

# Protecting the Protectors of Wilderness

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**Abstract**—Preserving the last remnants of wild country requires effective legislation, adequate finances, and appropriate policies, but in addition it requires the permanent presence of dedicated park rangers. For the International Ranger Federation, a ranger is a person who works in protected areas, and, among other tasks, is responsible for the protection of the natural and associated cultural resources. Within this broad definition are rangers with very different levels of formal education, and different levels of skills and experience, but all of them are on the frontline of protecting landscapes, seascapes and associated resources.

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## Duties and Dangers of a Park Ranger

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Fortunato Calacauqui, Eric Mota, Marco Antonio dos Santos, Aroop Ranjan, Henry Oram, Michael Pauling ... these are but a few of the names of rangers killed in the line of duty.

Many people are surprised to hear that rangers often face violent encounters, in the naïve belief that all we do is lead visitors along quiet and beautiful trails and play with children while teaching them to love the planet. But our profession has many aspects. The most popular of these seems to be providing interpretation to visitors and hands-on wildlife management. That visitors continue to be attracted to parks and that there are still natural resources to be managed, is because there were and there are rangers to take care of protected areas.

Poaching, in its many forms, is common, unfortunately, in many protected areas of the world. Because of the value and scarcity of the resources being stolen, poaching makes the job of the ranger very dangerous in many protected areas of many countries. A ranger may be confronted by violence any day, at any time. It could be gunshots, assault, physical violence, or even vandalism and destruction of his or the protected area's equipment and infrastructure. The observer could be forgiven for thinking that attacks on rangers are scarce, due to the lack of published data or publicity related to the problem.

There has been some recognition of this crisis, such as the Packard Awards of the World Commission on Protected Areas of the World Conservation Union (IUCN). Among 18 of these awards given at the 4<sup>th</sup> World Parks Congress held in

Caracas in 1992, one went to an Indian killed by a notorious poacher and another to two Guatemalan Rangers who were ambushed and injured. During the last World Parks Congress held in Durban in 2003, ranger John Makombo from Uganda, on behalf of the International Ranger Federation (IRF) and world's rangers, received a symbolic recognition of the dedication of all rangers who had lost their lives protecting protected areas. A dedication in the book by Shambaugh and others (2001) and the famous book by Adams and McShane (1996) with very specific stories on this matter, also provide some recognition. However, it is probable that neither the IUCN nor other protected areas specialists have a true idea of the actual scope of the problem. If we were to award every ranger injured, kidnapped or assassinated since the 4<sup>th</sup> World Parks Congress in 1992, the ceremony would probably last for 2 days.

Of all wild lands, only the largest remnants, such as the Amazon rainforest, Antarctica, and big taiga patches would maintain their integrity for more than a few weeks if rangers were to be taken away. However, human greed has impacted deep into unprotected tracts of the Amazon, where the indigenous people have rallied to protect their land and its natural and cultural resources, a wild land with which they have co-existed for centuries. The IRF was proud to accept the Associação dos Povos Indígenas Tiriyo, Kaxuyana e Txikuyana of the Amazon as its first indigenous community member. However, most wild lands of the world are part of established protected areas where, in the end, it is the rangers who are the on-the-ground defenders of wildlife and landscapes, confronting poachers, loggers, and other unscrupulous people without conscience. As wilderness and its resources become more and more scarce, the scope and extent of poaching into protected areas is escalating. The biggest problem occurs when poaching reaches a commercial scale. When this happens, offenders will fight to maintain their "job" and are far more dangerous than subsistence poachers. The commercial poacher does not hesitate to resort to violence, and for this reason many rangers are killed or seriously injured—and the world conservation community still does not recognize the true magnitude of this issue. In the United States, the Department of Justice reports that National Park rangers are the most assaulted of all federal law enforcement officers, including those working as agents for the Drug Enforcement Administration (DEA) and Federal Bureau of Investigation (FBI).

