

WOLF PRINT



The UK Wolf Conservation Trust

Issue 57 | Spring/Summer 2016

Do the ayes have it?

Is Scotland ready for the return of the wolf?

Wolves in the highlands of Ethiopia

In search of Africa's rare *canis simensis*

Seek the forest

Our wolf keeper goes tracking in Croatia

NEWS



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RESEARCH



MEDIA AND ARTS



Cover photograph by Mike Collins

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Editor
Julia Bohanna. Tel: 0118 971 3330
Email: editor@ukwolf.org

Assistant Editor
Francesca Macilroy

Editorial Team
Wendy Brooker, Mike Collins, Nikki Davies, Sue Fine, Pete Haswell, Jessica Jacobs, Cammie Kavanagh, Lynn Kent, Pete Morgan-Lucas, Lara Palmer, Johnny Palmer, Tsa Palmer, Denise Taylor

Patrons
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Lara Palmer, Johnny Palmer

Specialist Advisors
Alistair Bath, Garry Marvin, Kirsty Peake, Claudio Sillero, Denise Taylor

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AIMS OF THE UK WOLF CONSERVATION TRUST

- To increase public awareness and knowledge of wild wolves and their place in the ecosystem.
- To provide opportunities for ethological and other research that may improve the lives of wolves both in captivity and in the wild.
- To provide wolf-related education programmes for young people and adults.
- To raise money to help fund wolf-related conservation projects around the world.

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Editor's Letter



Julia and Nuka

Will wolves ever return to the Scottish Highlands? The word 'rewilding' is a buzzword with longevity, largely because it means committing to the future, eventually making our landscape and ecosystem better. But is introducing a large predator or two to Scotland, a step too far? Lynx has also been mooted. Schemes that are considered successful by many, such as the long-established Yellowstone project, have contributed to a number of people discussing the possibility of a UK version. After all, homo sapiens hunted wolves to extinction in the first place, where once wolves roamed freely through dank, dark forest. No creature better represents the wild than the wolf. However, the relative lack of space compared to America and the spread of sheep would make it impossible, surely?

When it comes to the Scottish reintroduction points, there are so many controversial questions and frequently a dichotomy between the lure of romance and the obstacle of practical reality. We were so interested in people's perceptions of the whole issue, we asked a variety of individuals their opinions, including Sir David Attenborough. I was most impressed that this magnificent conservationist and fascinating octogenarian gentleman took time and effort to pen a hand-written letter. Interestingly, he has also clearly been misquoted in many papers, particularly the Scottish ones.

Dear Julia Bohanna

Thank you for your letter. I fear you must have been misinformed. I have never 'spoken out in favour' of reintroduction of wolves. In fact I am not sufficiently informed about the proposals to take a view.

Yours sincerely
David Attenborough

To me – and this is entirely my own opinion – Scotland and wolves might be an astonishing marriage, but I am all too aware of the practicalities and those knotty health and safety implications. If 'I love you' are three of the most beautiful words in the English language, then 'health and safety' must be the most withering and depressing. Yet we have to respect them in this case, for the wolf as well as for humanity. The Wolf Border, Sarah Hall's interesting novel that Wolf Print reviewed in the last issue, explored the fictional notion of UK Wolf reintroduction, albeit in Cumbria. Interviewing her for this issue, I was struck by her comment about wolves coming back to Scotland: 'Do we hold up our hands and say that sheep farming is over?' Indeed. Since men first enclosed the land and farmed, the wolf has become an enemy, a thief with haunches raised in their sheep pens. There will be no quick and easy solution.

Health and Safety was also a factor when the UKWCT wolves starred in Monarch of the Glen in 2002, where they played wolves (of course!) introduced to a new wildlife centre. Tsa Palmer talks about the experience in her director's letter in this issue. I don't think the wolves were impressed with their husky stand-ins though or with the dog trainer who accompanied them!

A long way from Scotland, but also considered highlands on a different continent – Jonathan and Lara Palmer have recently been to Africa to see the beautiful flame-haired and desperately endangered Ethiopian wolf. We are proud to support this very important project and you can read their report on page 20.

