How Uganda's Rural Communities Can Help Fight Wildlife Crime

In Wildlife Tags Michael Schwartz, Voices for Wildlife December 9, 2016 2 Comments

Michael Schwartz

Between its largest protected area, Murchison Falls National Park, and its most visited wildlife haven, Queen Elizabeth National Park, Uganda ranks as one the most biologically diverse countries on the African continent.

But despite being a paragon of conservation success, the Pearl of Africa's highly volatile parks remain susceptible to wildlife poaching, particularly in places where animals and rural communities meet.

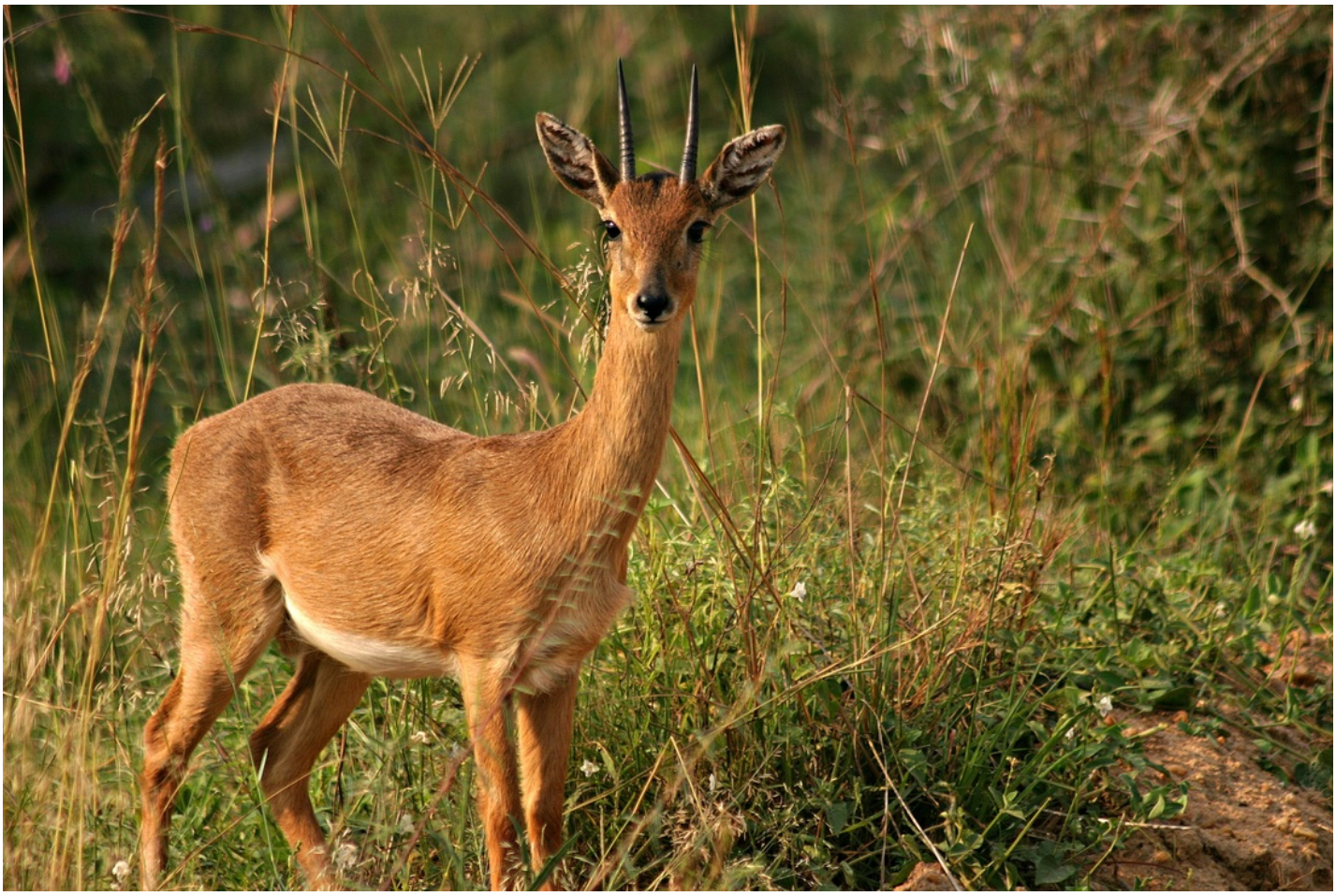
Part of the ongoing problem is the disconnect between wildlife authorities and the rural poor, most of whom consist of farming or pastoral communities.

