

**Transcript**

00:00:00:00 - 00:00:24:08

*James Shooter*

Five years ago, a book came out that changed the face of rewilding in England. Now I have a pretty poor attention span at the best of times, but I remember churning through the pages front to back within days. The book was *Wilding* by Isabella Tree, a story about the return of nature to a British farm and what a story it is.

00:00:24:10 - 00:00:51:16

*James Shooter*

The land beneath my feet used to be arable farmland. Large herds of dairy cows wandered the neighbouring fields, and a few thousand sheep grazed nearby. Nothing out of the ordinary for lowland Britain. It might have been green and it might have been pleasant. But wild? Not so much. Its previous identity is hard for me to picture because it's now an evolving land of scrub and wood pasture.

00:00:51:18 - 00:01:23:06

*James Shooter*

It's tangled, it's messy, and it's bloomin' marvellous. This land is now brimming with butterflies and humming with crickets. Nightingales sing late in the evening and turtle doves purr from the oaks above. This is a story of success where nature's cup is refilling. So how long did this transformation take from farm to feral? 50 years. 100, perhaps. Try 15 to 20.

00:01:23:08 - 00:01:51:06

*James Shooter*

Nature isn't clawing its way back here. It's sprinting. I'm James Shooter, host of The Rewild Podcast, and this is Knepp Wildland.

00:01:51:08 - 00:02:16:21

*James Shooter*

I've travelled down to Horsham in the south of England to meet Charlie Burrell, co-owner of Knepp with his wife Isabella Tree and Penny Green, the resident ecologist. It's an exciting preamble coffee because after staking out their wetlands until midnight last night, Penny brings with her some positive news. How are you? Nice to meet you. All I heard was Izzy saying, Have you heard the news this morning?

00:02:16:22 - 00:02:28:13

*Penny Green*

And I said, I tried to phoning and I sent a photo. It's in. It's not the best photo I'm afraid.

00:02:28:15 - 00:02:38:05

*Penny Green*

The alarm. I think you might be. We're not telling anyone until we tell Natural England first.

00:02:38:07 - 00:03:09:17

*Charlie Burrell*

It's quite grown up I know. I mean, you can't tease me with this. It's a beaver kit. We've been waiting for something to appear. Oh, really? Hoping that they have bred.

*James Shooter*

I leave Penny to her morning tasks and start following Charlie's hurried footsteps out into the field. Isabella is already out with a film crew somewhere in the scrub, and Charlie's got to show around a flock of journalists in a couple of hours.

00:03:09:19 - 00:03:32:05

*James Shooter*

So we have to get moving. It seems like a chaotic schedule to me, but I get the sense this is just part of the everyday now for this passionate team. As we walk into the greenery, Charlie's pace relaxes. Mounds of bramble breach above the ground. Wild rose is still clinging onto some of their pink petals and strands of blackthorn are decorated with sloes.

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*James Shooter*

The yellow flowers of common flea bane fill the gaps between them. 5 minutes ago, we were in a rush. But Charlie now can't help but show me things on the way through. You can tell he lives and breathes this land.

*Charlie Burrell*

So that was the first stork nest to be built on top of a tree. Right. Okay. And it was such a surprise because we'd been going around learning about these animals and what they did.

00:04:02:02 - 00:04:29:11

*Charlie Burrell*

And one of the questions I was always asking, whether you were in Switzerland or in Holland or in Sweden was where do they nest? Naturally. Yeah. And and we never got we never got the answer. Oh well, they do nest in trees, but mostly they nest on tops of poles and in villages and so on. And or on tops of cathedrals or whatever it is.

00:04:29:12 - 00:04:51:07

*Charlie Burrell*

So I kept on pressing, saying, Well, where do they nest? You know, before man came along and built its cathedrals and built, you know, where were they nesting and. And no one actually could point to it. So here we've got 24 nests say, and they're all in oak trees and they're all in the tops of oak trees.

00:04:51:09 - 00:05:17:21

*Charlie Burrell*

We've now got quite close to here white tailed eagles breeding and.. Roy Dennis has done them. Yes. Well, it was it was the Isle of White reintroduction. Yes. But they're breeding quite close to here. Wow. And the white tailed eagles come through. I have never seen them come over the stork pen, but several of the guides here have seen them.

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*Charlie Burrell*

And it just goes completely mad. I mean, the storks go completely mad. So I'm just wondering if if those stork nest right on top of oak trees actually become a little bit a feeling, a little bit exposed to a white tailed eagle because you can imagine a white tailed eagle just swooping down and picking off a stork.

