

Transcript

00:00:01:02 - 00:00:29:05

James Shooter

Fear not friends. No need to adjust your headsets. Whilst this might sound like I've broken something. This is actually the sweet sound of victory. Allow your ears to reach beyond the snap and crackle, and you'll hear the all important pop of success. I'm back on home turf in Scotland. Hanging out the window of a pickup in the Cairngorms National Park with what looks like a stolen TV aerial pointing out towards a distant hillside.

00:00:29:07 - 00:01:03:02

James Shooter

I am the passenger, by the way, before you start worrying for my safety. That ping in the background is the receiving signal from a recently reintroduced European wildcat. Bred in captivity, this is one of 19 cats released into the wild to reinforce a population that has dwindled to practically nothing over time. I've been traveling across the continent, exploring some of Europe's most inspiring rewilding initiatives, but is there anything quite as exciting as some very good stuff happening right on your doorstep?

00:01:03:04 - 00:01:19:24

James Shooter

I'm James Shooter, host of The Rewild podcast, and this is Saving Wildcats.

00:01:20:01 - 00:01:46:00

James Shooter

These episodes usually begin with me having travelled across an entire country, probably with some standard Shooter calamities en route. But today I've travelled ten minutes down the road to the Highland Wildlife Park. It's the middle of a Scottish spring, so of course it's four seasons in one day kind of weather. In the short commute, I've had cloud, sleet and sunshine. As part of the Royal Zoological Society of Scotland.

00:01:46:02 - 00:02:10:17

James Shooter

The park is home to polar bears, tigers and Himalayan tahr. They also have a strong focus on native species, so there's lynx, cranes and wildcats too. RZSS are the lead partner in saving wildcats. And it's Helen Senn, head of conservation that I'm to meet first. We walked down onto the on show wil cat enclosures. These are the ambassadors.

00:02:10:22 - 00:02:21:19

James Shooter

The general public can engage with. Is there going to be any about now? Oh, yeah. Well, having a good old lick doing as cats do.

00:02:21:21 - 00:02:47:11

Helen Senn

Doing as cats do. Yeah. Yeah. So we're looking here at the Wildcats that we have on show to visitors here at Highland Wildlife Park and across the UK, we've got wildcats held in

around 35 different institutions and there's around 150 wildcats at any one point in time and that population is part of a really important insurance population, for the species.

00:02:47:13 - 00:02:59:04

Helen Senn

So these cats, and cats in other zoos across Britain are, you know, used to visitors, but they're part of the genetic insurance program for wildcats.

00:02:59:06 - 00:03:20:23

James Shooter

Having been here many times is a local, there actually used to be a very engaging wildcat here called Hamish. He would entice visitors in with a smouldering look and just as people got close enough to appreciate him in all his feline glory, he'd turn around and spray them from behind. Did I take some semi sadistic pleasure in standing back and watching this unfold

00:03:20:23 - 00:03:35:08

James Shooter

on unsuspecting tourists? Well of course. I mean, if you think about it, it's quite a clever way to mark your territory by scenting up some moving obstacles that will distribute your smell all around the park. And who am I to get in the way of that?

00:03:35:10 - 00:04:12:05

Helen Senn

My background is in evolutionary biology, which is what I studied at uni, and I, I love, I love nature and I'm fascinated with how, you know, we got to have ecosystems and species and how it all came about. And I guess that's what evolutionary biology teaches you. So that's kind of where my, my passion is really, or was originally, but nowadays I'm just really passionate about trying to restore stuff and put stuff back, and RZSS is a species conservation organization.

00:04:12:11 - 00:04:26:23

Helen Senn

we focus on conserving threatened species and I believe really passionately that, recovering species is a driver for recovering habitat and restoring a whole range of other species at the same time.

00:04:27:00 - 00:04:50:24

James Shooter

First things first. What is a European wildcat? They're a small tabby cat with grey brown fur, striped flanks, and a blunt, black banded tail. They're roughly 25% bigger than your standard moggy with 100% more attitude. They used to be found throughout Britain, but have been restricted to Scotland for the last few decades, where they've been clinging on by a claw.

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Helen Senn

They eat a mixture of small mammals and birds, mice and voles. And they do really like to eat rabbits and so obviously with any species, you know, habitat is important because it's important as well for prey, so habitat provides a good prey base, good habitat provides a good prey base. It also provides other things like, you know, cover and vantage points and denning sites and things like that.

00:05:18:17 - 00:05:45:10

James Shooter

Whilst many discussions in rewilding focus on apex predators like Europe's two larger cat species, the Iberian and Eurasian lynx, mesopredators, that is, smaller carnivores lower down in the hierarchy have an equally important role to play. Species like foxes, badgers, pine martens and wildcats, they obviously have to target smaller prey than a wolf or a lynx, and so their interactions incorporate a whole different suite of animals.

00:05:45:12 - 00:05:57:01

James Shooter

For many years, European wildcats in Scotland were referred to as Scottish wildcats and thought of as a distinct species to those on the continent, but genetic analysis has helped our understanding of the population.

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Helen Senn

There is a separate population, clearly, because the landmass of Great Britain is separate from mainland Europe and they came over, you know, after the last ice age, so around 8 to 9000 years ago, but the species, it's the same species and they are you know, genetically, basically quite closely related to wildcats in mainland Europe.

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Helen Senn

and in fact, you know, part of this long term strategy for recovery will be to try and include wildcats from mainland Europe in the release breeding program in order to make sure that we've got that long term kind of, healthy population that can hopefully not just supply the release that we're doing here, but also, looking at other releases into the future, if, if that's possible.

