

Transcript

00:00:00:22 - 00:00:21:15

Iames Shooter

I'm stood on a famous bend of the Arda River on the outskirts of Madzharovo, a former mining town in the Eastern Rhodopes of Bulgaria. This is probably one of Bulgaria's most Instagrammable spots, but I'm not here to take a selfie. I've my back to the famous view, craning my neck towards the heavens, taking in a much more impressive scene

00:00:21:20 - 00:00:50:01

James Shooter

in my humble opinion, a sky full of vultures. There's a crashing of wings and a beak full of squabbles as the party of griffon vultures above my head attempt to displace one another from the clifftop apartments. It's only February, but these huge birds are already on eggs, or soon to be so. They're early nesters, and they have to be, as they dedicate a third of the year to incubating and raising their ravenous young up to the point of fledging.

00:00:50:03 - 00:01:16:17

James Shooter

This awe inspiring scene playing out above my head wouldn't have been possible 40 years ago as the species almost completely disappeared by the 1970s. A pair of even rarer black vultures joins the party. This definitely wouldn't have been possible even just a few short years ago. These ginormous birds with an almost three meter long wingspan were reintroduced to the Rhodopes just two years ago, and here they are circling above me.

00:01:16:19 - 00:01:42:08

James Shooter

I can't quite believe my luck as a golden eagle soars through and a peregrine falcon launches off the cliff, the latter a mosquito in comparative size. Four birds of prey in one patch of sky, but that's just a snapshot of the possibilities here. Time your visit right to these raptor rich mountains, and they could be joined by, deep breath:

00:01:42:10 - 00:01:59:04

James Shooter

Egyptian vulture. White tailed eagle. Eastern imperial eagle. Lesser spotted eagle. Booted eagle. Bonelli's eagle. Short tailed eagle. Marsh, Hen, Pallid and Montagues harriers. Black kite. Levant sparrowhawk. Eurasian sparrowhawk. Goshawk. Honey buzzard. Common buzzard. Long legged buzzard. Osprey. Common kestrel, lesser kestrel, Eleanora's falcon, Red footed.

00:01:59:04 - 00:02:02:02

James Shooter

Falcon. Lanner and Hobby.

00:02:02:04 - 00:02:15:21

Iames Shooter

I'm James Shooter, host of The Rewild podcast and this is the Rhodope Mountains.



00:02:15:23 - 00:02:38:06

James Shooter

It's my first visit to Bulgaria and although there's snow on the ground back home, our rental car is alerting us to the fact it's 23 degrees here. For various reasons we've ditched the campervan on this occasion and my dad has joined me for a jaunt in the Bulgarian countryside. There Rhodope mountains are a 240 kilometre long mountain chain in the borderlands of Greece and Bulgaria.

00:02:38:08 - 00:03:02:21

James Shooter

Its location on the southeastern part of the Balkan Peninsula, means it's influenced both by the colder air from the north and the warm breezes from the Mediterranean. It's a stepping stone between continental Europe and Asia, and as such, a biodiversity hotspot, and important migratory route. We've been rattling along a gravel road for a good few kilometres, winding our way up a hillside of patchy woodland and open pasture.

00:03:02:23 - 00:03:22:24

James Shooter

This is a hunting reserve the Rewilding Rhodopes team are working with. We make our way to the meeting point outside the compound of a small farm. Thankfully, the only thing coming over the hill is an old Toyota LandCruiser emblazoned with a big wolf print on the bonnet. This must be the person I'm meeting. The farm dogs seem to know them anyhow.

00:03:23:01 - 00:03:30:09 James Shooter Hello? Hello. How are you? Fine.

00:03:30:11 - 00:03:31:11 James Shooter They know you?

00:03:31:13 - 00:03:38:04 Desislava Kostadinova

Yes. He is actually the grandson of it's Berta and Bochki and Shishu.

00:03:38:06 - 00:03:39:03 James Shooter Oh.

00:03:39:05 - 00:03:46:23 Desislava Kostadinova

Oh, and we have this dog, Shishu, Karachakan one. and he's named after his grandfather.

00:03:46:23 - 00:03:50:14

James Shooter

Oh. Very nice. The whole family.



00:03:50:23 - 00:03:53:14 Nelly Naydenova You have a dog, right?

00:03:53:23 - 00:03:58:14 Iames Shooter

Yes. my dad has a dog. Yeah, yeah, yeah.

00:03:58:14 - 00:04:02:00

James Shooter

You're going to get a photo out, aren't you? Yeah. He can't help himself.

00:04:02:02 - 00:04:14:16

James Shooter

Freddie. Wow. Wow. He looks like a really spoiled. Yeah, he's a young chap. He's very spoiled.

00:04:14:18 - 00:04:30:01

James Shooter

Five grandchildren my dad has. And it's Freddie, the two year old Airedale terrier that gets shown off to strangers. I wouldn't mind so much, but this is the third person he's shown photographs to in 24 hours, including a taxi driver and our hotel manager.

00:04:30:03 - 00:04:33:09

James Shooter

Are these dogs used for livestock protection, or are they?

00:04:33:09 - 00:04:40:10

Desislava Kostadinova

Yes, actually. Okay, listen, well, they're not really purebred, but maybe Shishu there.

00:04:40:12 - 00:04:42:01

James Shooter

With just the head we can see?

00:04:42:03 - 00:04:47:06

Desislava Kostadinova

Shishu is Karakachan dog.

00:04:47:08 - 00:04:48:09

James Shooter

Okay. Right.

00:04:48:11 - 00:05:16:04

Desislava Kostadinova



And, this is some old, very old breed of dogs which are selected specially for the the protection of, livestock from the wolf. Yes. The good thing is that actually, when they grow with the herd and they start to think that they're a part of the herd, a sheep or lamb, and if somebody attacks the herd, they protect, the animals, as you know, if if somebody attacked the mother, the kid.

