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**INTRO**

**Sofia:** Welcome to Good Natured, a podcast where you can join us for uplifting chats that shine a light on conservation challenges.

**Julia:** We interview inspiring conservationists from lots of different backgrounds who each engage with conservation in their own way. Today we're thrilled to have Miriam Supuma as a guest.

**Sofia:** I'm Sofia!

**Julia:** And I'm Julia.

**Sofia:** Get ready to hear about traditional knowledge, birds of paradise and the role of cultural identity in preserving biodiversity!

**Sofia:** Hey Julia!

**Julia:** Hi Sofia!

**Sofia:** I'm so excited to be talking to Miriam today!

**Julia:** Yeah, same. I can't wait to have that conversation.

**Sofia:** So just to introduce her to our listeners. Miriam is a conservationist in Papua New Guinea, who has been working with conservation organizations for over 10 years. And she co-founded the Papua New Guinea Institute of Biological Research.

**Julia:** And throughout her career, Miriam has been researching traditional use and valuation of wildlife, especially birds of paradise, use of adornments, and trade by local communities there.

**Sofia:** Now Miriam is Synchronicity Earth’s Flourishing Diversity Programme Manager, focusing on the recognition of traditional knowledge and its role in safeguarding biodiversity and promoting diverse lifeways.

**Julia:** And we can't wait to talk to Miriam so let's hear from her!
INTERVIEW

Julia: Hi, Miriam. It's such a pleasure to have you here with us today for the podcast.

Miriam: Thank you Julia! Thank you for having me join the podcast.

Julia: Could you tell us what drove you to becoming a conservationist, but also, I know you work specifically a lot on bird of paradise. So what triggered your interest in that specific species?

Miriam: Well it mostly has to do with where I was brought up. In my early years, growing up, we lived in a very remote part of the country where my father was posted and it was such a privilege to be living in such a remote location and having the freedom to wander and explore. And it was from those early years that I began to have such a fascination for just being outdoors, but also the natural world.

When I was considering what career path to take, conservation wasn't that all appealing to many of the people in my age group. I think at the time, people were looking at becoming lawyers, doctors, engineers, accountants, and conservation or environmental biology was seen as an undervalued profession where you're not geared to be someone with a lot of money. But having said that the point is that it is hard to attract people to go into that career. But when you do have people interested, people going into the career, I found that to be very rewarding. It's only a handful of people who are able to make it a career.

I felt strongly for being involved in the environment and conservation sector. Shortly after graduating from the university of Papua New Guinea I was joining the Wildlife Conservation Society as an intern. And things started to develop from there. I began to develop an interest in the intersect of culture and the environment. It was a few years later, when I was working with the Institute of Biological Research, it was a young NGO working very much with traditional custodians and it was looking at ways to merge or intersect indigenous ways of life and living with the environment, connecting species to culture and conservation. That was what I found fascinating.

And the birds of paradise fitted perfectly within that. I found that the species itself, or the group of birds in the family of paradise today, are so diverse and how local people relate to them as well is also quite diverse. But one common factor which can be seen is that they're so valued and respected for their beauty that they take on the identity of the birds through the richness of the culture. And it's one of the ways in which it is expressed is through the headdresses, which is very fascinating.

Sofia: You've worked with local communities in the past to help curb the hunting of the bird of paradise without sacrificing cultural practices, such as these headdress adornments. So do you think you could tell us a bit more about that work?

Miriam: Thank you for that question. Yes, oftentimes, you know, we live in different parts of the world and sometimes our beliefs and our ways of relating to the
environment or to species may vary. With the birds of paradise there’s the knowledge associated with them and the connection by the local people in some parts of Papua New Guinea so well known, especially by certain knowledge holders of the communities and an example of that other hunters. They know when the birds come out to display, when they are breeding, they know when the birds are in full plumage, which is usually around the time they’re operating, and they know the kind of fruits that the birds eat or what the preference for food is.

So, this knowledge is well known to certain knowledge of holders. And because of that, there are certain statuses associated with it. The connections of the birds to culture is very intricate. In some parts of Papua New Guinea, certain birds of paradise, their local names are bestowed to a son. For example, where I come from the bird of paradise species, the Raggiana, is called Kua Baundo and when the name is given to a young, a boy after birth, it is an honourable name, and it means a status and vitality in life and success. And those names associated try to emulate the species, not only to the birds of paradise but there are other species as well that have that connection.

