

Dany Adone

Interview with Rohan Fisher on Mapping and Fire Management

Preface: Rohan Fisher is a researcher at the Northern Institute, Charles Darwin University, Australia. His work focuses on fire management in Northern Australia, connecting Western Science approaches and Indigenous Knowledges. The following interview has been recorded in October 2024.

Dany Adone: The first question that we have for you today is, could you tell us what exactly your research is about?

Rohan Fisher: Alright, so I do a few different interrelated things, really focused on trying to support a bit of Land Management, primarily in Northern Australia, but some of the techniques and ideas I developed now working throughout Australia and within some international projects. The core of the work and where it started was around trying to support better bio management across Northern Australia and particularly the tropical savannas of Northern Australia. So, the tropical savannas globally are the most fire-prone biomes in the world. That's primarily due to the fact that as savannas, they are grasslands in the tropics, they receive heavy monsoonal rainfall each year. So, in Northern Australia, that is through the northern hemisphere winter, is our monsoon time. From December through to around May we get a huge amount of rain, and that huge amount of rain produces huge grass fuel load. Then we have a very long hot dry season. And that long hot dry season makes the grass very dry. It's very cured, it's primed to burn, and it's similar across the tropical savanna biomes around the world.

We get these environments that are really conducive to fire. Now in Northern Australia and most other tropical savanna ecosystems, historically, people have used fire to manage the landscape, to support grasslands. Grasslands are very productive landscapes for people to live in. So, people have maintained grassland landscapes through the use of fire, but also controlled the extent of fire through the use of fire. Now what's happened not only in Australia, but around the world, is traditional fire management practices have been severely impacted through, I guess, a sort of colonial expansion, and to a certain extent, colonial ideologies around what good land management looks like. And fear of fire is a big part of that. And I think it's a particularly, not exclusively, but a *particularly* sort of Western European export to much of the world, which sees fire as a problem. And fire and the way it's used traditionally by people, Indigenous people native to those landscapes, were seen as a problem.

In many cases, people being in those landscapes at all was seen as a problem, because troublesome landscapes can be quite productive, pastoral landscapes. So as people moved in, Indigenous people, Indigenous land management styles, were removed from those landscapes.

What didn't disappear, though, is fire. So, fire is a constant, and particularly in Australia it's the most important human ecological factor that has shaped the nature of the continent for the last 60 or 70 000 years.

I'll talk most directly to Australia, because it's what I know, what I can speak with confidence on, but I believe it'd be similar for many other places around the world, a really important tool. However, the fear of fire, colonial expansion, the removal of people from those landscapes, has changed the way that fire exists around the world, and particularly in the tropical savannas.

What happened in Northern Australia over the last 50 to 100 years, as people became disconnected from their traditional fire management practice, is we moved from a state where we had lots and lots of small fires across the Northern part of the continent where people moved, where they hunted, where they did some radial practice as those fires were removed, we got a disrupted ecology, and it was replaced with severe and large wildfires. What in Northern Australia, Indigenous people, Aboriginal people would call Country, landscapes which don't have well-managed fires, the ecology changes, the ecosystems change. And Indigenous people would call those lands, or, as we say, that Country, they'd call it unhealthy Country. And it's not healthy, because there aren't people there working to maintain the health of the Country. And it's really important to note this, because there's also been this, I personally think it's like this Judeo, sort of Christian ideology around the idea that people are somehow evil and people in the landscape, us, is somehow unnatural. And that's where you get the idea of wilderness. And we elevate the idea of wilderness as being somehow pure and better and natural, whilst for Indigenous people, there is no wilderness and landscapes without people are unnatural and unhealthy. And, you know, I do sort of think it comes back to that sort of Judeo-Christian sort of thing, where somehow people are the fallen, and somehow evil. And there's a lack of purity where people are. But it's also quite absurd. So, when people are removed from the landscape, you get large wildfires, you get a degradation of the quality of that landscape, and that's what we've seen across Northern Australia.

But over the last 20 years, there's been a movement supported by North Australian scientists, by new technologies, but really lead and motivated and pushed by Indigenous land management aspirations to get fire back in Country, across Northern Australia. And that's occurred. What we see now is, over the last 10 to 15 years, has been a revolution in the way that the fire regimes across Northern Australia, from out-of-control wildfires to, once again, really nuanced, controlled, thoughtful application of fires at a continental scale. So, this is not a small endeavour. So, this is going from Broome across towards Cairns. That's about 3000 kilometers across. I don't know where that would be from, you know, if you took London as a starting point, but it'd be sort of maybe somewhere towards Istanbul or further. But it's a huge area, and as part of the process of supporting that work and monitoring that work, my involvement has been watching it from satellite. So, every week a part of a team of people who produce satellite maps of what's been burnt, and we provide real time information about active fires, and we provide that in the format which is focused on ease of use for the utility of

land managers. So, it's really looking at fire as a land management tool, and for land managers to use fire information the practical way.

