



Dr. Ron Ehrlich: Hello and welcome to “Unstress” where each week we explore what it means to think holistically. Not a New Age philosophy just happens to be the way our bodies and the planet work and also what stresses us as individuals and the planet. The tools you already know are inseparable and also where we explore another piece of the puzzle, our modern world. I'm Dr. Ron Ehrlich.

Now the words “sustainability” and “diversity” keep cropping up. A few weeks ago, we explored the Green Revolution and what a GDP (gross domestic product) actually says about the health of the country and more importantly about how happy and healthy its inhabitants are.

My guest today is Professor Jules Pretty – OBE. He's an author and academic whose work focuses on sustainable agriculture and the relationship between people, nature and the land. He is a professor of environment and society as well as deputy vice-chancellor of the University of Essex in the UK.

Jules writes on the importance and relevance of nature for people. His research focuses on green exercise, nature and health. His 2010 papers ‘dose of nature’ and ‘hundred top questions for agriculture and food’ received considerable coverage in a claim worldwide. Now we won't get a chance to go through all hundred questions today, but we do cover a few and then some other issues. I hope you enjoy this conversation I had with Professor Jules Pretty.

Welcome to the show Jules.

Professor Jules Pretty: Very nice to be on Ron.

Dr. Ron Ehrlich: Jules, you are a professor of Environment and Science and you've written books and done a great deal of research over the years. I wonder if you could give our listeners a sort of a brief of your own journey, a story of your own journey.

Professor Jules Pretty: It is about the kind of relationship between us and nature, between people in the planet, the individual things that we can do as well as the sort of larger policy things that can afford to happen. The concern is kind of obvious really. Our consumption patterns across the world are using up resources more rapidly than the world can supply them and unless we make some changes it's going to put us in a pretty difficult pickle if we aren't already there already.

Over many years I've worked on kind of food systems, on sustainable agriculture, as one part of the picture of trying to produce the things we need, the food we need whilst not harming or damaging the planet.

On the other side, there's a range of work and writing that I've done around the importance of nature in our lives. Both the kind of fundamental concept of that but also the kind of more direct benefits on the health of us being in natural places and looking after them and having some effective benefits from that on each of us.

There's a range of things that tie together but it's really about our relationships with nature with the planet that is at the centre of my work over many years.

Dr. Ron Ehrlich: The word “sustainability” is one that we're hearing more and more of related to cities, nature, agriculture. I mean at the risk of stating the obvious what does that mean and how are we doing as a planet?

Professor Jules Pretty: What it means to me is kind of living within limits really. We've got one planet. Only the one. If we go back actually to just about 50 years, 50 years ago this year on Christmas Eve, that was the first moment that humankind had ever seen a picture of our planet as a single system. It was when the Apollo 8 astronauts and William Anders came around the back of the moon and they took that famous picture which was called Earthrise. But that was the first image we had of a little pail green and blue planet in the middle of dark space on its own. It's now, of course, an iconic image. We might have all seen it today perhaps.

But 50 years ago, no human had ever seen it. I think that's quite a kind of symbolic moment for us to say. There's one planet, if we create problems for it there's no cavalry coming over the hill, there's nobody coming from outside to rescue us. We must create those kinds of solutions for ourselves. For me sustainability is about living within those absolute limits and taking responsibility for our actions whether we are from kind of affluent or from poorer countries and trying to find practices whether they're related to food production or energy or whether they're related to our health or a whole range of other kinds of things that we consume in order to have a life. We need to make sure that those don't add up across 7.2 billion people to a number that the planet just can't sustain.

Where we are is it's difficult. Difficult to be categorical about this. One could be pretty pessimistic and say it's looking pretty serious especially when it comes to climate change. On the other hand, lots of people are getting the message, lots of countries and policies are beginning to change. The key question is "Can we make those changes quickly enough to allow the planet to recover in our lifetimes, in our children's lifetimes without a serious disruption?" I think that's what the sustainability kind of field is all about really.

Dr. Ron Ehrlich: We're always hearing about GDP as a measure of how we're doing as a country and consumption is absolutely the driver of that. I mean the more consumed, the greater the GDP and I know that's a massive oversimplification but what are some of the challenges of that model? It's a great economic model.