Due in large part to distrust of authorities and insufficient revenue, poor communities sometimes resort to poaching, either commercially or for subsistence, not to mention poisoning livestock-stealing lions and crop-raiding elephants.

To learn more about what is arguably the greatest challenge to ending wildlife crime in Africa, I interviewed Dr. Henry Travers of the Interdisciplinary Centre for Conservation Science at the University of Oxford's Zoology Department.

Through funding from the UK government's Illegal Wildlife Trade Challenge Fund, and in collaboration with the International Institute for Environment and Development, the Wildlife Conservation Society, and the Uganda Wildlife Authority (UWA), Dr. Travers is working on a project called *Building Capacity for Pro-Poor Responses to Wildlife Crime in Uganda*.

He helped address some of these concerns, while highlighting ways in which wildlife authorities and rural communities in Uganda can come together to combat wildlife crime effectively.



THE ORIBI, THOUGH FAIRLY NUMEROUS, ARE SOMETIMES POACHED FOR BUSHMEAT. A SEVERE DECLINE WOULD NEGATIVELY IMPACT PREDATOR SPECIES SUCH AS LEOPARDS AND LIONS. PHOTO BY MICHAEL SCHWARTZ.

What was your motivation for this project?

HT: Over the last few years, there has been increasing international attention given to developing policies to combat wildlife crime, largely as a response to the recent surge in poaching of high-profile species like rhinos and elephants.

But these efforts have predominantly focused on increased protection through activities such as ranger patrols, while paying limited attention to alternative approaches that aim to engage local communities to stem the supply of illegal wildlife products.

And although law enforcement is clearly an important component of any effort to combat wildlife crime, such activities can have a disproportionate impact on poorer households, who may have few viable alternatives to support themselves.

Our motivation in conducting this project was to go back to first principles and help the Ugandan government develop more informed policies to combat wildlife crime based on a clearer understanding of the local drivers and likely impacts of possible interventions.

What is your overall impression of wildlife conservation effectiveness in Uganda and their mission to prevent wildlife crime?

HT: In many ways, the challenge in Uganda is slightly different from some other countries in the region as it hasn't come under the sustained pressure from organized poaching that countries like Tanzania and South Africa have experienced.

But many of Uganda's national parks, such as Queen Elizabeth National Park, are in densely populated areas, which creates its own set of challenges.

If you look at our two study sites, Queen Elizabeth and Murchison Falls National Parks, our findings show that 42 percent of households living around the boundary of these two parks hunted illegally at least once in the year leading up to our survey.

That certainly suggests that more can be done to address wildlife crime but it also points to the scale of the challenge facing UWA.

What was your methodology in carrying out this study, and what do you hope to achieve with it?

HT: We wanted to get a clear understanding of the current state of wildlife crime and conservation practice in our two study sites, and then to build on that to investigate potential intervention options that have been identified to help combat wildlife crime in Uganda.

The issue you face when investigating sensitive behaviors, such as wildlife crime, is that people are often understandably reluctant to admit their involvement.

We overcame that issue by applying an indirect questioning approach called the unmatched count technique that allowed us to produce an estimate for the proportion of households involved in different wildlife crimes without individual respondents specifically disclosing whether or not they were personally involved.

This type of approach has been shown to produce much more robust estimates than direct questioning, and is increasingly being used by conservation scientists to investigate sensitive behaviors.