We're housed at a university, but our work is primarily not research. It's about the practical delivery of information for people in remote landscapes to do the hard work of good fire management. And I want to emphasise that this is hard work. You know, I'm sitting in my office here. It's hot outside, and I watch it from space. I've sort of got the easy job, but the people who are doing that work on Country, it's thousands and thousands of hours out, putting in that right fire, the right way fire, early in the year. So, the idea is, you put in small burns after the monsoon, when things are still green, and you will get small fires, but it will reduce the fuel for later in the year. So, this time of year from late August, September, October, November, that are serious wildfire times. So, you need to have all of your good burns put in those small, nuanced applications of fire that's usually completed by around June, July. And it's this time of year that people are watching and hoping that they've done enough work beforehand.

You know, I recommend the students, whoever, have a look at the web resource that we support, North Australia Fire Information (NAFI). And you can jump in there, and you can watch, you can see all the burns early throughout the year and how that impacts the fires that are starting up now later in the year.

And I think one of the important points here is how Indigenous knowledge is applied to the landscape in a new way. In the extensive use of helicopters, new fire delivery machines, obviously driving around cars, and the daily use of satellite derived information. So most Indigenous ranger groups, they'll wake up in the morning, the first thing they'll do is jump on the internet, look at the computer and see what fires are being detected from space.

Traditional fire practice. So, the word 'traditional' is a very loaded one, and traditional practices are always evolving to meet new challenges. Now traditional practice uses space technology. I would not call that non-traditional practice. I would call that traditional practice, which has always been evolving and now it uses all these other tools. It implies that traditional cultural practice is not a living thing. It implies that it's somehow dead if it doesn't evolve. And it's almost always non-Indigenous people who are making judgments about what Indigenous people can claim as their traditional practice and non-traditional practice.

There are some forms of burning that people might do when they're walking through Country with their children, where they're really focused on delivering a specific sort of older cultural narratives, but the large scale burning that's being done across Northern Australia that I refer to that is right way fire. So, they're trying to put fire in the landscape in the right way. And the right way means a way that respects all the traditional owner views of how things should be done. So, it's respecting those older cultural practices, but it also is using all of these other tools. All the technologies, all the tools, everything they can use in order to get the best outcomes. So, I think there's an important distinction there.

I mean, it's excellent work where people are starting to read. A lot of people have been disconnected from Country and been disconnected from traditional fire management practices, and they've got the opportunity to get back and start doing that and sort of reinvigorating their culture. But it's that form of burning

that is disconnected from a larger scale, landscape scale engagement in trying to get good fire management outcomes. So, they are slightly different things, yes. So, I mean, I've talked through a few things here, so that's the background to some of my work, which has been supporting that practice across Northern Australia. And part of the success has been about creating spaces where non-Indigenous people, and particularly coming from academia or the science world, where opportunities to not just provide information and tools, but to provide spaces where we listen.

And I mean, that's how this whole resurgence in fire management had occurred, because people listened to the old people who said, "this is a problem, we need to do something about it". And if it wasn't the old people on Country saying, "we need to work together to find a solution here", and if it wasn't for the right, non-Indigenous people, going, "we hear you. We're not here to tell you stuff, we're here to listen and we hear you, and we need to work together". And I think that's the biggest lesson.

I've been trying developing other tools and techniques to try and support and create spaces that allow people to share and listen together, so I can talk a little bit more about that.

Dany Adone: You've mentioned these, some of our challenges. I mean, it would be nice to give us one or two examples later, after we've talked about this deep listening, because this is an issue. People say yes, and they turn around and do their own thing. And there are certain terms that have been developed, even with the Yolngu, they call it deep listening, which is exactly what you are saying, yeah.

Rohan Fisher: Yes. I mean, it's a challenge. And I think something which is also important in my practice, and you see it more deeply embedded in Northern Australia than maybe elsewhere is almost going beyond listening. It's sort of building skills and agency. So, you can almost try and do yourself out of a job as a researcher, where you don't need to tell other people's stories, and almost don't need to be there where the agency and the direction and the research is driven by the Indigenous people themselves.

Dany Adone: Yes. Indigenous and non-Indigenous people working together in a team, trying to, well, to move forward. Are there some challenges there, in terms of communication, in general?

Rohan Fisher: So, talk about the fire space and the fire management space. So that is largely, not exclusively, but largely run by Indigenous ranger groups. And a really important aspect of all of that burning work is, before people start, to do the correct consultations.

So, you'll have a ranger group for an area in Northern Australia, and they may be from that area, but then you have like clans, you know, clans and family groups within that area who are the traditional owners for that particular space. So, the rangers may be broadly from an area, but the rangers aren't the traditional owners of a particular place.