## Taking International Action

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The Zakopane Declaration, an outcome of the First World Congress of the International Ranger Federation which was held in Poland in 1995, gave voice to the fact that many rangers receive meager salaries, live and work under very poor conditions, often risk their lives and frequently fall in the line of duty. (Some of those deaths are due to accidents,

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but many are not). At that time, even the world's rangers did not understand the full extent of the violence, or that it would be so common. Today (in 2005) we are shocked by the frequency with which our colleagues are assaulted, kidnapped or killed. The difficulty in obtaining accurate data on these incidents makes us believe there are many more incidents around the world than even we, the rangers, are aware.

To begin to understand the magnitude of the problem, IRF conducted a survey of cases of physical violence against rangers, and of vandalism against equipment and infrastructure. The last was included as we consider it to be violence aimed at the ranger, intended to leave him or her without communication, transportation or housing when staying in the wilderness. To create a framework and facilitate the search, the study only targeted cases which occurred between 1998 and July 2005, and is based on requests to 27 countries, namely: Bolivia, Brazil, Colombia, Portugal, Czech Republic, Ecuador, Indonesia, Ivory Coast, Namibia, Perú, Spain, South Africa, Democratic Republic of Congo, Kenya, Uruguay, Zambia, Argentina, Philippines, India, Guatemala, Cambodia, Israel, USA, Venezuela, Vietnam, Ghana and Uganda.

During this time period, 120 rangers were murdered and 106 wounded, most of them shot. Three were kidnapped and seven ranger stations were seriously damaged (table 1). But this is only the tip of the iceberg, because it is very difficult to obtain accurate or comprehensive data on this matter. The IRF does not have member associations in many countries, and it is also common that governments are not willing to share the information regarding violence to rangers in the belief that the release of such information would not be in their interest and would deter tourism. With the exception of Australia, ranger deaths and injuries occur on all continents, contrary to what is often admitted.

## Potential Solutions to the Problem

The death or injury of a ranger is seldom made public knowledge or covered by the press, so on many occasions we do not receive even the names of the victims. No matter what they suffered or how fiercely they defended the integrity of a park, they commonly become merely statistics, such as in "seven park rangers were killed in ..." Violence against rangers has many different roots, and will not be stopped. We the rangers, and this Congress, can only hope to reduce it substantially. Common sense says that the occurrence of such cases would be greatly reduced if the rangers of the world could work under much improved levels of security. This security is based on three basic pillars.

First, there must be official recognition of the existence of the problem, with the political and institutional will to support rangers. Second, rangers must be provided with comprehensive and ongoing training. And third, rangers must be given the proper and appropriate equipment to carry out their vital role safely and efficiently. Both the training and equipment must be appropriate to the nature and level of the threats faced.

The level of integrity of protected areas and wilderness is in direct relation to the numbers, skills and equipment of the rangers responsible for that integrity. Can you imagine

the success we would have in conserving the biodiversity of the world if all rangers were fully supported, highly trained, and properly equipped?

Certain states or institutions believe that rangers should not be armed. This is an internal value judgment, but if it is taken in the face of a very real armed threat against rangers then such a decision is tantamount to sentencing the rangers to death. Others go further by passing the problem on to security forces, such as the police or army. Experience has shown that this route does not solve the problem, and often worsens the situation. Security forces for the most part do not have the skills, knowledge, ability or will to operate in "backcountry" where most poaching takes place, and are further notorious for complicity, or direct involvement, in poaching.

We do not wish to be the bearer of bad news, but this situation of violence against rangers has long since reached untenable proportions and the international conservation community is asked to recognize this and take action towards making the work of the ranger safer and thereby also more efficient. Violence exists in many protected areas and cannot be hidden.

We, the rangers, are the direct interface with the indigenous and local communities in and around protected areas, and much work is done on a day-to-day basis in community interaction and environmental education to reduce local and subsistence poaching threats. We do acknowledge that much more needs to be done at this level, and can be done with the proper training and resources. There will always be some level of subsistence poaching, of palm hearts, fish, skins, firewood, etc., and so there will always be some risk in the work of the rangers in many protected areas in many countries, but this is minimized through establishing sound relationships with communities.

