A multitude of measures, including regulatory changes, law enforcement measures and demand reduction campaigns, appear to have done little to stem the tide against organised environmental crimes. However, fewer rhinos were poached in South Africa’s signature national park, the Kruger National Park (KNP), in 2015 and 2016 than in the year before and a steady decline was evident at the time of the interview in June 2017. The KNP is home to the largest number of free roaming rhinos in the world. The park has been in the ‘eye of the storm’, losing close to 4 000 rhinos to poaching between 2006 and 2016. In 2012, the South African National Parks (SANParks) management formed a unit named Special Projects. The function of the project team was to develop and implement mitigation measures to deal with the drastic increase in wildlife crime and, in particular, rhino poaching in the KNP. Major General Johan Jooste (Ret) heads the unit. Critical voices have questioned the efficacy of the anti-poaching strategy, suggesting that park authorities are waging a ‘war on poaching’ with unintended long-term consequences for protected areas management and community relations.1 Scholars have argued that ‘green militarisation’ has led to an arms race between poachers and rangers and, moreover, that ‘green violence’ has led to the deployment of violent instruments and tactics in pursuit of the protection of nature, and ideas and aspirations related to nature conservation.2

In May 2017 Annette Hübschle interviewed Major General Johan Jooste (Ret.) to explore his views on the successes and failures of the South African anti-poaching strategy. The pair also discussed whether claims of ‘green militarisation’ in South Africa’s protected areas were justified.

Annette Hübschle (AH): General, please tell us a little about yourself and what drives you.

General Johan Jooste (JJ): During the later years of my military career, I played a key role in the transformation of the army. Many lessons were learnt. My main contribution to the rhino campaign is strategic thinking, strategy formulation and then the dynamic implementation at all levels, and considering the many facets of the problem. I also helped with the design of the anti-poaching toolbox and ensured that it is sustainable and value adding.

AH: What is the background to the current anti-poaching strategy in South Africa?

JJ: In early 2013, after I had been in office for about two months, we realised that [rhino poaching] was a global, continental and regional problem, and that our role is almost like buying time for other measures further along the supply chain to make an impact.
The things we do as law enforcers always take cognisance of the bigger picture. We must think big. I see community ownership [of conservation initiatives] and beneficiation in the form of business ventures with material gain as key to sustainable management.

Law enforcement in environmental protection requires certain skills and techniques. We had to start small but act with urgency without being reckless or hurying. One example [of an anti-poaching strategy] which we looked at was Mozambique. The Mozambique story is a success story. In 2013–14, 75% of poaching in Kruger came from Mozambique; it’s now under 30%. This is because we engaged with all parties over a long period and kept working at it.

Apart from a professional ranger service with dedicated staff, another factor was the use of technology. We started with night vision goggles and moved onto more applied technologies with a friendly human/machine interface. We came to understand what technology could do for us.

The practice in Africa for the past decade has been to convert ranger corps into anti-poaching units. That’s a bold and profound but unavoidable decision. I wouldn’t like to call law enforcement a band aid but we understand that we will not [end poaching] with law enforcement alone. Such a victory is impossible. Although, it must be noted that our actions save many rhinos.

We wrote up the essence of our current national strategy in the first quarter of 2013 and in it addressed the necessity of biodiversity management and factors beyond law enforcement’s control. We realised that we needed alliances, better information and integration of efforts to be effective.

Our philosophy is ‘think big, start small, act now’. On this we built our strategy to ‘clear the park from the outside’. It’s like the layers of an onion, you start in the countries that consume wildlife products, you work the international networks. You go to local communities, in Mozambique for instance. As law enforcers you are not directly involved, you have to be indirectly involved and make yourself visible and make sure that the green uniform is not only seen to be the aggressor.

AH: Could you explain the role of rangers in the park? Their functions seem to have changed from a conservation to a law enforcement role. How does this affect ranger management?