So, there's a long process of making sure the correct consultations are done with the right people, so they're informed, and they grant consent around the plans. But there's, in my experience, there's like a hierarchy. So, you'll get a, it's not a top-down hierarchy, in a way, but it's almost like a horizontal hierarchy. Different people who have different levels of engagement in that sort of the deeper complexity of making sure the right things are done the right way. So, at one end, you'll get non-Indigenous ranger coordinators, and their role is really important, because they work really closely with the Indigenous rangers, who are generally fluent in two languages and two worlds, but the non-Indigenous rangers often have a greater competency in dealing with the non-Indigenous bureaucracies that govern all our lives, and that's one of the biggest barriers.

You know, the federal government or somebody else will say, "Okay, there's a grant funding round to support your work", and it's immediately largely unavailable to Indigenous people directly because they have English as a second or third language, and you need to speak and be able to write the language of bureaucracy and deal with that space. So that's where the non-Indigenous coordinators play a really useful role at being able to actually engage with what we call that white fellow world, white fellow bureaucracy, and they then work with that next level of rangers who then have those family relations back into the broader community, and they will know who is the right person to talk to, who is the right person.

And from my experience directly, I just, I'm always aware that I don't understand, but I'm quite comfortable with that, and I don't think you need to understand if you are engaging with people in a respectful way, in a non-patronising way, and you facilitate and make sure there's agency and you don't get in the way, you don't need that to understand you can be guided. And I think that's the important thing, to allow yourself to make sure that you're guided in the right way and apply the skills that you have as is appropriate. And I think that's what I see happening, is that making sure you're aware of what you don't know, and making sure that you develop the right relationships with the people that do. And it's not always easy, but a lot of time is spent on making sure those protocols are done well. And for most groups across Northern Australia there's been a decade or two of having the right people work in the right way to build those relationships.

Dany Adone: But another thing is, you work with different groups across the Northern Territory, right? I mean different groups of people. Have you ever been in a situation where you were involved in a project and saw that things were not going well, and you had to take on the position of a mediator?

Rohan Fisher: Not so much, I mean, I'm in a reasonably fortunate space of the work that I'm doing, particularly with NAFL, is that we're seen as reasonably neutral and apolitical and just generally helpful. So, there's no real agenda other than to help people, so that where I have seen issues, it has primarily been non-Indigenous people making trouble.

So, for example, I've been working in places where we're looking at, well, there's been what they call joint management of national parks, and the idea

is that traditional owners of the places, which are national parks now, should be consulted with and involved in the daily running of the park. But I've seen non-Indigenous people within government bureaucracies feel very insecure about that, and be really quite disruptive. And that's where I've seen most trouble. It's really been where I see most often Indigenous people being incredibly patient, waiting often decades and decades and decades for honest engagement, and the opportunities arrive and non-Indigenous people don't come with the same patience or integrity. So that has just been my experience.

Working in the fire space, there is generally a fear of fire. It is the sort of Western European, sort of colonial mindset that fire is bad, which was taken on in all these landscapes where fire is an important thing. And we have had some really large and bad fires in southeastern Australia. The 2019/20 black summer fires were quite devastating. And so, generally, we have a culture of the fear of fire. And there is therefore very poor, I call it a pyro-ecological understanding of the nature of Australian landscape in general. So therefore, the fear of fire is transferred onto fire work being done across the rangelands and northern savannas of Australia. And so, there's a lot of misconceptions about what people are doing, and very poor understanding of, I would argue, world-beating outcomes.

And I must say, if you talk about poor behaviour, some of the poorest behaviour I've seen is from academics, from professors in southern Australia wanting to claim ownership of fire ecology as their field of expertise and casting judgment on what is happening in landscapes that they don't understand, on a culture that they don't understand. And their work, them promoting their own work through being aggressively denying the work of others in the North. And you know, academia can be quite like that. There can be some bigger egos who try to promote themselves through undermining the work of others, and they don't really understand what's going on. So, I mean, a lot of my work has been trying to educate the broader Australian population about what is actually going on and the good work in Northern Australia in terms of fire management, because I think that's where a challenge comes. If you maintain the fear of fire, you maintain a poor understanding of the fire ecology of places which aren't near Sydney, Melbourne, Canberra, or Perth, you have all of these misconceptions, and it can lead to conflict, you know, maybe not on the ground level, but it can be quite disruptive.

It can be a very closed, inward-looking world. I mean, one thing that's been great, particularly my institution, and something that's been pushed here from executive down, is this idea of what we call Bush universities. So, trying to really acknowledge traditional knowledge, and give it the respect. And in a different way, in envisaging the value of knowledge, and in trying to acknowledge and respect that from a university and by calling it a Bush University, and properly acknowledging the several PhDs worth of knowledge and skills and intelligence of people who will never get a formal PhD within a Western system. So that's something that is being pursued here, which I think is a really good thing.

Dany Adone: Thank you.