All rangers of the world are potentially exposed to threats and physical violence. Inherent in the effective management of protected areas is the obligation to provide for the safety of rangers. Efforts to mitigate risks and resolve these issues should occur at many levels, from the individual ranger, supervisory and managerial personnel, institutional hierarchy, legislators, justice, and other stakeholders such as community leaders.

For this we ask governments, conservation agencies, and conservation NGOs to:

- Recognize their responsibility to train rangers in personal protection.
- Prepare threat assessments for their rangers to determine the appropriate types of training and equipment they need.
- Provide rangers with equipment that is serviceable and commensurate with the level of risk that might be encountered.
- Provide life insurance for all rangers.
- Pay the rangers commensurate with their responsibilities AND risks.
- Collect and disseminate information related to assaults.
- Promote the role of the ranger.
- Provide an adequate legal framework and basis to perform the protection duties.
- Properly punish those responsible for assaults and any other kind of physical violence toward the rangers.

**Table 1**—Results of a survey to 27 countries about attacks on Park Rangers (1998–2005).

Country	Protected area	Killed	Injured	Other	Attacker
Bolivia	Carrasco N.P.			Burned pick-up Burned ranger station Rangers threatened	“Sin Tierra” Movement
Bolivia	Apolobamba N.P.	Fortunato Calacauqui 2000			Vicuña poachers
Brasil	Serra dos Reis State Park	Eric Mota 13/8/02		Felled ranger Station 8/02	Illegal loggers
Brasil	Carlos Botelho N.P.	Marco Antonio dos Santos 14/3/98			Palm heart thieves
Colombia		Jairo Valbuena 11/01			Paramilitars
Colombia				Efraín Rodríguez Varón, Kidnaped, 20/8/02	Rebels
Czech Rep.	Mala Kotlina Nat. res.			Marek Banas Attacked	Group leader
Ecuador	Galápagos Is. N.P.			N.P. Headquarters and Rang. Station and equipment Destroyed, 17/11/2000	Illegal lobster fishermen
Ecuador	Galápagos Is. N.P.			Wilson Fuentes, Julio López y Palermo Castillo hit by Fishing vessel 26/6/02	Illegal fishermen
Ecuador	Galápagos Is. N.P.			René Freire y Julio Lucero Hit by fishing vessel 4/7/02	Illegal fishermen
Indonesia	Bali Barat N.P.		Komang Astika Shot in leg and attempt to kill, 31/1/02		Wildlife thieves
Ivory Coast			Four rangers Injured with Machetes, 2001		Farm encroachment

(continued)

Table 1 (Continued)

Namibia	Erongo region			Rod Braby, Vandalism to caravan, signs and threatened	Off road Quad bikers
Peru	Pacaya- Samiria N.P.			Four rangers attacked, Canoe, engine, food and luggage stolen, 17/4/02	30 loggers
Portugal		Antonio Nabo Pires, 31/1/02			hunter
Portugal		Manuel Fonseca and Paulo Coelho	17 rangers injured in last 5 years		Hunters and poachers
Portugal	Arrabida N.P			shots	poachers
Portugal	Sintra Cascais N.P.			Shots and attempt to run-over by car	loggers
Portugal	Peneda Geres N.P			Shots to ranger station	poachers
Portugal	Sado N.Res.			Shots to ranger boats, Attempt to shoot	fishermen
Portugal	Tejo Estuary Res.			Attacks	Poachers And fishermen
Spain	La Robla, León		Salvador Ochoa, lost hearing, 28/11/99	threatened	Wild boar poachers
Spain	Córdoba		Two rangers Injured, 2000 and 2001		hunters
Spain	Near Madrid			Hanged by feet	poachers
Spain	Avila			Attempt to shoot Two rangers	poachers
Spain	Avila			Bullet almost kills Ranger at home	¿ ?
Spain	Andalucía		Two injured with heavy objects		Inspecting Illegal building
South Africa	Sta. Lucía N.P.	Henry Oram, 4/5/01			Shrimp fishermen
D.R. Congo	Virunga N.P.	Michel Safari 25/5/01			rebels
D.R. Congo	Virunga N.P.	Mambo 25/5/01			rebels
Kenya	Tsavo East,	Two rangers killed 15/5/03			poachers
Uruguay	El Potrillo,			Shots during law enforcement,	Capibara poachers