00:05:16:04 - 00:05:17:18

James Shooter

It feels like that. Yeah, that.

00:05:17:18 - 00:05:34:24 Desislava Kostadinova

They would started immediately to protect the mother without thinking. Yeah, yeah. Another very good thing is that actually, they don't have this hunting instinct that other dogs have. Okay, so if the predator keep the distance, they will never go to to run after the predator or to kill the predator.

00:05:35:04 - 00:05:36:08

James Shooter

So they'll stay with the herd.

00:05:36:11 - 00:06:02:02 Desislava Kostadinova

Yes. And not everything here was actually human made because this place was inhabited very long time. So now we will see a cultural landscape. In the past here there was a lot of domestic grazers, now, like everybody everywhere in Europe. And all the people go away. Nobody wants to live in rural mountain areas. So now the people are gone, livestock is gone.

00:06:02:02 - 00:06:04:16
Desislava Kostadinova
And now the wild herbivores slowly start to take.

00:06:04:17 - 00:06:07:06 James Shooter To replace them. Yes.

00:06:07:08 - 00:06:38:07 Desislava Kostadinova

Yes, yes. Last year everybody knows there was a very big fires in Alexandroupoli and Dadia National Park was burned. and we have also here such problems. But for example, in Madzharovo a wildfire started and because in this area you have grazers. Okay, they are domestic but the tradition in livestock breeding in these areas is semi wild.

00:06:38:09 - 00:06:39:13 James Shooter Fires.



00:06:39:15 - 00:07:04:08 Desislava Kostadinova

It the fire was very small. The, and very, very easy managed to stop it. And in Greece, where they don't have so much of. Okay, the the number of domestic herbivores in Greece is really, really very low already. But also they don't have wild herbivores. We all see what happens. Yeah.

00:07:04:08 - 00:07:07:20 Desislava Kostadinova It was a biggest fire in Europe for the last decade.

00:07:07:20 - 00:07:37:07

James Shooter

In this region, the Rhodope Shorthorn cattle can be seen wandering the hillsides, living a semi wild life. Whilst the decline in wild herbivores played out, these domestic animals took on part of the role and maintained open meadows amongst the otherwise encroaching shrubbery. They've kind of been accidental firefighters. Thankfully, the wild herbivores are back on the rise with red deer, fallow deer, free roaming horses and bison, have all recently been reintroduced. Dessi calls it the Balkan Serengeti.

00:07:37:09 - 00:07:43:15 Desislava Kostadinova

Now we see how the grazers make this impact and how the nature take it again.

00:07:43:15 - 00:07:45:00 James Shooter Yeah that's brilliant.

00:07:45:02 - 00:07:51:21 Desislava Kostadinova

And the small birds came back. And my favourite, rollers. I love rollers. You know this blue bird.

*00:07:51:21 - 00:07:52:20 James Shooter*Oh yeah. Yeah, yeah.

00:07:52:22 - 00:07:54:14

James Shooter

Yeah I see them every now and again. They are stunning!

00:07:54:15 - 00:07:56:14 James Shooter Yes, yes.

00:07:56:16 - 00:07:58:10



*Desislava Kostadinova*For me this is the biggest impact.

00:07:58:14 - 00:08:05:04

James Shooter

Yeah. Most positive impact of the grazing. Well you're allowed to have favourites. That's okav.

00:08:05:10 - 00:08:13:13

Desislava Kostadinova

Yeah. Well it's okay for example here before the Bisons came there were no rollers. Now we have three pairs.

00:08:13:14 - 00:08:14:08

James Shooter Really? Wow.

00:08:14:09 - 00:08:20:02

Desislava Kostadinova

Yes. And also within the area with konik horses in the past there were no rollers and this hoopoe.

00:08:20:04 - 00:08:21:22

James Shooter

Whoop. Oh, yeah, I love hoopoes.

00:08:21:24 - 00:08:22:06

Desislava Kostadinova

Yeah. Me too.

00:08:22:09 - 00:08:28:01

James Shooter

And is that because there's more invertebrates because of the grazers?

00:08:29:00 - 00:08:37:16

Desislava Kostadinova

It's because of the grazers. So the grazers also attract also the insects. And these are birds who are eating insects.

00:08:37:19 - 00:09:04:06

James Shooter

Rollers and hoopoes are arguably two of Europe's most attractive bird species. The roller, crow like in shape, but electric blue in colour. And the hoopoe with a flash of zebra striped wings and flamboyant peach crest both benefit from large wild herbivores. They keep the grass short, which helps the birds to hunt their invertebrate prey, and their dung, free from wormers and anti-parasitic agents, provides a plate full of tasty beetle larvae.



00:09:04:08 - 00:09:29:01

James Shooter

Yum! Whilst animals and humans may have shaped the skin of this landscape, over relatively recent times, it was tectonic collisions and volcanic eruptions that sculpted the bones. Note to self, use less sinister metaphors. Mining played a big part in the economy of this region. The semi abandoned tower blocks of Madzharovo were built for the workers. Entrances to the former lead and zinc mines

00:09:29:01 - 00:09:53:11

Iames Shooter

still scar the landscape, but most are shut down now. Along with the mines, overhunting, overgrazing, persecution of predators and scavengers. They all added up to a depleted ecosystem, not functioning as it should. The rewilding efforts here, then, have been largely focused on protecting those species still present, restoring those that are not, and working on coexistence measures so that the circle of life is restored.

00:09:53:13 - 00:10:00:05

James Shooter

It can be easy to separate ourselves from these elements of the natural world, but fully functioning food webs brings benefits to us all.