*James Shooter*

Doesn't this feel like such a mad conversation to be having, though, for southern England?

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*Charlie Burrell*

It is mad, isn't it? White tailed eagle taking. And that's the thrill of getting rid of all this, is that you have people like Roy and you have people like the Cotswold Wildlife Park and and willing landowners like us to do these sorts of things. Yeah. Yeah. Brilliant combination. Yeah. Amazing. And Roy Roy's. Roy's team is also involved in the White Stork Project.

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*Charlie Burrell*

Tim Mackrill is is part of this whole project as well. He's going to be watching his white tailed eagles eat his storks, basically. And he's thrilled about that. And thrilled, it sounds like Tim. Shall we walk on?

*James Shooter*

Charlie's grown up in farms. He was born in Zimbabwe, where his parents farmed the land before moving to Australia and finally on to England, where he inherited Knepp estate in 1987.

00:06:31:09 - 00:07:06:23

*Charlie Burrell*

So I've had that sort of background of being in Africa and Australia. Big countries, big landscapes and always involved in the land. I came back to the UK, went to school here and then aged 21 I took over running the Knepp Castle estate from my grandparents. Look, all the storks are up and flying. Yeah. And then I, I then then took over running the farm a couple of years later when my grandmother died.

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*Charlie Burrell*

And so I was running the whole show by the age of 23, I guess

*James Shooter*

Knepp is 1400 hectares in size, only around a 10th of the size of some of the private estates close to where I live in Scotland. Yet, here in the middle of the now wild land, you feel away from it all. In fact, the only reminder we're an hour outside of the capital is the planes flying low overhead on the way into London's Gatwick Airport.

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*James Shooter*

Charlie inherited the reins after years of intensification and the farm was already losing money.

*Charlie Burrell*

We had a very conventional farming system as I was saying. You had your dairy, you had your you had 600 dairy cows producing a little bit over 3 million litres of milk. We were farming it with a with a mixed this mixed farming system with arable and beef in buildings being fed on barley.

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*Charlie Burrell*

We tried that out and we tried a whole lot of different systems in terms of beef production. Then we also had three or 4000 sheep as well in rotation and with all the arable. So it was a mixed conventional farming system.

*James Shooter*

Every square inch of Knepp's land was being utilized to improve productivity in the search of some kind of profit.

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*James Shooter*

The hedges were tight and the ponds filled in. There was a constant battle to drain water off the land to try and make the heavy clay soils here anything better than unworkable. Nature uncontrolled was not an option. By the end of the nineties, the farming business was really struggling as global prices were squeezing Knepp out of the market.

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*James Shooter*

The only thing keeping it alive was subsidies from the EU. At the turn of the century, everyone was talking about these being disbanded and without Knepp changing tact it would have been a final and very big nail in the coffin.

*Charlie Burrell*

The big decision was that I didn't believe that we could make this profitable, so we decided that we would come out of farming altogether.

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*Charlie Burrell*

We didn't quite have a clear plan of what that meant. We knew that that something might come along and where my interest lay was in nature and at the same time is that in the end of the nineties I was meeting through Ted Green and Jill Butler, a whole lot of Europeans and they were really fascinating people and Frans Vera was one of them.

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*Charlie Burrell*

And Frans had just written and had his book translated in 2000 *Grazing ecology and Forest history*. And that was I thought, I thought completely fascinating and also what I understood ecology to function like having come from Australia and Africa's ecology. Grazing ecology seemed to be, I couldn't understand why you wouldn't think like Frans.

*James Shooter*

In a nutshell, Frans hypothesized that closed canopy woodland would not be the final point of succession for much of lowland Europe, as large herbivores would have maintained a more open landscape.

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*James Shooter*

He argues that like demanding trees would not have been so well represented in the fossil record if closed canopy conditions were the main ecosystem. Aurochs and tarpan, the wild cattle and horses of Europe; boar, bison, elk and deer, they all would have added a huge amount of positive disturbance to a dynamic and ever changing landscape. They browse, they scratch, they trample, they rootle, they wallow, they dung. Take them out of the equation

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*James Shooter*

and the trees get a clean run towards expansive forests, an ecosystem less species rich than mosaics of semi-open wood pasture and scrub. So how can one small corner of the English countryside mimic this theory? Here at Knepp, Charlie and his newly formed advisory board felt that the native vegetation needed a head start before animals were brought into the mix.

