

**Grizzly Times Podcast**  
**Episode 50**  
**Tom Mazzarisi**  
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**Louisa:** This is Louisa Willcox with Grizzly Times, and I'm thrilled to talk today to Tom Mazzarisi who's been a bear ranger for over 15 years -- first in Yellowstone and now in Glacier Park. Tom has had intimate experiences with grizzly bears and wolves and wolverines and other northern Rockies wildlife -- and he's also been in the company of leopards and lions and elephants and wild dogs and more in African parks where Tom and his wife lead naturalist safaris.

Today we'll have a chance to dive into these experiences and Tom's reflection on management of two very different landscapes with large charismatic wildlife. And I should say too that Tom is not wearing his park hat today but is rather speaking for himself. So Tom, welcome.

**Tom:** Hi. thanks Louisa. It's a pleasure to be here.

**L:** So let's start from the beginning. You grew up in New Jersey but got interested in grizzly bears at a very young age with your seventh grade science project focused on grizzlies. So what was it that drew you at such a young age to the grizzly bear?

**T:** I'm sure it was a picture that I saw -- whether it was at my grandfather's house, in an outdoor magazine or maybe a picture in a book in the library. But obviously it was a long time before I actually set my eyes on a grizzly bear. But there was just something -- even just looking at a picture of it. It's appearance -- there's a powerful wild mysterious air about the animal just looking into a picture of it. And then looking into its eye -- I found a picture of a true wild grizzly bear, and there was just something, you could see a sense of intelligence and wildness in its eyes. There's just something about the bear that just kind of struck a chord deep down somewhere deep in my soul.

And growing up east of the Mississippi in New Jersey, that wildness just doesn't exist anymore. So there's also a little bit of yearning for something. There was just something out there that I wasn't experiencing in New Jersey. It's just tough to put into words. People who fall in love with grizzly bears can relate to this. But there's just something about the grizzly bear -- even looking at a picture of it was just awe inspiring.

**L:** You got a chance to see your first grizzly on a summer trip with your family. What was that like for you and how did that experience influence your life trajectory?

**T:** It was our second trip to Yellowstone. We did the family RV trip through the Rockies. The first year we were out in Yellowstone we didn't see bears, and I remember being really disappointed. But on the second trip, I remember we were heading south of Mud Volcano and there were two pullouts on the riverside. And I remember there was a little bit of traffic. And then there was a ranger parked at one of the pullouts, and we pulled into one. And the ranger

pointed out that there were bears across the river. And there was a sow with two cubs, cubs of the year. And that was our first grizzlies.

And I remember one of the cubs had an obvious injury where it wasn't using its back legs very well -- probably a result of a male bear -- boar -- grizzly bear trying to kill it. But it was keeping up pretty well with its sibling and its mom. And it was a dream come true to see a grizzly bear in the wild. It was pretty fascinating.

From there I kind of knew that I was going to end up in Yellowstone someday working. My passion was to try to get into research but obviously my direction went towards the protection line of work, working as a ranger and working to protect bears. But it was a pretty awesome experience I'll never forget it.

**L:** Well, your early dream came true of becoming a ranger and getting into Yellowstone and getting into grizzly bear work. And you've been able to see so many bears up close and personal. And one in particular I wanted to ask you about was Scarface, a very famous Yellowstone bear. It sounds like you saw him right after his injury presumably from another bear. So, what kind of bear was he -- and what was it like too to manage the huge throngs of people that he attracted along the roadsides of Yellowstone?

**T:** The first time I saw Scarface was probably soon after he received that wound to the side of his face. There was a bear jam going up the road towards Dunraven Pass from Canyon, and we were chasing people away from him and back into their car. But I just remember the glance he gave me. It's tough to explain -- it wasn't aggressive, but it was just so intense. And at the same time, he had just a genuine tolerance of people, being in such close proximity to people. But he had an air about him -- that you didn't want to cross a certain threshold with him just out of respect for him. It was not like he was going to do something wrong.

He was a great bear. I saw him quite a bit. I wouldn't say he was a celebrity bear like 399. And he always seemed to find good places to show up where at least there were places for people to park and watch him.

