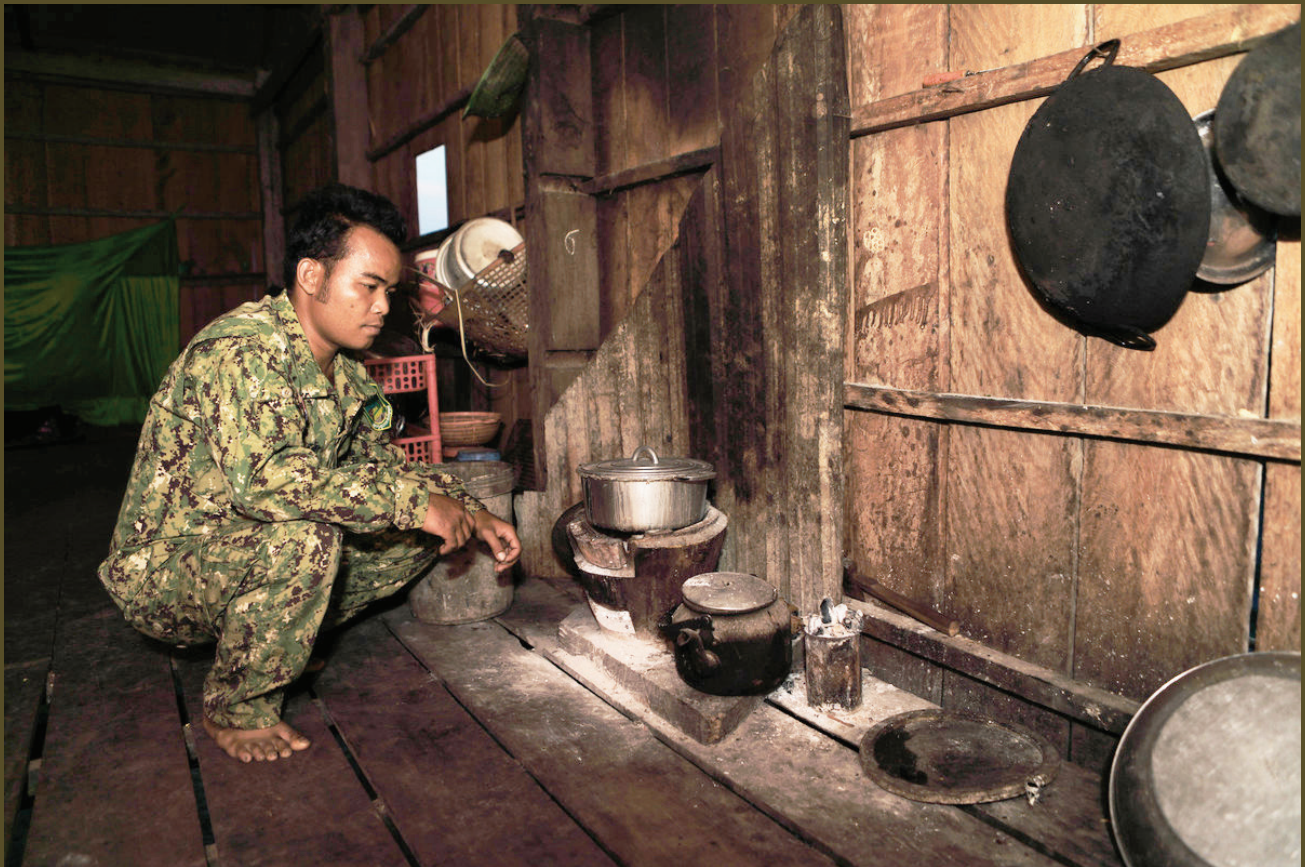
In order to link that effort to broader dialogues around best practice in the workplace, the survey design team, as far as possible, incorporated questions that addressed the International Labour Organization (ILO) Decent Work Indicators (ILO 2013). These indicators, adopted in 2008, represent the most widely recognized global framework

through which to track the quality of working conditions. The survey design team also referenced the Eurofound *European Working Conditions Survey* series as a source of guidance. Several of the other white papers in this issue of *Parks Stewardship Forum* draw on the results of this project, including, for example, analyses of working conditions and gender, and insights into building capacity and professionalization of the ranger force.