The interesting thing with the birds of paradise is that it is the males that have full beautiful plumage. The females are dull. And the younger males as well are often dull and can be mistaken for females. But the younger males can be quite active in reproduction at the time. So even if some species are over hunted or within a certain region, you have the young male population coming up to fill up the next recruitment age or age gap. but there are certain factors that are contributing to conservation concerns. And these are related to species that occupy a certain narrow elevation range or have fragmented habitat or are just rare within the landscape. So those are the ones where overharvesting can be of great concern.

Sofia: It sounds like you have these really complex things which are interconnected, which are all of the ecological patterns and distributions and natural history life cycles of these birds, and then the enormous cultural importance of the birds as well and the way that these things are intertwined. Can you talk a little bit about that balance? What is it like to try to balance that as a conservationist?

Miriam: That’s a very good question. In my previous work, I should say we tried to encourage local people that culture is important. You can continue to use the birds that are important to you through the expression of cultural identity. It is after all the symbolism of identity when birds are hunted, not only are they used for trade, but they also use to build community ties, strengthened theirs within communities, this was traditionally in the past. But they also provided a means of income to the local people. When birds are worn on headdress, they symbolize the identity of a person wearing it, what culture or what place in Papua New Guinea they come from. Different sorts of headdresses represent different parts of Papua New Guinea. That is all very important.

This can continue to exist. One of the messages we tried to get across to the communities, especially during the cultural events, is to preserve what they already have. If they have a set of headdresses, it is important to preserve that and make sure it is kept well so that it continues to maintain the integrity. And in doing so there
will be no need to purchase new additional feathers or plumes to replace the old ones. So that is one way.

The other is that you can continue to be patriotic or prideful of culture. And there's a trend now where I see that there's a lot of Papua New Guineans, especially the younger generation, during cultural events they want to wear more plumages on their headdresses. And oftentimes you can see more than 15 to 20 different birds on the headdresses. And that can be of concern. Having more feathers on the headdresses or different kinds of species does not necessarily authenticate your identity. An identity is often inside you, in what you do, what you carry, and in valuing your connection to your land or your people. That is a sense of identity. But sometimes it is taking on board this materialistic approach, which should not be the case.

Julia: I think you've made some really interesting points and that connects quite nicely to the next question we wanted to ask you. And I love all these points around identity! You are now Synchronicity Earth’s Flourishing Diversity Programme Manager and you focus on the recognition of traditional knowledge and its role in safeguarding biodiversity, and also promoting diverse lifeways. And I was wondering if you could dive in a bit more into why it is essential for conservationists all around the world to recognize traditional knowledge.

Miriam: Traditional knowledge is very important. It is a system of different experiences that are important to the survival of local people and community, especially indigenous societies. This traditional knowledge is very much rooted to the way in which people live their lives, it has helped them survive for hundreds and thousands of years. Traditional knowledge because of the way in which it is does continue to enable people, local people, to persist. It is often very much place-based. It relates to physical boundaries. It relates to governance of resources. It relates to the knowledge associated with the physical environment in which the local people live in.

So, for instance, when there is a disruption in the natural environment, I'll just give an example, if there's logging that has happened in a community, to an extent that you have say 50% of the forest logged out, that can also take away the knowledge that people hold in connection to the environment. For instance, you lose the name of a tree, the physical tree, when the tree is lost, you might have a name, but the tree is no longer there to make a reference to. And while the tree may exist somewhere else in another part of the country that knowledge associated with the tree, or the body of language or knowledge associated with the place is lost. That is why traditional knowledge is very important. It contains information that is important to a community. There’s so much information that is retained in traditional knowledge.

Sofia: I was actually reading another interview you did where you discussed the links between language and environmental knowledge. So the ways that for example, linguistic diversity and biodiversity can be linked. Do you think you could tell us a bit more about this, about how words can influence our understanding of nature?
Miriam: As a personal experience, I do not know my language and I'm not often proud of it but I am aware that there are other Papua New Guineans who can speak in that language very well but that does not mean that they know the names of all the trees in the language, different kinds of trees or birds or plants.