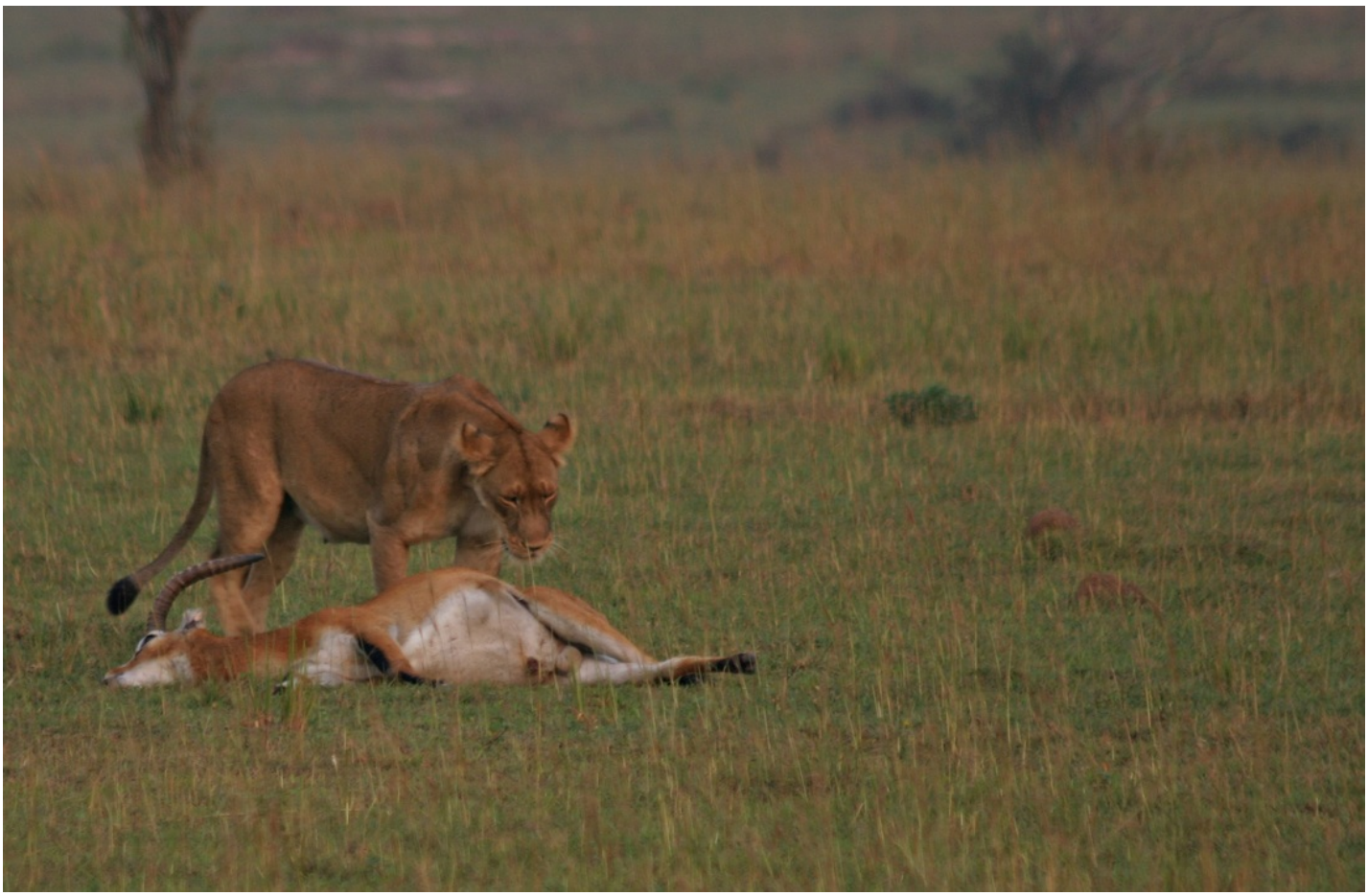
Coupling the data we got from the unmatched count technique with basic household information also allowed us to investigate how the prevalence of different wildlife crimes varied spatially around the two parks and what household characteristics were most associated with involvement in different crimes.