Mike Collins, our wolfkeeper, has reported on another project in Croatia on page 24 and it's an ongoing privilege to be an organisation with such international reach.

May this year continue to be happy, healthy and of course, defiantly wolffy!

Julia Bohanna

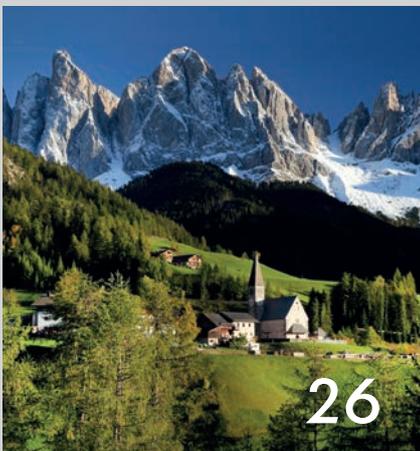
Julia Bohanna, Editor



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Anything but flat – The wolves’ pancake event

The day dawned cold but sunny; the Arctics, Beenhams, Mosi and Torak were put into their side enclosures so that the children could go into the main enclosures, look around, see the dens made in readiness for the breeding season and place the stuffed pancakes they had made in different places for the wolves to find.

The pancakes were filled with a variety of cooked meats including black pudding, sausages, lamb and ham as well as fish and cheese. They were then carefully wrapped and tied with edible raffia.

The Beenhams were the first to have pancakes and whilst Tala and Tundra were a bit wary at first, Nuka must have wolfed down at least eight of them! Motomo was too shy to come close to so many people, but Mai was rapidly gathering up the goodies and



Mosi eating a pancake by Mike Collins

she had quite a pile in the end. I hope she shared some with Motomo!

At the Arctics’ enclosure, guess who was first to run in and find pancakes? Yes, it was Pukak - who loves his food. Massak and Sikko soon joined in though and enjoyed the tasty treats. Mosi watched where the children put the pancakes, then dashed in after they had gone and ran around checking which was the biggest and best before

eating any. Torak calmly wandered back and picked up some pancakes to take away and quietly eat at a distance as he usually does, ignoring Mosi’s frantic dashing about.

All the wolves and children had a great time and the children learnt a lot about the behaviour and character of their ‘dinner guests’.

Wendy Brooker

DONATIONS

Ethiopian Wolf Conservation Programme

£5,000

Christy Les Biological Station (organisation), Vladimir Bologov (biologist) in Russia

£4,000

Zagreb Veterinary Institute (organisation) Josip Kusak (biologist), in Croatia

£5,000

TOTAL GIVEN IN ALL

£14,000



Mosi by Mike Collins

The Trust's Hermann's Tortoises

The Trust is home to two resident female Hermann's tortoises (*Testudo hermanni hermanni*) called Rocket and Tin Tin. Presently, they live in the Education Barn. Both are only four years old, relatively young compared to the 75 years they can achieve. They can grow up 18-20cm in size, so these girls are nearly fully grown.



Hermann's tortoises have a yellow orange coloured dome shell with bold black markings. Their shell is made up of 60 different bones all connected together. Like all tortoises they possess no teeth but just a very strong beak. They can be found in the wild throughout southern Europe and are near threatened in their native habitat. They were used as a food source during WWII because of the issue of rationing, but most recently the risk is the destruction of their habitat. At the Trust they are very well looked after, having recently acquired a new house, built for them by work experience individuals. In autumn you'll usually find



one of the tortoises sleeping, getting ready to hibernate for the winter.

Rocket and Tin Tin are fed well with a diet of tomato, kale, cucumber and strawberries. We also put a light sprinkling of calcium powder on their food which is advantageous for their health. Cuttlefish bone is given for them to bite on, to provide them with more calcium.