That is one of the challenges of maintaining that is that we don't have enough Papua New Guineans who show an interest in documenting this diverse knowledge. And if we can encourage Papua New Guineans to document such important knowledge, have them have them in repositories for future reference, it might not seem important now but it is very important in that this historical knowledge spending beyond hundreds of years but they also, within those knowledge, they may contain links or clues to understanding current biodiversity.

We have 800 languages or more in the country. And one of the factors that is, I think, a two-edged sword is that the current education system that we have in which English has taught us a major, main language, a mode of communication in classrooms. Just to give you a typical example in a rural setting, you would have an eight-year-old kid going to class during the day to learn lessons in English and then he goes back in the afternoon to continue his way of life, maybe do his chores and chat with his parents in the local language. If he does that every year, that's eight hours a day in class. And less hours at home. So he is missing out on that interchange between himself and his parents compared to what he would traditionally in the past do like accompanying his father going, hunting and learning from the father. So there's a loss in language and loss in knowledge associated with different ways of teaching over the years.

Sofia: Overall, what are some of the challenges that conservationists face in Papua New Guinea?

Miriam: There are a number of challenges. Papua New Guinea is quite a large island. It shares a border with Papua in Indonesia. But Papua New Guinea alone, much of the areas, the interior, there are no road networks. I guess this works to some advantage in terms of having some forest intact, but for conservationists, this means logistics become challenging to go into these remote areas to do work and the cost is quite high.

The other challenging aspect is that many, well I should say that is the other aspect of it, is having more of the right people become conservationists. Having the kind of support that would continue to keep them there. And one of the challenges we have seen having worked with the NGO sector is that sometimes in the donor world there is support for projects but not enough support to pay salaries for staff. And oftentimes this can be one of the main factors- in driving committed conservationists to work in other sectors outside of conservation.

Julia: And I just want it to jump in as well because I think one thing you just said before is about the importance of having more conservationists. And we have a question that we ask all our guests, which is, is there another conservationist
that you found particularly inspiring? And if so, who is that person and why do you find them inspiring?

Miriam: That's a very good question. Of course, there are many scientists abroad, but I often like to support local people who I know, because we've experienced a lot of challenges in the country.

So, one of the conservationists I found inspiring is a young female colleague who's working in the freshwater conservation field. And this particular person that I'm referring to is Yolarnie Amepou. She's got a small NGO called the Piku Biodiversity Network, working with communities along the Southern coast on freshwater turtles.

And I liked the approach wherein she and the community work together helping identify nesting sites of turtles and ensuring that they are protected. But also, they integrate the learning of the turtles in their natural habitat and the awareness of conservation into the local school curriculum for the different levels so that it breaches the gap of what we talked about the loss of knowledge. The kids can still learn from their parents when they go back home, but they can see the connection of the environment through the curriculum that they learned in school. So, I think that's an interesting, and a great approach of integrating science as well as traditional knowledge from the community.

Sofia: I'm glad to know that there are such inspiring conservationists working in the Papua New Guinea context. Our last question is, do you feel optimistic about the future of nature and if so, why? Or if not, why not?

Miriam: We should feel optimistic. I think being hopeful helps us to diversify ways of embracing our environment, but also seeking ways to safeguard the environment and protect it in its essence in which in this case, I refer to nature in the holistic way, not just plants and animals, the people within their life weights, the culture, the traditional knowledge associated with it.

If we are not so hopeful then we are left with nothing. So sometimes we should be looking to have that hope in us to have something to look forward to. Otherwise, it's going to be a dreary world out there. So, I think I am very optimistic. I think this is what we should have. We should be having confidence that whatever little effort we put in it contributes to something positive. It might not be quite obvious, or we may not see the result in say five years, but any incremental effort directed in a positive way should in my view, contribute to something that is positive and reciprocal in nature in the nature and the environment that we live in.

Sofia: That is such a lovely answer. I'm quite taken aback. That was such a great way of kind of bringing together all of these different threads from different parts of the interview. I mean, I've learned so much during our conversation. Thank you.

Julia: Yeah, thank you so much. It was really, really interesting hearing about all the different topics you've covered. Thank you so much for answering all our questions.
Miriam: Thank you Julia and Sofia for having me.

