



'Meet the researcher - Imma Oliveras'

Podcast transcript

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Claudia

Welcome to meet the researcher, a podcast from Oxford University Ecosystems lab. I am Claudia Cassidy and today Imma Oliveras has kindly agreed to join us and tell us about her work. Imma is the Research Director in disturbance ecology at the Institute of Research for Development in Montpellier and a lecturer at Oxford University, Environmental Change institute. Welcome Imma and thank you for joining us.

Imma

Thank you, thank you Claudia, for the invitation. I'm delighted to be here.

Claudia

Thank you. Imma, shall we start with you telling us a bit about your work and your career path please?

Imma

OK, well that's a that's a huge question. So maybe let's started with my career path. I have recently accepted the post of research Director at the Institute of Research for Development, but before that there was a lecturer and that leader at ecosystems program in the Environmental Change Institute, to which the Ecosystems lab is linked to. And before that I have been doing a number of fellowships and postdocs. I did my PhD at the Autonomous University of Barcelona in community ecology and forest ecology, at Creaf (Center of Research for Environment and Forestry applications), then I did a postdoc in Brazil and that's when I started, just after finishing my PhD, working in the Topics where most of my research is nowadays based. That only started after my PhD, and I spent three years in Brazil. After that I joined the Ecosystems Lab on a post-doc to study the current dynamics and the and the impact of fires on the carbon dynamics of tropical mountain platforms in Peru. After that, I got a Marie Curie and I went to the Netherlands to Wageningen University and I went to work in Savannas again, to fire ecology in Savannas, and what thresholds limit tropical forest Savanna transitions, and it was only in 2016 that I got the lectureship in Oxford for I was in the post for five years. All this pathway has not been strategic. It has been something that it is my passion for science and for nature, basically, for vegetation sciences. Both grasslands as Savannas and forest. I am passionate about

outdoors and since I was a kid, I was very aware I wanted to work with nature and nature conservation. I was curious, I had a very curious mind, so I would be trying to collect a lot of things like I had my own herbarium, and I was fascinated always with plants so and I think that this sort of curiosity has been taking me along this pathway. For my work I have been doing a number of studies regarding the fire ecology, tropical ecology, community ecology in an ecosystem ecology. Earlier in my career I developed a lot of studies regarding ecophysiology, then I moved to fire college during my PhD and some of them my post-doctoral work and then I've been also applying a lot of more pattern-based approaches of the landscape scale with their remote sensing. So basically, my main research nowadays is trying to answer the questions:

How is vegetation is responding to increasing disturbances? And altered disturbances, regimes? with a focus on fires and extreme droughts. So, I have also to integrate diverse fields with a bottom up approach, so I want to understand the physiological mechanisms that make vegetation be vulnerable, resilient or resistant to disturbances such a wildfire and extreme heat stress. But I'm also very interested in aspects that will have ecosystems to that ongoing changes so certainly integrated fire management, restoration and nature based solutions.

Claudia

Thank you, that was very fascinating and it's amazing to see how what started as an interest of a little girl playing with little plants and her bugs became such an incredibly successful career.

Imma

Well, thank you I'd say that I'm not sure if it's a successful career or not, but I think that that's something it's very important when people think on their academic career pathway is try to stay engaged with what you were doing. Just try to stick to it. I think in academia nowadays very easy to get lost in the need, on this constant need on having to publish and having to constantly publish. I think you can lose sometimes like purpose. So, it's just finding the purpose and try to always keep mindful that you have to be happy and passionate about what you do. And that's more important than publishing papers. I think that something I would say to early career scientists, is just find a topic you are really, truly passionate about and pursue it and just go after it and yes of course it is very important to publish papers but that comes along when you are having interesting questions and the curiosity and thrive to answer them.