Finally, we backed that up with more informal interviews with various key informants, including around 50 people known to be involved in wildlife crime.

To investigate the likely impact of different interventions, we used a combination of approaches, drawing on behavioral economics.

This allowed us to apply multiple performance measures to each intervention, which is particularly important when making predictions as it enables you to triangulate the results of the different approaches and gives you greater confidence in the outcome.

Hunting is done for commercial bushmeat, subsistence, or traditional needs. Which would you say poses the greatest threat to Uganda's biodiversity, and is there any way to partner the cultural and subsistence aspects with conservation considering the growing call to end all forms of hunting?



A LIONESS KILLS A UGANDAN KOB IN MURCHISON FALLS NATIONAL PARK. LIONS NEED A STABLE PREY BASE TO SURVIVE. PHOTO BY MICHAEL SCHWARTZ.

HT: Our results certainly point to commercial bushmeat hunting being the greatest threat, at least for those species affected. The majority of hunters we spoke to primarily choose to hunt to raise cash, with the meat that they keep for their family largely seen as an added perk.

It's often difficult to differentiate between what constitutes commercial hunting and subsistence hunting though.

For instance, although some of our respondents earned considerably more than average and would be considered commercial hunters, many hunters use the money they earn to meet basic needs, such as schooling and medical care, that they would struggle to meet through other means.

So, although they are contributing to the commercial bushmeat market, they are largely driven to hunt by subsistence needs.

On the flip-side of this, I think that it is also important to recognize that even subsistence hunting can have a significant impact on vulnerable species.

Most people hunt by using snares or wheel-traps (similar to bear traps), which are indiscriminate and hugely wasteful if not checked regularly.

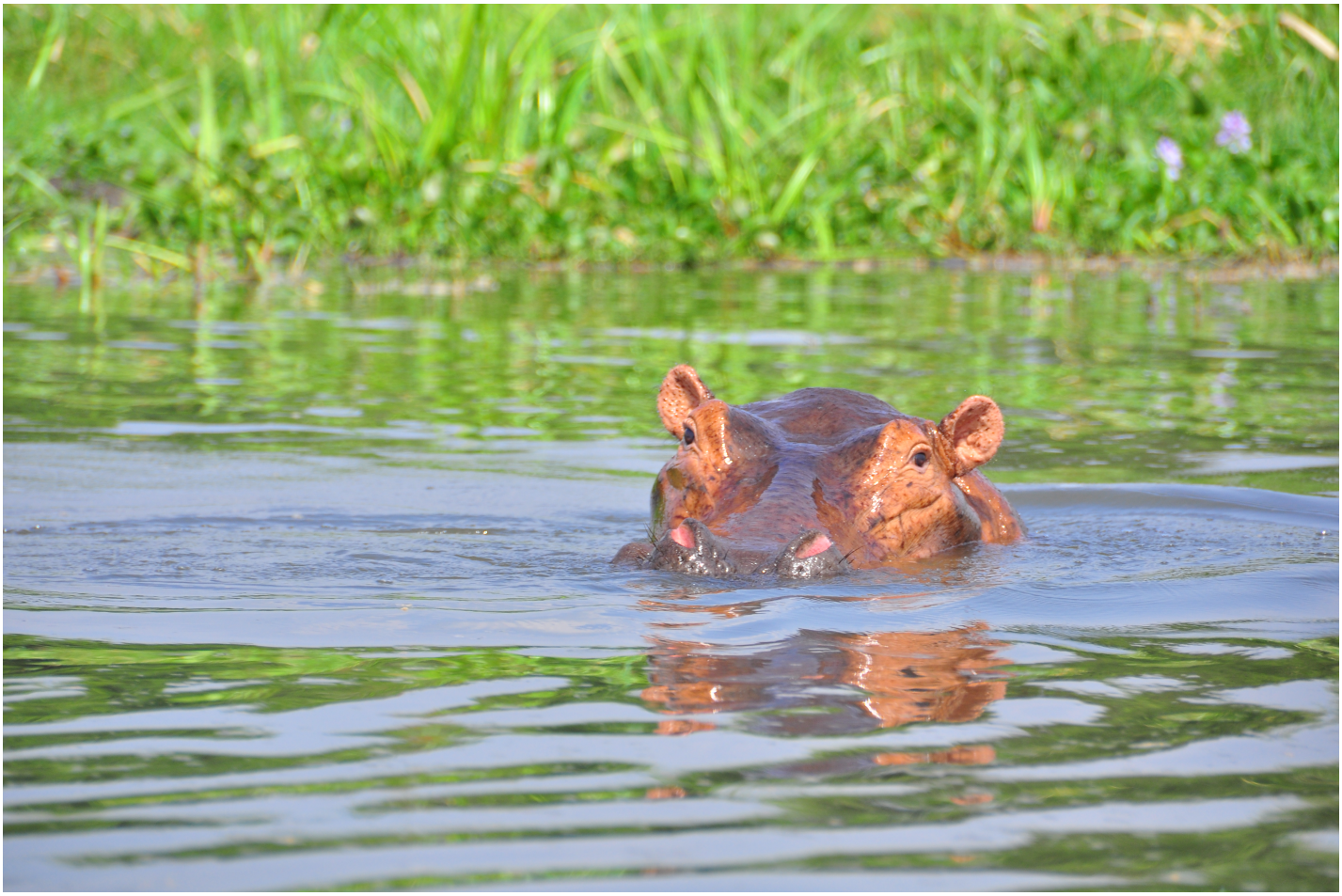
Similarly, most hunters are opportunists and so, even if they enter the parks to meet their basic needs, they will take opportunities to catch more valuable species, such as elephants or pangolins, if the opportunity presents itself.