OUTRO

Julia: Well, I really enjoyed this conversation with Miriam today! I feel like we covered so much ground and she made so many interesting points. I definitely learned a lot. It was a lot of food for thought and one thing that I thought was particularly interesting is how the identity is really tied in with the birds of paradise in the communities and how there was this concept of what you're wearing in terms of like the species you might have on your headdress might have a specific meaning, but also the more species you might have could be associated with like having a certain status and how it was important to remind people that it wasn't necessarily the case and that you could wear less species and still have that status and identity.

But also, I loved when she mentioned that kids could be named after certain species of bird of paradise, and then it had that specific meaning associated with it. So I thought that was quite interesting when she mentioned these different points.

Sofia: Definitely, I loved all of that! I also thought it was so interesting how she talked about language and the way language, including how names could really influence our understanding of biodiversity. And so the way that these traditional languages can really contain so much information about the natural world, which can then be lost.

Julia: Yeah. And I think that's something that is so important at the moment because we really seeing a lot of languages slowly disappearing. And, you know, we often think of species becoming extinct, but actually languages can become extinct too. And even just looking at my own country, looking at France, we have certain languages that are less and less used nowadays. Like people in Brittany have their own language or in the Basque country and so I think there's so much power as well in preserving languages so that we keep these specific words and that knowledge, because there's so much information in them.

Sofia: Absolutely! And I loved the way that she talked about the past and the future, and the importance of maintaining that past and that cultural identity, and it sort of was exemplified in the way that she was talking about these headdresses. Simultaneously preserving these old headdresses and looking after them and making sure that they stayed usable, but at the same time thinking about how best to produce new ones.

Julia: And I mean, of course, that also ties in, you know, with fast fashion and what we're seeing here as well, just thinking of this concept that we've reached a point in the world where we think that we need to buy new things. And again, that kind of show a certain status if you're able to just have a new outfit every day. And actually, how now we're reverting and saying like, look, we need to really consider slow fashion instead of that fast fashion trend and really wear and buy things that might be more long lasting. It's, it's really thinking of that sustainability as well. So, it was interesting to hear that parallel with the headdresses as well in Papua New Guinea.
**Sofia:** One of the points that she made that I really liked was around the really rich and deep knowledge that people have when they are interacting with these ecosystems all the time. And so, she was talking about hunters and how they will be really aware of the distributions and habitats of these birds. It's also well-established in the marine context. Fishers will often be the people who know a lot about species, where they are, how they’re acting. I mean, with my PhD on human-made reefs there were a lot of structures that only fishers knew about.

And I think that quite often, maybe these groups are seen as like the enemies of conservation in some way, or, you know, because they are hunting or fishing these species, but actually they can be incredibly powerful allies because they have such a deep understanding of the species that we’re trying to conserve and protect.

**Julia:** it's funny I think we have a thread throughout this second season of the podcast, because we touched on that with Dino who told us about why it's so important to work with people who are in the agricultural sector. And then we touched on it again with Sofiya who was talking about people who are trading birds and how they have so much knowledge because they were the one actually breeding the birds as well.

And I think it's just another reminder of how important it is to work with different stakeholders and how, you know, incorporating that knowledge is so important because as scientists or conservationists we don't know it all. And we need these people to really bring in the information.

**Sofia:** Absolutely. So really just kind of considering the sustainable use and how to hold multiple goals and practices at the same time, which I think that Miriam did such a beautiful job of describing and showing the way of how it's possible to do that.

**Julia:** Yeah. And I think it is so important to remember, especially in conservation, when we work with so many different people around the globe all together to reach a common goal, I think it's so important. And sometimes to remember to think about other people’s perspectives and the way they see thing because that is just an essential part of doing conservation nowadays.

**Sofia:** Completely. Well, that seems like a really good place to end actually!

**Julia:** Amazing! Well, we hope you enjoyed this episode. If you have any thoughts or reaction, you can send us a voice note at podcast@conservationoptimism.org or reach us on Twitter @ConservOptimism.

**Sofia:** This episode was produced and edited by Julia Migné and myself Sofia Castelló y Tickell. Our theme song was composed and produced by Matthew Kemp.

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