JJ: This relates to the perimeter of the park, also called ‘fortress conservation’; the so-called ‘war’; and other allegations and assumptions about what we do inside the park. First, when it comes to anti-poaching you look at your rangers, what will the impact be? You then look at your structure, which is para-military – not military, but you must convey certain skills and techniques to all staff, and work as a multi-faceted unit in a structure. You determine how you will cooperate with your airwing, other forces, or intelligence agencies. How do you sustain this? It is expensive. Many people say anti-poaching takes money away from ‘proper’ conservation. But in terms of a value proposition: anti-poaching requires a multi-million rand input to protect a multi-billion dollar asset.

Our ranger training at the SA Wildlife College, as in the private industry, has changed drastically. Apart from their conservation ethic and skills, rangers need to be able to enforce the law through extended static and mobile patrols, and unfortunately making contact with poachers. How do you protect yourself? You adapt your training and your equipment. It starts with carrying ability. You’re no longer driving around, you’re walking. You’re in the bush for up to a week, so you also need camping equipment. Then you’re always
carrying a rifle, night vision goggles, good binoculars, camera traps, and sensors, all to improve rangers’ situational awareness. You add to that the Cmore [real-time situational awareness] technology – and you have rangers conduct operations applying the techniques and drills they were trained in, in a very specific way.\textsuperscript{3}

We have designed and developed this structure and its systems, and we try to write it up as we go. So when the anti-poaching unit recruits rangers, we make sure they understand the line of command and management [we use]. We’ve got money behind this and we train and equip them for the business of protecting rhinos. We also need to ensure we protect our rangers by training them to acquire certain skills, many of which are military skills.

I am often asked how many rangers have been killed by poachers in the past 10 years and the answer is none. Apart from amazing grace, this is a result of discipline and training.

This approach has risks, such as cost and the unintended consequences to conservation. In the past only 10\% of rangers’ work was law enforcement. Currently 10\% is conservation and 90\% law enforcement. This work never ends, day or night. These operations also have a human cost. Poachers also have families. We know that many or most are lured into poaching because they don’t have alternatives, and if you make it once as a poacher, it changes your life. Then maybe you go a second time because the chances of being detected in Kruger remain low, unfortunately.

The second cost is to communities. Communities start living off the proceeds of illegal trade because that is what is there. That creates a small economy, which in a way criminalises part of your community. The community then doubts the ranger uniform, perhaps wondering, “What did you do to my brother who went poaching?” The human cost is severe among rangers and their families. We had to launch concerted and sustained projects to look after the spiritual, social, psychological and physical welfare of rangers.

We manage five main risks. The biggest risk is a ranger down. Rangers can get killed. Once poachers have the horn they are especially aggressive. The second risk is of a ranger being convicted. What if the ranger had to shoot and there is a fatality? The police are called in immediately, a docket is opened and it is referred to the National Prosecuting Authority. So on the first risk – ranger down – all you can do is to discipline and train the rangers. On the second risk, we must have legal support and keep training rangers in the legal rules of engagement. We do that at every meeting, then twice a year we send a legal team through the park where rangers and the legal team role-play the rules of engagement. They drill it into them that you cannot take the law into your hands because it’s not nice to see a fatality, nobody likes that. And, by the way, we don’t support shoot to kill, it will not solve the problem. It will only demean and degrade who and what we are.

The third risk is of a ranger becoming psychologically bankrupt, their thinking and behaviour deviating from the norm. We have a lovely project, ‘Project Embrace’, where we have a psychiatrist who comes to the park to work with the rangers. Then, after every incident or tough time we contract psychologists who provide counselling. We also apply extensive preventive measures with our honorary ranger volunteers, talking through the stress and worries they have.

The fourth risk is of rangers being rejected by and alienated by from communities. You walk into a Shoprite near your home on a Saturday morning and you’re stared at, avoided or insulted. The only thing that we do there is to yet again emphasise rules of engagement, to
make sure nobody can ever point a finger at you and suggest that you’ve abused or taken your authority outside the park. If anything needs doing outside the park, it can only be done by the police. Police must make the arrest.

