

# Nature-based investing with Suzanne Tavill

**MV:** [00:00:00] Nature provides the building blocks for civilization, arable soil, air and water filtration, or as and minerals for extraction and economic and recreational opportunities. In almost any other context, you would expect to pay for these services. But with nature, we are want to expect these things for nothing. Hence the title for the White paper we released late last year, “We don’t value nature.”

As financiers and economists, we are wont to look at nature and try to derive an ROI. And for that reason, institutions have underrated nature—the returns were not competitive with other asset classes. Part of the reason for that is we had not properly placed a price on all the benefits and pleasure we derive from nature. And by doing so, the thinking goes, nature will find a place in investors portfolios. Joining me to discuss nature based investing is Susanne Tavill Stepstone head of Responsible Investment, Susanne. [00:01:00] Happy New Year. Welcome back to RPM.

**ST:** [00:01:02] Thank you and same to you. Always good to share ideas on the RPM podcast.

**MV:** [00:01:06] Let's start at the top. There's a lot of vocabulary here. So Susanne, what is nature?

**ST:** [00:01:13] Yeah, there is some great jargon here. So on a physical level, nature's made up of four realms land, ocean, freshwater and the atmosphere. If we break down the realm, then we find that it's composed of biomes and these you can think of as communities of plants and animal life occupying a specific habitat such as a tropical forest or open ocean or coastal shoreline. Now, realms and biomes are, of course, in fact affected by a range of environmental factors in a given land space.

So thinking about I'm fortunate enough to live in Sydney, Australia, and if we think about our famous Bondi Beach where I love to swim, you [00:02:00] know, that is a coastal biome that is heavily impacted by winds and rains and water runoff. And so here we've got the combination of an ocean realm, a coastal biome, and currently we've got a very healthy system working there. And we can see this because we've got lots of fish, lots of vegetation—very well, well functioning. But in periods of fires or heavy rains, basically

you literally see the number of fish drop substantially, the amount of vegetation decrease. So it shows you that when we talk about these things, we have to understand just how fluid and flexible these ecosystems are. [00:03:00]

So from a financial perspective, if we disaggregate the ecosystem, then there are specific assets that we were able to own and develop. And these assets themselves deliver ecosystem services such as pollination, such as water filtration, such as carbon sequestration. So quite a different way about thinking of assets and their services that we get introduced to when we start to talk about nature.

**MV:** [00:03:31] There's a lot to unpack there. So it's quickly I want to check my understanding: Nature is this all-encompassing entity that includes assets that provide services, and we call these assets natural capital and these provide services that we consume: air purification, pollination, etc. Some of these services originate in biodiverse hot zones that rely that require [00:04:00] a variety and abundance of life in order to provide the services that we rely on. Is that more or less correct?

**ST:** [00:04:07] Yes, that's correct, because ultimately it's the assets that make up the ecosystem. And what we know today is that a well-functioning ecosystem is a biodiverse ecosystem. I guess like a well-functioning society, we could argue, should be a very diverse and inclusive society. But biodiversity is a really tricky within nature because it is unbelievably complex, and we are still very nascent in our understanding around the interconnectivity between plants and animals, plants to plants, plants to the air. So what we do know is that it can take hundreds of years to achieve deep, mature biodiversity like we see in old growth forests or mature mangroves. Now 3% of the Earth's land is [00:05:00] composed of hotspots that contain 44% of the world's plants and 35% of the lands vertebrates. This is amazing because it speaks to the density of biodiversity in these spaces. But of course it's also really scary because we've got these super valuable eggs sitting in a tiny concentrated basket. And what we know is that even if we achieve a one and a half degree temperature rise or limit ourselves to that, which as we know at the moment, we're on track for above that one and one half degrees. Even at one and a half degrees, we're going to lose one in seven species.

**ST:** [00:05:41] So what does this say when we talking about biodiversity is that biodiversity is heavily at risk because we face a number of extinction events as a result

of climate change. There's some really interesting work done by the Stockholm Resilience Centre, [00:06:00] so they've been trying to understand the complexity at a global level of this biodiversity, this interconnectedness, and they've identified nine important systems that need to be well functioning for the overall aggregate system of our earth to be well functioning. And what they've shown is that already over half of those systems have been impacted and we've broken through into a high-risk zone, which means that globally, at a macro level, our whole ecosystem is not functioning as well as it should be. It is under threat. And what this ultimately means is that our food supply, food security is at risk. And this, of course, is the bottom line. It's [00:07:00] unbelievably, you know, concerning when we're talking about at a global level, food supply being at risk, because we know if we can't survive without food, I mean, the amount of instability and human suffering that comes from that. So this stuff is incredibly serious.

**MV:** [00:07:17] So for any listeners out there who might be interested in, you know, seeing the I guess the Stockholm Resilience Centre's framework in graphical form, we've got a great picture in our whitepaper. So Susanne, how does one go about investing in nature?