It is also very difficult to gauge the overall effect that culture plays in driving wildlife crime. Certainly, a number of products that hunters sell, ranging from big cat skins to porcupine spines, have cultural significance or are used in traditional practices, but the animals that provide these products are rarely encountered and so don't tend to feature in people's decision to go hunting.

You often hear the argument that people hunt because the act in itself holds cultural significance but again, of the people we interviewed, most were quick to dispel this idea.

I have no doubt that some people do choose to hunt for cultural reasons but, on balance, I would say that the threat this represents is minimal in comparison to commercial drivers.

I think you have to be very careful in setting goals such as ending all hunting without considering the impact that will have on local communities.



ICCS RESEARCH SUGGESTS THAT HIPPOS ARE LIKELY THE SPECIES MOST COMMONLY TARGETED DELIBERATELY, AS THERE IS A STRONG LOCAL PREFERENCE FOR THE MEAT AND THE TEETH CAN BE SOLD TO TRADERS. PHOTO BY TIZIANA ZOCCHEDDU.

While we know that a lot of bushmeat is sold locally, a good proportion is traded nationally and I certainly wouldn't be surprised if wildlife crime contributes more to the local economy in many areas than tourism or even farming. That income would leave a big hole if measures were introduced to eliminate hunting without some thought given to viable alternatives.

There are certainly successful examples from other African countries that integrate elements of subsistence and cultural hunting where conservation programs have sought to devolve management or ownership rights to wildlife but it is challenging getting such projects to work well.

You found that the rate poachers will encounter rangers is around five percent, the arrest rate is between 0.1 and 0.2 percent, convictions are roughly three months of prison and a small fine, and most poachers, despite being slightly intimidated by wildlife authorities, aren't worried about getting caught.

Given these findings, isn't it logical to say that there is a severe lack of trust between rural communities and game rangers, and little incentive not to poach?

HT: In general, the relationship between local communities and rangers isn't great, with a lack of trust on both sides, and this was one of the drivers of wildlife crime that we identified in our research.

The work that we've been doing with UWA to put some of the recommendations that have come out of the research into practice for bridging the gap between local communities and UWA staff is one of the central guiding principles.

That won't always be easy, and will require a shift towards a greater balance between law enforcement and community conservation activities. In the long run, though, our research findings suggest that this will make UWA's efforts to reduce wildlife crime more effective.