00:10:00:07 - 00:10:25:24

Desislava Kostadinova

Now we work for the bringing back the black vultures, cinerous vultures. And it is so nice, you know, because in the past, okay, you see griffon vultures, but now it's it just go somewhere, look at the sky and you see the cinerous vulture and more often, and more often and more often. Now, you know everywhere in Europe, there is African swine fever.

00:10:25:24 - 00:10:45:21

Desislava Kostadinova

But here we don't have so much cases and we can see wild boar and it is because we have this healthy circle of wild, because if some wild boar is sick, of course the wolf will go and eat it. And the vultures will take the rest. And the nature is amazing.

00:10:45:21 - 00:10:51:03

James Shooter

So it's a good indicator of your healthy environment basically, that the wolves are doing well, the vultures are doing well.

00:10:51:03 - 00:11:06:07

Desislava Kostadinova

Yes, yes, yes. So if we let all these pieces to work as they should work we will have also less problems with diseases and we have to think about this because climate change will bring us a lot of diseases.

00:11:06:07 - 00:11:07:12 James Shooter



Yeah, yeah yeah, yeah.

00:11:07:12 - 00:11:26:17

Desislava Kostadinova

The things are now tropical for Africa and exotic for Europe. Soon or later will come also. Yeah. And that's why actually if we want to survive as species, humans, we have to restore the nature and make it strong enough to, to manage the processes.

00:11:26:17 - 00:11:44:08

Iames Shooter

Dessi's given me a great insight into the region and some of the challenges and opportunities facing this rural part of Bulgaria. We get picked up by Nelly and Stefan, now two more people for my dad to show off his dog to and drive back through town, where we pass a huge vulture mural 16m tall on one of the tower blocks.

00:11:44:10 - 00:11:50:23

James Shooter

I love the big, Egyptian vulture on the side of that tower block. It's amazing. When did that go up?

00:11:51:00 - 00:11:59:13

Nelly Naydenova

I think this 4 or 5 years ago, our partners from Bulgarian Society for the protection of Birds, they had a really huge project, LIFE project, and they did it within that initiative.

00:12:08:05 - 00:12:09:18

Nelly Naydenova

It's really impressive. Yeah. The first thing

00:12:09:20 - 00:12:10:17

Desislava Kostadinova

you see when you enter Madzharovo.

00:12:10:17 - 00:12:16:04

James Shooter

Yeah, yeah. Nice. yes, I know, it's amazing. It gives a real

00:12:16:04 - 00:12:43:18

Iames Shooter

kind of iconic status to the species in this area. It's good to see a community embrace this family of birds that are so often maligned. Vultures are often seen as the harbingers of death and decay, but they're the exact opposite. They bring life from death. They're nature's recyclers and a largely misunderstood group of birds. Stefan stops the car at a site along the river and quickly sets up his spotting scope.

00:12:43:20 - 00:12:47:05

James Shooter



What do we have here?

00:12:47:07 - 00:12:50:22 Stefan Avramov One of the artificial nests.

00:12:51:00 - 00:12:53:00 James Shooter Oh, yeah.

00:12:53:02 - 00:12:58:13
Stefan Avramov
Where one of the birds was photographed.

00:12:58:15 - 00:12:59:16 James Shooter What? Recently?

00:12:59:18 - 00:13:01:04 Stefan Avramov Recently

00:13:01:06 - 00:13:04:15 James Shooter Oh, wow. Oh, amazing.

00:13:04:17 - 00:13:08:01 Stefan Avramov But the female is now in Greece.

00:13:08:07 - 00:13:08:22 James Shooter But really?

00:13:08:24 - 00:13:13:05 Stefan Avramov Yes. Maybe drinking Retsina.

00:13:13:07 - 00:13:14:22 James Shooter Enjoying herself.

00:13:14:24 - 00:13:28:00

Stefan Avramov

Let's hope that she will return. In some years there was one observation of black vulture for the whole area.



00:13:28:00 - 00:13:29:13 James Shooter Whole area. Wow.

00:13:29:15 - 00:13:41:08 Stefan Avramov And now they're flying everywhere.

00:13:41:10 - 00:13:44:02 Stefan Avramov Looks two blacks.

00:13:44:04 - 00:13:47:21

James Shooter

Coming over to slowly join the Griffons.

00:13:49:02 - 00:13:59:15
Stefan Avramov
Beautiful view. Maybe a pair because they fly in close distance.

00:13:59:17 - 00:14:00:20

James Shooter

Could it be the ones that were pictured on the nest?

00:14:02:03 - 00:14:16:09

Stefan Avramov

Maybe, maybe? Maybe so. Can you imagine in the summer flying also with Egyptian vultures? Yeah. Wow. And in 5 or 10 years with bearded vultures.

00:14:16:09 - 00:14:36:16

Iames Shooter

Yeah. All four species together. As rewilding manager Stefan is mostly involved in the reintroduction of deer species to the Rhodopes, but I want to pick his brain to find out more about the specialist wildlife here. Being at the most southeastern tip of the continent, the region hosts some unique species, some of which I've never come across before.

00:14:36:18 - 00:14:41:17

James Shooter

Like the sousalik, otherwise known as a European ground squirrel and the marbled polecat.

00:14:41:22 - 00:14:54:03

Stefan Avramov

We are trying to buy some of their localities and to manage the habitat in order to protect the species. But it's difficult.



00:14:54:05 - 00:15:00:00

Iames Shooter

Difficult and what do they need? What kind of habitat do they need?

00:15:00:01 - 00:15:07:12

Stefan Avramov

They need open pastures, both of them. And the marbled polecat needs a lot of sousaliks.

00:15:07:14 - 00:15:10:11

Iames Shooter

Right? Oh, so they they feed on them.

00:15:10:11 - 00:15:11:04

Stefan Avramov

They feed on them.