**ST:** [00:07:35] So really what we're talking about is investing in natural capital, which are the underlying accessible assets within nature. So clearly we can't invest in the ocean, but you are able to invest in certain mangrove assets; you are able to invest in aquaculture, where in turn your practices [00:08:00] such as enhancing the biodiversity of that particular farming zone, using intelligent nets, using advanced recycling and filtration system—all of that can end up actually improving the biodiversity and the ecosystem services that your asset can deliver in addition to just additional fish. So we need to understand the opportunities that exist to invest in in the natural capital space. And this takes a bit of a change of mindset.

So, you know, historically we've talked about forests or plantation land, and people assume that, you know, the return is going to come from chopping down the wood. Now, clearly today you would not be owning an old growth forest and chopping down the wood. You would be getting revenue from carbon sequestration. [00:09:00] And we believe very strongly in the future you would be getting credits from biodiversity credits, from licensing to the likes of chemical and pharma companies who would be allocated

spaces to be doing research on the incredible biodiversity that exists within those, as we call the treasure troves, right. So again, all of this has to be carefully managed, but the idea of thinking about how these assets can actually generate revenue is evolving and evolving quite fast.

**MV:** [00:09:39] All right. Thank you for clearing that up. In any other context, we'd expect to pay for the goods and services that nature provides. And to the extent we do already pay for things like passes to national parks or fishing licenses, in many cases, we haven't fully captured the true cost. We're [00:10:00] still getting a really good bargain. How much of the nature crisis can be resolved through better pricing? And, you know, what are some of the initiatives underway to do just that?

**ST:** [00:10:11] Absolutely. This is really the core thrust of our argument today. Ecosystem services are vastly undervalued, and we believe, and we've seen time and time again, when services are appropriately value, which in turn impacts how the assets are valued, then how those assets get used adjusts. So if I take the example of in Australia, when they started to apply pricing on water allocation from specific river systems, what we saw is that for assets that were sitting on high water allocation, that were high value, that farming of low value [00:11:00] crops stopped and rather shifted to high value crops such as nuts and wine. Similarly, what we saw across the board is an adjustment of how people were watering their crops away. When those long-arm sprayers where who knows where the water ends up probably three neighbours down or on the wind, and suddenly there was an investment in sensors to to direct water. There was investment in proper drip systems. So some of this is not super high tech, but what you saw across the board was greater efficiency of water usage, which is ultimately what we want. So here as it's got priced, it adjusted behaviours, and in turn, led to a wide number of biodiversity benefits.

Beyond [00:12:00] the water pricing, which we see occurring in a number of distinct river systems around the world, you've obviously got voluntary carbon credit markets that have been emerging, some regulatory credit markets. Obviously there's the hope that that all combines together in a more global system. We also seeing the use of in areas such as funding the repair of certain forests in Brazil, that companies who are choosing to do that in turn are getting carbon credits. So that is really, really interesting. And where we see this moving to is the following is there is a big push by the Task Force for

Nature-based financial disclosure, the TNFD that is going to require companies to disclose of their interactions and impact on nature. As companies [00:13:00] are forced to do this, the natural consequence is that they going to be required to show how they addressing their impact on nature. And for many companies, a key way of doing this is going to be through nature offsets, biodiversity offsets, which means that they're going to need to be assets who are going to have to generate those credits to deliver as offsets. And this becomes the key and crux driver for then in turn, a revaluation of natural-capital assets.

**MV:** [00:13:40] So the TNFD is kind of like a sister organization to the TCFD, the task force for climate related financial disclosures. Where does climate fit in? I live in San Diego, where we have a Mediterranean climate not unlike the one in your native Cape Town. We derive a lot from that: strong [00:14:00] agriculture fisheries, plenty of recreational opportunities. Is investing in climate another flavor of natural capital, one that has very specific climate-related goals and objectives?

**ST:** [00:14:13] So this is an important question. Maybe let's address that at different levels here. So some might think that they can invest into climate change without having to touch nature, think they can invest into battery storage or solar power. And it might appear that there's no plants here, right—there's no impact on biodiversity. But that's the wrong thinking, because ultimately the manufacturer of the batteries, how the solar panels are created, all of these, they consume water, minerals, there's waste impacts. So clearly there's an impact on the environment. And clearly anyone investing in climate when making those investment decisions should [00:15:00] be incorporating considerations around biodiversity into the ESG considerations around this investment. And this is a large part of what the TNFD actually is pushing a framework for consideration of these risks and opportunities.

So even today, when people are investing in climate, they actually are making an impact on, on biodiversity and, and nature, and that needs to be considered.