But there was one time I remember I was with two other seasonal rangers, and we were going on the Howard Eaton trail. And that trail starts at Canyon and heads south and actually connects you to Fishing Bridge. And wolves that year had a den and rendezvous site back there. And I closed it because we just didn't want people sneaking back in there and disturbing them. So the rangers and I were doing a patrol to make sure nobody was back in there.

And I remember seeing such fresh grizzly tracks -- and they were huge grizzly tracks. And then I told people: "we're probably going to run into a bear pretty soon." And sure enough, about 100 yards away there was Scarface. And I knew where he was going, so we backed out of there. And I called another ranger on the road and I'm like: "hey just head to the north end of the Hayden Valley by the Mary Mountain trail. He's probably going to come out somewhere near there and cross the river." And that's exactly what he did.

But one of the greatest memories I had of him, I was responding to a report of a grizzly bear somewhere along the north rim of the Grand Canyon of Yellowstone. And I thought: "Wow that's not really great place for a bear to be with this many people."

So I remember driving down the wrong way of the one-way road, because it was all just one way, and I'm looking for him. And all the sudden I see him and he's just cruising right down the paved pathway. And I'm following him. And you don't want to try to haze or scare him at that point because you don't know where he's going to go, and there's still people around that still haven't seen him.

I remember he walked right behind somebody that was looking down the canyon -- and the person had no idea that there's this 400-to-500-pound grizzly bear about 20 feet behind him.

And then he started to drop down towards the trail that takes you to the brink of the Lower Falls. And then it was kind of a little bit of a human rodeo getting people out of the way. But he moved out of the way eventually and headed out towards the road. And we made sure he was able to get across the road safely.

But he'd been through a lot of battles from not just that big scar on his face, but obviously from years of being a big dominant bear. And the way he ended his life was unfortunate - and I'm sure that'd be another segue to probably another question. But Scarface was another example of a bear that was tolerant of us. As long we can show tolerance of them, they can make a life, a safe life on the fringes of humanity -- if we're willing to take the time to let it happen.

**L:** What you're describing with Scarface is your approach to that situation, and I assume that of other people in Yellowstone: an attitude of forbearance. He was around people trying to mind his own business, do his own thing, and you were not hazing him with rubber bullets or trying to scare him. That was a choice on the part of yourself but also the Park -- that they decided that they weren't going to deliberately frighten these bears that were by the roads.

**T:** We didn't want them hanging out inside developed areas. Every now and then I think we used probably like a cracker round just to get him moving out of an area, but Yellowstone has pretty good hands-off approach. I think in all the years I was there, I don't remember even using a rubber bullet. And I don't even remember us even having them available. And even if a cracker was used it was used in a pretty rare case.

But that's the philosophy I grew up in was the Yellowstone philosophy. And obviously we wouldn't want bears hanging so close to the road where they put themselves in immediate danger, but it wasn't necessarily a line drawn in the sand. If there were bears being bears and using natural food sources, we did our best to manage people and keep people away and allow the bear to do bear things. I mean we don't have to be there. The bear does.

And clover's a wonderful food source, but unfortunately that grows quite a bit along the roads and the shoulder. So it could be a challenge.

But I just remember one time -- he probably suffered another injury and he was limping -- he was just on the edge of our housing area. And he was starting to move into the housing area. But I was like: "Well you know he's injured. I'm just going to keep an eye on him, and I'll just escort him through if he needs to move through the housing area."

But he had his route. He knew where to go and where he couldn't go. But he was a fun bear, big boy.

**L:** Well maybe jumping forward to his unfortunate demise outside of Yellowstone's northern boundary where Scarface was killed in 2017. And it was right before the government had made the decision to remove endangered species act protections for Yellowstone grizzlies. And some have suggested that Scarface's death serves as kind of a cautionary tale about what would happen to other lesser known park bears after delisting. Maybe you could talk a little bit about your view of this.