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*Charlie Burrell*

So we didn't just stop farming bang, we came out of the worst arable fields first and then slowly came out over a six year period. And during that six year period, we're just allowing the stubble, the after harvest, the stubble to be colonized by whatever was going to come in. What we were seeing was all these little what I was seeing was a whole lot of successional of plants.

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*Charlie Burrell*

Obviously, you first of all, start with just common ragwort and creeping thistle and spear thistle and all the things that farmers hate. And it was all very scary. And then you and then that goes through that transition. And you can see all the little plants, the Woody Shrubby plants coming up, and we then let that happen for nine years.

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*Charlie Burrell*

So some of the fields were out of arable production for nine years before we put a ring fence around and we actually put animals in here. So that was really important to have

that rest period before the animals came, because that allowed those plants to start to build up the wherewithal to fight the browse that was coming, if you see what I mean.

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*Charlie Burrell*

So these plants needed to build up starches, needed to build up the sugars to then produce the tannins, to produce the the hardened thorns, the energy needed to protect themselves needed to come from a length of time. And I think, you know, where we've got to here and this is now 20, 20 years later, this is actually 20 years ago was in 2004

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*Charlie Burrell*

this field was standing in now. But, you know, so you're talking ten or 15 years. You can have one of the you know, best sites for breeding birds in Britain is here. That's incredible. There's nothing short. So ten years, 15 years, bang, you've got something extraordinary. Yeah, that is brilliant.

*James Shooter*

With the aurochs and tarpon extinct and boar

00:12:40:18 - 00:13:06:04

*James Shooter*

difficult to reintroduce the team at Knepp, turned their attention to native domesticated breeds. These would be hardy enough to live out their lives free of intervention and work as proxies to their wild counterparts. English Longhorns, an impressive looking cattle breed with, you guessed it, Longhorns take the place of the Aurochs. Exmoor ponies, which seem like pretty wild animals from the off, take the place of Tarpan and Tamworth

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*James Shooter*

pigs take on the snuffling duties of wild boar - not extinct, but prohibited from being released. Alongside red, roe and fallow deer, they roam freely across the estate. They're the foot soldiers in the battle between tooth and thorn.

*Charlie Burrell*

In the UK. You've got real restrictions on what you can choose. You can't choose. I was talking to someone in Denmark who's doing the same thing

00:13:28:09 - 00:13:53:05

*Charlie Burrell*

having read Izzy's book. He decided that he was going to do a rewilding project on their pretty stony, crappy ground and they'd been trying to farm it. Anyway, what his choices were for his introductions was wild boar, elk, bison and heck cattle. So he was able to think completely differently. And none of those things we could have here.

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*Charlie Burrell*

We can't have the boar, it's part of the dangerous wild animals like we can't have the heck cattle, part of the dangerous wild animals act, we can't have the elk, part of the dangerous wild animals act, can't have the bison, part of the dangerous wild animals act. So we've got very few choices here. So you have to use proxies of these grazing animals.

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*James Shooter*

I'll try to stay clear of going too far down the rabbit hole of Brexit. But since we parted ways with the European Union, the future subsidy system for farmers has been up in the air. The UK government had an opportunity to reimagine support for farmers and they've been making some good noises about public money, for public good. Subsidies would no longer be focused solely on production or the amount of land you own, but the Environment Land Management schemes (Elms for short) were being set up to finance environmental restoration, either alongside food production or in place of it.

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*James Shooter*

This would add value to some of the most unproductive farmland in England and Wales and would pay people to boost nature. The trouble is every farmer I've spoken to has said that details have been so scant, an initial ambition, so watered down that nobody really knows where they stand. Do land managers gamble and start aiming their business plans towards an unfinished subsidy plan for environmental gain or double down on increasing food production,

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*James Shooter*

knowing that one way or another government support can't be relied upon? Whichever way you look at it, the government budget doesn't touch the sides. Payouts for farming and the environment in England are set at £2.4 billion a year. It might sound a lot, but Charlie is not impressed.

*Charlie Burrell*

I was talking to someone in the MOD and that was just a bad contract going wrong.

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*Charlie Burrell*

I mean, it's tiny. The amount of money that we are spending on saving this country for nature and farming is just a drop in the ocean. I mean, this is nothing. They should double triple that.

*James Shooter*

The lack of government backing for the large scale restoration of nature in the UK is jarring against our supposed leadership on the fight against climate change.

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*James Shooter*

Leaders in words perhaps, but not in action. If you'd like to hear about a nation that's been truly ambitious on this platform, look to Costa Rica for some inspiration. In the late 1990s, they started paying landowners to preserve and restore the environment, using taxes from fossil fuels propped up by a healthy, nature-based tourism model. They've managed to make social progress whilst restoring their rich natural assets.