As the numbers you've quoted suggest, the current success rate of patrolling is not really sufficient to deter people from wildlife offences, at least among the people who already hunt.

There's a number of different factors at play there, not least the size of the reserves that patrol teams must cover, a certain amount of collusion between hunters and rangers, and the tactics that hunters use to avoid detection.

That doesn't mean that some people aren't deterred by patrolling, and it should also be said that patrols can be made to be more effective. For instance, a recent study from Queen Elizabeth National Park found that the detection of illegal activities could be increased by up to 250 percent just by altering patrol patterns.

My concern is that law enforcement activities currently take up a significant proportion of conservation budgets in Uganda, which leaves other activities under-resourced.

There is clearly frustration toward lack of responses to human-wildlife conflict, while those who've been relied on to report wildlife crimes feel let down by the system. How might one go about fixing this?

HT: I think there are two main things you can do: reduce the costs people experience from living close to wildlife and increase the benefits.

Both of those things require a strong working relationship between wildlife authorities and local communities, which can only be gained by long term commitment.

> LIONS IN QUEEN ELIZABETH NATIONAL PARK SOMETIMES STEAL LIVESTOCK FROM NEIGHBORING HUMAN SETTLEMENTS. PHOTO BY MICHAEL SCHWARTZ.

One of the recurring sentiments we encountered in our research was that promises have been made to local communities but not delivered on, which only goes to foster further resentment.

Committing to working with communities long-term and delivering benefits are therefore essential steps towards building stronger relationships. That doesn't mean that there won't continue to be areas of conflict, but it will put both parties in a stronger position to be able to resolve those conflicts as they arise.

When you talk about reducing human-wildlife conflict, what might an effective framework look like?

HT: One of the challenges in addressing human-wildlife conflict is that the nature of the conflict varies from place to place depending on the species involved, which means that a single solution won't be effective.

As such, it will be important to develop solutions that are adapted to local needs. It is also important to ensure that whatever measures are employed, incentives are in place to ensure that those measures are properly maintained.

For instance, UWA has dug a number of trenches to prevent elephants from accessing local farms. These are expensive to dig but also require maintenance to keep them clear of vegetation and ensure that the walls don't collapse.

In the past, UWA has viewed this maintenance as the responsibility of local communities, leaving a classic public goods dilemma in which there is a temptation for individual households to free-ride and leave the maintenance to others.

The result is that some of these trenches have fallen into disrepair and no longer act as effective barriers. However, there are a number of alternative approaches, for example placing bee hives around park boundaries or transitioning to non-palatable cash-crops, that can serve a dual purpose of providing alternative sources of income and mitigating crop raiding.

Again, it is important to work with communities to develop solutions that are locally appropriate and ensure that they have sufficient support and training to be able to implement those solutions.

How might agri-environmental programs and wildlife friendly enterprises reduce wildlife crime?

HT: In many of the communities adjacent to national parks, there are opportunities for wildlife friendly enterprises that aren't currently being exploited.

For instance, with the correct training, communities can supply fruits and vegetables to tourist lodges, which often currently stock their kitchens with goods transported from Kampala. This is a prime example of ways in which individual households can benefit directly from conservation.

Provided such schemes can provide tangible benefits to participating households, many people will be willing to forego the income they gain through wildlife crime to focus on legal livelihood activities.

Over time, as enterprises grow and community acceptance increases, compliance structures can be developed to ensure that these enterprises substitute for wildlife crimes rather than simply becoming additional sources of income.

Our research also suggests that people benefiting from such schemes are more likely to provide wildlife authorities with information about illegal activities, which is particularly important in tackling the trade in high value wildlife products such as ivory.

A JUVENILE ELEPHANT IN MURCHISON FALLS NATIONAL PARK WITH PART OF HIS TRUNK MISSING, LIKELY DUE TO A POACHER'S SNARE. PHOTO BY MICHAEL SCHWARTZ.