Professor Jules Pretty: It is and it's pretty flawed because it measures our consumption largely of kind of goods and services and that is only part of the picture. A couple of thoughts here. If you measure the life satisfaction or indeed put another way the kind of happiness of populations, if you look in affluent countries like the UK, US, Australia, another kind of affluent countries over the past 50 years GDP per person the amount each of us has any kind of spends on stuff has improved substantially over that time in the UK and the US it's kind of three and a half to four-fold more than fifty years ago and in Japan it's sevenfold more per person. But when you look at life satisfaction at the population level it's flat across the 50-year period. We've got more stuff, but we haven't seen the benefit in terms of life satisfaction.

Of course, each of us goes up and down across a day, across a life course, within populations, there are people feeling better feeling worse. But aggregated out it's a rather kind of alarming flat picture across the whole of that period of time. That suggests to me that GDP, as it measures our consumption of goods and services, is flawed because it's missing really important stuff to us.

Let me give one example. How about the consumption of birdsong? Listening to birdsong in the garden or in a park? How about consumption of a sunset? Pretty well every single person who has a camera I guess on the planet has taken a picture of a sunset and what's that all about? Well, it's not because of the inherent colours of a sunset it's because we stop, we look, we go "Oh, that's nice, look at that". That's stopping is a behaviour that allows us just to kind of settle become calm, forget the stresses the anxieties of the world and we consume a moment that actually produces benefits for us.

Birdsongs are not part of GDP, sunsets are not part of GDP, sitting on the beach watching the day go by doing nothing, watching other people doing nothing is a form of consumption as well but is not measured by GDP. All those kinds of rather narrow measures of so-called economic success tend to miss the really important stuff for each of us. The things that make us kind of want to live and enjoy the day and give us things to talk about. We get stuff, after a bit we get fed up with it and we want another one or a new one or a brighter one or a shinier one and that, of course, is part of the reason why the planet is straining under that kind of choices that we make because of the dissatisfaction that is created around the goods that we have and our desires which are often manufactured by companies and another kind of interests to encourage us to go and get another one.

Dr. Ron Ehrlich: Are there are other accepted measures? We often hear about Bhutan as being a country of the happiest in the world or maybe Norway is. I'm not sure so it's a toss-up. But are there any other measures that we could or should be using?

Professor Jules Pretty: There are. There is kind of a range of efforts to kind of measure and to resolve back to single indicators a whole range of aspects of our lives, but they tend to be a bit flawed because you're trying to

cram so many ideas into a single indicator. My preference is to look at things that countries that are doing well and in terms of common satisfaction or happiness Bhutan is a good example as you just mentioned. Scandinavian countries Norway, Denmark, Sweden, do well on these scores as well. When you pick that apart that's because those cultures and indeed policies of the governments encourage expenditure on things that seem to be important to us that make us bail. They encourage them. In Scandinavian countries, there are very substantial government support for paid maternity and paternity leave, a year's pay when you have a child for each of the parents.

That is something that the people of those countries support. That's where their taxes are going, and it makes them well and it improves childcare raising and has a substantial impact upon people's lives. But it is mostly missed by GDP.

My preference would be too kind of set aside those narrow measures and say “Yep, they tell us one thing but not a lot. Actually, we should be looking at the other things that countries do.” Bhutan, clearly one of their reasons is because of the clear national support for a kind of spiritual approach to the world of the kind of Buddhist culture within the country is it kind of woven deeply within the culture and is another reason why people focus on kind of happiness and life satisfaction above other forms of consumption.

Dr. Ron Ehrlich: What's the history of GDP? I've never actually even thought of this. Is it just being one of those things that have emerged out of the economic rationalist neoliberalism of the early 80s?

Professor Jules Pretty: It was a post-war thing. After the Second World War, Marshall Plan and other efforts to kind of focus on investments on recovery in countries which had been ravaged by six years of warfare. Economists wanted to find a measure that would help them determine the value of the returns of those sorts of investments and it just became a kind of cult thing I suppose that those in charge felt that this will measure because it measured the stuff that was important to us. That I'm not exactly sure how it became so dominant but it's only in recent decades, recent years even that people have started to challenge what's inside the measures of GDP.

If I were to drive into town after our conversation here and crashed my car and had to go to hospital I would be contributing to GDP because the car would have to be replaced, tick, money would have to be spent on doctors and nurses to look after me, tick, insurance companies would get more business, tick. All good for GDP whereas if I drove and didn't have a crash I wouldn't be contributing to GDP very much.

You can pick apart these individual measures and say actually some of that is crackers which you should be thinking about the world in a slightly different way and just looking at benefits and costs. If we took the food system you would say well that's interested in what food do we get but what negative impacts, what economists called externalities to happen to nature in the environment in the business of producing food? And if we can measure those, well, I think we have done that, cost them then we can find ways of encouraging investments in alternatives that would be more sustainable.