**T:** I think it's still pretty murky, the details around exactly what caused that hunter to shoot Scarface -- I think his official number was 210, so he was definitely a bear collared and tagged early in the Park Service. But I have no doubt that somebody probably shot him that was just scared. I'm sure that bear was just probably just walking and freaked out and shot in "self-defense." And regardless of the Endangered Species Act protection, I think there's this the whole self-defense argument. Essentially during the elk season, hunting season in the fall, it is a grizzly season, because a lot of bears are being shot in self-defense. And I'm sure every now and then there's legitimate self-defense. And it's unfortunate. But with as many bears being shot in self-defense, I think that people are just being a little bit too quick to the trigger.

I think with some of the activities that take place out there, people are putting themselves in bad positions. I mean sneaking around in the woods is one thing. But making a kill towards the end of the day, knowing you have to go back the next day to get it. Leaving the carcass and gut piles out there, you're just asking for it. And I bet you that most of these instances are probably just bluff charges -- and the bear was probably not even as close as they're saying.

But it's just the irrational fear that leads to an itchy trigger finger. But as far as the Endangered Species Act itself, boy it's done a lot of good for bears, but I think there's some flaws in it that I'd love to see changed. Just setting recovery at a minimum number of bears to maintain recovery, I just think that opens you up to problems.

As we're seeing with wolves now, there's no science, there's no reason for the rate that wolves are being killed outside national parks right now in the West. There's no reason for the level of killing that's going on. And what makes you think that's going to be any different with bears? There's this lack of trust I think with state agencies and how they've managed predators.

I mean there's a whole lot of ways I can go with this, but it's as far as hunting and the Endangered Species Act, what they proposed last time when they were proposing hunting, they were going to auction off a quota at about 20 bears. But that's regardless of whether you had 60 bears killed up to that point -- whether it's in self-defense, management actions, poachings. How do you justify killing more bears when you've essentially already exceeded a quota and there hasn't even been an official hunting season?

I hate the argument: "well, hunters pay for conservation." "Well that's the system you set up." Give us a different system. It's just really an unfair system, and I think they haven't come up with any ideas or ways to try to raise money from non-consumptive users of wildlife. It's just kind of sad, I think.

I'm not anti-hunting. Trophy hunting, it's tough to stomach because a lot of people are just going out for a trophy. To me I think they're not interested in the meat or anything else, they just want the head or the hide. If they have to pack the meat out, they'll pack the meat out, but. Especially in the lower 48, just growing up in a time where you get to enjoy a population of animals that weren't at least sport hunted. And there's a philosophical dilemma with that. But there's just something about enjoying a population of animals that aren't subjected to somebody just wanting to shoot them because they want a rug.

**L:** Tom, let's turn to the topic of poaching. Around Yellowstone, the number of bear deaths being investigated for possible poaching has skyrocketed over the last decade. And deeply troubling incidents are coming to light. In one, hunters in WY shot into a group of grizzlies that had been drawn to the carcass of an elk one of them had killed and left, and they gunned down one of the bears -- this after the hunters had watched the bears they had baited from a safe distance for a long time. A recent story involves a mother grizzly with young cubs that was found riddled with bullets in eastern Idaho. What is your take on why this malicious killing is occurring and what can be done about it?

**T:** Well, what you're talking about are just those people that are just kind of anti-government. They equate predators to the government. Those are the type of people that are going to look at the Endangered Species Act like it's an attack on rural America, an attack on people trying to make their living that are tied to the land -- which it's not.

And then I think the other thing too as far as the poaching, is just the fear aspect, and that self-defense argument -- but you don't need to shoot it. But it is so tough to disprove self-defense. I mean essentially you either have to have a witness, video evidence, or just evidence of a bear literally got shot in the butt.

So in 2009 the credit card act gave us guns back in the park. It's kind of an interesting, from the fear/self-defense standpoint. Inside our busy parks it's just amazing we haven't had more incidents. And I attribute that to the wildlife more than the people. But there's just such a gross ignorance that people have. And when you talk to people in the backcountry, they're almost

surprised: “Oh you mean there’s bears on this trail?” “Yes, you’re in Glacier National Park or you’re in Yellowstone National Park, you’re in Grand Teton National Park. Your chances of potentially seeing a bear are actually pretty good. What have you done to educate yourself to temper those fears?”