00:06:47:21 - 00:07:11:02

James Shooter

So why does the Wildcat need help in Scotland? Numbers have been dwindling of the last few centuries, and we're now at a two minutes to midnight scenario here. As of 2018, the species was declared as functionally extinct in the wild. That is to say that whilst individuals may still exist here, they are too few in number and too fragmented geographically to be considered viable and would soon be lost without help.

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James Shooter

Habitat degradation has been a big issue over time and historic persecution too. Wild cats were once seen as vermin on Scotland's large shooting estates. Anything that could

potentially affect game species like grouse and pheasants were heavily controlled in the 19th and 20th centuries. This is tightened up a lot in recent years, but ongoing culls of many abundant predator species is still legal and allowed, whilst wild cats are protected

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James Shooter

feral cats are fine to cull. These could easily be confused with at risk wildcats. So indirect persecution is still a potential threat. As wildcat numbers depleted, breeding and hybridization with more numerous domestic and feral cats has become a major concern.

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Helen Senn

We know now from the genetic work that's been done, that hybridization is quite a recent thing, so it's probably been going on occasionally for a very long time and technically, you know, domestic cats have been here since the Roman times. So that's, you know, about 2000 years but we know from the genomic work that we've done, the genome sequencing that, hybridization has only really accelerated in the last 60 years or so.

00:08:18:15 - 00:08:45:22

Helen Senn

So that what that points to is it's a symptom of small population size, not a kind of primary cause of decline. And in order to be able to sort that out, you need, genetic analysis really in order to be able to understand what's going on and early on in my involvement in wild cat conservation, which is now, I think, almost 13 years, I was involved in developing the first genetic test to try and distinguish wild cats from domestic cats here in the UK.

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Helen Senn

And that's been, you know, implemented as part of our conservation project. So it's kind of one of those challenges where you do need genetics to sort things out.

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James Shooter

Whilst closely related, European Wildcats (*Felis sylvestris*) aren't the ancestor of domestic cats (*Felis catus*) which stem from the Middle Eastern wildcat at least 4000 years ago. But with all this dilution of wild genes, how do you tell the genetically pure from the genetically poor? And does it matter? Researchers at the National Museum of Scotland and Oxford University's Wildlife Conservation Research Unit came up with a pelage score to test for wild cat traits in the field.

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James Shooter

It's a checklist of wild cat aesthetics and focuses on seven key features. After totting up the results, high scoring cats are considered of conservation value. In more controlled conditions like in captivity a genetic test can be utilized for a more detailed look at what's going on inside. Why is it important to protect the genetic integrity of this species in Scotland?

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James Shooter

Well, for one, they've gone through many thousands of years of evolution to adapt specifically to this environment. Domestic lines stem from wild cats that evolved in Egypt. And as you can imagine, Egypt's natural habitats are quite different to Scotland's. Equally, the domestication of *Felis catus* over time means they are no longer well adapted to a wild existence. They've largely become accustomed to a magical bowl of tuna appearing every night.

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James Shooter

Not something you want to rely on for life in the wild. If you were to accept this diluting of the gene pool, you're almost promoting devolution. And that's not healthy for a species over time. You've never heard of anyone suggesting a wolf might be improved by mixing it with a bit of bulldog. Well, the same goes here because wildcats haven't yet fully gone extinct from Scotland, just functionally kaput, there's a window of opportunity where the restoration of this species is less challenging.

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Helen Senn

They're still within people's human consciousness, so I remember having a conversation a few years ago with a conservation biologist who is who is reintroducing scimitar horned oryx back to Chad in Africa. And then it went extinct in the wild. And I said to him, why are you doing this now? You know, there's so many challenges here in Chad.

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Helen Senn

It's one of the poorest countries in the world and all of these kind of things. Why now? And he said, well, because, you know, they went extinct in the in the late 80s, early 90s. And it's really important that we reestablish them while, they're within human memory because as soon as species go out of human memory then people just they haven't learned to live alongside them.

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Helen Senn

And they don't think they're, you know, they don't think they're part of their culture and part of their landscape anymore. And so I think that we're lucky with the wildcat because, it's still within human memory.

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James Shooter

By the late 90s, there was a general consensus that wild cats were in trouble here and the first conservation project began in 2009 called Highland Tiger. A friend of mine, David Hetherington, managed this on behalf of the Cairngorms National Park Authority, and it set about understanding and highlighting the plight of the wild cat and improving its conservation status within the national park.

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James Shooter

From that, a national wild cat recovery plan was put together and the Scottish Wild Cat Action Project was born, hoping to identify key populations in the wild to save the existing populations in situ. However, partway through the survey work from this initiative found fewer wild cats left in the wild than was suspected. And at that point, the IUCN specialist group reviewed the results and recommended a change of tact.

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James Shooter

To really be effective in saving this species in Scotland a reinforcement of animals would need to take place. And here we are now with saving wildcats and the new conservation breeding for release plan in motion.

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Helen Senn

Species and ecosystems don't recover on human timescales. You know, we might have a 3 to 5 year agenda. Well, that's very nice. But, you know, that's not the timescale that trees grow and animals reproduce on and things like that. So I think it's really important with conservation projects that if you engage, you're in for the long haul.

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Helen Senn

And I think the institutions, you know, the organizations that are part of this project, like, CNPA and FLS, NatureScot, you know, they've all been committed to wildcat restoration for a long time and RZSS, and say it's it's that's really important. And it's really important that people, have that long term vision. And it's great, actually, that we're working with the Cairngorms Connect Partnership on this project because I love the fact that, you know, there's a project with the 200 year vision.

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James Shooter

Next on the team I'm to meet is David Barclay, the ex situ conservation manager. He's the one who's been developing the breeding program and scaling up the facilities to ensure a healthy flow of cats to be released back to the wild.