Hibernation is an annual behaviour that the tortoise goes through which is critical to their wellbeing. It happens every winter from November to February when the temperature starts to drop. Due to being cold blooded animals they rely on the outdoor temperature to heat their body so when the temperature drops they go into a 'sleep' to survive the winter. When this happens you have to take their food away from them making sure they have an empty stomach. We then weigh them before they go into hibernation and reweigh them when they wake up. This is to monitor their weight loss during hibernation. During hibernation they need to be kept in a warm dry place which has a temperature of between 3-7°C which is the tortoises natural body temperature. This is to make sure they don't freeze or overheat.

Article and Tortoise Hut photo by Calum O'Flaherty

February Half-term

We had another busy open day during the February half term, with the many visitors taking the opportunity to come and see the wolves. Both adults and children enjoyed learning about the wolves and watching them being fed at two o'clock, devouring their food. The children seemed fascinated, wanting to know more about the different types of foods the wolves eat, such as how good are they at hunting and how much they eat. Other activities on the day included making wolf masks, nature trails and decorating bird and bug boxes.

Valentines Day 2016

On Valentine's Day, 12 couples came to enjoy a romantic walk with the Beenham pack: Nuka, Tundra and Tala. Everyone enjoyed a walk in the surrounding English countryside, where they were able to observe the wolves' behaviour and enjoy their company. The wolves did not disappoint, as they investigated molehills, rabbit holes, and occasionally rolling in smelly deer droppings, much to the amusement of the visitors.

Francesca Macilroy



Dakota

In a world where superstorms, droughts, energy concerns and the fate of numerous species make news, the ability to distinguish between facts and opinion becomes increasingly important for those who are more concerned about our planet.

Environmental education is essential for understanding and appreciating science, the beauty and the importance of our natural environment. Education about wolves is an important part of environmental education. For many people, the wolf is an icon of the wilderness. So educating the public about wolves is where UKWCT comes in and we are increasingly being asked for our thoughts on the possible re-introduction of wolves into Scotland,

the wolf being a keystone species that greatly affects our ecosystems. Wolves limit the population of ungulates. This in itself presents overgrazing of vegetation at the riverside and allows vegetation to establish on the riverbanks. Establishment of vegetation at the bank sides also helps to stabilise soils and prevents erosion of riverbanks; this too helps stabilise the river course and helps towns from flooding.

We have witnessed the highest rainfall and warmest December and January in the UK since records began, along with the consequential flooding. We need to consider all measures that could alleviate this happening again. Could wolves being reintroduced play their part? In this 'Tartan Issue' we have interviewed many people to find out the general opinion of this often controversial subject!

Carrying on the theme of the UKWCT's experience in filming – I thought I would write about the time in 2002 that five of the UKWCT wolves, Europeans Lunca, Latea and Alba and North Americans Duma and Dakota starred in two episodes of the long running popular BBC series "Monarch of The Glen". The cast included Susan Hampshire, Julian Fellowes and Alastair Mackenzie,

who played laird Archie Macdonald (pictured left, with Duma.). The basic concept behind the wolves being used was that Glenbogle Estate, where the laird lived, was struggling financially and needed to improve the estate and also generate some income. Archie acquires some wolves with the aim, long term, of re-introducing them to Scotland. People's perceptions in the storyline were that the wolves were 'big bad creatures'. Slowly this perception changes as a wolf escapes and is re-captured without injury to either animal or person. The script therefore was loosely in line with the Trust aims of education, conservation and perception of the wild wolf. The producer of the scenes, Stephen Garwood wrote to the Trust saying: "The reason the Monarch of The Glen production company sought to use real wolves in the storyline was because of the huge interest in these creatures amongst the viewing public and because of the high production value to the BBC when the wolves are seen in the context of the Scottish scenery of the location."

So the five wolves made two trips to Scotland in April and May 2002 for the filming – the organisation of the trip was fairly complicated logistically. The journey from Beenham to the Ardverikie (Glenbogle) Estate in Inverness was 527 miles and took around nine hours – we transported the wolves in two trailers with a backup team in another vehicle. This journey necessitated gaining permission from the environmental health officers of Newbury District Council, Birmingham Council and the Highland Council as per our dangerous animal movement licence.