(continued)

**Table 1** (Continued)

Country	Protected area	Killed	Injured	Other	Attacker
				18/3/03 Two rangers and a policeman	
Zambia	Lunga-Luswishi G.Park,Zambia		Gideon Chembe (28) Wounded by shot 6/6/03		Game poachers (two arrested)
Argentina	Res. Bios. Yabotí Misiones,	Environmental police killed 22/5/03			Poachers
Argentina	Sanborombón Nat. Res. Bs.As			Daniel Mac Lean, Violence, risk of death May 03	Poachers
Philippines	Balayan Bay	Sixto Atienza (44) Killed, 3/5/03			Killed after public speech, Fishermen
D.R. Congo	Virunga N.P	Safari Sulubika (41) 27/5/03			Rebel group
Argentina	Sanborombón Nat. reserve	June/2003		Hit and menaced with knife	Poachers
DR of Congo	Virunga N.P	21/6/03 Kambale Binikere (25)			Elephant poachers
D R Congo	Virunga N.P.	Kamondo Mayele,1998			Rebels
“	“	Simba Ndianabo,1998			“
“	“	Kambale Kinda, 1999			“
“	“	Kanyamibwa J. de Dieu, 1999			“
“	“	Kambale Twitebo, 2000			“
“	“	Mambo Mwendapole, 2001			“
“	“	Masubaho Mubake, 2001			“
“	“	Muyalulimbo Idembe,2000			“
“	“	Paluku Jogoo 2002			“
Kenya	All country	1998,1 killed 1999,0 killed	4 inj.		Poachers

(continued)

Table 1 (Continued)

Country	Protected area	Killed	Injured	Other	Attacker
		2000,2 killed 2001,0 killed 2002,0 killed 2003,2 killed	1 inj. 1 inj. 0 inj. 0 inj. 2 inj.		
Argentina	Laguna Blanca N. P		Injured by shot, 21/10/03 Narciso Quilaqueo		Angry cattle owner
India	Kuklung Reserve Forest	Girindra Nath Borbhuyan Kidnapped and other killed nov.03			Rebels
Argentina	Laguna Salada grande Res.			Alejandro Leiss Threatened and vandalism,25/11/03	Users
España	Nicovan, Catalunya			Two shots at night 7/2/04	Duck hunter
Guatemala	P.A Punta de Manabique	Enrique Alcántara 11/2/04 3 shots			Unknown, while he was on leave
Congo D.R.	Virunga N.P.	Kwibesha Musekura Boniface 23/6/04			Rebels
Congo D.R.	Virunga N.P.	Ruvuzo 10/9/04	A ranger Injured (shot)		Rebels at gate
Argentina	Parque las Araucarias, Misiones		Daniel Kurday, Shot in back October 14, 04		Poachers while birding at night.
Cambodia	Bokor N.P.			Chey Yuthearith and 50 rangers, hand grenades	Loggers and poachers
Israel	Bet Guvrin Nat. Res.	Vladimir Rubin January 05			Terrorists
Peru	Andes	4 rangers 2000-2005 Associated Press, april 15/05			Vicuña poachers
USA	Hawaii	Steve Makuakane, 2000			Dog owner
USA	Organ Pipe	Kris Eggle,			Foreign

(continued)

Table 1 (Continued)