00:13:33:04 - 00:14:03:15

David Barclay

I think I've always, always been a big fan of carnivores. And I think over time and, you know, going back 20 odd years, when I first started working with carnivores and cats, I just sort of gravitated towards cats more than anything else. And maybe I sort of, subconsciously, sort of associate with cats in some way that they're sort of, I don't know, they can be quite lazy sometimes and do what they want.

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David Barclay

And, yeah, I think they're, you know, they're predominantly a solitary animal, quite happily on their own sometimes. I have to be careful. I'm married with children. Making it sound like I want to be on my own for the rest of my life, but, I don't know, I just. I think there you.

00:14:19:11 - 00:14:23:09

James Shooter

Might be more of a cat, cat aligned after this, podcast goes out.

00:14:23:09 - 00:14:25:08

David Barclay

No, I know, I know.

00:14:25:10 - 00:14:45:16

James Shooter

We head out to the office and jump in one of Saving Wildcats electric vans, as David wants to show me the breeding enclosures up on the hillside. I'm impressed the project has thought of zero emissions vehicles to use, but this was more than a choice of sustainability and it's my first hint at the level of detail the team here have gone into for the best possible chance of success.

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David Barclay

These vans are good because we've got the little electric buggy for the breeding centre, for the keepers. And then this is another electric vehicle. And, you know, we've got we've got cats out there that have just given birth, we've got females that are close to giving birth. And of course, you know, one of the biggest mortalities with carnivores is road traffic accident.

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David Barclay

So if you imagine we're out there feeding the cats daily and going out there and a nice big noisy pickup truck, that doesn't take too much for the cats to associate the noise of a vehicle to hear sound coming. Yeah. So then you, you know, you kind of joining dots here, but, you know, you can imagine.

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David Barclay

it's quite easy for an animal to hear a vehicle if for a year then foods appeared meant to be released, then see roads and think, well, it'll be there.

00:15:34:12 - 00:15:39:11

James Shooter

Yeah, yeah. It's been a while since I've been up here. It looks like.

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David Barclay

Well, I was just thinking that. Yeah.

00:15:42:00 - 00:15:43:11

James Shooter

Looks like Jurassic Park up there now.

00:15:43:14 - 00:15:47:06

David Barclay

Yeah. I mean, there's been a fair few developments since then.

00:15:47:07 - 00:15:49:19

James Shooter

Amazing.

00:15:49:21 - 00:15:57:20

James Shooter

Well, just in the, just in the year me and Gem have been away. We've come back and there's now beavers and wildcats on our doorstep. No.

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David Barclay

And you and you didn't even bring them here.

00:15:59:12 - 00:16:02:00

James Shooter

I didn't even bring them from the continent.

00:16:02:02 - 00:16:03:12

David Barclay

I know, I know, it's amazing.

00:16:03:12 - 00:16:21:03

James Shooter

It's incredible what can happen when people actually get on with stuff, you know? So it's so exciting. It is amazing how much goes into it, really, yeah. Because, to, to to people that don't understand the mechanics. Oh, you get some wild cats and you put them out there. Yeah. You know, with so much goes into it, it's insane.

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David Barclay

Yeah. And I mean, even, you know, breeding the wild cats, it's like, yeah, well, you put a male and female together, you breed them, you get kittens, and then there's your kittens for release. And every part of it, you can make it sound super simple, but we want the cats to develop their their natural behaviors. We don't want them to get accustomed to humans.

00:16:39:05 - 00:16:58:18

David Barclay

Okay. So fine. How do you do that? Well, just don't go out to the breeding centre that often, okay? But how do we maintain their health and welfare? How do we collect data on their behavioural development? Okay, well, get some cameras. So, you know, the more, the more we try and do away from the cats, the more challenges we get.

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David Barclay

And that's why we have to start looking at things like quite extensive CCTV systems. We have to try and develop some new tools that we can, you know, we can help develop behaviours or we can collect data on the weights of the cats. And none of it is straightforward. We're passing just now some of the breeding enclosures.

00:17:16:17 - 00:17:27:14

David Barclay

And this is where we've got our, our breeding pairs. And, this time of year, we're expecting births. We've got births. We've had a first day, first couple of litters.

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James Shooter

So it's exciting.

00:17:29:04 - 00:17:48:19

David Barclay

Once we move those kittens from the breeding enclosures to the prerelease. They're subadult. So they're they're almost fully grown. We've got different blocks of enclosures here. We have 22 animals in there last year, whereas now we've got 16. and that, you know, just how many cats we've got can sometimes force us to go down a certain path.

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James Shooter

So these, these are the cats, these 16, are the ones that go out this year. Are they?

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David Barclay

These are the candidates for release. there's no guarantee that although we've got them in the pre-release enclosures that that, that they'll be suitable for release. One thing we do on the ex-situ side is we, we obviously monitor the cat's behaviours. We collect the data from the CCTV monitoring. We have various methodologies that we use in collecting data.

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James Shooter

Now, David, quite rightly, I suppose, isn't letting me in near the breeding and prerelease enclosures even after my offered bribe of the Mars bar. So he's taking me down to the control room to have a spy on these secretive animals through their extensive CCTV system instead. I walk into the cave and there's two huge monitors in front of me on the

wall, each split into quarters with a different camera view on each segment and two more screens on the desk for zooming in on detail.

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James Shooter

It's like Big Brother.

00:18:45:02 - 00:18:46:13

James Shooter

Yes, I know.

00:18:46:15 - 00:19:03:00

David Barclay

And in terms of keeping an eye on the cats, we come down here in our control room and here we've got we've got all our all our cameras for the prerelease. so we've got a monitor here that just as the prerelease enclosures, about 40 or 50 cameras in there, we've got another.

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James Shooter

40 or 50? Wow.