Although not as comprehensive as the WWF-led global survey project, a number of additional studies provide important contributions on ranger working conditions. One such study gives considerable insight into a number of job stressors that adversely impact ranger welfare in Uganda (Moreto 2016); another flags very low rates of ranger job satisfaction in a Nigerian game reserve (Ogunijimi et al. 2008). Shortcomings in ranger insurance coverage have been analyzed in Long et al. 2016. In studies of Kainji Lake National Park, Nigeria (Meduna 2009), and Montana, USA (Eliason 2011), the respective authors identify inadequate funding and low salaries as among the foremost challenges faced by rangers in those locations.

The Chitwan Declaration and ranger welfare

The Chitwan Declaration, adopted by ranger associations from around the world at the 9th World Ranger Congress in November 2019, charts a course for rangers and ranger associations. It situates rangers at the nexus of biodiversity conservation, habitat and ecosystem integrity, climate change, Indigenous peoples and local communities (IPLCs), human rights, and sustainable development, and identifies the challenges facing rangers as they aim to fulfill their role as planetary custodians. For this reason, the declaration is an appropriate reference point for examining ranger working conditions. Most of the themes addressed in this paper fall within the category of “ranger welfare,” which is the heading for Article 1 of the declaration. Unless otherwise stated, all statistics that follow are taken from the summary report of the WWF-led survey effort (Belecky et al. 2019.)



Cambodian ranger | RANJAN RAMCHANDANI / WWF

Chitwan Declaration, Article 1(i): There is a pressing need to improve access to services that can improve health and safety, both on and off duty. Among the most important elements are access to communication networks and devices, shelter, clean water, training in first aid and fire management, effective medical evacuation plans, and adequate health care, both in terms of access and coverage.

Access to communications devices. On patrol, only 43.2% of rangers indicated they either “always” or “often” have access to communications devices. Access rates at outposts are nearly identical at 43.4%. These two findings are among the most alarming, and are presumed to greatly endanger rangers at their places of work. Rangers seem to recognize the problem as well, with 47.2% expressing a belief that their communications devices are insufficient for the work that they are asked to do. It is worth noting that in Latin America only 32.4% rangers “often” or “always” have access to communication devices on patrol.

Shelter. When patrol takes rangers away from their main station overnight, 13.5% said they “always” have to sleep in the open (i.e., do not have a tent or shelter or any kind). A further 23.1% said they “often” have to sleep without shelter. This exposes rangers to a number of threats, including possible dangerous night encounters with wildlife and exposure to malaria-carrying mosquitos. Overall, 31.3% of rangers had contracted malaria within the 12 months prior to taking the survey; the proportion would be slightly higher if the small number of survey sites outside of malaria zones (e.g., high-elevation sites in Nepal and Bhutan) were removed from the sample.

[Africa = 21.6% “always” were without shelter overnight, and 67.6% have contracted malaria within the 12 months prior to survey]

Clean water. On patrol, 57.4% “rarely” or “never” have access to clean drinking water. That number decreases only modestly to 49.4% at outposts.

[Africa = 68.2% and South Asia = 68.3% “rarely” or “never” have access to clean drinking water on patrol]

First aid training. Just 24.4% of rangers had received first aid training within the year prior to completing the survey. Given that guidelines in most countries require first aid training to be renewed every three years to remain valid, it seems likely that a large proportion of rangers are not certified to deliver potentially lifesaving first aid while on patrol.

[South Asia = 11.2% received first aid training within the 12 months prior to survey]

Medical treatment/emergency medical treatment. Only 48.3% of rangers answered affirmatively when asked if the medical treatment provided was adequate when needed.

[South Asia = 26.6% believe medical treatment to be adequate when needed]

Each of the findings above is problematic in isolation, but when considered as a whole it is fair to state that the physical health and safety of rangers is being imperiled by an absence of access to basic necessities. Some of these shortcomings (water purification, simple shelter, and first aid training) are all the more troubling given that they could conceivably be rectified at relatively low expense.

Chitwan Declaration, Article 1(ii): There is a pressing need to provide all Rangers with quality life insurance coverage to support the families of Rangers killed or seriously injured in the line of duty.