And then you get someone who shoots something in self-defense. And then maybe they decide and shovel it up because they’re worried about getting...who knows. I think that’s another aspect of poaching, another motivation for poaching.

**L:** What can be done about it? It seems like with Glacier and Yellowstone, you’ve got huge educational efforts underway to educate the public about how you behave around these large carnivores and avoid conflicts and the like. And that is only getting you so far, as you said. So what do you do about the poaching that is actually hampering grizzly bear recovery right now?

**T:** The sad thing is I don’t think anyone really knows the level of poaching that’s out there. The personnel’s not there, the funding’s not there. I think really to try to even get a handle on it, the agencies, whether it’s the Park Service, the Forest Service, state agencies, Fish and Wildlife Service -- I mean there’s people out there that feel very strongly about poaching. And they are out there and want to do the right thing but boy they can only do so much. I mean when you have one Forest Service ranger assigned to hundreds of thousands of acres, there’s a lot somebody can get away with, I think.

There has to be -- number one, we should try to determine the extent of what poaching there is. But at the same time I think some of the best things you can do is preventative instead of trying to sit and wait and catch. I think part of the preventative aspect is having more of a presence. You’ve got to build up a relationship with the communities, even the people you don’t agree with. Because ultimately the people you catch, the shoot shovel and shut up thing just doesn’t work. Because the shut up thing doesn’t work for a lot of folks. There’s going to be bragging somewhere. Someone’s going to tell somebody what they did.

And also you have to create a community policing type thing, and be able to work with different people from different walks of life and different views on wildlife. But ultimately if you get people working together on the ground from the ground up, I think that’s really that’s the best way to get anything done really.

You can’t wait for something to happen from the top down -- it’s never going to happen. It definitely has to work from the bottom up. And that’s working with people who are out there in the woods hunting for the right reasons -- true hunters, true sportsman that are out there in the woods, because they’re the ones that are going to be seeing a lot of things.

And whether law enforcement, or whatever agency it is trying to get out there too has to at least have a presence, and show they have a presence, and maybe prevent some things from happening. But it’s tough.

I mean you look around the world at the extent that animals are disappearing, ultimately it's habitat loss. Habitat really is the big key. And you can see what's happened with, still happens around the world with the illegal wildlife trade. And with the weapons and the killing instruments we have today as opposed to 200 years ago. Heck, we wiped out almost 50 million bison and 50,000 grizzlies with pretty basic rifles compared to what's available today. It's scary I think. No one really truly knows the level of poaching that is probably out there.

**L:** I think it's much more serious than we believe. Just the cases that are getting prosecuted are pretty appalling -- and there are many other cases that are not.

**T:** That's the big key there. The prosecution and the appetite for prosecution and then the outcome of the punishment. Ultimately it is the appetite by the states to prosecute. It's not going to help if they're just going to give people a slap on the wrist for poaching a female grizzly bear. That's a huge aspect of it.

**L:** Well maybe on a more positive note, you had this amazing experience after picking up a little teddy bear that was melting out of a snow bank. Maybe you could share the story of how you helped reunite that teddy bear with its owner.

**T:** Actually I was off that day, so I wasn't working the day it was reunited. But what led to it was this: a few days before the bear was reunited with the family, I was monitoring a grizzly bear and a yearling cub and another big male grizzly bear that were creating a little traffic in this area called the Pecan Pass trailhead. And all the sudden the big boar came down to the trail and then decided to go up the trail. So I moved some people away. But then he started walking up the trail. And it was towards the end of the day when you're going to have people coming off the trail.

And I followed this big boar -- he was probably 100 feet in front of me, but I was trying to keep him in view and keep an eye for people coming down. I mean you can't haze a bear in that instance, because if you haze he's going to start running down the trail towards who knows what.

And every time I'd see someone coming down I'd be like: "Hey it's ok, bear's walking on the trail, just move off and he'll move by you." So I did that for a while to get that bear to safety. And then all the sudden a sow and the cub were coming up the trail, and then I had a group of 6 people going down. So we moved off the trail, and had a pretty fun viewing opportunity with her until she was able to move past us.