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David Barclay

Yeah, I think, yeah, it's 40 in prerelease. Yeah. and then we've got that monitor just as the breeding enclosures. We've got another 32 cameras and then we've got another monitor, which does everything. So, I mean, in theory, we can have three different people operating three different cameras across the place at the same time.

00:19:28:02 - 00:19:51:21

James Shooter

Whilst the horde of cameras are running 24 hours a day, it would be impractical to watch every second. Instead, the wildcat team run through certain surveying techniques, usually recording different behaviours at set times throughout the night. Wildcats are mostly crepuscular and nocturnal, after all. There's still a huge amount of data to process, but this all gets factored into their suitability for release

00:19:51:21 - 00:20:00:18

James Shooter

into the wild. The secret lives of wildcats are on display to the team, and little do they know, they're undergoing the biggest audition of their lives.

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David Barclay

Any cat that we release has that has to pass this ex-situ checklist so you know, things like, is a cat physically fit and healthy? Okay, well, how do we prove that, has a cat got a natural

activity pattern? Okay, well, how do we prove that? Can the cat source food independently? How do we prove that?

00:20:20:07 - 00:20:38:08

David Barclay

So by collecting data on, you know, the behavioural profiles of the cats, any hunting behaviours we've seen, for example, this this is a remote feeding box that will sit in the enclosure for a week. We can open it and put food in it. It will open at 9:00 at night, 1:00 in the morning, 3:00 in the morning.

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David Barclay

And the cat's interacting with that. And, so we use that data to answer the questions on the checklist and that checklist, then once we complete it and everything's fine, says okay that cat and then sort of go to the next stage of questions before we release it.

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James Shooter

It's giving them the best chance and you the best chance to put the right cat in the right places.

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David Barclay

Alex is on the breeding centre cameras here and we can just scan around for females. you know, keep an eye for the small changes in behaviours. See if the females are moving kittens.

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James Shooter

And you've actually seen the kittens so far on the cameras?

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David Barclay

yeah, we've seen one of the females move, move, haven't we?

00:21:20:10 - 00:21:31:03

Alex Perry

So we've seen two. so we've got camera trap footage of Ffion shifting hers. we did see Morag moving hers too. It's not the best visibility on that. Yeah. Sorry Margaret rather.

00:21:31:03 - 00:21:34:12

James Shooter

Margaret the wildcat, I like it!

00:21:34:14 - 00:21:36:12

Alex Perry

And we've seen Morag moving some of hers.

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James Shooter

And you know how many

00:21:38:10 - 00:21:39:19

James Shooter

Kittens they've had in those two litters?

00:21:39:19 - 00:21:44:03

David Barclay

Got two litters of four in those. So. Yeah. Amazing a good start.

00:21:44:03 - 00:22:04:07

James Shooter

Things are seemingly going well through the conservation breeding for release program. And there's a sense of cautious optimism in the air. But it's taken a lot of hard work to get here. And when Scotland's wildcats were at that critical moment where they were deemed functionally extinct, there was another option on the table. Translocations of cats from the continent.

00:22:04:09 - 00:22:22:13

James Shooter

Sounds easy. Trap a few cats, ship them over to Scotland, open the door, bing bang bosh! The population is saved. Time for a celebratory whisky. Or perhaps this is one of those moments David would describe as making something sound simple. But yeah yes, it's not as if you can just do away with all this.

00:22:22:13 - 00:22:39:01

David Barclay

No, you can't just bring them straight over and put them straight out. They've got to go somewhere and do disease screening and quarantine and that's necessary so you would still be building some kind of facility for that. And then you could be out in, in the wild and you could be trapping cats for six months and you could say, right, we want 20 cats for release.

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David Barclay

So you go out and you start trapping cats left, right and centre. Well, it might be that, of those 20 cats that you've trapped, that ten of them, or two old or eight of them are too old, some of them are too young. So you discard them straight away. and then you find out of the ten remaining that you've got nine males and one female, and you say, right, well, that's not great.

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David Barclay

So we need to get rid of some males. And so you might have to trap 30, 40, 50 cats before you get the 20 that you need. And even then, can you be confident that those are unrelated cats or is unrelated as is would be appropriate? And when you think about that, you say, right, well, we're going to have to have a trapping location here about 1000 miles away, another one here and and another one here.

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David Barclay

And it's like, oh my goodness. So this is definitely doable. And you know, in the history of recovery projects, it's it's a technique that has been used many times and will continue to be used for some species. But for us, it just wasn't the most appropriate or convenient.

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James Shooter

Equally as important, at the time this decision had to be made the team were lucky in that they already had a relatively healthy captive population on hand. RZSS had been managing this for several years, and had been working hard to improve the size and quality of those individuals in collections across the UK. Utilizing this also enabled David and his team to have much more control of the process.

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James Shooter

They could matchmake the most suitable partners. I mean, nobody wants to go on a blind date only for your cousin to accidentally show up. No, no. Through selective conservation breeding, you can determine the genetic composition, age, sex, even behaviour of the partners being brought together. It's also a tried and tested method with great results for species like black footed ferrets, European mink, and perhaps the most famous conservation breeding program in history, the Iberian lynx.

00:24:26:20 - 00:24:58:00

David Barclay

When you look at all of them and if you regard them all as good projects and, you know, in various ways, and I think deep down they all are, regardless of the final outcome, you find that there's a common theme and it's having a dedicated conservation breeding centre of some kind, where, you know, there's a big focus on on animal, animal husbandry, animal management prior to release, biosecurity, observations, data collection, best practice, evidence and things, scientific approaches that's sort of the root of all.

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David Barclay

And then you say, well, that's that's we're not going to reinvent the wheel. That's that is the wheel. and we just need to sort of try and shape it for, for what we need with, with wildcats. So I would say out of all of those Iberian lynxes has been the biggest influence. we visited some of the breeding centres.