Country	Protected area	Killed	Injured	Other	Attacker
	N.M.	9/8/02			criminal
USA	Texas	Michael Pauling, 2/8/01			Run-over by car
USA	Oregon		Two State rangers Shot		Cleaning a restroom
USA	Mississippi		Cons. Officer shot		Individual walking
USA	Ohio		State Park ranger shot		Investigating illegal fireworks
USA	North Carolina	Joe Kolodski, 22/6/98			
Uruguay	Rocha lagoon			Hector Caymaris attempt to run-over by car, Three times 2002	Off-road drivers
Uruguay	San Miguel N.P.			Station shot	Poachers
Venezuela			José Melchor,		Fishermen
Vietman		12 rangers killed 1996-2000			
India,	Nanoi Range	Deepak Bharali, 27/10/1988			Killed by extremist
India	Lakhimpur Range	Pranjit Kalita, 13/12/1998			By extremist
India	Dharamtul Range	Aroop Ranjan Pathak , 21/2/2001			Knocked down by truck
India	Valmiki Tigre Reserve	Bikhu Chowdhury 27/1/02			Murdered
India				2 Assistant Conservation kidnapped 21/6/03	Extremists
Ivory Coast				2 rangers missing 2/6/03	Civil war
India	Corbett Tiger Reserve	Bipin Chandra Pandey, 28/8/01			Poachers
Uganda	Bwindi N.P.	8 tourists, 1 staff, 1999		4 vehicles burnt in HQ, 4 tourists camp burnt	Interahamwe rebels
Uganda	Bwindi N.P.	Paul Wagaba 1999			Rebels
Uganda	Bwindi N.P	John Barigira 1999			Communities
Uganda	Bwindi N.P.		Byarugaba		Communities

(continued)

**Table 1** (Continued)

<b>Country</b>	<b>Protected area</b>	<b>Killed</b>	<b>Injured</b>	<b>Other</b>	<b>Attacker</b>
			Ignatius 2002		
Uganda	Bwindi N.P.		Masinde Godfrey 1999		Rebels
Uganda	Mt. Elgon Cons. Area	Pte. Makayi Apollo, 2003			
Uganda	Mt. Elgon Cons. Area	Pte. Kundu Mathew,2003			
Uganda	Mt. Elgon Cons. Area	Labourer Satya Stephen,2003			
Uganda	Mt. Elgon Cons. Area		Pte. Musobo Sande Francis,2001		
Uganda	Mt. Elgon Cons. Area		Pte. Iryema Raphael, 2002		
Uganda	Mt. Elgon Cons. Area		Pte. Kipsongi Rodgers,2003		
Uganda	Mt. Elgon Cons. Area		Pte. Egessa Eronda James,2002		
Uganda	Mt. Elgon Cons. Area		Pte. Makuyi Eric,2002		
Uganda	Mt. Elgon Cons. Area		Pte. Okwanyang Paul, 2002		
Uganda	Mt. Elgon Cons. Area		Pte. Otto Jimmy, 2003		
India	Saranda Forest Div.	Luther Tirkey 17/12/02			Naxalite Attack
Uganda	Murchison Falls C. A.	Asiimwe Stephen, March 2001			Shot by rebels
Uganda	Lake Mburo N.P.	Begumisa H., 2002			Shot by poachers
India	Kottayam Forest Div.		P.J. Joseph 3/12/02		Poachers
India	Govind Wild. Sanctuary	Ram Bharose Dhobal 5/3/03			Murdered
India	Palamau Tiger Res.		Bhagwati Yadav 17/4/03		Naxalite Attack
India	Palamau Tigre Reserve	Tepeshwar Singh 30/6/03			Idem
India	Palamau Tiger Res.	Jetan Singh 30/6/03			Idem
India	Palamau Tiger Reserve	Baleswar Singh 28/8/03			Idem

(continued)