Claudia

I think that's really brilliant advice. I think you're absolutely right. It's easy to get caught up in the more political, result-driven world, rather than remember why you chose to do the job and your passion and drive and willingness to do something that really makes a difference in the world. Especially now. Something else I wanted to ask you Imma is that for the past two years it has been really tough with COVID, we are in the middle of a pandemic, starting to get better, but there are certain challenges and I understand November you went back to Brazil in a field trip after two years of forced absence. Would you like to tell us a bit about that? How is how is being back in the field and doing what you love and what you're so passionate about?

Imma

Well, it was it was simply fascinating. It was, I mean, the core of the work I do for me it's being in the field. Seeing, not just seeing, but just working with the systems I work with, of course working with the data I get from the field expeditions and the scientific expeditions is very important. But for me more

important, always along my career, I have spent many months per year in the field and working with my local collaborators with my students and with my colleagues in the field.

Two years without that, it's a little bit of losing the soul. It was a really, really tough and difficult so going back was just fantastic. It was a very nice experience. What I realized is that some anecdotes that it was a bit lost after two years I would have forgotten basic things like gloves. When I work, I have to wear gloves to be protected from bugs and from also the sun. I had forgotten those, so I ended up with having some sun burns in my hand and a lot of bug stings, but actually it was even being happy to be stung by bugs and bees and things like that. That was the positive aspect but there was also an aspect that made some concern, it was that also these two years have been years of deep deep political changes in Brazil and I could see that on the ground. How much Cerrado has disappeared, so when I drove, when we drove with my colleague, my collaborator Maria Antonia Carniello from UNEMAT (State University of Mato Grosso) who I work with. We took this three hour road that we take every time we have to go to the field and, maybe before the pandemic, I would say 60% was still Cerrado, undisturbed Cerrado, and this time I'd say that there was like about 30% remaining. Half of it had been converted to pastures and that was very concerning and very sad to see that two years have caused such a land conversion.

Claudia

Yes, that definitely sounds like a big change. Certainly, in the Cerrado area of Brazil. Do you think COVID has affected global ecology? or do you think it's mainly localized in certain areas? I know it's bit of a broad question, but what's your insight into COVID effects on forests?

Imma

Well, COVID has impacted everything. I mean, I think COVID has changed a lot of things, and, whether those changes are to stay or not is to be seen yet. But I think there is a lot of room for reflection on COVID and the way we deal with nature and we treat nature. I mean COVID is certainly not the first and not the last virus that can come from nature and spread as a pandemic into human populations. In global ecology, I would say it has been deeply impacted. I mean, we have been seeing the huge inequalities that we have with treating the global pandemic and all these, of course deeply impact ecology directly or indirectly. I would say that more than a direct impact on the state of nature, I would say its indirect effects that can have potentially devastating consequences in the near future, because I mean there are huge inequalities that have been portrayed with COVID and if these inequalities aren't tackled then they are going to be reflected into global ecology.

Claudia

Yeah, absolutely. I think we should all look at our lifestyle and see what difference can we make both at the individual level, and also at a bigger level in terms of governments and policymakers. So what do you think our priorities should be as a society in terms of protecting our forests? Do you think it should be more something to leave people making laws and policies? Or can we all kind of try and contribute and do our bit?

Imma

Certainly everyone can contribute to conserve nature, not only our forests but our natural landscapes. So let them be also grasslands and meadows and so forth. And I think everyone can contribute. Maybe it's some small things like being respectful when you walk across them, not throwing rubbish. Nowadays, one of the inputs actually COVID is that usually natural spaces are much more dirty. You find a lot of face masks everywhere, so I think that everyone can be respectful and try to protect their

surrounding nature land and then of course we also need effective management and public policies that help protecting at a larger scale our natural environment.

Claudia

Thank you so much Imma. It's been absolutely great talking to you today and you have not given us all a lot of room for reflection and a lot of great advice. And yes, keep up the amazing work. Thank you again for joining us.

Imma

Thank you very much for inviting Claudia. It's been a pleasure.

Claudia

Thank you bye bye.