I think there's a way around the kind of GDP argument by just saying it's flawed, it doesn't measure the important stuff but hey this is the way we should go by doing that.

Dr. Ron Ehrlich: Now a few weeks ago we had the pleasure of talking to Professor Paul R. Ehrlich and I love the way that rolls off my tongue, Professor Ehrlich but it wasn't me, it was him and he wrote that book in the 60s – “The Population Bomb” and I was asking him about how we were going here because the Green Revolution came shortly after that and it provided us with seemingly cheap food. I say seemingly cheap because it came at a price. In your observation what are some of the prices we've paid for this seemingly cheap food?

Professor Jules Pretty: Huge number actually. The first Green Revolution that one that the 60s and 70s delivered agricultural systems that substantially did increase food production per hectare, per farm, per farmer and certainly contributed to a reduction in hunger. But we did pay a price for that. The forms of agricultural production that were encouraged and indeed are kind of still extent in large parts of Australia and large parts of



Europe, North America and other affluent countries. Our food systems that look on the one hand productive, but they are productive because they externalize some of their costs.

If you use let's take one example, if you use a pesticide to control your insect pests and that pesticide gets in the water system and the water company then has to pay to remove it before it delivers drinking water to you, the water company isn't paying for that, actually the consumer is paying because they'll pass on the costs to the drinking water consumer whereas the farmer is not paying. That's externalizing the costs elsewhere into the food sector.

I'm kind of fond of saying that when it comes to food which as you said in some context appears cheap actually we pay three times for our food. We pay once at the till, at the shop at the retail outlet, we pay a second time to clean up the environmental and social costs and then we pay a third time for the taxes and subsidies that are paid to farmers to encourage them to continue to use certain forms of agricultural system.

Food is not cheap, it's expensive. It's just that it appears cheap relative to other goods and services because we've hidden some of those other costs.

Dr. Ron Ehrlich: The other word that intrigues me and I've heard a lot of in the context of our microbiome be it in the gut, in the mouth, in the soil is that diversity is a good thing in terms of building resilience. That's been another feature that suffered in the Green Revolution, hasn't it? I think what we are actually exposed to isn't as diverse as it once was.

Professor Jules Pretty: Sure. Yes, that's one of the costs of simplifying agricultural systems to focus on productivity of the core crops which as we were saying already that's been very successful. In the UK now, average wheat yields of between 8-9-10 tons per hectare. This is a remarkable change from just kind of 50 years ago dramatic but the cost of that is that we create monocultures in order to do that because our focus is on the food production itself. We lose important environmental services or ecosystem services that help farmers in other ways. When you remove biodiversity in the broader sense that might be crop diversity or it might be wild diversity close to fields or near to farms or on the edges and that in itself provides a range of services that have monetary value to farmers.

Certainly, part of the movement around sustainability in agriculture has been to deliberately redesign agricultural systems to make them more diverse but to be very cognizant of these kinds of services that diverse systems can provide.

Dr. Ron Ehrlich: What are some examples of those ecosystem services?

Professor Jules Pretty: Let's take one that's kind of emerged in East Africa. A really interesting system called "push-pull agriculture" or in Swahili is Mutu tsukumo - push/pull. This relies upon the recent knowledge, relatively recent kind of in the last decade or so there's been a lot of fascinating research on the semiochemicals, the kind of hormone-based compounds that plants produce when they are attacked by pests in particular herbivore. When they are under attack plants produce chemicals that are released into the atmosphere which encourage predators and parasites to come in inwards. That's the pull. So, plants say "Hey, I'm being attacked. Come over here, there are some things that you could eat and destroy if you come quickly". They also produce some compounds that push away the pests that are repellents.

These are kind of natural outcomes of millions of years of evolution. If you put together for example rather than just growing maize on its own and then the maize suffers from pests, for example, the main stalk borer is a big pest of agricultural systems in East Africa and Southern Africa and farmers have to spray a considerable amount of insecticide to get rid of it. If you take a system and instead of just having maize you put in some legumes, called desmodium which also fixes nitrogen in the soil. It delivers you a free fertilizer. The desmodium in the maze plus having a range of grasses around the outside, a nipper grass, molasses grasses, a range of other ones. You create a system called "push-pull" which pulls in parasites to parasitize the cornstalk borer. Pulls in predators to eat them and pushes away the stalk borer from the maize onto the grass and the grass release a resinous compound which is under attack which is toxic to the main stalk borer.