Birmingham Council were contacted because we had a stop at the Birmingham services and had to locate a service where, if necessary, the wolves could be taken out of the trailer and walked! All the trailers had an air lock door, minimising the risk of an escaped wolf when taking them out! We then stopped at Grubil Farm, near Dumfries around tea time to exercise and water the wolves finally arriving around 9pm at our end destination.



Alastair Mackenzie with Duma

The enclosure the wolves were filmed in was approximately one third of the size of their current enclosures. It encompassed a small wooded area as well as a rocky crag with deer fencing dug into the ground where possible three foot and nine foot high being angled in. The wolves slept at night in the trailers with some handlers in caravans beside them while the rest of the handling team stayed at local bed and breakfasts. The wolves were exercised daily in the surrounding countryside which was magical, and then fed on local venison!

Some of the wolf scenes were easy to achieve, others had to be very pre-planned to get all the wolves to do what was wanted. Where the filming required the wolves to interact with each other and dominance being displayed, we achieved this by taking Duma and Dakota out for a long walk and when we put them back, this behaviour was natural when the Europeans came up to greet them and then Duma and Dakota showed their dominance.

When Duma had to act being unwell, as she was heavily pregnant in the storyline, again we took her out for a long walk and then she lay down tired and lethargic in the pen whilst the other four wolves remained active. The scene where the wolf escapes and is then recaptured and walked outside the pen needed quite a few rehearsals to get it right. A door in



The enclosure at Ardverikie, Inverness

the enclosure was left slightly ajar and we had to allow Dakota to slip out without letting her truly escape! Then when she was outside the enclosure walking up and down we had attached a thin strong wire to her collar which could not be seen on film! The hardest scene was where



Duma

a new wolf arrives and the crate is taken into the enclosure and then the wolf is released. We borrowed a wooden quarantine crate from a local kennels and practised for several weeks getting Duma and Dakota to go in with food rewards and then come out. Duma acted perfectly but the production company had a husky double ready at all times should she fail to achieve this scene. Also when one of the characters – trainee animal keeper daft Duncan – decided to feed the wolves local salmon – it got fried on the electric fence and had to be put (correctly) down the feeding tube. Alba got a bit of it but Lunca wouldn't let anyone eat it – she just guarded it from all the other wolves!

Working with the wolves on films is always very exciting. They never fail to surprise you in how they adapt in their new environment; provided you have pre-thought how to best prepare the wolf for the scene, it usually goes to plan. Dakota was happily running round a courtyard scene loose with all the handlers moving around with titbits to make her move around.

When you want the wolves to be lethargic and sit down quietly you make sure they are well fed or have had a long walk and vice versa. If you want them pacing in the enclosure they are hungry – it's hard to achieve both these scenes on the same day though!

Tsa Palmer



Dakota



Roe or Rag – all worth having!

The size of a wolf pack's territory depends on a few factors, two important ones being the amount of prey and proximity to neighbours.

Wild Arctic wolves' home range has no such restrictions, so can be up to a thousand square miles. The downside could mean having their prey widely dispersed, involving long distances seeking for it and having found it, exerting much valued energy whilst, hopefully, catching it. Wild Arctics eat numerous lemmings, tiny rodents that weigh in at only approx 1-4oz; a lot of running around for such a small snack. A bigger catch, like an arctic hare, would weigh in at 6-12lb.

Luckily for our Arctic pack, they do not have to concern themselves with these statistics. They have no need to run about after their food, just content themselves with substituted brown bunnies of 3-4lbs brought to their door by the local farmers, roadkill deer, beef and a variety of birds. Weekend volunteers will hand feed them these succulent best cuts with the right amount of bone to meat ratio

to meet all their nutritional needs. I love listening to the satisfying sound of them crunching into their chicken carcasses. By the look on the Arctics' faces, these are equally enjoyed.