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*James Shooter*

Successful rewilding by national government. Take note, politicians of the world. Now Knepp isn't Costa Rica. But they have without doubt been pioneers for environmental progress in England. They were brave enough to take a leap of faith and results across the board have been phenomenal for nature. They've shown what's possible on our own doorstep. And the brilliant thing is they've inspired other landowners to copy the model.

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*Charlie Burrell*

I'm so pleased I'm part of a movement. And whatever little we have been able to add to that whole collective knowledge. But, you know, one of the things that has always been really important for us is to show what it looks like here. So we have a lot of people coming. And we talked a little bit about politicians earlier on, but we get everyone from the politicians to the NGOs to just people fascinated, wanting to feel what it feels like to have a rewilding project because they may want to buy some land and do it. Every year

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*Charlie Burrell*

there's something extraordinary. I mean, this year it's the you know, it's the beaver kit appearing. Wow. I mean, that's today. It's the first time you've seen a beaver kit. Last year, it was the breeding colony of butterfly that hadn't been seen in the UK for 50 years, the large tortoiseshell. I walk and think this landscape the whole time.

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*Charlie Burrell*

And my thrill is the. It's the. It's the Gaia. It's the whole thing. It's the. It's the. It's the. It's my little planet. And so just seeing that little planet coming alive again is what I'm thrilled by. That's what gets me out of bed every morning.

*James Shooter*

Charlie leaves me near the southern end of the estate willing to wait for Penny and Jamie Craig, curator of Cotswold Wildlife Park.

00:18:21:02 - 00:18:44:13

*James Shooter*

He and his team are dropping off a van full of juvenile white storks to top up a reintroduction project that's been happening for the last few years. Today, they're getting relocated to a pre-release enclosure where they'll stay for a couple of weeks to acclimatize

before being fully released into the wild. I'm not entirely alone as a few pairs have already established adults of bell clattering from giant nests and the oak trees around me.

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*James Shooter*

The friendly welcome display between mated birds sounds like a two stroke engine starting up, and along with 15 or 20 birds swirling above me, it's an incredible sight to behold.

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*Penny Green*

That's it – you're good. You're clear! Right, that's one through. Dramatic! Come on in! We can shut the gate. Thank you.

*James Shooter*

So, what's the process? Do you literally just bundle the boxes out?

*Jamie Craig*

Yeah. I think we'll bring him to here so we can open them and they'll go down into this, and so that is it. It's just a mass unloading, and then just keep an eye on it.

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*James Shooter*

Is it okay to take a few photos?

*Jamie Craig*

It's fine. Yeah. Yeah, No problem. That they should be fine. They should walk by, go down that end even though we're bringing the rest in now, they'll hang around the other end. You got any cable ties? It might be worth doing a couple.

*Penny Green*

We always have cable ties, so that might see something else.

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*Penny Green*

They've got quite a lot of red in their beaks haven't they.

*Jamie Craig*

Is that all for that lot? They should just sit quietly at that end if we're up here.

*James Shooter*

Are they easy to breed in captivity?

*Jamie Craig*

Not necessarily.

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*Jamie Craig*

And you need that dynamic right. You know so you need and you need a good keepers who follow routine. The trick is you don't want them to be tame. You just need them habituated so they ignore you. You're not part of it. So a lot of places do struggle, right? And if you put them off because they're a long lived bird they can go years just stop breeding.

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*Jamie Craig*

But if you've got good pairs producing eggs, it just spur on the next one and the next one and the next one. And then what should happen is those birds too young to produce should, may still lay eggs and go through all the motions of nest building and everything because they're copying, because actually they're really a colony bird. Most of the pictures you'll see is of one up a telegraph pole.

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*Jamie Craig*

That's just because in the countries of origin a lot of the breeding sites are so far spread we've watched if they, if you leave them to it what they want to do they will see a dominant pair or the earliest breeder and they'll all want to breed near to them. So we put platforms up, but actually one built a nest on the ground by the pond and the others are literally, we'd call it a stab distance away.

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*Jamie Craig*

They don't want to be so close they keep pecking. Yeah, yeah, yeah. And we also what is interesting is that you pinch each other's nest. So, we've got one that build a lovely nest, but the others just pull it apart because they leave it, because they're not experienced, they'll be building a nice nest.