Life insurance. Roughly one-third of rangers (33.7%) indicate that their employee insurance scheme provides compensation in case of job-related fatality.

Insurance for serious injury. 41.8% said that they have insurance coverage under an employee scheme that would provide compensation in a case

of serious injury sustained during work (e.g., an injury that would prevent future work as a ranger). There was no significant regional disparity in insurance coverage rates for either life or injury insurance.

Health insurance. In a separate study pertaining to the topic of ranger insurance coverage, survey questions were distributed electronically in 40 countries. It was found that in 20% of those countries rangers have no basic health insurance coverage. In those countries where rangers do have coverage, it is provided most often by a public system (58%), followed by private insurers (30%) and NGOs (6%), or is self-purchased (6%; Long et al. 2016).

These figures are alarming, especially when linked to the finding that 84.8% of rangers believe their job is dangerous due to the chance of encounters with poachers. Nearly as many (78.2%) feel the same way about potential encounters with and animals. With 1,038 on-the-job ranger deaths recorded during 2009–2019 (International Ranger Federation 2019), these fears seem well founded, especially given that it is highly likely that many ranger deaths have gone unreported.

Chitwan Declaration, Article 1(iii): There is a pressing need to empower, motivate and enable Rangers to maintain a balance between work and home life through i) provision of adequate leave to reduce physical and mental stress; ii) the hiring of adequate and appropriate numbers of Rangers per site; and iii) clear frameworks and opportunities for career progression and enhancement.

Sick leave. Fewer than half of rangers surveyed (46.6%) stated that they have access to paid sick leave.

[Africa = 28.4% with paid sick leave]

Annual leave. 63.6% of surveyed rangers have some form of paid annual leave.

[Latin America = 37.7% with paid annual leave]

Hours worked. On average, rangers stated that they worked 72.3 hours per week, which would be far in excess of normal workplace expectations. There may be some discrepancies in how rangers perceived “hours worked” (e.g., some may consider all hours *on site* or *on call* as hours worked, while others may not include them) but in either case the number is still concerning.

[Africa = 89.7 hours worked per week, with 52.0 of those hours worked between 6pm and 6 am]

Overtime pay. Only 20.1% received overtime pay.

[Latin America = 3.1% and South Asia = 6.0% with overtime pay]

Work-life balance. The survey revealed that only 31.1% of rangers who are married actually live with their spouse. These numbers suggest the issue of work-life and work-family balance is a considerable concern in this profession and should be directly addressed by ranger employers.

[Africa = 18.9% and Latin America = 18.9% live with spouse]

The results from a separate ranger survey project conducted between 2015 and 2018 (Singh et al. 2020), covering 1,743 rangers across 40 countries, revealed that 64% of those rangers see their family 10 days or fewer per month, and roughly one-quarter see their family fewer than five days per month (Table 1).

Career advancement. 58.6% of surveyed rangers note satisfaction with their promotion and advancement opportunities in their workplace. This was a positive finding in the sense that it was a higher proportion than was seen in a global study of employees (from a wide variety of sectors), where

only 44.8% answered affirmatively to a similarly worded question (Eurofound and ILO 2019).

[Africa = 41.5% satisfied with chances for promotion/advancement]

Other employment welfare indicators

The points above are structured around the text of the Chitwan Declaration. However, there are many other elements of employee well-being not specifically flagged in the declaration.

Contractual status. Overall, 73.2% of surveyed rangers worked under permanent contracts, 23.4% had limited-duration contracts, and 3.3% did not have a contract of any type.

[South Asia = 6.0% of rangers worked without a contract of any type]

Compensation. When asked whether they believe they are paid a fair wage, 44.9% of rangers either “agreed” or “strongly agreed.” The perception of “fair wage” for the undertaking of ranger work is a complex matter in the sense that it is likely influenced by broader factors, such as individual self-worth, perception of one’s place in social and economic hierarchies, the degree of professionalization in the sector, as well as general attitudes towards public-service work in the country of the survey taker. For these reasons this indicator should likely be seen as secondary to the more objective findings in this section.

One attempt at quantifying ranger pay is through a comparison of their average wage to that of police in 26 of the 28 countries in the WWF-led survey (Figure 1). The average monthly ranger salary is US\$345.27—far lower than the average police salary of US\$865.82.