They're about a hundred and fifty thousand farmers now in Kenya and Uganda and Tanzania that have adopted this system. By this redesign you can completely remove the need for paying for insecticides for farmers it's cheaper for the environment it's better because there are no toxic compounds being used. For farmer's health, it's better. For the companies that produce the insecticide it's not better, so they fight back but for the redesign of systems you end up through a more diverse and really rather clever research-based system. A design that can deliver substantially more food with less damage and with greater resilience because that diversity gives you this kind of buffer against shocks and stresses as well.

Dr. Ron Ehrlich: Fantastic. It's just a beautiful system. Yet this tension between what is possible, what is better for our health, what is better for the farmers, what is better for the environment and the messaging that we are contending with is one of the challenges really, isn't it in the environmental world?

Professor Jules Pretty: It is and there will always be winners and losers in any kind of transformation, in any sort of system-wide change and a recognition that kind of each of us has agency and can foster change, us as researchers or writers or people who are working closely with farmers within systems extensionists or other advisors, farmers themselves, farm families. If you can kind of say to people "it is a system, it works, we've tested it in these ways, have a go" then that's a kind of starting point for then being able to say "Okay, this is the way that we'll hold your hand, we will help you work together with others, we will create what we call 'social capital' – The relations of trust, reciprocity obligations, mutual support that will allow farmers to make changes together which gives them a greater kind of strength and motivation and indeed confidence actually to engage in doing something quite different. We shouldn't underestimate how difficult it is to do that. We all have our own kind of ways of living, of acting, of choosing and if somebody came along and said "You know what? That thing that you're doing it's really bad and you should do this" then our first response tends to be "Okay, I'm not sure I believe in you or maybe I'll do it until you go away and then I'll go back to doing what I did before". We've got a much better understanding of this kind of pathways of change that transformation of helping give support to farmers in groups and helping that sort of that agency led transformation then we used to have.

A good example would be land care in Australia. The six-thousand land groups that were formed, farmers working together on proper difficult problems weather drainage or waters management or Wildlife or a whole range of fascinating really good pest management programs on your side. Farmers working together can develop knowledge as well as confidence and create systems that have the potential continually to change over time because the world changes ecologies change, social and economic environments change and there's no kind of perfect outcome to sustainability, there's no moment when we arrive at the station and all will be well and then we can retire. It will always need change and innovation and the capacity to develop new solutions.

When you think of them the 500 million farmers across the world the challenge for all of us is to give them the capacity continues to be able to adopt change, create novel systems in the face of the shocks and stresses that will be coming at them possibly more than ever before.

Dr. Ron Ehrlich: We've kind of moved as individuals in our cities and actually on the farm to moved away from nature and that's been part of the problem and we're rediscovering that, but you proposed a way of reconnecting with nature, you've called it "The manifesto for the green mind". Can you tell us a bit about it?

Professor Jules Pretty: Sure, you're absolutely right. Especially in affluent countries but also in the industrialized parts of many developing countries or that term is flawed but you'll understand what I mean is that our lives are now increasingly being led in ways that take us away from direct contact with natural places. We've done 15 years of research around what we call green exercise which is just the notion of activity in natural places and we found that there are benefits for all ages, genders, ethnicities social groups from all kinds of green environments whether urban or rural or high or low biodiversity or whether garden or farm.

That kind of that notion of ubiquitous benefit from natural places for all of us then leads us into then saying "Well, how does that come about and what should we do about it to encourage more of it?" The challenges are substantial if you take just because of the kind of changes that we have in our kind of the rest of our economies. If you take a rural part of England where I live on the edge of Suffolk and Essex which is to the northeast of London, the average person walks about 120 miles a year but if you go into London into the middle of London

the big city, you'll find that people walk on average 290 miles a year. People are more active which is better for their health in the city than in the rural areas where there's a lot of nature and that's because of changes to transport services, you've got to travel further to get to them and of course nowadays we use the motorcar.

If you look at something like a big city like London, you say that's interesting, people are more physically active. What are they doing with their time? Well, on a summer's evening like today beginning of August, Hyde Park, one of the biggest green spaces in the middle of London, this evening we'll have probably about two hundred thousand people in Hyde Park out walking, playing, enjoying themselves, playing with the kids, kicking a football around, maybe playing a bit of cricket who knows. But they're all receiving a health benefit from being out there in nature even though they might not have articulated it quite in that way.