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David Barclay

We worked very closely with their many colleagues in the Iberian lynx project. So we have we've been very lucky being able to learn a huge amount about and what what the what they've done and the challenges that they had.

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James Shooter

For reference, there were fewer than 100 Iberian lynx left in the wild in 2002. Today, that's now over 2000. Between 2011 and 2023, 372 captive born lynx were released. Even more positively, the species has, as of just this last week, been downgraded from endangered to vulnerable. It's pretty obvious why any conservation program wouldn't mind emulating those kind of results. For wildcats in Scotland

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James Shooter

there's been a captive population across a number of collections for many decades, but it didn't have much conservation value until relatively recently. When RZSS took on the studbook in 2015, there were around 65 animals of breeding age, but it wasn't really known who was related to who and where the best match up of genes would have been.

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James Shooter

Today, all the RZSS have increased that to more than 160 breeding cats, and the stud book is now being utilized to assist decision making.

00:26:28:17 - 00:26:45:02

David Barclay

When you hear people refer to stud books, a stud book is just a data set. I mean, it's we've got quite a fancy program for it on the computer, but it's it's really just a very elaborate Excel spreadsheet. I mean, that's, that's a way to think about as a data set. On its own, it does nothing.

00:26:45:02 - 00:26:49:04

James Shooter

Studbook to me makes it sound like it's a leather bound beautiful book.

00:26:49:04 - 00:26:51:21

David Barclay

No I wish, I'd quite like a nice book!

00:26:51:21 - 00:26:52:20

James Shooter

The cats going well.

00:26:52:20 - 00:27:17:18

David Barclay

Yeah. And then we have the conservation breeding program, and the conservation breeding program is using the information from the stud book to then make management

decisions. And population, population management decisions. So we can take the information from the studbook. We can export it into population management software program and then we can do various analysis and calculations on, on population.

00:27:17:18 - 00:27:20:02

James Shooter

So it actually kind of spits out what cats should go where.

00:27:20:02 - 00:27:48:23

David Barclay

Yeah I wish I could say okay, we've got a population of 160 animals, you know, out of that, 140 of them are of breeding age. I want to produce, in the next, you know, two years, I want to produce 80 offspring. How many pairs do I, do I need, taking into account that, you know, not all pairs will reproduce and that there will be, maybe a level of mortality, albeit it would most likely be low.

00:27:49:00 - 00:28:03:22

David Barclay

There's a lot of sort of, bits of data that need to get factored into that. But I can say I don't want the level of relatedness to be above 0.01 or something. So I can put in a whole bunch of parameters and it will spit out a list.

00:28:03:23 - 00:28:06:07

James Shooter

I don't know why you're trying to make this sound so complicated.

00:28:06:09 - 00:28:12:09

David Barclay

No it's easy! Five minutes and you'll be doing it James.

00:28:12:11 - 00:28:35:00

James Shooter

David and the team set the target for this project of producing 20 cats per year. In 2022, the first season at the newly established breeding centre, 22 kittens were produced and 19 released. Last year, 14 were born. And so far this year, the first two letters of the season has brought eight brand spanking new wild cat kittens onto the scene.

00:28:35:02 - 00:28:58:04

James Shooter

Cute. The wildcat production line is functioning well then, and actually their survival is much better than was model too. From experience of other conservation breeding projects, mortality is an unfortunate but somewhat natural part of the process. If the wildcats keep surviving as well as they have been, they may have to slow down the number of kittens produced in subsequent years.

00:28:58:06 - 00:29:22:09

James Shooter

It's a nice problem to have. The survival rate for the released cats will no doubt be down to David and his extensive prerelease checklist, and the keepers who are working hard to keep the wild of the wildcat functioning whilst in captivity. But also it's a sign of the amazing habitats the team chose for the cats to be released into. They're headed out into the creme de la creme of recovering Scottish Highland ecosystems.

00:29:22:11 - 00:29:32:13

James Shooter

Cairngorms Connect. This is 600km² of Caledonian forest, flower rich grasslands, bog, river, loch, peatland and mountain.

00:29:32:15 - 00:30:04:12

David Barclay

I hope that we can we can get to a point where we've got wild cats across different sites in Scotland and their breeding and, you know, they're they're taking back old range and, I think that would be that would be incredible. Would be a long way in the future, I think. But, you know, I think the second part of that is that the work that we are doing and that this project can, can leave a legacy in, you know, this is the first step and a long stairway of wildcat conservation, but, hopefully this can be a catalyst for for more projects, and they can learn from what we've done and,

00:30:04:14 - 00:30:09:07

David Barclay

and have further successes to reestablish the wildcat population.

00:30:09:09 - 00:30:33:12

James Shooter

I'll leave David at Wildcat HQ and start loading up into one of the charity's pickups. I'm heading out into part of the release site with Alex. Today we're on a mission to find a couple of the wild cats that was set up home to the north of where we are now. We're going to check some camera traps that have been left out, but they've also got GPS collars on, so we're hoping to download the data from the last few days so the team can analyze where they've been hanging out.

00:30:33:14 - 00:30:44:16

Alex Scurrah-Price

The cats we're going to be looking for are Alvie and Lorne, a male and a female in a really nice part of the release site that have had quite a lot of crossover. Oh, really?

00:30:44:16 - 00:30:45:16

James Shooter

That's good. Yeah.

00:30:45:16 - 00:30:51:05

Alex Scurrah-Price

And both of them have fully operating collars, so we get full data from that.