Table 1. Summary of ranger responses to the question “how many days per month do you get to see your family?” (Singh et al. 2020).

	< 5 days	5–10 days	10–15 days	15–20 days
Asia	45.3%	30.8%	10.6%	13.4%
Africa	30.2%	46.9%	15.5%	7.5%
Latin America	7.7%	35.0%	19.2%	38.0%
Overall	26.5%	37.5%	15.3%	20.6%



Figure 1. Ranger vs. police wage differential in 26 countries (Belecky et al. 2019). The other two countries that were part of the survey, Russia and China, were excluded from the analysis because the survey was not delivered at a national scale in them.

Considering that both police and rangers are public-sector employees tasked with enforcing and upholding the laws of the countries in which they work, the pay disparity should be seen as potentially damaging—both to the status of the sector (and its ability to recruit talent), and to perceptions of value and importance rangers associate with their own work and organizational goals. This comparison with police officers is further relevant in that there is no occupation more likely to drain rangers from the field, or to be compared with if rangers are going to lobby for wage increases.

Late pay. Within the 12-month period prior to taking the survey:

- 32.8% of rangers had been paid late once
- 15.6% had been paid late three or more times
- 7.2% had to wait two months or more to collect salary they believed owed to them.

The likelihood of wage insecurity, highlighted in Table 2, could lead to a number of undesirable outcomes—conceivably even enticing some

rangers to participate in illegal activities, such as wildlife poaching, in order to make ends meet. These cases would also be a violation of the ILO Protection of Wages Convention, 1949 (C095), notably Article 12.1, for those countries that have adopted and implemented it.

Union representation. Of the rangers surveyed, 30.2% stated that they have union or similar representation that can collectively bargain on their behalf. Rates of union representation did not vary greatly by region.

Abuse at work. As mentioned above, the Eurofound and ILO (2019) global working conditions survey was an influence on the design of the WWF-led ranger survey. On one set of questions in particular—pertaining to abuse, threats, or violence faced in the workplace—both produced data that can be compared with each other. Eurofound and ILO aggregated responses from similar survey questions from one region (the European Union) and from 13 other countries, such that the result “takes into account approximately 1.2 billion of the world’s workers.”

Region	Paid late at least once	Paid late three or more times	Paid late by two months or more	Pay canceled
Global (n = 6,241)	32.8	15.6	7.4	4.0
Latin America (n = 301)	44.5	17.5	6.4	8.6
Africa (n = 2,061)	40.7	18.9	5.0	4.2
South Asia (n = 1,783)	35.8	18.8	10.4	3.4
Southeast/East Asia (n = 2,096)	22.5	10.0	6.7	3.9

Table 2. Response rates, globally and by region, to frequency of late or canceled pay within the previous 12-month period.

Source	Bullying, harassment, verbal abuse	Threats	Physical violence
On-the-job incidence rates, rangers (Belecky et al. 2019)	31.1% from community members 15.3% from co-workers 12.7% from supervisors	31.6% from community members 11.0% from co-workers 10.0% from supervisors	7.8% from community members 3.1% from co-workers 2.0% from supervisors
On-the-job incidence rates: various sectors (Eurofound and ILO 2019).	8.1% verbal abuse 3.8% bullying / harassment (average of four country/regional scores)	1.5% (average of 11 country / regional scores)	2.1% (average of 12 country / regional scores)

Table 3. Rates of various types of abuse faced by rangers in 26 countries vs. rates of abuses faced in broad surveys of employees of all types undertaken in the European Union, China, USA, Turkey, South Korea, and nine Latin American countries. Note: rates of verbal abuse, threats, and violence experienced by rangers were considerably higher in Africa than in other regions.

As seen in Table 3, the incidence of bullying, harassment, verbal abuse, and threats faced by rangers is far higher than seen in a typical workplace. Physical violence is also more common. Although the nature of ranger work would lead to some expectation that these incidents might be more commonplace, the incredibly high incidence of negative encounters is likely a major cause for workplace stress and concern for rangers.