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*Jamie Craig*

Then both going to get nest material. And while they're gone, the cunning older birds, we just walk over. Well, because if we they don't just pick any stick. Yeah, you think it's just a bundle of sticks, but they really pick the bit they want and they'll fight over a stick because they know it's the right one. Yeah. And if you look at the nest, they're pretty impressive.

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*Jamie Craig*

They can look scruffy. But if you get, ours will last all winter through all weather, they wear down a bit, but the basic structure is pretty solid.

*James Shooter*

As I'm sat just to the side of the transport boxes, taking a few photos as the storks come out, I quickly realize I'm within stab distance myself and decide now's a good time to leave the experiences team to it.

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*James Shooter*

I wander off to find a quieter spot with Penny amongst the scrub.

*Penny Green*

So the main part of Knepp, as you've probably seen on your walk through here is as the scrubland and this amazing dynamic matrix of scrub with blackthorn, hawthorn and Bramble Wild Rose and we've got the fleabanes in flower at the moment, this lovely little yellow daisy like flower, and there's lots of open areas.

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*Penny Green*

It's open pastures, but then hedges are growing out. Lovely old veteran trees. We've got water lags, these little floodplain meadows running through the site as well, which provide a aquatic element to the site with aquatic plants and water shrews and harvest mice and dragonflies thriving in those areas. So it's really dynamic. The fact there's loads of edge I think is the key thing where we transition from scrub to open areas and then back to scrub again and back into hedges and so on.

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*Penny Green*

So it's really diverse and providing opportunities for all sorts of wildlife. But what we now need is connectivity, thinking about how species move between sites and places like Knepp, where we were on marginal land that was no good for farming. These can provide the kind of opportunities still. I got this stork right above us. It's right above us.

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*Penny Green*

And so we're hoping to you know, you think about how you can have nature recovery in large areas with minimum intervention.

*James Shooter*

So if scrub is so good, why don't we see more of it across the English countryside? Well, it's a transitional habitat and an untidy one at that. It's normally transitioning out of something we want to keep like a grassland or heathland or transitioning into something.

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*James Shooter*

We want to get faster like a woodland. The messy bit in the middle we've kind of done without. We like shoehorning habitats into neat little boxes here in the UK. Allowing scrub to take hold goes against the grain of traditional conservation and where you want to keep a habitat in the status quo. It's been cut back, burned, overgrazed and dug up.

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*James Shooter*

It never really gets a chance to play out. Knepp is giving it that chance at scale and the results speak for themselves.

*Penny Green*

I think the bird diversity here and the number of nesting birds that we have is quite remarkable. Just because we have so much scrubland opportunities for nesting birds, but also the food source, insects and seeds and fruit and those kind of things, and the little caterpillars in the spring as well.

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*Penny Green*

So, you know, there's loads of resources here for birds.

*James Shooter*

One incredible surprise of the rewilding initiative has been the rapid success of a stunning little butterfly, which has now been immortalized in Knepp's logo. The Purple Emperor. They have fancier tastes than your average butterfly, bypassing flowers and cutting straight for fox scat aphid, honeydew and the sap secreted from wounds on oak trees.

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*James Shooter*

I mean, when I say fancier, I do mean weirder. If you were to read the literature on this magnificent species, it's described as a woodland animal, but here at scrub HQ, they've gone from recording none in the recent past to being the UK's largest colony. If Knepp had targeted purple emperors, they might have been obliged to create closed canopy forest.

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*James Shooter*

But by sitting back and seeing what results came in, they've inadvertently done a much better job.

*Penny Green*

Purple emperor season has just come to an end actually, and it's been pretty good considering we had a drought, a drought year last year and I think we had all their food plants had wilted, but here we've got the lovely old oak trees where the males will be displaying over and sort of clearing their airspace.

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*Penny Green*

So they'll be seeing off other purple emperors, they'll be seeing of birds, you know, wing flapping, swallows. I've seen the chasing house martens and woodpeckers are pretty vicious and so on the wrong end. I think it's the fact we've got these big old oak trees for the male territories right next to the willow scrub. And the willow is where the female will be laying her eggs and the larvae will be hatching out of these eggs and then feeding on the young growth of the willows and then overwintering on those willows and then feeding up again in the spring and then pupating and coming out.

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*Penny Green*

June, July time. But I think the biggest total we've had of a daily count was a few years ago and I think it was 2018. That's 388 purple emperers seen in a day. It was just amazing and it's very distracting as well when you're trying to do other work.

*James Shooter*

Another species enjoying the return of scrub is a bit of a plain Jane to look at, but when it sings its beauty is truly revealed.