And then I found out from people that were hiking that there were also other bear sightings further up the trail. So what I ended up doing is closing that trail, just because of the amount of bear activity.

And so on my days off there were rangers on the trail patrolling it to see if the bear activity was still high -- or if not they would open it. But the vehicle that kept the teddy bear in it -- one of

the other rangers was using it that day. And she parked it at the trailhead. And then it was friends of the family that pulled by that trailhead -- I think they were planning to hike. But then they saw the teddy bear on the dash of my patrol car. And the rangers that were working that day did a lot of work to get that bear out of the vehicle and back to the family.

So I found the teddy bear while removing some bear closure signs. And then that bear was found again by the family because of a bear closure sign. So it was a kind of serendipitous in a way. But was really a fun little story.

**L:** So who was its owner?

**T:** Her name is Naomi and her family are the Pascals. They live in Jackson Hole. And they adopted Naomi from Ethiopia. And the first thing Naomi got was this teddy bear, even before she actually got to meet her parents. And this teddy bear has really traveled with her everywhere, wherever the family has gone. And I think they adopted her when she was maybe 2 years old and now she's 7 years old. So it was definitely more than just a simple stuffed animal for somebody. This was something that was pretty special from the day they came into the lives of her family. And I finally got to meet the family through a Zoom call.

**L:** Oh you did? Oh that's fun.

**T:** Yeah I did, a couple weeks after they got the bear back. It was a fun story, a nice heartwarming story.

**L:** It is so heartwarming. Did you have any sense when you saw this little teddy bear melting out of the snowbank and you picked it up and stuck it in your dash that it might get reunited? Or was it just an idle thing: picking it up and putting it in your car.

**T:** I just didn't want the bear to end up in the trash. It was so weathered, I had a feeling that it had been out there for a long time. But it just didn't really even occur to me that somebody was really even looking for it. So I don't know. I wasn't surprised that it was found. But at the same time it was a great little mascot for a Ranger vehicle.

And it was a good conversation starter too when I'd just be out and about managing bear jams or whatnot. And somebody just sees it and it starts a conversation of how it came to be in my truck.

I wanted to go back too about when you had talked about what drew me to grizzlies, and how I kind of came to know about grizzlies. I want to mention that Frank and John Craighead -- my first science project probably was all because of all the research I was able to dig up that they did. And they were a big influence on my life as far as my interests in biology and wildlife biology and environmentalism -- and grizzly bears and Yellowstone grizzly bears, it just seemed to be just a little extra wow. Not only being a grizzly bear but being a Yellowstone grizzly.



I'm not sure if you remember the story, I remember a Life magazine article with a big picture of a roaring grizzly bear on it. And I wouldn't be surprised if it was actually Bart the Bear in his younger days.

**L:** The movie bear.

**T:** There was a Swiss woman camping alone who was killed in the Yellowstone backcountry and then another person that was killed outside Yellowstone by a bear I think the following year. But the article -- it was nice -- did not' sensationalize the killing. They talked more about the plight of grizzly bears and Yellowstone grizzlies.

And I remember even writing to the superintendent -- it was Superintendent Barbee back then - I think I was probably 11 years old or 12 years old. And I said: "Hey she was hiking alone, you shouldn't kill the bear." And I remember him writing back and explaining what happened. And any time I asked for bear research or stuff they always sent stuff.

But I got to meet Superintendent Barbee in 2012 or 2011? And I told him: "because of you and because of the effort you took to just respond to a kid's letter, it made me want to become a ranger -- or at least to work in Yellowstone or work with wildlife or do whatever I could do to protect the park and wildlife."

So you just never know the influence you might have on somebody. And I thanked him for that. He didn't have to write back -- and especially nowadays probably most people in his position don't even have the time to consider that.

**L:** What you said is so important - that actually the simple act of responding on the part of Superintendent of Yellowstone to an 11-year-old kid's question - it can be transformative, as you were describing in terms of your life and your trajectory. And I think we can lose track: you want management to be much more effective on a global level, but it really gets down to these personal influences, these personal connections -- whether it's with a teddy bear or in your case with managing grizzly bears. One person can have a huge impact on another's life.