The last risk is a very strange one: ranger betrayed. We know there is corruption. It’s not a challenge that every ranger faces but it damages good people when they realise that their colleagues have betrayed them. For that we have a specific budget to fight corruption. We have instituted compulsory lie detector testing and continually investigate and act against the corrupt. Sadly last year, we arrested one of our senior people but we owe it to honest rangers to do so.

AH: You said that Kruger is doing lie detector tests with rangers. Can you say a bit more about what you are doing to prevent staff members and rangers from joining poaching gangs or collaborating with them?

JJ: First, we deal with that in our road shows during which we visit all 22 ranger sections in the Kruger National Park. When we engage with our rangers, it’s on a very personal level. We even have a former official from correctional services ask, ‘Do you want to go to jail one day?’ There’s the carrot and then there is the stick. We do integrity testing, including lie detector tests. It took a while to formulate this so that it fits into the framework of labour relations. A ranger gets a personal letter if we detect deceptions, so they know they are the subject of an investigation. We have extra capacity to investigate those cases. It is incumbent upon us to arrest and bring to justice those that are involved in corruption. There are not many but it’s not good for morale. You don’t want an honest ranger to feel betrayed.

AH: You mentioned that 75% of poachers came from Mozambique in 2013–2014. These numbers have changed. Are we seeing geographic displacement, including poachers moving from Kruger to KwaZulu-Natal? Has the composition of poaching groups changed?

JJ: There is a displacement effect, and we are very cognisant of it. We are in constant cooperation with the conservation authority Ezemvelo KZN Wildlife in KwaZulu-Natal. It’s no use asking [management at] Kruger. Yes, Kruger is the eye of the storm. Some of the poachers from our side, the western side, are foreign nationals but not more than an estimated 25%. Most are poachers recruited from the 2 million or more people west of Kruger, who haven’t got a lot of economic options. There are between 5 000 and 10 000 people involved in poaching out of a population of more than 2 million.

AH: Let’s tackle ‘green militarisation’. Several academics and policy researchers have suggested there is a burgeoning arms race between poachers and conservation officials. Are we fighting a ‘war against poachers’? Do you agree that militarisation is happening?

JJ: We are in the business of protecting all fauna, including megafauna, specifically rhino and elephant. The last of these species are in Africa, and the money involved in their protection is staggering. We have no option but to act now.

It is a business of protection. To protect rhino and elephant you need the rangers and if you send rangers, you must protect them. In a way, we feel the accusation of militarisation is a betrayal of the thin green line. We did not ask for it. If militarised poaching ended tomorrow we would just revert back to 10% law enforcement, 90% conservation.

I think ‘green militarisation’ is a loaded phrase. It is a necessary intervention which can be pursued with responsible rules of engagement. I don’t think it’s our preferred method, but I know of no conservation institution in Africa that did not have to go this way. The fact that
Kruger draws a lot of attention has to do with ‘the ex-general’ [me] that came there, although the [paramilitary] training started before my time. I was quoted early in my term, saying we would ‘take it to the poachers’ and we did. In the first four years we arrested over 1 000 poachers and confiscated over 300 weapons. So a lot of rhinos were lost on our watch and a lot were saved.

Green militarisation, I think, despite the one-sided criticism, it’s a reality. If there is any alternative, then one must consider it. You first go to your own forces, your police forces – but police in the bush, it’s not a good fit. The army is conventionally trained. It’s not a good match either. In Africa, these forces have other priorities – crime fighting and peace support operations. So now you’re back to the rangers.

Partial privatisation is not unthinkable but we have not done anything about it. It’s a profound decision: it will be expensive but there are specialist technologies with which you can combat wildlife crime in your park. That will bring about ethical, moral and practical issues that have not been considered yet.