00:27:10:23 - 00:27:37:23

*James Shooter*

The Nightingale. It erupts into song at night time when all the other birds have finished for the day. A star performer, a solo act. It nests in tangled scrub close to the ground so isn't particularly interested in tight hedges where the legs are bare. It's rapidly declining in southern England, but Knepp is booking that trend too.

*Penny Green*

We're not putting any pesticides down any more, obviously previously intensively farmed landscape.

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*Penny Green*

This would have had lots of pesticides and fertilizers and so on, put on it and so now we've got loads of insects. So they'll be feeding themselves and their insects and their young on these insects and say, hopefully getting off lots of successful breeds on that abundance and and also, you know, when they're coming to a migration here there'll be lots of opportunity for them to feed up on migration and hopefully they're seeing this place and thinking I might come back here next year and say, This year was a bumper year for Nightingales.

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*Penny Green*

We had over 50 singing males just in the southern block, which, you know, if you go out at night time, just to hear the nightingales, all the other birds have gone to bed. It's just, you know, the most amazing thing you'll ever hear, gives me goosebumps just thinking about it.

*James Shooter*

We can't obviously not talk about storks whilst we're here.

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*James Shooter*

So they've been kind of reintroduced here. Why was that important to reintroduce storks?

*Penny Green*

They're not like a beaver per say where they're an ecosystem engineer. They're not, you know, creating loads of habitat for other species. But what they are doing is getting us thinking as humans, thinking about and well, you know, having, having big nature back in

our skies again and how important that is to us and for us to be able to engage with landscape connectivity.

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*Penny Green*

So getting us thinking about how we can look at nature recovery over large areas and not just in small silos. So they're an amazing ambassador, especially through COVID, when people are here on their daily activity, didn't need to know anything about wildlife to be able to look up and go, Oh my God, that's amazing. And that's inspiring.

00:29:15:21 - 00:29:42:07

*James Shooter*

After seeing these birds circling around in the air and looking down from their oak top penthouse suites, I can certainly confirm that they elicit a sense of excitement. We need to get people fired up about nature. We're competing with people's attention spans for Instagram, Netflix, the pub, the footie Love Island, incorporating a few wow factor species that can easily be seen has the potential to hook people in. Once they're through the door,

00:29:42:09 - 00:30:12:10

*James Shooter*

what else might they discover?

*Penny Green*

It's been an amazing partnership project with Roy Dennis Foundation and Cotswold Wildlife Park, you just met, another state over in East Sussex and Warsaw Zoo over in Poland, and so it's been quite a long process. It started in 2016 with importing rehabilitated birds in from there and then year on year, we've got the bolstering numbers coming through from Cotswold Wildlife Park where they're breeding young and bringing them down here just before they fledge.

00:30:12:12 - 00:30:38:09

*Penny Green*

And then they'll be released ten days after they arrive here and then they can fly and be here for a little while. And then we're hoping they migrate and with them we hope to migrate the young that have fledged from here as well. So this year we had 11 successful nests, mostly up in the oak trees all around us here where they've made their nests and they've successfully reared 26 chicks between them, which is amazing.

00:30:38:11 - 00:31:09:23

*James Shooter*

You've got to hand it to Knepp. They really are ambitious. They're not satisfied with just a little bit more nature, they're greedy for more. And so they should be. They received beavers brought down from Scotland, which were released into a 240 hectare semi-enclosed pen. A pen because the English government is dragging their heels on allowing full blown reintroductions and semi-enclosed because Knepp wanted to trial less infrastructure in the hope that they wouldn't escape if their new home was big enough, well, they escaped.

00:31:10:00 - 00:31:46:08

*Penny Green*

So then we had to reapply to natural England because we realized the Semi-enclosed pen wasn't going to work and that they would travel much larger distances to get out if they wanted to. And so on the back of that, we have now got a two hectare pen around one of the little water lags, one of the little streams that run through and a different pair of beavers have been brought in again from the Tay catchment and they have been there for for about 18 months now and haven't escaped and it's been delightful and they have created the most amazing habitat.

00:31:46:08 - 00:32:09:10

*Penny Green*

You know, it's just so beautiful. And through the drought last year, like three or four months of no rain, this was a completely parched landscape. And then you were going in the beaver pen and there was a bit of trickling water. There were dragonflies, zillions insects hatching off of the water surface. You know, there's hobbies and kingfishers hunting, you know, it was just this oasis in such a dry landscape.

00:32:09:10 - 00:32:32:17

*Penny Green*

And I was like, Oh my God, this is a real wake up call. It is a no brainer. The beavers are so important and integral to our landscape. We we need more of them.