On weekdays, the Arctics are occasionally given a much bigger carcass to eat. This is most rewarding for all three wolves, a more naturalistic way for them to eat and instructive for those observing pack dynamics. When a 33lb roe deer was served up, Pukak was first in to see how much he could devour. Once there, he guarded the carcass – there's a surprise! Anyone who knows Pukak will be well aware he does like his food - we are constantly having to monitor his intake. Unlike his wild equivalent, he doesn't work it off inbetween meals! Massak tried to show dominance but decided against a fight. Sikko, as usual biding her time, waiting nearby for an opportunity to get some food, managed to snatch a piece while the boys were having a standoff.

Later Massak was seen with Sikko's piece and Pukak was still guarding the main piece even though he seemed to have eaten his fill. By the next day there was only skin and bone left on the carcass, so an extra 'starve' day was added. Usually these days are just once a week, as being captive animals they do not consume as much as their wild brethren, who need that extra energy for pulling down caribou or musk oxen.

If our Arctics are not hungry and have had a blowout feast, it's good to rest their stomachs; it mirrors what would occur naturally in the wild where it's very often a feast or famine lifestyle. Wolves may go for several days or even weeks without food. They are resilient creatures, though I'm not sure if Pukak would be too happy with that arrangement!

Visitors who braved our cold spell at the beginning of the year were rewarded by seeing our Arctics wearing

their thicker winter coats, looking their best. Though perhaps raincoats might have been more appropriate. Luckily their coats, designed by nature, adapt to whatever the weather throws at them. Arctic wolves are different from their fellow Arctic critters in this respect; in the winter months the Arctic hare, ptarmigan, weasel and the fox, all fashion the same white coats. In spring, it is all change again. Once matured, Arctic wolves remain true to their white coats throughout the year, whatever their surroundings.

On these short cold days it's good to remember those long warm summer ones and 'enrichment' games. On one particular day our three Arctics were given a hessian sack doused with an enriching healthy dose of natural fly repellent consisting of scented tea tree, eucalyptus and citrine. Three Arctics into one hessian sack won't go, so a game ensued.

When the thrown hessian landed, Pukak was closest, got there first and no doubt initially thought it might contain some food, so ran off with it. Massak and Sikko chased after him in hot pursuit as this was obviously something worth having!



Pukak and Massak by Mike Collins

When Massak finally caught up with lower ranking Pukak he showed his dominance by giving a fine antagonistic pucker, but Pukak was determined to hold on to this newly acquired treasure. Massak, sensed this and even though the alpha male, didn't push it. A case of *I could but I won't*.

Sikko stayed back intently observing her two boisterous brothers to see how

this would pan out. Although smaller of stature, she does have the benefit of being the brains of the outfit and did what she does best: goes in, winds her brothers up further and while they were too occupied to notice, grabbed her prize and scarpered. Clever girl! So it was now Pukak's turn to wait on the sidelines for his opportunity. There was a lot of back and forth, rolling about, with the added benefit of the sack's scent being widely spread over their large enclosure.

Massak decided to content himself with rolling in places the sack had previously landed and only got hold of it properly when Pukak had had enough! This game lasted a good two and a half hours, right up to lunch when a large chunk of deer leg was thrown to each of them, appearing as if from the heavens. Massak was in a bit of a dilemma, as he wanted both deer leg and hessian sack. A tough call.

Eventually though Massak felt he had owned two prizes for long enough, so finally went off to a shady spot to concentrate on his lunch. Mind games such as these can last for days if the prize is thought worthy enough. A calm descended on the pack, all quiet on the Western Berkshire front – for the time being!

Suzanne Fine



Pukak by Mike Collins



Update on Mosi and Torak

Despite the winter being unseasonably mild so far, all the wolves' coats are in their full winter glory. Maybe they know something about the coming weather that we don't! As they approach their tenth birthdays, Mosi and Torak probably appreciate it not being so cold.

Torak had been showing signs of arthritis but medication has sorted that out and he's back to moving like a well-oiled machine. This is a great example of how socialisation of our wolves benefits their health - because they are closely monitored, we were able to spot Torak's condition early and take the steps to ensure his comfort.