00:15:11:04 - 00:15:12:04

James Shooter

All right. I didn't realize that.

00:15:12:04 - 00:15:45:12

Stefan Avramov

Okay, so this is some kind of keystone species because it is important for the polecat and also for all raptors. Imperial eagle, there were in the past up to ten pairs of imperials in the area. They disappeared maybe 20 years ago with the change of the landscape. And now we are working to maintain the succession to to maintain the open areas with this restoration of deer species.

00:15:45:14 - 00:16:12:10

James Shooter

It's not just the endangered sousaliks and polecats that are reliant on open areas and grazed pastures. The Rhodopes have a wealth of reptile life, with 28 species recorded here. The warm shrublands and stony substrates host snake species like sand boa, cat snake, nose horned viper and the 20cm long worm snake. Aw! Lizards include eastern green lizard, Kotchy's gecko, and snake eyed skink.

00:16:12:12 - 00:16:32:05

James Shooter

There's even a couple of species of tortoise, Hermann's and spur-thighed. I've actually been peed on by one of those in Greece as I tried to help it cross the road, although I'm not sure which species it was, I didn't have time to look at its thighs whilst in the middle of my extremely heroic act. It's not just cars the tortoises need to look out for here though.

00:16:32:07 - 00:17:12:12

Stefan Avramov

The golden eagle eats a lot of tortoises and they lift up in the air, in the sky, the tortoises and they throw them against cliffs where the tortoises break, and then they're able to eat



them or to bring to the nest and a colleague mounted a few camera traps in front of Golden eagle nests and collected a lot of pictures of golden eagles feeding their young with tortoises.

00:17:12:17 - 00:17:18:05

James Shooter

It's amazing because we have golden eagles in in Scotland, but they, yeah, feed a lot more on carrion.

00:17:18:09 - 00:17:19:01 James Shooter And.

00:17:19:02 - 00:17:28:00

Iames Shooter

Hares, grouse, deer carcasses. I would never have guessed that they go after tortoises, so it's amazing how adaptable they are to different species.

00:17:28:01 - 00:17:52:21

Stefan Avramov

They're extremely adaptable, even the ancient Greeks were informed about this, and I think that one Greek philosopher was killed by a golden eagle. They said this, because, he decided that his bald head is a cliff. Okay. I don't believe in this but...

00:17:52:23 - 00:17:55:12 James Shooter I kind of hope that's true.

00:17:55:14 - 00:18:38:12

Stefan Avramov

But this is the legend. We reintroduced fallow and red deer in order to support the natural processes and to maintain the open landscape, this mosaic of habitats, in a natural way. They are food for wolves, and also the remnants, the carcasses, their food for griffon, Egyptian, Black vulture, and also for the golden eagle and white-tailed eagle. So they're very important, element of the ecosystem. The fallow deer is more grazer.

00:18:38:14 - 00:19:21:24

Stefan Avramov

It prefers open areas, semi-open forest, pastures, but not very big pasture, pastures with bushes and prefer they they prefer to graze grass. The red deer, they are more, animals of the forest. And they prefer to eat, bushes, trees. And then both species, they maintain, they damage the forests and bushes and maintain the open place they ensure light for insects, reptiles, orchids.

00:19:22:01 - 00:19:29:21 Stefan Avramov



In the past, they were over hunted and they were over poached. And they were exterminated completely.

00:19:29:23 - 00:19:57:09

Iames Shooter

More than 50 years ago the hunters here reintroduced fallow deer on to one of their reserves. It went so well that today Stefan is able to purchase animals from their hunting quota to translocate them across the whole eastern Rhodope. New Fallow and Red deer populations are now popping up and reconnecting across the entire region, purchasing in some scenarios, up to 30% of a quota raises money for the hunting club, whilst allowing the species to spread to new ground.

00:19:57:11 - 00:19:58:20 James Shooter It's a win win.

00:19:58:22 - 00:20:33:21

Stefan Avramov

It was successful because they were able to stop the poaching there. It's very essential. The normal hunting is not the problem because, the hunting management is well organized. They have hunting quotas, so they they took a few percent of the population. But the poaching, the poaching is terrible because the poachers they exterminate everything. And here we collaborate with the hunters, we sign the contracts with them.

00:20:33:23 - 00:20:55:08

Stefan Avramov

For they are obliged that they will not hunt the animals for five, ten years, until the time when the population is for a few hundred animals. And because of this collaboration with the local people, they decrease radically the poaching.

00:20:55:08 - 00:21:04:17

James Shooter

Brilliant. So they they fully understand the long term gain of seeing them and letting them be. And then the future they'll be, they'll be a quarry species again.

00:21:04:19 - 00:21:20:04

Stefan Avramov

Exactly. If there are a few dozen thousand of fallow deer in the eastern Rhodope, there will be animals for the hunters. There will be animals for the wolves. There will be animals for the vultures.

00:21:20:06 - 00:21:22:09

James Shooter

So the idea is to have lots and lots and lots.

00:21:22:14 - 00:21:56:07

Stefan Avramov



I'm happy because everything is going well. The population is growing. There might be more than 200 red deer in this new populations, and more than maybe 500 fallow deer in the new populations, or even more. And in the next five years we hope to translocate at least between 500 and 1000 more deer in the eastern Rhodope.

00:21:56:07 - 00:22:05:13

James Shooter

Well, so a lot more. Yeah. And what would you hope to see their populations grow to in say, 50 years time? What would be a good population size for you?

00:22:05:15 - 00:22:25:03

Stefan Avramov

For the fallow deer the available habitat is for maybe more than 10,000 animals, maybe even 20,000 but if there is no poaching and everything solved and for the Red deer, maybe a few thousand animals.