*James Shooter*

It's almost 15 years since the first beaver reintroduction trial in Scotland began. Almost ten years since it was completed, and four years since they were afforded protected species status and allowed to stay in the wild in Scotland.

00:32:32:19 - 00:32:59:21

*James Shooter*

You would have hoped that following all that groundwork by that northerly neighbour England might want to skip ahead a few stages. Frustratingly, they're still only being allowed entry to the English countryside behind bars. The government are moving so slowly on this they're almost going backwards. I saw a tweet the other week that Sheffield City Council have been awarded almost £100,000 to gain a greater understanding of the benefits they have on our landscapes.

00:32:59:23 - 00:33:26:23

*James Shooter*

But we know what beavers do. The conversation has to be much further along than this by now, they do the same as beavers in Scotland and the same as beavers in Bavaria. In a climate and biodiversity emergency. We need more walk and less talk, especially when beavers bring so many benefits. But Knepp aren't stalling. They're always looking forward and hoping to add more pieces back to the jigsaw of life.

00:33:27:00 - 00:33:52:22

*Penny Green*

So we've got a couple of irons in fires at the moment and not only do they get us thinking about connectivity, but also most scrubland, which is what we're talking about earlier on, how do we get people loving scrub? So these two species are Red-backed shrike and the black veined white butterfly and they both, you know, require scrub as part of their lifecycle, nesting or for caterpillars and their egg laying.

00:33:52:22 - 00:34:24:23

*James Shooter*

The charitable arm of Knepp is involved in a partnership organization called the Weald To Waves Initiative with big plans on working towards a 160 kilometre corridor along the south coast. It has established forests, a couple of major river restoration projects and is promoting the benefits of scrub and landscape recovery at scale. This has got everyone involved thinking big and both the black veined white and the Red-backed Shrike are highly mobile species, meaning connectivity is key.

00:34:25:00 - 00:34:52:14

*James Shooter*

Strikes are a fascinating group of birds. They generally like to nest in dense, thorny bushes. So there's that to consider. But they also like to catch their food by impaling their prey on spikes. They favour large invertebrates over 12 millimeters long, but will also go for small birds, rodents and reptiles too. So if you're walking the wilds of Knepp in a few years time and come across a miniature horror scene with lots of dead things on thorns, fear not.

00:34:52:16 - 00:35:21:11

*James Shooter*

This isn't the work of the devil. Red-backed strikes are finally back and you've walked into their spiky larder.

*Penny Green*

So for the butterflies, they need lots of nectar sources as well as the Hawthorn and Blackthorn they need lots of nectar sources and apparently they have a particular taste for pink and purple flowers. So again, it's just getting more nectar rich habitats into our landscape as well, which is going to be good for butterflies, good for other insects as well.

00:35:21:13 - 00:35:46:13

*Penny Green*

So these are the flagship species for this kind of scrubland superheroes projects is going to benefit a whole load of other species like the cuckoo, the turtle dove and the nightingale who require the same kind of habitat.

*James Shooter*

When Wilding came out, did you see that make a big difference? A) To people kind of wanting to know about Knepp and then equally people wanting to visit Knepp? How did that how did that change things?

00:35:46:14 - 00:36:10:04

*Penny Green*

It's been quite an amazing time, really. When I first started rewilding, I started in 2015, rewilding, you know, people are talking about it, but really only people were in, you know, sort of had that kind of intrinsic interest in it. And I would be out doing surveys and I just can't believe we know we got so many miles of footpaths and bridleways.

00:36:10:04 - 00:36:29:04

*Penny Green*

Yeah, I can understand why I was the only person here. I was out like, you know, doing some I know some transects or whatever, and I just couldn't understand how, you know, where was everyone. And obviously Izzy's book came out in 2018 and all of a sudden we're thinking, Oh my word, there's been this huge wave of interest.

00:36:29:06 - 00:36:53:01

*Penny Green*

People are asking about rewilding that in a normal people are talking about rewilding. It is a thing. And just to see this huge increase of interest and enthusiasm for it, but also the increasing numbers of people visiting, coming to see it for themselves? It's just been the most amazing thing for us, really.

*James Shooter*

Ecotourism is often touted as one of the prime benefits of rewilding.

00:36:53:03 - 00:37:15:22

*James Shooter*

Get nature back and people will pay to come and see it. Now, I agree with this, but to be honest, I normally follow that up with a small dose of reality and say, "But remember, it's not a silver bullet." Well, Knepp have developed an enterprise of safaris courses glamping and a shop with £1,000,000 turnover a year and a 20% profit margin.