00:30:51:06 - 00:31:16:10

James Shooter

Oh, amazing. We've been driving for around 20 minutes in the drizzle before pulling up next to a picturesque loch. The ospreys have recently returned and are titivating their nests. Golden eye display from the water surface and the first sand martins of the year, dart about catching a plethora of insects on the wing. We head up a small game trail at the side of the road to one of Alex's camera traps, attached to a glorious old oak tree.

00:31:16:12 - 00:31:40:18

Alex Scurrah-Price

So typical camera trap location for us. Try and find a very clear, well defined game trail. It does mean that we will get a lot of non-target species like badgers and roe deer, red deer in particular, especially up in Scotland, but that's the those are the paths that the wild cat will make use of. Yeah. Tend to use path of least resistance.

00:31:40:20 - 00:31:41:22

James Shooter

So that makes sense.

00:31:41:23 - 00:31:55:09

Alex Scurrah-Price

So we'll have a look to see if this camera has been fruitful for us. So it's not been checked in a few months. It's working fine 1624 images.

00:31:55:11 - 00:31:55:19

James Shooter

Right.

00:31:55:20 - 00:32:06:15

Alex Scurrah-Price

So there's quite a few. Well used. It can take up to about 5000. So otter. Yeah. Look at that. That's it, so we're going back, so this was let me guess is that the.

00:32:06:15 - 00:32:07:17

James Shooter

Is that the last one or the first one?

00:32:07:17 - 00:32:17:01

Alex Scurrah-Price

It's the last one. So 10 p.m. on the 16th. Last night. Last night. That's cool sir. Badger.

00:32:17:03 - 00:32:20:21

James Shooter

Badger.

00:32:20:23 - 00:32:22:04

James Shooter

Pheasant.

00:32:22:06 - 00:32:22:24

James Shooter

Always. Pheasant.

00:32:22:24 - 00:32:26:17

Alex Scurrah-Price

Always. Pheasant. Roe deer. Otter again.

00:32:26:19 - 00:32:27:24

James Shooter

Wow. Well using it.

00:32:27:24 - 00:32:32:23

Alex Scurrah-Price

It's very well used. Yeah. That's badger there. Badger again.

00:32:33:00 - 00:32:37:19

James Shooter

Some walkers. Dogs.

00:32:38:00 - 00:32:41:24

Alex Scurrah-Price

Dogs.

00:32:42:01 - 00:32:45:08

James Shooter

Otter again. God got this as well. Using that back and forth.

00:32:45:08 - 00:32:51:03

Alex Scurrah-Price

Quite a bit. That's Oh that's nice. That's the fly fishermen.

00:32:51:05 - 00:32:57:09

James Shooter

And oh they amazing. Right in the centre of the infrared light as well.

00:32:57:09 - 00:32:59:14

Alex Scurrah-Price

Yeah. Really good camera. This one. It's been.

00:32:59:14 - 00:33:01:03

James Shooter

Very free. So what date's that?

00:33:01:05 - 00:33:03:09

Alex Scurrah-Price
That looks 11th.

00:33:03:11 - 00:33:07:17

James Shooter

11th. So six days ago. Yeah, six days ago.

00:33:07:17 - 00:33:24:18

Alex Scurrah-Price

But we know the female is routinely in this area and she can go she can be really close to this camera and not go past that. Oh really? Yeah. It's interesting. She like we've tracked, knowing that she's been in that broom for a couple of consecutive days and she just won't be on the camera.

00:33:24:20 - 00:33:25:22

James Shooter

So she's just messing with you.

00:33:25:22 - 00:33:36:03

Alex Scurrah-Price

Yeah, exactly. Just depends on when she fancies walking by. Which is why it's really handy to pair the camera trapping with the GPS data. That was just. There we go. Oh, wow. Yeah, I wanted to show. Yeah.

00:33:36:04 - 00:33:45:15

James Shooter

Amazing. That's so cool. 2 in 1, 2 in 1. And so that that almost definitely is a male and a female.

00:33:45:20 - 00:33:57:19

Alex Scurrah-Price

Yeah. From the GPS data, we went back and compared the date on the image data strip to the fixes that we got for those cats. And yeah, we could confirm that that was.

00:33:57:21 - 00:34:00:15

James Shooter

And that was in February, that one.

00:34:00:15 - 00:34:06:01

Alex Scurrah-Price

That was February. So peak breeding season. Yeah. Yeah..

00:34:06:03 - 00:34:10:22

James Shooter

So that's a really good sign breeding. Maybe the female now is that female now is pregnant.

00:34:10:24 - 00:34:12:16

Alex Scurrah-Price

It could potentially be. Yeah.

00:34:12:22 - 00:34:34:24

James Shooter

Getting two wild cats on one camera trap image. It's like striking gold. And knowing these recently released individuals were prowling the same path were on is an exciting thought. I wonder if they stop to admire the old oak above us too and these two just paces apart could well have paired up. I do love checking camera chops. It always feels a bit like Christmas.

00:34:35:01 - 00:34:45:07

James Shooter

Not truly knowing what might turn up. One of my friends did catch a nudist walking past his camera trap one time though, that had a bit less of a Christmasy feel to it. I must admit.

00:34:45:09 - 00:34:49:00

Alex Scurrah-Price

This is really the area that she's inhabiting.

00:34:49:02 - 00:34:53:04

James Shooter

So yeah, it's very mixed isn't it? Right? Patches of trees and scrubby bits and.

00:34:53:06 - 00:35:09:21

Alex Scurrah-Price

Yeah, nice broadleaf trees. Really mature beech trees over there. there's a mature Scots pine as well, but. And also, yeah, the watercourse is down there, nice open, rough grassland. We know that there's plenty of brown hare down there. We've had camera trap images of one of the males predated on brown hare.

00:35:09:24 - 00:35:12:22

James Shooter

Wow. And they catch brown hare easily. I mean that's...