00:22:25:05 - 00:22:50:14

James Shooter

I leave Stefan at the riverside and rejoin Dessi and her partner Hristo, another rewilding manager here whose focus is on the iconic vultures of this landscape. I'm excited to learn more about these misunderstood birds. We hike up the hillside with an amazing 360 degree view around us. Black woodpeckers are shrieking in the trees below, and a pair of ravens are twirling around the sky together, displaying to one another.

00:22:50:16 - 00:23:03:18

Iames Shooter

The tell tale signs of bison are everywhere on the debarked trees around us. Something I learned lots about in the Carpathians of Romania. But as I didn't get to see them then, Hristo's next words are very exciting.

00:23:03:20 - 00:23:07:21

Hristo Hristov

There are two, three animals just in the forest.

00:23:07:23 - 00:23:12:21

James Shooter

So the shapes in the trees?

00:23:13:00 - 00:23:16:01

Hristo Hristov

That's about three, four.

00:23:16:03 - 00:23:26:00

James Shooter

I think more. Oh yeah. Do you see them? Yeah, yeah. It takes me a while to.

00:23:26:02 - 00:23:28:06



James Shooter

I'm trying to make sure what I'm looking at is.

00:23:29:17 - 00:23:32:04

James Shooter

Is the bison.

00:23:32:05 - 00:23:33:15

James Shooter

I think I can see them with the naked eye.

00:23:33:19 - 00:23:34:19

James Shooter

Yes. The two.

00:23:34:19 - 00:23:38:11

James Shooter

The shapes in the, the darker shapes amongst the trees.

00:23:38:13 - 00:23:38:21

Iames Shooter

Yeah.

00:23:38:22 - 00:23:40:12

James Shooter

Like one two three.

00:23:40:14 - 00:23:42:17

Desislava Kostadinova

Three. They're really hiding.

00:23:42:19 - 00:23:42:24

James Shooter

Yeah.

00:23:42:24 - 00:23:49:12

James Shooter

They're amazing at hiding. To be. I can see them moving now.

00:23:49:14 - 00:23:52:22

Desislava Kostadinova

At one moment the bush started to move then it's a bison.

00:23:52:24 - 00:23:55:11

James Shooter

If the bush moves, it's a bison.



00:23:55:13 - 00:24:06:19

James Shooter

It's hard to prize my eyes away from these incredible creatures, even if the distance does make them look like shuffling shrubbery. But I'm here to find out more about the vultures role in the ecosystem from Hristo.

00:24:06:21 - 00:24:38:02

Hristo Hristov

They clean dead body of the animals at all. They are the last one in the trophic chain. normally the griffon vulture eat only soft materials like intestine, liver and, very soft muscles. The black vulture. They prefer the skin and very strong muscles. Very strong that griffon will have no possibility to eat and lammergeir

00:24:38:04 - 00:24:46:02

Hristo Hristov

prefer bones. Egyptian vulture he ate everything that is left from the other ones.

00:24:46:04 - 00:25:13:07

James Shooter

Egyptian vultures, which are easily identified from the other species due to their smaller size and bright white plumage with lemon yellow head are only present in the spring and summer before returning to Africa for the winter. Griffon and black vultures are present here year round, but sadly, the fourth species and arguably the coolest, the lammergeier or bearded vulture, is extinct in the region, with the closest population southeast of the Rhodopes in Turkey.

00:25:13:09 - 00:25:39:10

James Shooter

The Egyptians live as a pair in an individual territory, which they defend ferociously, whereas griffons like two nesting colonies on cliff ledges and rock faces. Black vultures nest in loose colonies roughly a kilometer apart from one another, usually preferring tree top nests and lammergeier, the rock and roll vultures, which drop bones from height to smash them up and feast on the marrow within, nest in caves because they're cool and they can.

00:25:39:12 - 00:26:22:14

Hristo Hristov

Circle of life, have many subprocesses inside. The main one is this trophic chain. Normally in the nature wild herbivores, if they get the parasite or some disease, they're not so, in the good condition. And first will be prey for carnivores and normally wolf attack, fallow deer or wild cattle or red deer. They eat something, but not at all, because one large herbivore is big enough for one wolf.

00:26:22:14 - 00:26:26:11

Hristo Hristov

Pack, and the rest is for vulture.



00:26:26:13 - 00:26:50:21

Iames Shooter

The four species of vultures are fascinating in the way they're feeding habits all fit into distinct niches. Egyptian vultures and normally first on the scene, as their dainty size means they don't need as powerful thermals to get going, and their smaller territory sizes mean they find carcasses quicker. As the classic saying goes, the early bird captures the corpse and they need to as well, as they'll tend to get pushed off by the larger vultures.

00:26:50:23 - 00:27:02:10

Iames Shooter

By mid-morning, with the warming sun griffons and their enormous wings can get going. They take flight and work as a unit, often honing in on where Egyptian vultures have already landed.

00:27:02:12 - 00:27:30:01

Hristo Hristov

At least 20 will fly from here, they make a line 50m or 1km in between each other in Lake of Line. And if the body is here, this vulture that is just above here will see this and maybe other one they will not see this, but this will prepare a special explanation with wings. And just in one minutes all of them will be here.

00:27:30:01 - 00:27:30:13 James Shooter Oh wow.

00:27:30:13 - 00:27:32:12

James Shooter

So they're signaling to each other by.

00:27:32:14 - 00:27:34:21 *James Shooter* Circling here that there was

00:27:34:23 - 00:27:38:17

James Shooter

one of them is spotted a dead body. Wow. They really work as a team then really it's.

00:27:38:19 - 00:27:43:17

Hristo Hristov

Yeah. They colony birds. They have possibility to survive only if they are colony.