Let's get back to you were talking about: managing people in Glacier. Since COVID, park use has exploded -- and no surprise to you but in places like Glacier and Yellowstone, there are throngs of people hungry for a taste of the wilds and hungry to get outside, and they are showing up in places like Yellowstone. How are you coping with the throngs of visitors coming to the parks?

**T:** It's challenging. I think it's a welcome challenge. I mean we do have to remember that the vast majority of the people are there doing it right and obeying the laws, respecting wildlife, respecting nature. But there's always going to be those that don't, whether they do it intentionally or unintentionally.

I think the big thing is: we do our best to try to educate visitors about the dos and don'ts of being in the park, but it's almost impossible nowadays. But at the same time there's also no

excuse for people not to take some responsibility to learn about the areas they're going. I mean there's so much information at our fingertips. It's not like 40 years ago when if you wanted to learn about Yellowstone, you had to go to a library and take out books and actually have a little bit more effort to learn. It doesn't take much to find out about basic bear behavior, basic elk behavior, or the flowers that are growing. There's so much information out there.

With some people I come across, this is the kind of question I get: "what do we do if we run into a bear?" And obviously they haven't gotten that information, whether they tried to and couldn't find it, or they just didn't make the effort. And somehow, they made it to the trailhead without probably even opening their park newspaper, if they even got a park newspaper.

So, the big thing that I do is education. And I would talk to people saying: "hey this is what to expect." And on some of the trails in Glacier, bears become so tolerant -- they are forced to become tolerant of people because they have to do what they need to do to survive. But one of the big things I tell people especially with more and more people carrying guns in the parks is: "if a bear's walking down the trail, it's not a time to panic, the bear's not acting aggressive. It's just walking." And I would try to tell people: "ok this is what an aggressive bear would do, this is what a non-aggressive bear would do, this is what essentially an indifferent bear would do."

And you just try to educate people, to ease their fears. And then sometimes you get people who are so afraid. And I just get to a point when I say: "listen, if you're that nervous about seeing a bear on a trail, then probably you shouldn't be hiking this trail." But I also tell people: "listen, I've been spending my career, more than half my life in grizzly bear country. When I'm not working, I'd never carry a firearm." I still don't own a firearm. The only firearms I have are what I'm issued while working as a ranger. I've never felt the need to have a firearm hiking in grizzly bear country.

And so the big thing is try to ease people's fears as far as the bears. It's just educating them. It's awesome if you do get a chance to see a bear. And I try to teach them to do the right thing when they're out there and they encounter a bear.

**L:** Well maybe let's switch gears to Africa and take a journey to Africa with you. You and your wife honeymooned in a park in Zambia and then you found yourself going back and managing a bush camp with all these kinds of animals -- lions and leopards and honey badgers -- even starting a guiding business centered on wildlife viewing. You said your experiences there have been transformative. Maybe you can explain how.

**T:** I think somebody who's big pastime is enjoying the opportunity to watch animals in their natural environment, Africa is the zenith of that. It's tough to explain. It's like when you step foot -- my first place was in Zambia, and the park was called South Luangwa National Park -- it's a weird feeling, as if deep down in our genetic makeup. It's like we know this is where we evolved as a species. There is some familiarity with the area. It's something just intangible that you feel when you step foot into the bush.

And then the wildlife – oh my gosh, the wildlife that still thrive -- it is just 24 hours a day. Everywhere, just life everywhere -- all different sizes of animals from elephants down to the elephant shrew. Hundreds of different species of birds, it's intoxicating. And then the parks are not crowded by any means like an American park. It was just a breath of fresh air to be able to be at a nice wildlife sighting and maybe have 2 or 3 other game viewing vehicles there, not a line of cars that's going to last for hours.

It's just phenomenal, the diversity of life and how intricate it all is.