00:35:12:22 - 00:35:34:04

Alex Scurrah-Price

We don't know how easily but but they do. Yeah. I'll show you later. There was a footage. We had a camera trap pointing at a fence and brown hare goes through the fence, wildcat follows brown hare, looks like it could be stalking. Eight minutes later, wildcat was dragging the brown hare through the fence. We don't know if that's the same brown hare, whether that brown hare was alive or not, but yeah, well, predated on brown hare.

00:35:34:04 - 00:35:35:19

James Shooter

Because they're fast aren't they?

00:35:35:22 - 00:35:42:19

Alex Scurrah-Price

Yeah. No. You see them alongside like the stakes or other wildlife for scale they are probably.

00:35:42:19 - 00:35:57:10

James Shooter

Yeah. We track down the road a little with me pointing in the TV aerial looking gizmo out the window, and pull into a hill track in front of some woods. Alex's managed to get downloads from this location before, so we're going to get out the vehicle and try our luck.

00:35:57:12 - 00:36:05:09

Alex Scurrah-Price

So, what I would like you to do, James, if you can just you don't have to have your arm pointing out anything, but if you can have that antennae.

00:36:05:13 - 00:36:08:07

James Shooter

I get a role in monitoring? you do. Yes.

00:36:08:09 - 00:36:22:22

Alex Scurrah-Price

Take that receiver. Just make sure it's on and can see. Yeah. This is where tracking with a pair can be very useful. It's usually when you find them in the first instance.

00:36:22:24 - 00:36:26:17

James Shooter

So what actually happens if we come across and it just pings does it?

00:36:26:17 - 00:36:27:21

Alex Scurrah-Price

Yeah. So just check that.

00:36:28:00 - 00:36:30:17

James Shooter

And that's the walkie talkie thing? Or that's this thing?

00:36:30:19 - 00:36:32:08

Alex Scurrah-Price

it'll be the receiver that pings.

00:36:32:10 - 00:36:37:11

James Shooter

The walkie talkie thing? Yes.

00:36:37:13 - 00:36:40:08

Alex Scurrah-Price

And it will be the walkie talkie thing that, you'll hear.

00:36:40:12 - 00:36:41:15

James Shooter

Now, you speaking on my level?

00:36:41:19 - 00:36:43:22

James Shooter

Yeah.

00:36:43:24 - 00:36:58:07

Alex Scurrah-Price

Right. Okay. I see. I'll just crank the volume up.

00:36:58:09 - 00:37:00:07

James Shooter

Oh, yeah. I can hear it.

00:37:00:09 - 00:37:02:15

Alex Scurrah-Price

Now. Yeah. That's it.

00:37:02:17 - 00:37:15:22

James Shooter

He is likely up in that direction. Amazing. So on that hillside, there's one of the the male wildcat that we're after. Yes. Okay.

00:37:15:24 - 00:37:17:02

Alex Scurrah-Price

And then you move on to the next cat.

00:37:17:02 - 00:37:21:08

James Shooter

Because a lot of input there isn't there? You must be dealing with huge amounts of data.

00:37:21:10 - 00:37:41:24

Alex Scurrah-Price

There's an awful lot of data. I think we've uploaded as of this morning, 869 files to Move Bank, which is the software that we used to analyze the tracking data. And yeah, there's hundreds and thousands of kilobytes of data within it since the cats were released.

00:37:42:00 - 00:37:58:03

James Shooter

And so in terms of project what what then like the full circle. What does that data give you that you can then you know utilize in the field or for future work?

00:37:58:05 - 00:38:21:07

Alex Scurrah-Price

So it can help inform us where future releases will happen. So it will tell us where the wild cats are and whether we need to supplement that subpopulation with more males or more females, for example. It can also tell us what kind of social dynamics are ongoing, so which males and which females are interacting with which ones. So it can tell us an awful lot really.

00:38:21:09 - 00:38:27:14

Alex Scurrah-Price

And it's still very early, early stages of the project. So there's an awful lot more information that we're still going to get.

00:38:27:16 - 00:38:53:02

James Shooter

As you probably starting to realize, data collection is a huge part of this project. And while it is offering up some detailed insights since the cats have been released, it was equally as integral in the build up with hybridization, an ongoing threat for the depleted national population, it was imperative to find out what the free roaming feral cat situation was prior to letting any wildcats out of the back. Through an extensive winter camera trap survey.

00:38:53:04 - 00:38:59:02

James Shooter

Thankfully, numbers were extremely low in the locality, paving the way for the wild cats return.

00:38:59:04 - 00:39:19:00

Alex Scurrah-Price

If we see a cat appear now camera and it's not known to us, then the first step is to try and identify whether that cat is owned or not. So if it doesn't have a collar but it doesn't look like, a wild cat, then we will start doorknocking and leafletting in the local area and from that we will try and determine whether that cat is owned or not.

00:39:19:00 - 00:39:36:00

Alex Scurrah-Price

And if it's owned and neutered, then we can have a conversation with the owner about the project and what that means for them as a pet cat owner. And if it is a feral, then the next stage is to try and trap them. And we would neuter them, vaccinate them, and then return them to where they were first trapped.

00:39:36:18 - 00:39:59:05

James Shooter

The camera trap surveys also help the team get an insight into prey availability for the proposed release sites. Areas doing well with wood mice, field voles, rabbits and brown hares. They all form part of a wild cat diet. They even apparently have a fondness for water

voles. I wouldn't have thought they'd be the easiest animals to go for, spending most of their time in burrows or swimming through watercourses.

00:39:59:07 - 00:40:03:13

James Shooter

But cats are canny, and if it's small, brown and furry, it's fair game.