00:27:43:17 - 00:28:07:09

James Shooter

Black vultures work similarly to this, but restrict their team efforts to family groups. Lammergeiers, if they were still here, tend to work solo, mainly because their coolness renders any assistance futile. This does mean they're the last on scene, but because 85 to



90% of their diet is bones, they're quite happy to arrive at a stripped carcass. That said, they do make up a small percentage of their diet from live prey.

00:28:07:11 - 00:28:21:09

Iames Shooter

And unfortunately for our friend the tortoise, it's not just golden eagles that like to pick them up and drop them from height. I'm torn here between wanting to see this incredible behaviour, but scared that the sad face of a free falling tortoise would forever haunt my dreams.

00:28:21:15 - 00:28:44:05

Hristo Hristov

If you take vultures from here, the population of large herbivores will be not so strong. A wealth of disease and parasites. If you lose the herbivores here, the wolf will be less in number and vultures will disappear totally because there will be no food.

00:28:44:08 - 00:29:06:24

James Shooter

Vultures are part of an ecosystem's disease control. And their presence is much more important in the warmer south. For example, babesia, a tickborne parasite found worldwide, has only one species found in northern Europe. Here there are five. Vultures handle the putrid flesh as they have incredibly strong stomach acid. Somewhere between 10 and 100 times stronger than humans.

00:29:07:01 - 00:29:26:07

Iames Shooter

Lammergeier have a pH of about 0.7, which helps them to digest the bones they swallow. That's more corrosive than battery acid. Poisonings were largely to blame for the vultures' demise in the 50s and 60s, but in the 80s that came to a stop and the vultures began to slowly breed successfully and build up in number once more.

00:29:26:09 - 00:29:33:10

James Shooter

Whilst you would hope the halting of poisonings meant populations recovered quickly, their life cycle added extra challenges to the scenario.

00:29:33:12 - 00:29:55:12

Hristo Hristov

And in middle of September and the end of September, a group of young birds that is one year old, just juvenile, they organize group and they go in Africa directly to the south. They have this vagrant instinct and they stay there for five year before to be adult. And 65% of the mortality of the species is from this period.

00:29:55:17 - 00:30:17:03

Iames Shooter

Inexperienced birds are at high risk of losing their way on the long journey to Africa. Strong winds or poor orientation might sweep individuals off course, and they really need



to act as a group to open up carcasses, so if they're left alone, there's a real chance of starvation in those early years. For the ones that do get to Africa, there's often poison baits left out for species like hyenas.

00:30:17:05 - 00:30:24:10

James Shooter

Whilst the griffons are slowly gaining ground now as a breeding bird, black vultures are still needing a helping hand to get going.

00:30:24:12 - 00:30:55:20

Hristo Hristov

The black vulture has disappeared from eastern Rhodope the last there was here in the 90s, and we start together with this big project, maybe five year project will be for the reintroduction of Black Vulture. And normally this black vulture arrived from Spain from different zoos, rescue centers and, breeding centers, but not from wild populations.

00:30:55:22 - 00:31:20:17

James Shooter

So far, one shipment of 17 birds and one of 13 have been translocated from Spain. They're usually young birds that are brought over, so it takes him a while to establish nests. Two individuals have already paired up, and the team are hopeful of eggs this year. Another two are looking likely to follow suit. It's extremely exciting to think that one of the black vultures I'd been watching that morning could be raising chicks this very spring.

00:31:20:19 - 00:31:32:10

Iames Shooter

They would be the first hatchlings in Bulgaria for 30 years. With griffins and Egyptians on the bounce and blacks actively being restored. That leaves just one species missing to complete the set.

00:31:32:12 - 00:32:04:11

Hristo Hristov

The last pair of lammergeier was present in North Macedonia. Previous last one was Eastern Rhodope in Greece. I mean, this is very suitable, habitat in a suitable place also for lammergeier. But for lammergeier is more difficult than black vultures because they also arrive from the breeding center, zoos and rescue center but the number of the lammergeier is less than the blacks.

00:32:06:11 - 00:32:25:03

James Shooter

Amazing thought, though, to have all four species of vulture back. Exciting. It's getting late in the day now. And all this talk of vultures feasting on the putrid flesh of rotting corpses is making me hungry. So we head off for dinner back at our guest house with some more of the team I managed to squeeze by the gaggle of geese guarding the garden.

00:32:25:05 - 00:32:35:03 James Shooter



I meet Todor, the enterprise manager for Rewilding Rhodopes, and Marin, a local entrepreneur who runs a vulture watching hide nearby.

00:32:35:05 - 00:32:37:00 James Shooter Hey Todor, I'm James.

00:32:37:03 - 00:32:40:12

Todor Todorov

Nice to meet you. Okay. I'm. So. Do you already know my name? Welcome.

00:32:40:18 - 00:32:42:02

James Shooter

Thank you very much. Thank you very.

00:32:42:02 - 00:32:56:01

James Shooter

I would guess Todor is roughly my age, mid 30s, early mid 30s for a bit more clarity. And amazingly, it was Hristo who inspired him to get involved many years ago when he was leading a nature youth group Todor was a part of.

00:32:56:07 - 00:33:25:15

Todor Todorov

Hristo and my mother. They were colleagues, working for this project, that was related to sustainable development of the Eastern Rhodopes, a piece to cultural and natural heritage. and, there was in my hometown there is this heron colony, and we had a project the related to this one, from my school, the creation of the eco club to protect the heron colony.

00:33:25:17 - 00:33:45:05

Todor Todorov

We were all the time going on weekends, on vacations, during holidays, going and doing all kinds of very interesting stuff and getting to know this, beautiful region, because I'm from here and it's still, I still didn't know.

00:33:45:06 - 00:33:47:00 James Shooter

That's amazing, I love it.

00:33:47:00 - 00:33:55:11

James Shooter

It's come full circle. I like it a lot. And why do you think it's important to find connections between local economies and a wild and natural world?