Our interest is in improving access to green spaces, making it part of our daily lives and our "manifesto for the green mind" was about saying "You know what? There is some kind of really important fundamental things that we should be doing." Just let me pick one example - Every child playing outdoors every day. It would be a good kind of target because if you can get behaviours early in life, particularly in the middle ages of childhood between about ages 5 to 11, that's the period when we first lay down continuous memories, when we explore the world, when we take risks, where we create the kind of stories and metaphors and memories that we'll carry for life. If we don't do that in natural places when we grow up and someone says we should protect the environment or nature we might say "I don't think so because I don't remember doing any of that myself". But if you can remember a day when you had a picnic under the tree with your family in the park or you went to the beach and something happened, and it was really nice you might carry that memory in a way that then provokes behaviours and choices that would be good for sustainability later in life.

Dr. Ron Ehrlich: You have given our listeners quite a lot of things to think about there. Tell me when you look at what could be and should be and you've seen happen in various parts of the world and then the flip side of that is what is going on in our world. Are you an optimist?

Professor Jules Pretty: I am actually.

Dr. Ron Ehrlich: Let's talk.

Professor Jules Pretty: We should be optimistic. We have to be kind of cold-eyed around the evidence and the way that kind of things slip away so rapidly and focus attention upon those related to the physical activity that I was just talking about and the food systems that we were covering a little bit earlier. Thirty years ago at the time of a very important document that was reduced towards the end of the 1980s was called "Our common future" - The Brundtland commission's report on sustainable development, we were involved in the Secretariat at the time back then and pretty much the whole of that book still stands up about the challenges for sustainability about challenges for removing poverty in the world and creating kind of better human benefit.

One of the big things that missed completely was climate change because people were still thinking maybe we're going to be entering a period of kind of greater cold. That was the dominant narrative in the early 80s. But it also missed the emergence of the obesity pandemic and at the end of the 1980's the number of people in the United States who were clinically obese, that's body mass index of 30. In the US was 6% and in the UK was 3%. Now a generation later just a single human generation in the US it's about 35% average and in the UK is about 25% on average. Most kinds of affluent countries are in that kind of range with a few notable examples of where people really pay attention to food behaviours and are continually active for example Japan or Korea. They haven't got that similar pattern.

That's a single human generation. We didn't see that coming and bang, we're at a point where we're talking about a quarter to a third of the population of some affluent countries where adults will probably pre-decease their children because they're just not living long enough. That's what the evidence tells us. Then we need to kind of swing into action and do stuff.

My optimism would come from years of working around sustainability in food systems and seeing substantial improvements in kind of understanding and in practice across the world. Around the whole kind of nature and



health thing, we've seen that emerges as a kind of important narrative that is beginning to shape policy and practice as well as behaviours. Can we do something as dramatic in another generation to control, limit, prevent climate change or obesity or other big problems like dementia, type 2 diabetes, loneliness, mental health, other kinds of afflictions of affluence?

Going back to our discussion earlier on about GDP, it has been said that affluence has betrayed us. We think its a great thing but actually, we've been betrayed by it because we've allowed these other things to sneak out which then become big costs that drag back the economies.

Dr. Ron Ehrlich: One could argue that another by-product of the Green Revolution was that health picture because they were worried at the time about feeding the population but not overfeeding. That wasn't on the agenda. The other thing that may not have come up in our common future was the impact of technology and I think you probably are old enough to remember when we were promised that the introduction of technology would be the dawning of a golden age of leisure and stress-free life because so much would be done for us.

Professor Jules Pretty: Exactly, that's right and we'd be living on the moon as well at the same time. Yeah, absolutely. Technology's a fantastic thing. It's kind of delivered all sorts of benefits, the technology of our kind of mobile phones and the capacity to stay in touch with people has been transformative. It's had side effects, but it's been transformative. The technology now that is delivering renewable energy systems is advancing at a pace and offers us hope that we will break our addiction to oil and fossil fuels sooner than kind of many expect. Denmark now has a number of months each year where their total electricity production in the country is from renewables.

When you think about what you say that when it's a small country its four million people, but they've invested in a whole range of technologies that give them alternatives and their energy production once the turbines are built or that solar photovoltaics are in place. That technology has no side effects. It's just using up the wind and the Sun and it's producing energy for us which if we then invested in electric cars would mean we could get rid of air pollution which has become a kind of a new old problem in many of our cities. We could get rid of all of that at a sweep if we all took on electric cars.