00:37:15:24 - 00:37:37:11

*James Shooter*

Whichever way you look at it, it's a fine turnaround from the days of spiraling farm debt just a few short decades ago.

*Penny Green*

And I think it's really important for people to come see it themselves because we are yeah, we're right in the south east of England. We're in the middle of a very busy, busy county and we're in this amazing kind of wildlands that you can feel like you're in the middle of nowhere.

00:37:37:11 - 00:37:55:08

*Penny Green*

And yet we're here, We are quite near to some main roads and not for an hour out of London. So I think it's important that people can see that we can make these changes in

busy areas. You know, it can be done and say that the turnaround can be quite quick. We've seen nature flood back in in a relatively short amount of time.

00:37:55:09 - 00:38:20:19

*Penny Green*

We can make a difference. And it's not all doom and gloom. We know the power is still in our hands to make a difference. Okay, we are going to lose species and we have lost some really rare species that need very specific habitats. You know, they're not necessarily going to come back here, but what we are seeing come back are some rare and protected species, but also just the general abundance of life that we're missing in the rest of our landscape, our wider countryside species.

00:38:20:19 - 00:38:45:06

*Penny Green*

We're seeing in good numbers that these all seeing declines elsewhere. And actually all they need is a bit of messy scrub. I mean, it's just sitting here. It's not rocket science, is it? It's just some brown and blackthorn. Although we've got livestock, so there's dung, there's disturbance, you know, there's different habitat structure. You know, it's not difficult to recreate this.

00:38:45:08 - 00:39:09:08

*James Shooter*

On the back of pioneers like Knepp, there's been real momentum building for rewilding in England. We may be coming to the party slightly late, but the results are exciting and they're inspiring a new way to look at the land. Ambition is rife amongst landowners, NGOs and farmers too, but they need clear support from the government to transition into something truly special. Ambiguity does nobody any favours.

00:39:09:10 - 00:39:38:07

*James Shooter*

Rewilding our land and seas brings huge benefits to our society. Ecosystem services or natural capital are the buzz words that get thrown around. Healthier soils, filtered water, carbon sequestration, flood mitigation, drought alleviation, pollination. They're all vital to human survival. Yet we shouldn't downplay the sheer delight brought by a nightingale singing its heart out or a purple emperor landing on your shoulder.

00:39:38:09 - 00:40:03:02

*James Shooter*

I mean, this may not be for everyone. Penny did tell me they once had a complaint from a campsite guest, that the birds were too loud and the moon was too bright. Still, for many, these kind of experiences can inspire something primal inside us and build a desire for more. Who would have thought just a few short years ago there would be white tailed eagles and storks battling it out in the skies above?

00:40:03:04 - 00:40:28:17

*James Shooter*

If England, as a country can learn to love the untidy, embrace the thorn and allow nature free reign, there's no reason we can't have a natural environment as rich as elsewhere in Europe. Knepp is the proof of that. And all happening just 65 kilometres, as the stork flies from the skyscrapers of central London. Now that's exciting.

00:40:28:23 - 00:40:59:15

*James Shooter*

For me, the most inspiring element of all of this is the speed of success. It can be pretty daunting knowing we're in a race against biodiversity loss and climate chaos. But if we can just get an army of Knepps all sprinting in the opposite direction, we actually have a chance at beating this. Time to scrub up.

00:40:59:17 - 00:41:23:04

*James Shooter*

Thanks for joining me for episode seven of The Rewild Podcast. It was great to hear from Charlie and Penny and to finally see this awe-inspiring estate for myself. The team here are so passionate about getting the word out and people in, so I urge you to visit if you can join a safari or book a weekend of camping, just be warned about those bright moons and loud birds.

00:41:23:06 - 00:41:50:24

*James Shooter*

If you can't make it down here, Penny hosts an excellent podcast called the Knepp WildLand Podcast, where you can get to grips with all the detail and research going on here. Thanks as ever, to Andrew O'Donnell of Beluga Lagoon for the beautiful music and to Gemma Shooter for the fantastic artwork. Knepp Wildland is a member of the European Rewilding Network, a collection of groundbreaking initiatives across the continent brought together by Rewilding Europe as part of a broader rewilding movement.

00:41:51:01 - 00:42:08:09

*James Shooter*

This is an organization making rewilding happen through positive action on the ground. Do join us next month as we'll hopefully be back on the road and continuing our journey across the continent. Catch you next time.