Middle age hasn't slowed Mosi down - she still takes it upon herself to greet visitors when they arrive in the car park and keep tabs on all that is happening on site. Her coat is mellowing to a stately silver although she has a way to go to be as pale as Mai. This summer she busied herself making a large den in the side of the mound in her enclosure (with occasional help from Torak) - this was down in part to a phantom pregnancy last spring but she carried on afterwards, developing her own Grand Design. Sadly the wet weather we've had over the last couple of months has meant that the den has partially collapsed so Mosi may yet have another project to keep her busy once the ground dries out.



Mosi and Torak by Mike Collins

Mosi also has a new admirer. One of our handlers, Pete, has become the proud owner of a beautiful young Rottweiler called Archie. At nearly two years old, he is already a large dog but with a gentle, curious nature. The first time Archie saw Mosi, he was transfixed and whenever he visits, he will stand by the safety fence watching her every move. Mosi, for her part, will greet him with squeaks and a wag of the tail but she will always go back to Torak. Like the dignified wolf he is, Torak ignores Archie!

in each other, the walks are stopped for a while. Torak always takes the opportunity on the first part of an enrichment walk to have a good roll, particularly on any spots the tractor may have passed over. You have to be patient as he takes his time! Even Mosi has the good sense not to interrupt Torak's enjoyment although once the walk gets going, she will make sure she doesn't miss out on anything Torak is sniffing. He is very tolerant of her pushy behaviour!

Torak and Mosi are still going on their enrichment walks and get excited when they spot the right combination of handlers on site. We always try and take them out when possible as they enjoy the stimulation the walks bring. As the breeding season approaches and they become more engrossed

Torak and Mosi remain great favourites with volunteers and visitors alike and, as they are the first wolves to be seen when you arrive on site, are a wonderful introduction to the work we do here at the Trust. Don't forget we are open to the public every Wednesday from 11am to 4pm - the wolves will be pleased to see you!



Mosi and Torak by Francesca Macilroy

Mai and Motomo Updates

Now in their full winter coats both Mai and Motomo look excellent, if a bit wet and muddy at times. Both enjoyed their Christmas lunch – an oven-ready chicken each (though without stuffing or any of the usual festive trimmings).



Mai by Mike Collins

The students from Berkshire College of Agriculture have been providing environmental enrichment for the wolves in the form of hessian sacks stuffed with straw, to which various scents have been added. Mai in particular loves rolling on these, shaking them, carrying them around with her; Motomo is somewhat less enthusiastic, preferring to sniff Mai after she's finished her scent-rolling.

At the beginning of January, both Mai and Motomo were showing subtle signs of the impending breeding season. Both were doing more scent-marking around their enclosure; Mai had been seen doing 'raised leg urination,' a sign of a confident, assertive and high-status female, rather than the traditional squat. Motomo started to carry out more regular 'perimeter patrols' in addition to the usual fence-sparring with the Arctic wolves in the adjoining enclosure. They were also playing together; usually Mai would approach a resting Motomo and poke him with her paw. When he eventually responded

(it can take several paw-pokes...) they would both then play 'chase' around the enclosure for a while, interspersed with Mai doing the traditional canine play-bow if Motomo seemed to be losing interest: head and upper-body crouched down, hindquarters raised and tail wagging. These play sessions



Motomo by Calum O'Flaherty

were generally short; in their full winter coats and with the weather being unseasonably warm, both Mai and Motomo clearly felt the heat and after a few minutes would retire – panting heavily – to rest in their favourite places at the edge of the copse in the upper corner of the enclosure, from where they could keep an eye on the Arctic wolves and, just as importantly, the food shed.

Owing to the breeding season, we discontinued Mai's enrichment walks, partly because her behaviour at this time is potentially less predictable, and partly because Motomo could be stressed by separation from his mate, even for a relatively short period. At this time of year, lovers want to spend time together! Friendly handlers are still usually available to give Mai a tickle through the fence if she wants it though. The wolves' den in the mound also needed re-excavating, as the extremely heavy rainfall at the beginning of January caused the roof to progressively cave in and what was once a den is became a sunken pit. Given the strength of a wolf's paws, re-digging a den did not take too long once Mai felt the urge.