These findings also invite larger discussions about the nature of ranger work. Rangers are often required to operate in the midst of complex regional conflict, and in areas where IPLCs have been displaced and disenfranchised (Fynn 2020). In these complex social and historical landscapes, where the state may be regarded as an oppressive force rather than as a democratic representative and provider of security and welfare, it is not surprising that many rangers—who often either are state actors or may well be

perceived as such—feel the brunt of resentment and hostility (Duffy 2019). Moreover, in conflict zones, rangers armed for conservation purposes may be regarded as just another armed group. Addressing the shortcomings of ranger welfare and safety remains an important step in itself, but it is unlikely to succeed in isolation. Deepening the understanding of the political economy as it relates to resources and conflict, and resolving broader governance challenges, must go hand in hand with professionalizing rangers if the desired results are to be obtained (Duffy 2015).

Recommendations

The numerous shortcomings identified by rangers in their work environments have potential ramifications beyond immediate negative impacts on individuals. For example, it has been widely acknowledged that poor conditions in one’s workplace can negatively affect job performance and motivation. In an employment sector

characterized by exposure to high levels of physical risk, strong motivation would likely be particularly important in achieving organizational objectives. In the most damaging cases, corrosion of motivation due to poor working conditions or safety might even encourage participation in environmental crimes, with some rangers utilizing their specialized knowledge in profitable illegal activities that result in poaching in protected areas.

Considering the findings and discussions outlined above, we recommend the following to improve ranger employment conditions.

International level

Governments should:

- **Utilize all available channels to lodge ranger welfare issues within the international policy agenda**, including those involving the ILO, World Health Organization (WHO), United National General Assembly (UNGA),

United Nations Environment Program (UNEP), United Nations Development Program (UNDP), Convention on Biological Diversity (CBD), the Commission on Crime Prevention and Criminal Justice (CCPCJ), United Nations Office on Drugs and Crime (UNODC), United Nations Convention Against Corruption (UNCAC), United Nations Convention against Transnational Organized Crime (UNTOC), and the various international and regional human rights commissions and mechanisms.

- **Recognize an important and unique role for the ILO**, especially for the “development of guidance and policy frameworks based on international standards and good practices” as called for by the Chitwan Declaration. Governments should further recognize their central role in the ILO tripartite representation structure (as both government *and* employer), and that this structure lends legitimacy to any

Kenyan ranger with his child. Work-life balance is a major concern for many rangers. | AMI VITALE / WWF-UK



decisions or standards reached on ranger work. At a minimum, governmental parties to the ILO should:

- Assess through which channels they might table or otherwise raise ranger employee welfare issues within ongoing or planned ILO processes or agendas.
- Ratify the Labour Inspection Convention, 1949 (no. 81) and the Convention on Labour Relations in the Public Service, 1978 (no. 151), as well as other ILO conventions deemed relevant to ranger welfare (Belecky et al. 2019). Such ratifications represent a strong expression of political will towards tackling the challenges facing rangers.
- Ratify and fully implement into national law the newest ILO convention, the Violence and Harassment Convention, 2019 (no. 190), which is of particular relevance to ranger work. The ranger sector should be factored into ongoing discussions as to how C190 will be implemented within national law and policy.
- Direct the ILO to engage with workers, employers, and government to develop sectoral guidelines to improve working conditions for rangers. This should be recognized as a critical component of certain ILO sustainable development approaches, such as those developed under their “just transition towards environmentally sustainable economies and societies for all” agenda.
- Encourage the ILO to study the Code of Practice for Safety and Health in Forestry Work (ILO 1998), both for its content applicable to ranger welfare, and as a model that might be replicated specifically for ranger work. This code of practice touches on themes of particular relevance to ranger work, including identification of duty holders; safety, health and risk management; first aid, emergency response, and occupational health services; shelter and nutrition standards; and reporting and investigation standards.
- Fully explore the potential of creating

sector-specific sets of ILO guidelines, with a long-term goal of negotiating an ILO recommendation for rangers and related workers.