What is an eco-guard, and how might that help people and wildlife living near Uganda's national parks?

HT: The term eco-guard can be slightly confusing because it is taken to mean different things in different places.

In Uganda, the closest existing parallels are called wildlife scouts. These are members of local communities who are given training and some support for responding to incidences of human-wildlife conflict.

Although UWA staff do respond to incidents of human-wildlife conflict, often these are not reported or staff arrive too late or, in many cases, not at all.

Wildlife scouts therefore represent the first line of defense against crop raiding. They can also act to bridge the gap between communities and wildlife authorities.

For example, while the loss of a few plants can be a significant event for an individual household and cumulatively can have a big impact for a community, such losses can end up being trivialized by wildlife managers with bigger concerns.

By responding to incidents of crop-raiding and recording the damage, wildlife scouts can help to measure the extent of losses and provide reassurance that the issue is being taken seriously. Unfortunately, the current Wildlife Act doesn't allow for compensation to cover losses, but even an improved understanding of the scale of the problem can help UWA to develop and prioritize solutions.

You discovered that the biggest response for key informants was steady jobs. Aside from small-scale enterprises, what would you see as most effective for conservation in terms of local employment?

HT: This is a major challenge and one that is bigger than conservation in Uganda. The issue here is that the seasonal labor demands of many households' livelihood strategies leave periods of the year when they are either not earning money or have few ways of occupying their time.

As such, many turn to hunting as a way of supplementing their income and having something to do. People see steady employment as a way of countering this, even if the income generated isn't as much as they can earn from hunting.

In this regard, I would like to see greater cooperation between government departments, development partners, and NGOs to prioritize job creation in areas close to national parks.

In many of these areas, wildlife crime is a major contributor to the local economy and there needs to be something to replace that if people are going to support conservation.

What is your outlook on the future of wildlife conservation in Uganda?

HT: The future of wildlife conservation will be challenging the world over and Uganda is no different in that regard.

A BULL ELEPHANT MARCHES TOWARD THE SUNSET IN MURCHISON FALLS NATIONAL PARK. PHOTO BY MICHAEL SCHWARTZ.

Having said that, I think there are a number of reasons to be optimistic for the future of Uganda's wildlife.

At the recent CITES Conference of the Parties in Johannesburg, the Ugandan government committed to providing greater support for community conservation, including more community rangers, more training for rangers in community engagement, and increased community conservation budgets.

Similarly, we have been building on our research to work with UWA at park level to develop action plans to tackle wildlife crime that put a greater emphasis on community conservation approaches to address the underlying drivers of wildlife crime.

Our hope is that the implementation of these plans will help to conserve wildlife, and that the approach can be rolled out to other parks.

Finally, despite the current pressure from illegal hunting, the latest population estimates from Murchison Falls National Park show that wildlife numbers are recovering there, which is very heartening to see.

MEET THE AUTHOR

Michael Schwartz is a journalist and African wildlife conservation researcher. With field experience around the continent since 2005, his passion for Africa's wildlife is matched by his compassion for the people who live there. A significant portion of his field work is carried out in Uganda, where he studies lion and elephant conservation. You can visit his website at http://www.michaelwschwartz.com.

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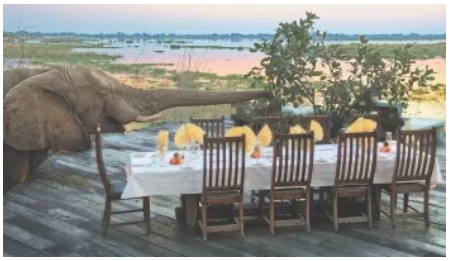

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Murungi Paul • a year ago

This is a first step to fighting human-wildlife conflict. Poaching is a big problem but it is also a contribution to the local economy as most communities living near game parks are poverty stricken as a result of wild animals like elephants destroying their crops.
This has forced most of them to engage in poaching for survival.

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Jyothi Mohan • a year ago

Sir,
I think it will be a wonderful planning to protect wild animals as well as the farmers and their crops.

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