We have also adapted our rhetoric to avoid saying it’s a ‘war on poaching’. We have toned down that rhetoric, it’s not helping public perceptions. One expects academics to read a little more broadly and to consider other utterances that people like me have made over the past four years. We accept that people out there talk about the so-called war and the negative dimensions of green militarisation. We understand that. All we can say is that we intervene as responsibly as we can, and only because we don’t see other options. I would really like somebody to show me one community or demand reduction project that will decrease poaching before 2020. There are many laudable interventions currently being launched but I honestly don’t see how selling beads at the gate is going to make a difference. I just don’t see a project that will create alternatives here, or change behaviour in the Far East, in the next three years.

When you look at the figures you wonder if it might be too late for the rhino of Kruger or for the whole rhino species. We are not fatalistic. The rhinos will not go extinct but one must understand the context. Yes, militarisation is certainly not the preferred option in the bigger scheme of things. But what must we do to make sure that it doesn’t last a day longer than it must? One would like a discourse on that, to say, ‘Let’s make sure that this necessary intervention doesn’t last another 20 or 30 years.’

**AH:** Some have suggested that the privatisation of anti-poaching will ensure that only skilled professionals undertake anti-poaching operations, and that some in the ranger corps may lack the required skill set. There are examples elsewhere in the world, including Iraq and several African countries, where private military companies have been involved in conflicts on behalf of the state. Beyond legal, ethical and moral issues, does this proposal require consideration of human rights?

**JJ:** It smacks of mercenaries. Six months ago we took a firm stance. We, SANParks, the Game Rangers Association and the SA Wildlife College decided not to allow sponsored military people to train our rangers. If you have special skills worthy of sharing with our rangers, you go to the SA Wildlife College, where your skills are toned and changed to suit our curricula. We’ve seen instances elsewhere in Africa, and a few in South Africa, where the trainer means well – they were a staff sergeant or a captain with 10 years in Iraq or Afghanistan, which is fair – but don’t
I fully agree that employing private rangers is an option but one must be very careful. If you do that, for how long? What about your rangers? Where would they fit? How would the command channel work?

**AH:** An article in this special issue of *South African Crime Quarterly* suggests that South Africa should emulate Botswana’s ‘shoot-to-kill’ approach. Our Constitution would not allow such a policy, nor is there data that shows that the ‘shoot-to-kill’ approach has brought down poaching. What is your stance on this?

**JJ:** We have advocated over time for many interventions, like the ability to work closely with the parks in Mozambique, and we always found solutions that were acceptable. South Africans were angry, demanding three things. First, they said ‘drop the fence’ or ‘fence them out’, to which we said ‘No, the fence must be on the other side of their conservation area’. Then there was the issue of ‘hot pursuits’ [of poachers fleeing into the Mozambique side of the park]. We don’t do that. If we do joint cross-border operations and a situation develops where we come closer to your boundary, I hand that operation over to you. It’s impractical, it’s not feasible, it’s not necessary for two South African rangers to penetrate a 100 km into Mozambique. Finally, we get the really emotional people who respond to the barbarity of poaching depicted in a photo, by saying ‘shoot them’. But we as law-abiding citizens have never given consent [to such acts], no matter how angry we were. There is no evidence to suggest that [killing poachers] would solve the problem. We have to enforce the law, we must be clear about that. Similarly, our community projects will not succeed if we don’t prove to our communities that we can maintain the law.

I have never seen [an example] where [killing poachers] helps. It is misleading when one is protecting some rhinos very well to say it’s because of the ‘shoot to kill’ [approach].

**AH:** There have been a lot of rumours about the anti-poaching approach. People claim that poaching statistics are doctored and questions have arisen as to why they are released at infrequent intervals two or three times a year.