00:40:03:13 - 00:40:31:08

Alex Scurrah-Price

So they were at least across four separate locations, and a lot of it is down to landowner engagement. So we can't just decide on any area. We have to work very closely with the landowner. We also have to find areas that they're not going to be disturbed by members of the public. And yeah, the hope of releasing them across four areas is that we're not going to have really dense, clustered areas of wild cats which could cause internal conflict amongst the population.

00:40:31:10 - 00:40:51:19

James Shooter

One thing the team weren't expecting upon release were for a few of the cats to get a taste for chicken. In the early days of release, a couple of them unfortunately started to predate on people's garden, or farm hens. The important part here, of course, is not to ignore the issue and hope it goes away, but to step in and try to address it in the strive for reducing conflict.

00:40:51:19 - 00:41:16:11

Alex Scurrah-Price

We went out and engaged with the landowners, immediately, to try and discuss with them, why it happened and also ways that we can mitigate for that happening in the future. What we found, is if you're able to house your chickens in a suitable pen, then yeah, they should be, they should start to move quite low down the wild cats preferred prey list.

00:41:16:12 - 00:41:30:24

Alex Scurrah-Price

Well, I think what is important to mention, though, is that some of the individuals that were known to have potentially preyed on chickens, we know that they have also been in areas very, very close to chickens, and they have not preyed on them. So not a given pattern no.

00:41:31:01 - 00:41:48:17

James Shooter

The majority of individuals have acted as the team expected. But another decided to go for a bit of a jaunt traversing the Cairngorms plateau. I have an affinity for this cat. Whilst hyper dispersing isn't ideal for the project, you can't blame him for wanting to take in these incredible mountain views.

00:41:48:20 - 00:42:12:08

Alex Scurrah-Price

He scaled up a munro, he then scaled back down this Munro went back up again to Braeriach and over towards Ben Macdui, which is the second highest Munro in Scotland, and eventually found his way onto Mar lodge. And we calculated that that was a net distance moved of approximately 36km over, I think it was a week and a half to two week period.

00:42:12:10 - 00:42:18:06

Alex Scurrah-Price

So that was really impressive. And yeah, none of the other cats have travelled that far from the release site thankfully.

00:42:18:06 - 00:42:23:06

James Shooter

Was actually like at the top of these Munros. I mean, that's like 1300 meters.

00:42:23:10 - 00:42:30:24

Alex Scurrah-Price

Yeah, this is the benefit of having this GPS technology, is that we know from his tracking data that he was right on the summit of these Munros.

00:42:30:24 - 00:42:32:05

James Shooter

Literally bagging a Munro.

00:42:32:05 - 00:42:32:19

Alex Scurrah-Price

Exactly.

00:42:32:19 - 00:42:53:06

James Shooter

That's amazing. It's been so wonderful to explore this exciting initiative on my doorstep. Since recording the interviews, I've actually had my first sighting of one of the release Wildcats just three minutes from my house, and I only saw it because I was heading out on a job and as usual, forgot something behind. So I had to do a U-turn and head back home.

00:42:53:08 - 00:43:11:15

James Shooter

It was on that return journey. I locked eyes with the young Wildcat as it looked back at me from a copse of aspen, its identity confirmed by the GPS collar hanging around its neck. So it was thanks to my bad memory and poor organizational skills that I got to witness such a perfect moment. No need to change, after all then.

00:43:11:15 - 00:43:38:00

James Shooter

In other exciting news, the first wild born kittens have been caught on camera since these cats have been released. It's so incredibly hopeful. Go and check out the Saving Wildcats

social channels for cuteness overload. It was really great to get into the detail of this inspiring project. So much innovative work going on behind the scenes, and it's only thanks to the vision and tenacity of people like Helen and David

00:43:38:02 - 00:44:07:09

James Shooter

that got it over the line. I think I can safely admit that I didn't realize how much work goes into something like this. The research, the stakeholder consultations, the ecological surveys, the husbandry protocols, the enclosure design, the genetic analysis, the follow up monitoring that's an incredible amount of work hours from a dedicated team. As a first of its kind breeding for release program at this scale in the UK, the team set out to cross every T and dot every I.

00:44:07:11 - 00:44:32:11

James Shooter

Their initial success is a testament to the hard work they put in. It's not only important for this project, but for any future releases of wild cats or other species for that matter. Saving Wildcats have set the bar high. They're creating a future showcase for a country that's generally pretty nervous about bringing species back, that it can be done successfully with little fuss and minimal conflict.

00:44:32:13 - 00:44:55:08

James Shooter

Purrrfect. And you thought you got all the way to the end without hearing any cat puns, didn't you? Can't stop meow. I'm on a roll. Sounding good. Feline good. I'll stop now. Cat's got my tongue.

00:44:55:10 - 00:45:19:13

James Shooter

Thanks for joining me for episode 16 of The Rewild podcast. A fascinating insight into species restoration. Thanks to Helen, David and Alex for showing me around and giving me the lowdown on everything wildcat. As always, thanks to Andrew O'Donnell, of beluga lagoon for the music and to Gemma Shooter for the episode artwork. Now I hope you're sitting down, but next month is our

00:45:19:13 - 00:45:46:03

James Shooter

penultimate episode of the series. I feel I need to give you some prior warning to come to terms with the fact that after number 18 hits your ears, we are done, we are out of here, we are sitting still for a while. 18 episodes of the rewild podcast were agreed. And 18 episodes we will have delivered. I know some of you may now be gently sobbing, but please hold back the tears.

00:45:46:05 - 00:46:01:08

James Shooter

The Rewild Podcast
By James Shooter
Episode 16
Saving Wildcats



If you cry, I'll cry. And I am an ugly crier. Nobody wants to see that. So stay strong and we'll see you at the end of July for a tour around the Oder Delta in the borderlands of Poland and Germany. Catch you next time.