The second consideration is should you be and this I believe, is the crux of your question, should you be adding natural capital assets into your climate change program as part of strengthening that climate change effort? Now, you know, obviously today the most technologically sophisticated and efficient carbon sequestration [00:16:00] device

that we've got is still a tree. So there is there are very strong arguments to say that natural capital has a place within climate change programs. And we believe that this is a path that many will take. So expanding the breadth of climate change programs to incorporating natural capital, another approach is saying natural capital, though, is such a large suite of assets and opportunities, it in fact can warrant a dedicated allocation because it is going to be generating a far more diverse level of impacts. So most climate change programs will target an impact focused on the reduction of GHG emissions. A natural capital program will target [00:17:00] an impact that might expand from around water pollination again and GHG. So it's far more complex in terms of the impacts that it can it can deliver.

**MV:** [00:17:17] So help me put this into all into context. The so-called climate movement is only a few years older than the nature movement, which and the climate movement materialized quickly, mostly before the pandemic, inflation, and the war in Ukraine. How much do you expect nature to follow climate's playbook and how, if at all, will current economic conditions affect enthusiasm for nature investing?

**ST:** [00:17:48] Yeah, so I mean, like I would say, the climate movement within the context of financial markets certainly has accelerated sharply. In more recent years. That [00:18:00] effort stands on decades of hard work by many at both a government and at a broader societal level to get acceptance that even climate change was happening. So for some it feels shorter, but for others, obviously a longer journey.

When we think about nature, it's similar. There have been many out there who have been trying to raise the profile of what is happening to nature, the importance of nature. You can just look at the some of the work done by the World Wildlife Foundation in this regard, but again, within the context of financial markets, because we see now nature sitting on the coattails of the TCFD, so the TNFD [00:19:00] using the credibility and the acceptance that the TCFD has as they launch their framework around nature, and the way that they've gone about launching this is being very well considered. What we expect to see is quite widespread and rapid acceptance of what the TNFD is advocating for. What we can see globally is that a lot of regulators are very comfortable with the TCFD and are pointing their regulations to look at and reference the TCFD. So that's the level of acceptance that that has. And so it's not hard to imagine that the TNFD will gain quite widespread adoption and acceptance in the financial community, but also actually

in the regulatory community in the years ahead. [00:20:00] In the short term, the current economic environment might dampen enthusiasm around taking on a newer concept. We can definitely see that, you know, allocations might be more constrained in the short term. I just think that this is a timing issue. If it's not addressed today, it's ultimately going to be addressed tomorrow globally through investment portfolios.

**MV:** [00:20:40] Okay. And assuming society doesn't put this off any longer and we do indeed, you know, begin, placing a price on all the services and benefits we derive from nature. Some industries will need to change faster than others: materials, energy, [00:21:00] utilities all have a much higher share of activities that affect the natural world than, say, financial services. I guess for me, it sort of stands to reason that, you know, these high impact sectors have the most to lose, at least in the short run, if they fail to account for nature, and that the low impact sectors, like financial services, may have the most to lose over the long run because investors have stakes in both types of sectors and to varying degrees, the way in which each investor addresses nature in their portfolio is going to differ. Talk to me a little bit about the challenges that investors and asset owners are facing with respect to building a nature-based portfolio.

**ST:** [00:21:49] Yeah. So the first is that this is all relatively new. The frameworks are nascent and there's many concepts that still [00:22:00] need to get ironed out and systems developed.

So some investors might view this one as too hard; they might prefer to wait on the sidelines until there's greater or this sort of more nascent period has passed and there's greater clarity of concepts or approaches wait to see how others do it type of thing. While we can already see that there are some investors who are saying we need to dedicate the time and attention and resources to getting on top of this and learning about this and making sure our portfolios are positioned appropriately, particularly before assets are assets may rerate, right. So I think the biggest issue, therefore, in summary that investors are facing is the newness of all of this and the fact that this is now, again, something else consider off the back [00:23:00] of years of ESG integration, we've had climate considerations, and now we're loading on nature as well. So it's just

you know, it's quite a a lot and it requires appropriate, as I said, time and resourcing within organizations.

**MV:** [00:23:21] Lastly, I want to talk about COP 15. The UN's 15th annual convention was held last winter in Montreal. Heading into that conference, policymakers had some lofty goals like protecting 30% of land and seas by 2030 and slowing the rate of extinction by 90%, all while not impeding on humanity's economic ambitions and recognizing the land rights of local residents and indigenous populations. But considering that, like 1.8 billion people [00:24:00] live in areas that would need to be conserved, this goal is nothing short of very ambitious. In your estimation, how did COP do? Where did it succeed, and where is there room for improvement?