**Table 1** (Continued)

Country	Protected area	Killed	Injured	Other	Attacker
India	Dudhwa Tiger Reserve	Sesha Giri 5/3/04			Poacher attack
India	Valmiki Tiger Reserve	Harihar Yadav 2/1/05			Murdered
Uganda	Nyamusingiri	Robert Mugabe, 1997-2000			Shot by suspected rebels
India	Palamau Tiger Reserve	Daniel Khalkho and Sitaram Yadav 6/9/04			Naxalite rebels
Uganda	Queen Elizabeth N.P.		One ranger and one driver 15/8/2003		Shot by unknown rebels
Kenya	Private ranch	Samson Ole Sitima 19/4/05	2 other rangers		Killed by a big landowner
Ghana	Kyabobo Nat. Park	Paul Nyame and Ntim Obofor 11 July/05	A ranger shot 11 July/05		Ambushed by 25 poachers
D.R. Congo	Garamba N.P.	Mokilibé Atakuru and Likambo Masikini may 2004			Janjaweel militia
India	Debrigarh Wildlife Sanct.	Bhola Nath Dhal 4/6/05			Murdered

If we are not able to minimize this serious threat, many rangers will lose morale, and that is the first step to losing ground in protected areas. So, what can we do? The IRF believes that the risk to the ranger at work is lessened when staff are well trained, well equipped, supported, and when morale is high.

The conservation community has to recognize that, as stated by Carabias and others (2003), protected areas have not become national priorities either for governments nor society, and there are many problems that must be confronted urgently. I believe that the tourism industry centered in protected areas, which has been reported to have grown in recent years, could be the logical source of funding to back the work of rangers. Moreover, two World Parks Congress (WPC) Recommendations reinforce that idea.

Recommendation 5.08: Private sector funding of protected areas (point b): Develop appropriate legal, administrative and financial instruments which implement new partnership arrangements for the benefit of both the P.A. and its private sector partners.

Recommendation 5.12: Tourism as a vehicle for conservation and support of protected areas (item 1b): Make tangible and equitable financial contributions to conservation and to protected area management.

Jairo Valbuena, Manuel Fonseca, Joe Kolodsky, Safari Sulubika, Kris Eggle, Sixto Atienza, Kambale Binikere.... They did not want to be heroes, they simply enjoyed their jobs, they loved the animals, and had so much to live for and to contribute.

Most rangers are underpaid, and when they are killed or are injured on duty, very often they leave children and widows in a very precarious situation. The IRF asks the private sector working in protected areas to make a donation of 1 percent of their earnings for the purpose of training, providing proper equipment, or making donations to rangers who were seriously injured protecting our resources and are no longer able to work. It has to be seen that investing in ranger insurance is a direct investment in wildlife protection, more directly than most people can believe. This would help all rangers, who would feel supported as never before. How many days would the mountain gorillas last if all rangers would leave their positions? No more gorillas, no more bears, no more sequoias, please think about it and help us.

## Summary

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As natural resources become more scarce, poachers, loggers, anglers and other people tend to extend farther inside protected areas, reaching the most remote areas of wilderness. For that reason, rangers are increasingly confronting armed people inside protected areas who often menace, injure, kidnap or kill them. The problem is big and difficult to investigate. The IRF is very concerned about this fact and has decided to fight it to minimize the risk of being a ranger. It has collected data from 27 countries on all continents, and for the period of time from 1998–2005. The results are: 120 rangers killed, 106 injured, three kidnapped and seven ranger stations vandalized. Rangers have been assassinated on all continents.

The work performed by rangers is essential to maintain biodiversity and natural landscapes. Rangers in many countries are underpaid, lack institutional support, need training and feel forgotten. Rangers that feel supported, receive proper training, are well equipped and better paid are more effective. All governments should provide life insurance to the rangers. We ask the private sector working in tourism in protected areas to make a donation to the IRF to help us improve the ranger's profile in the world.

## Acknowledgments

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My most sincere thanks to the many rangers who sent in data about violence against rangers. They were many, but I need to specifically mention at least Jobogo Mirindi from Virunga National Park, in the Democratic Republic of Congo, who even in a time of armed conflict kept communication with us. Also, Augusto Atturo from Italy, who has been sending accurate information for years.

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