Non-governmental organizations should:

- **Support the Universal Ranger Support Alliance** (URSA; www.ursa4ranger.org) **action plan to facilitate the improvement of ranger working conditions.** An essential characteristic of this plan includes clear guidance on efficiently coordinating NGO investments and interventions aimed at improving ranger welfare.
- **Work in partnership to undertake and publish a regular analysis quantifying and comparing the progress made on ranger employment welfare and ranger policy both within and between countries.** Ideally, this analysis should be concluded every two to three years.
- **Actively engage with the private sector to find mutually beneficial partnerships that increase ranger welfare and on-the-job safety.** Any arrangement that can improve availability and quality of communications devices would be an appropriate starting point to explore (e.g., discounts on communications technologies and devices for ranger work in exchange for public brand perception and corporate social responsibility opportunity).
- **Quickly launch major public campaigns on the topic of rangers and the challenging working conditions they face, cognizant of the sensitivities in this space.** This action will be necessary in order to increase the public visibility of this sector to a level commensurate with its importance. This in turn will help encourage positive policy change from governments.

Both governments and non-governmental organizations should:

- **Generate a dramatic increase in actionable quantitative data on ranger employment welfare.** In doing so, international guidelines, such as those provided through the International Conference of Labour Statistics

(ICLS) resolutions, should be used, in addition to other documents that can provide guidance in this area.

National level

All governmental authorities with appropriate jurisdiction should:

- **Commission a national review that compares key employment welfare indicators from ranger work with those from other public-sector workers.** Comparisons with police, firefighters, and border agents are essential, while wider public-sector comparisons (to teachers, nurses, etc.) are also strongly encouraged. The analysis should include *at a minimum* comparisons of wage, contract status, hours worked, percentage and quality of insurance coverage, overtime pay, and sick and annual leave policies.
- **Use the results of the above analysis to draft policies and plans that close the gap between rangers and other public servants in any of these elements.**
- **Immediately review, and then ensure, that existing labor laws and civil service regulations guarantee adequate working conditions for rangers,** and that these conditions are assured through regular monitoring and auditing of workplace practices and conditions.
- **Ensure some form of ranger-led workplace representation and collective bargaining, so that rangers can relay their concerns and call for systematic improvements where needed.**
- **Draft a national action plan for rangers,** which outlines time-bound commitments to improve ranger safety and on-the-job welfare. Focal points of contact should be nominated from each relevant government agency (e.g. those from environment, forest, and labor ministries) to oversee the plan.
- **Comprehensively evaluate the URSA action plan,** and use it as a basis for the adoption of a strategy to increase collaboration with outside organizations (particularly parties to the

action plan) for the benefit of rangers and their welfare.

- **Immediately engage health authorities to devise a strategy to implement the health programs most needed by rangers,** which might include, *inter alia*, emergency evacuation, increasing first aid certification rates, and occupation-specific health (and mental health) care.
- **For all rangers, ensure the implementation of all eight recommendations for WHO member states e listed in the Workers' Health Global Plan of Action (WHO 2007).**
- **Urgently work to provide full, high-quality insurance coverage (general health care, injury, life) for rangers.** This will entail undertaking an analysis of the current status of ranger insurance and consulting with industry experts to develop approaches that will quickly increase coverage rates. The large overall number of public-sector rangers (i.e., the size of the class to be insured) should be leveraged to negotiate better rates and guarantee against coverage exclusions.

Non-governmental organizations should:

- **Lobby governments for urgent changes to improve ranger welfare,** particularly in those countries where evidence of poor conditions has been collected.
- **Where needed, lobby for the adoption of insurance coverage approaches that have been highly successful for rangers elsewhere,** such as the model delivered through the Game Rangers' Association of Africa.
- **Respond in a timely manner to all requests from government agencies** asking for any data or analyses collected on rangers or their work. Furthermore, they should also encourage agencies to use these data to make the case for increased budgets for ranger work (i.e., they should engage in intra-governmental advocacy for the benefit of rangers).
- **To the extent possible, help government agencies** implement recommendations addressed to them, either through technical or financial support.

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The Interdisciplinary Journal of Place-based Conservation

Co-published by the [Institute for Parks, People, and Biodiversity](#), University of California, Berkeley and the [George Wright Society](#). ISSN 2688-187X

Berkeley [Institute for Parks, People, and Biodiversity](#)



Citation for this article

Belecky, Mike, Rob Parry-Jones, and Rohit Singh. 2021. Employment conditions of public sector rangers: A major under-addressed problem. *Parks Stewardship Forum* 37(1): 185–195.

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The journal continues *The George Wright Forum*, published 1981–2018 by the George Wright Society.

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