**ST:** [00:24:15] So overall, I think it did well because it actually came to some type of conclusion and ambition. And the way they laid it out is actually there are four overarching goals targeting 2050, and these are really to repair the ecosystem. So this is addressing extinction issues, protecting hotspots like we spoke about. One of the goals is around valuing ecosystems and ecosystem services. So clearly, they've been listening to us. And finally, there's another important goal around mapping [00:25:00] and understanding nature and sharing that knowledge. So this really sort of channeled some of what we were talking about in understanding the secrets of the old and ancient growth forests and really getting to grips with what is happening in that interconnectivity between nature in within nature, and sharing that knowledge widely and also incorporating knowledge from indigenous communities into that understanding. So all of that's quite amazing. And finally, there's a very big goal around appropriately resourcing, even at a governmental level, all of this effort.

So I think very important 2050 goals, clearly 2050 always feels like so far in advance. So as per, with the climate movement, there's the 2030 goals and this starts to introduce certain metrics. And as you rightly said, they are our goals [00:26:00] around protecting and repairing 30% of land and reducing waste and toxicity by 50%. The next COP has the very difficult job of getting into the minutiae of how exactly this is going to be measured and reported. And no doubt this will come to the issues that you were raising of the very tricky tradeoffs that have to be taken when we have this this discussion. And I think everyone's acutely aware that, you know, previous attempts under the COP framework, have been challenged and in fact have failed because either



the metrics were too complicated, too granular, too difficult to measure. So the next COP is going to be incredibly important. But I think we do have to recognize that where we got to out of this one, which I think, you [00:27:00] know, was incredibly encouraging.

**MV:** [00:27:02] Suzanne, is there anything else that you want to cover that we may have missed?

**ST:** [00:27:07] So, look, as I touched on, ESG processes will need to be amended to include biodiversity considerations. And the work being done by TNFD is going to be incredibly important in informing this. I think there's also work being done by ISSB, which of course is today coming out with climate disclosures. But in the future we believe that they're likely to include biodiversity into or in addition to those climate disclosures. So I think those are two important, big, important groups for people to be watching what they do.

But stepping back, you know, I think we need to recognize that our understanding of nature [00:28:00] is still nascent. And I believe really strongly, as we learn more and more about nature, these natural capital assets, I think we will be increasingly awed by the complexity of nature and what she can offer us. And I really hope that as we start to listen and learn more, that, you know, many of the ills of the world be those around in the medicine, food supply, how we power cells, a lot around our industrialized world. We will find some a lot of solutions, I believe, sitting in the natural world. And this for me is incredibly, incredibly exciting. Today, you know, we know more about distant stars than we know about our [00:29:00] oceans. And this has all got to change because we need all the help that nature can give us.

**MV:** [00:29:06] So that makes me think of something. You know, when we think of the digital divide, you know, we think of kind of like disenfranchising people in remote parts of the world. But I think it's a, you know, a two-way street. I mean, sure, like in developed countries, we have greater access to technology and to communications. But we've also kind of maybe lost some of the wisdom and the knowledge that, you know, I don't know indigenous peoples, peoples that don't have access to the same technology, things about the natural world that they have long known and understood and that we have lost on our march toward technological progress.

**ST:** [00:29:45] Yeah. And I think, you know, this is what really that 2050 goal around mapping is getting to. Yes, they talk about DNA sequencing, but they also talk about sort of inclusion of the [00:30:00] knowledge of the indigenous communities. And I think there's an increased recognition that, you know, a lot of that old knowledge and old wisdom, it was touching the using understanding aspects of nature. And today we can bring technology in, partner with that aged wisdom to really understand exactly at a molecular level what exactly was going on. So, you know, I'm hopeful that, you know, the fact that that's even being recognized within a COP framework is incredibly exciting. Of course, you know, I personally worry about how much of that ancient wisdom has already been lost. You know, and we've got to we've got to hustle and scramble to sort of make up for it.

But I think the other issue that I would highlight is, as you say, there's tradeoffs happening between developing and developed worlds. [00:31:00] between different regions. And when we get to grips with discussing nature, you know, it throws up all those tradeoffs and all those difficult decisions right in our faces. And, you know, this is something that we would all have to understand that it's not going to be easy, right? It's not going to be easy, the decisions, when we understand that an important solution for a particular disease might come, you know, from the use of a particular plant, which is sacred to a particular community. Now, how do we bridge that? Well hopefully there'll be, you know, approaches of how to breed that plant, etc.. But yeah, I think lots of lots of tradeoffs and lots of need for listening and learning.

**MV:** [00:31:53] Suzanne, it has been a pleasure as always. Thanks for joining me. Be well and hope to see you again soon.

**ST:** [00:31:59] Thanks, [00:32:00] Michael. Appreciate your time.

**MV:** [00:32:02] That does it for this episode of RPM. For more information on StepStone's approach to nature, ESG, Climate Impact investing, head to our web page at [stepstone.com](https://stepstone.com). RPM is available on Apple Podcasts, Spotify, Stitcher, and other podcast platforms.