**JJ:** The strategy was to release them quarterly, but you know our country is busy. So unfortunately, here and there, they have been late. What we saw four years ago was an emotional response generated by the media. You opened the paper and read about ‘another bad weekend at Kruger’ where somebody said, ‘another 10 killed’, which was true but ignored the fact that the previous week fewer were killed. So we are in favour of a structured, periodic report and think that if there’s a report once a quarter, it provides enough of a context and a picture.

One thing I can confirm is that our stats are our stats. They come from us, and have never been sugar-coated, even in difficult times. Remember it took us three long years to stabilise the rhino poaching rate and now we’re driving it down. What we have achieved is success, not victory – but we will get there.

**AH:** On the topic of stats, are rhino calves and unborn rhino embryos counted in the rhino stats?

**JJ:** We don’t count unborn rhinos but calves are counted. A lovely part of our strategy is...
the biological management. The thinking five years ago was, ‘Guys, let nature take its course, we don’t want rhinos in the zoo.’ But with time we adapted. So we have set aside resources and support and work closely with rhino orphanages. Where we can, we evacuate calves to one of those and we are pleased with the work that they do.

AH: You touched on the importance of communities. In my research I found that communities are crucial for conservation successes and anti-poaching strategies. Right now, a dead, poached rhino is worth more than a live one to people living on the edge of the parks. What is being done to include communities and incentivise local people to become involved with conservation?

JJ: You’re touching the very essence of the challenge: how can it be that this thing is so valuable to one person and means nothing to the next person? The fact that SANParks now has a special division at Kruger, Peoples and Parks, to look at corporate responsibility, has led to some good initiatives. Every time a bus of schoolchildren visit, every time you see meetings with traditional authorities and municipalities, good communication takes place. Recent efforts to compensate people who have land claims, the quick response to human–wildlife conflict, the preference given to communities when it comes to procurement, are some examples. There are also projects funded by [the Department of] Public Works, through which a lot of youths are now trained and brought in for auxiliary tasks. Some of these projects touch on awareness raising, a bit of socio-economic investment where we work on roads and infrastructure, and on microprojects – people selling beads at the gate, for example. But beyond that the business spaces are not big enough to get a funder interested, and that is why many of these community projects have little impact. It’s not that we have not done enough but we are falling behind with real community beneficiation. You know it’s about money, saying to communities, ‘You cannot have any of these, you must not try to compete with rhino money.’

You have to provide alternatives. If you side with me, it’s for the long term and it’s honourable. It must be possible, but then you need business people involved, you’ve got to build that business space, take their hands, you need honest developers and a lead time of at least a year or two until the project is fully-fledged. Personally, that makes me a little bit despondent because I don’t see any of those. I was in our archives the other day and I saw that the same thing was said about 20 years ago, but did not lead to anything.

AH: There are limits to what conservation authorities can do to uplift communities. Maybe this speaks to the bigger picture of the lack of service delivery to communities in rural South Africa. Especially in the south-western parts around Kruger, where you don’t even have small communities, there are peri-urban neighbourhoods with several hundred thousand residents. The frequent service delivery protests are an indication that the socio-economic conditions of people living around Kruger are dismal and that people are angry.

JJ: When I drew our plan up for 2020, I put up this macro-plan and I couldn’t find any indication that any of those community interventions have made an impact on rhino poaching. I know that’s a profound statement and it’s a personal statement, but dammit, where are we going? Why is it like this? As for law enforcement, we all wish that rhino poachers were gone so that we don’t have to live like we live. I was in Kruger yesterday; we’re asking impossible things of people. The stress and the emotional strain that this
so-called war causes are not things we should extend one day more than is necessary.

Notes

1 See, for example, Department of Environmental Affairs, Minister Edna Molewa highlights progress in the war against poaching, Media Release, 22 January 2015, https://www.environment.gov.za/mediarelease/molewa_waragainstpoaching2015 (accessed 12 June 2017).


3 Developed by the South African Council for Scientific and Industrial Research, Cmore is an integrative collaborative distributed awareness system that provides a platform for collaboration between agencies in interdepartmental and multinational scenarios.