One time I remember I was managing a camp, and we had a water hole in the camp. And usually about around 11 o'clock in the morning, you'd get like a rush. And one time was there was elephant, giraffe and impala, baboons, warthogs, I think there was even zebra, I think kudu. It was like a 7-layer cake of life. You have all these different levels of animals all sharing a water source. Here's all these animals of different species that have figured it out, and they're getting along. And they're using the same resource without a whole lot of argument or despair or fighting over water. It was pretty special.

And then there is the issue of how parks in general are managed, how the protected areas are managed. A lot involves guides to at least control people for their safety and for wildlife safety, and to try to prevent a disruption to wildlife as much as possible.

**L:** Do you think that potentially that approach of relying more on guiding services as a way to enter the parks, is that something that you think the Park Service here could look at?

**T:** I think they have to look at different solutions. And unfortunately, with as heavily as the parks are used, we're going to have to give up some of the independence that we've come to enjoy in parks. I think guiding would be one way of doing it. More guiding, less unfortunately independent use of the park potentially.

I remember talking about how we can decrease at least the traffic, the vehicle traffic in the parks. You have all these hotels that are outside the parks, and every time they build a new hotel that's another how many people a day, another how many people a week and a month that will come into a park. How about if we encourage those hotels and camps, lodges to essentially hire and run a guiding program?

We're not talking about big tour buses or giant vans -- but at least something where you have a guide. At least you would have more people going into the park guided. It'd reduce the amount of traffic flow, maybe have more people with somebody who's educated about being in bear country or being in the woods or being in whatever park it is. You would have little bit more help to kind of "control" the masses.

I think that's a part of a bigger solution. But I think it works. And granted, parks in Africa don't necessarily see the visitation of Yellowstone or Glacier. I think Ngorongoro Crater had some 700,000 visitors a year I think I just read. I'm sure Maasai Mara and Serengeti are pushing a

million, Kruger's pushing a million. And still those areas are essentially "guided only" with very few places where people can go unguided. And it works.

It's not ideal, but I cringe if we had the African wildlife in our parks here with what I have seen and still see about how people act around wildlife. It just would be a nightmare. I couldn't imagine seeing a breeding herd of elephants with young calves with a bunch of people walking out to go say hi to them. It would be catastrophic. Or somebody walking up to a pride of lions down on a kill with young ones. And really most like the lions would probably run away but the elephants wouldn't. If you approach a breeding herd of elephants, it's not going to end well for you.

I think guiding is going to be -- has to be considered as part of a bigger solution for future management of visitors in the parks.

So to give you an idea the quality of the guides I've worked with in Africa, in Zambia to become just a driving guide, their written exam was a thousand questions and it wasn't multiple choice. You had to write out whatever it is. And that was just one aspect. And then they would have to go out with guides as if they were guiding them. And once they passed that they could become a driving guide. But then to become a walking guide, even a lot more training was required.

It's amazing, the guides there. They could tell you essentially every bird by sight and sound, they know a lot of the scientific names of pretty much almost all of the grasses and bushes and shrubs and trees. And obviously their knowledge of wildlife is impeccable. They're also from the local communities too, so they've grown up in it. And they also have a certain working knowledge of a lot of the different uses of plants, from what you can eat to medicinal uses. They're walking encyclopedias.

And I could see if we had more of those people, that level of guide, guiding into the parks with maybe no more than maybe 8 people -- and I think you'd get more than that. You could create jobs. Maybe those hotels would be willing to create that cadre of guides and tour vans. And maybe they can circumvent the ticketed entry or whatever restrictions that are being put on people entering the park, maybe there could be some type of just incentive to move towards guiding.

So it's definitely above my pay grade and something that hopefully it's being talked about. But we're killing our parks. I think recreation is underrated as far as its effect on wildlife and natural resources in the parks. I think that's really the next big threat to wildlife: more people in the woods. I mean it's great that people love nature and are getting out in nature, but when you have outdoor companies and magazines and publications marketing different areas to death, coming up with new gadgets, new tools, new ways to get out in the woods or in nature, it's challenging. It's tough to tell somebody you can't go into the woods. How do we educate people to at least recreate more appropriately?

**L:** Well thank you Tom. This is Louisa Willcox with Grizzly Times and we're here talking today with Tom Mazzarizi. Thank you so much.