00:33:55:13 - 00:34:29:22

Todor Todorov



Because you otherwise you maybe have minds everywhere and, not any biodiversity at all. And also, like some people think that nature comes back when people go away. That's not actually true because people can help nature. Yeah. If they come away, come, come with the bulldozers, it kind of goes away. But local communities can be based around, natural life and the products that come out of nature.

00:34:29:23 - 00:34:33:19

Todor Todorov

And there is a lot of possibilities for this here. Actually.

00:34:33:19 - 00:34:55:18

Iames Shooter

It's Todor's role to find some sustainability for rural communities through nature based enterprise instead. There's a growing appreciation for Bulgaria's wildlife and Todor's already putting together a network of guesthouses, hotels, restaurants, guides and service providers to capture new audiences. The Rhodope team are putting the vultures right at the centre of the region's wild allure.

00:34:55:21 - 00:35:23:02

Todor Todorov

The vulture centre actually, it was made by nature conservation enthusiasts and as well as the aviary, it was made mainly built mainly by, volunteers. It was an old hut, but they renovated it and stuff. So it became a place where you, you have this, this place that you can get old information that were running all, those processes of returning the vultures here.

00:35:23:04 - 00:35:51:24

Todor Todorov

of, creating the protected areas and all these things. Also, the vulture awareness day. It's a nice, event that we usually, together with our partners from BSPB each year. And, it's good because people from the big city that have never heard of, before, they never knew, actually, we had vultures here they come. Because of Facebook and social media.

00:35:52:01 - 00:36:22:02

Todor Todorov

They come here and they they they can see them because they're flying around everywhere. And they get can get to know their biology, their ecology better. Why they are very important scavengers for, for, for for nature. As for circle of life. How how you have many Bulgarian people, for example, they don't know that this is one of the not so many places in Europe that actually has preserved circle of life.

00:36:22:04 - 00:36:34:08

Todor Todorov

We are also trying to strengthen it more with our activities in rewilding. But it's this is a very beautiful thing that you cannot see it in many places, especially in Europe.

00:36:34:10 - 00:37:00:06



James Shooter

Re-normalizing wildlife such as vultures for the residents of Bulgaria, is an important part of the rewilding process and for a highly visual species soaring on huge wings above your head, they do have the wow factor. They can be the draw that brings people into the region where you can then show them bark stripping bison and tortoise dropping eagles. To build on the opportunities that wildlife tourism could bring to this biodiverse landscape.

00:37:00:08 - 00:37:08:09

James Shooter

Lots of new talent will be needed, bringing fresh ideas, exciting products and a wealth of enthusiasm.

00:37:08:09 - 00:37:35:13

Todor Todorov

For future we have plans working actually with, students that study tourism, and we want to present the niche for wildlife and ecotourism to them because they don't have them. they're that in their curriculars and, present the niche, maybe do a training with them, show them how, how, how nice it is to to to bring people in nature.

00:37:35:19 - 00:38:11:06

Todor Todorov

And I'm not speaking about but I'm speaking about Madzharovo, I'm speaking about, all of those little towns that have these beautiful surroundings with lots of wildlife, lots of endemic species that are to be seen only here in the whole world. So so we're going to have more trainings with the established, enterprises as well as maybe, building more capacity with people that are going to be soon to be professionals.

00:38:11:06 - 00:38:50:10

Todor Todorov

So perfect scenario for me would be to, to for people to get to know nature better because, you know, sometimes you live in a place and you don't see further from your nose. This is one of those things that we have in Bulgaria. So, I, I'm positive that if people like from the NGOs, teachers and people that are aware of what, richness we have in nature spreads this message, people are going to live more harmonically with it.

00:38:50:10 - 00:39:23:15

Todor Todorov

So, yeah, hopefully in 50 years we are alive and enjoy more and more species more and more, such, pleasures like that are simple pleasures and are more, more important than driving a Bugatti, for example. Maybe it's fun, but who knows? Kayaking on the river while watching, three meter wing spread birds ten meters above you. It's also nice, also fun.

00:39:23:17 - 00:39:45:01

Todor Todorov

And for children especially, it's very, very, very, entertaining. We actually did a couple of camps with children here. And those guys, they cry when they have to leave. So really



nature actually impacts children the most. And, the more, well, the more children you get close to nature, the better.

00:39:45:03 - 00:40:00:15

James Shooter

Marin has been running Nature Madzharovo for almost 15 years. They offer adventure tourism through kayaking and rafting on the River Arda, wildlife photography guiding, birdwatching holidays, specialist geology trips and a unique vulture feeding station there.

00:40:00:18 - 00:40:04:17

Marin Kurtev

There are some people in the hide this is today.

00:40:04:17 - 00:40:06:20

Iames Shooter

They are young people, you know.

00:40:06:22 - 00:40:09:00

Marin Kurtev

They are sleeping two nights in the hide.

00:40:09:01 - 00:40:10:12

James Shooter

Oh, they stay overnight in the hide.

00:40:10:14 - 00:40:15:11

Marin Kurtev

yeah, especially for the wolves. But unfortunately we don't have wolves these two days.

00:40:15:13 - 00:40:16:07

Marin Kurtev

It's not too late. Maybe today they will go.

00:40:18:24 - 00:40:20:21

James Shooter

But, there are more.

00:40:20:21 - 00:40:30:09

Marin Kurtev

Real cases with, wolves on the feeding station. Yeah. Today and, yesterday, they have been griffon vultures. About 100.

00:40:30:11 - 00:40:31:03

James Shooter

100.

00:40:31:05 - 00:40:31:13



James Shooter Yeah.

00:40:31:13 - 00:40:38:08

Marin Kurtev

And, about seven, black vultures also. And they are waiting for the Golden Eagles.