That would be another technology there that it's just kind of creeping up. We're just waiting for them to be cheap enough for everybody to buy them. If government's want it to be really sensible and radical they would put in subsidies and incentives and get us all to buy electric cars as soon as possible and then suddenly you'd have this kind of potential, nice solution of producing our energy, electrical energy by renewables with no side effects, us moving around in vehicles with no side effects. Transformative, potentially really transforming. That's kind of where it can really work for us.

Dr. Ron Ehrlich: Yeah, yeah. I think technology - transmitting information is also a powerful tool. I was incredibly optimistic about this up until about a year or two ago and then along came the American elections and Brexit and I realize that technology information can be manipulated. Hopefully for good. Maybe that's what we've learned.

Professor Jules Pretty: Well, I think you're right there. Technologies are neutral until people use them and they use them in different kinds of ways. If we accept our kind of capacity for agency to make choices, to encourage the use of technologies, let's say communication technologies for families to stay in touch, for farmers directly to stay in touch with researchers who might have solutions to their problems and be able to tell them from remote places exactly what they should be doing about a certain insect that they might have spotted or a certain kind of pest damage. I mean you can just imagine the potential for that flow of information to be extremely positive.

There will be downsides as you just mentioned. To a certain extent I think some of those kinds of interests acted first and early and worked out quickly how to create benefits for them by manipulating advertising on social media and some of those platforms as well we have heard in the press were complicit in this because they were happy to take the money. But we're seeing changes in that as well.

Dr. Ron Ehrlich: I still remain an optimist. Now look, we've covered some great territory there Jules and I really thank you for this. I wanted to just finish with this final question, taking a step back from your position as a professor of environment and society and head of a department and all of that because we're all on a journey in this world, what do you think the biggest journey is for people on their health journey through life? The biggest challenge on their health journey through life in our modern world? What do you think that might be?

Professor Jules Pretty: That's a really good question. I think it's about our behaviours and our choices. Now what we do is of course shaped by big kind of operators and changes advertising has a direct and often insidious effect upon us, the shaping of our economy, our transport systems, the way we live. All limits are our choices. We don't really have free will but it's heavily shaped.

However, within that context there are things that we can do that will benefit our own well-being in the short term and the long term. For me that's certainly around the kind of two areas that we've talked about our food choices, making healthy effective food choices where we choose food, we shape the farm systems at the other end of the food system and when we make choices around our activities in nature we give value to natural places and the planet as a whole and we also receive health benefits.

For me going back to the kind of an echo of what we talked about earlier I would put the biggest priority on making sure that children's children have those opportunities early in life in order to form the good behaviours as well as to give them the personal resilience to deal with the kind of stresses and anxieties of a modern world that we see before us.

I would say it's that really. Outdoors every day, activities in the garden, in the park, on the beach, on the farm where it is or some kind of personal behaviours that encourage and looking after the land in the better way I would say.

Dr. Ron Ehrlich: Jules, thank you so much for joining us today, it's been fantastic. I've so enjoyed it and until we speak again, be well.

Professor Jules Pretty: My pleasure Ron. It's been really nice chatting. Thanks very much indeed.

Dr. Ron Ehrlich: It's interesting to hear about the “push-pull” agriculture model in Africa. Regular listeners will remember the interview I did with Joel Salatin earlier this year. Arguably the world's most famous farmer. It's also worth listening again to my interview with Charles Massey where he identified the problems with the Green Revolution and went on to discuss regenerative agriculture and the five crucial landscape functions or processes. Go back and listen to it, it's a beauty. And of course, my interview with holistic management expert Allan Savory talking about the holistic context of management decisions and holistic land management in particular.

Now as Jules said our relationship with nature is an important one and we need to engage with it. Not just getting out in it and enjoying the connection which is clearly important but becoming aware of the choices we make.

Now we get to vote every three or four years in elections but the big one is we get to vote every single day in how we spend our money. If money talks which it clearly does, we should use that power constructively.

Jules has written some great books on the environmental health and nature and he blogs regularly on a wide range of subjects, so we'll have links to his website.

Until next time, this is Dr. Ron Ehrlich. Be well.

*This podcast provides general information and discussion about medicine, health and related subjects. The content is not intended and should not be construed as medical advice or as a substitute for care by a qualified medical practitioner. If you or any other person has a medical concern, he or she should consult with an*



*appropriately qualified medical practitioner. Guests who speak in this podcast express their own opinions, experiences and conclusions.*