00:40:38:10 - 00:40:58:10

James Shooter

Marin has been involved in vulture conservation in the Rhodopes for almost as long as Hristo. In the past, he's been involved at the national level for the conservation of the Egyptian vulture, and is also the former manager of the nature centre here. He sees his vulture watching hide and its ability to excite and involve the general public very much a part of the wider conservation of the species.

00:40:58:12 - 00:41:24:22

Marin Kurtev

But this activity is good for the vultures. Also, it's directly support for the vultures because we feed the vultures and this is also this activity, they are photographers, they're making very good pictures. This is good for, public relations also. Yeah. It's good also sometimes for monitoring program because now this is the first pairs with, black vultures.

00:41:24:24 - 00:41:27:00

Marin Kurtev

And, we are looking for the behavior of the birds. I mean, we saw two, maybe three different pairs. This is something new for the region. And, maybe some of the pairs

00:41:39:17 - 00:41:49:15

Marin Kurtev

Some partner will be from Dadia forest reserve, and it's invisible only with the satellite transmitters. We need to look, on the feeding station, the behaviour between the birds.

00:41:50:14 - 00:42:19:23

Marin Kurtev

And it's possible to see the young birds. The, how many are the young? The adults. And it's, it's possible to make some, this is, kind of counting of the, the birds also. Also, this is a kind of anti poisoning activity this feeding because, the possibility for the vultures to go to some poisoned carcass is less because there is available carcass on the feeding station.

00:42:19:23 - 00:42:21:10

James Shooter

You know, exactly what they're eating.

00:42:21:12 - 00:42:30:14

Marin Kurtev

yes. Yes. And also, this kind of activity is good for education program. You are working with children also. Sometimes there are about 20 children in the hide.



00:42:30:15 - 00:42:31:03 James Shooter Really wow!

00:42:31:03 - 00:42:36:03

Marin Kurtev

The last time last year there have been 20 children and the wolves have been also on the carcasses.

00:42:36:04 - 00:42:42:24

Iames Shooter

No way. Yeah. So all the children got to see the wolves? Yes. Oh well. Lucky children. Yeah.

00:42:43:04 - 00:42:55:02

Marin Kurtev

And finally it's good to, to use these pictures for, more public relations because, they are very beautiful birds, not the vultures from, Cartoon Network.

00:42:55:04 - 00:42:57:19

Iames Shooter

Yeah. They're very beautiful. Yeah, yeah.

00:42:57:19 - 00:43:00:02

James Shooter

And to see them up close as well, I mean, it's very different.

00:43:00:03 - 00:43:00:11

Marin Kurtev

Also, this is commercial activity. I mean, there are some profit. This is good support for the local people, for the local companies. It's, it's kind it's a part of income. So also, our groups are sleeping in this hotel. It's, in the winter, especially in the winter. It's full with photographers. They are small groups between five, six, seven, eight people. But, it's totally empty in the winter. And this is very good support to the owner of the hotel.

00:43:31:14 - 00:43:55:02

James Shooter

It really is wonderful that vultures are getting some positive press. The hide was fully booked right through the spring and summer, a testament to the growing appreciation of these enigmatic birds. Thanks to vulture cheerleaders like Marin, alongside the "oohs" and "aahs" of seeing these huge birds up close, people will also be learning about their ecology and vital role in southern European landscapes.

00:43:55:04 - 00:44:20:14

Iames Shooter

The circle of life can't function properly whilst links in the chain are missing. It might grind along, but sooner or later something will break. It's inspiring to see such hard work here,



to re-establish food webs and bring back dynamism to the ecosystem. The fallow and red deer, bison and horses will help to keep these semi-open hillsides alive and kicking the sousalik and marbled polecat, tortoises and lizards.

00:44:20:16 - 00:44:44:02

James Shooter

They all benefit from the mosaics created by hungry herbivores. When the large animals fall to sickness or predation, they become food for the scavengers and soils alike. Nutrients then get taken up by emerging vegetation, and the process cycles through once more. I'll not go into a full rendition from The Lion King, but this is The Circle, The Circle of Life.

00:44:47:04 - 00:45:09:18

James Shooter

I can't hear you, of course, but I'll presume I'm getting a round of applause right now. I feel extremely fortunate to have laid eyes on the bison and black vultures, both recently reintroduced. I await on bated breath to see whether there's been any news of chicks for the first time. It will be huge for the species in this area, expanding and connecting with populations over the border in Greece.

00:45:09:18 - 00:45:28:03

James Shooter

And who knows, if I come back in a few years time, perhaps Captain Cool the lammergeier will have been returned too, to fly alongside the other vultures that call the Rhodopes home.

00:45:28:05 - 00:45:54:13

James Shooter

Thanks for joining me for episode 15 of the Rewild podcast. Life, death and decay. Beautifully intertwined in a stunning display of ecological function. Thanks to Dessi, Stefan, Nelly, Hristo, Todor and Marin, a fantastically ambitious team working wonders in the Rhodope Mountains. As always, many thanks to Andrew O'Donnell, a beluga lagoon for the tunes and to Gemma Shooter for the artwork.

00:45:54:15 - 00:46:16:22

James Shooter

Maybe she'll paint us our own building size vulture mural on the side of our house. I think that look pretty swanky in rural Scotland. The biggest of thanks goes to Rewilding Europe for collaborating with me on this series. The Rhodope Mountains are one of ten inspiring rewilding landscapes brought together as part of a broader rewilding movement. This is an organization creating positive action on the ground.

00:46:16:24 - 00:46:27:23

James Shooter

Join us next month as I'm catching up with the team restoring Wildcats to Scotland. It's a bit of an easier commute being just five minutes from our new home, but it's an exciting story to tell. Catch you next time.