Mai's desire for food seems to fluctuate – at other times she will eat everything offered and even steal some of Motomo's, at other times she leaves a significant amount (which Motomo usually ends up devouring even though Mai has 'labelled' it as hers with a squirt of urine) or she takes uneaten food and caches it in the remoter parts of the enclosure; occasional piles of feathers in the enclosure make us think Mai is also supplementing her diet with a freshly-caught pigeon or pheasant while nobody is looking – a trait she has definitely passed onto her daughter Tundra.

February 14th – Valentine's Day – is usually said to be the time of greatest affection between 'bonded' pairs of wolves; Mai and Motomo have again perpetuated this tradition.



Beenham Pack

In their full winter coats, Tala, Tundra and Nuka can feel the downside of the unseasonably warm winter. Thick underfur that keeps them warm down to temperatures of -50°C is a distinct disadvantage when temperatures are hitting 16°C during the day.



Tala, Tundra and Nuka by Pete Morgan-Lucas

A wolf cannot take off a few layers like humans can to stay cool, so they cut down on exertion. The Beenhams spend a lot of time resting under the pine trees in the top corner of their enclosure.

The thick winter coats have helped to keep them dry during the wettest January for a long time. The outer guard hairs and top inch or so of underfur may get wet, the fur next to the wolf's body remains wonderfully dry and occasional vigorous shakes help fluff up the coat and eject trapped mud or water. Nuka has the endearing(!) trait of shaking himself dry just when a handler is within splattering range; I can confirm that an adult male wolf's winter coat can hold a lot of water along with some other deeply stinky things.

The warm weather and lack of frosts has means that there has rarely been any ice to play with in the water troughs and buckets. Nuka and Tala would normally enjoy lots more opportunities for crunching their way

through sheet ice. They've received various 'enrichments': scented straw-stuffed hessian sacks (the fresh ground coffee granules were particularly well received). It's amusing to see Tala running around carrying an entire oven-ready chicken while trying to look over her shoulder to see if Tundra's chasing her. Tundra has retained her rank as dominant female and can often be seen quietly asserting her position over Tala.

Only very rarely does this turn into anything more overtly aggressive; usually a hard stare, a change of Tundra's tail posture, or maybe resting her chin on Tala's back, is all that's needed for Tala to back down, though sometimes it will escalate into a full-on chase.

Although Tundra is the smallest wolf of the Beenham pack, she still looks most impressive with her tail up and fur on her neck and back 'hackled up'. There are occasional food squabbles; even though we generally feed Tundra away from too many onlookers, she will sometimes decide that the food offered

to Nuka or Tala tastes better so she steals theirs and guards it. Sometimes she's not really that interested in eating at all – like her mother Mai she's adept at snatching a wayward pigeon or pheasant that lands in the enclosure, so we are not that concerned if she misses a meal occasionally.

On visitor walks, Nuka loves to receive a good tickle from his favourite handlers and often ends up rolling over to get a good belly rub. Tundra is more confident on walks now and will approach the visitors more closely if she feels safe and has an understanding handler. She is still occasionally unsettled by people pointing large camera lenses directly at her; if you want to get a good photo you need to do it discreetly.

Usually initiated by Nuka or Tundra in response to the other wolves, howling while on walks is always a treat. A howl session can last several minutes, then Tundra decides it's time for silence and gives the other two a quick glance to shut them up. Nuka and Tala love to stand on the big log in the bottom field and pose for the camera while Tundra looks on from a distance; sometimes Nuka will decide that this is a good time to rub up against a handler, forgetting that he's balancing on the log. When wet the log is slippery and it's not unusual for him to slide off in a rather less than dignified way.

As the weather gets warmer and the days lengthen, soon it will be moulting season and when the colours in the wolves' coats often change. Tala will almost certainly go greyer (like Mai and aunt Mosi) – Nuka and Tundra are likely to turn lighter-coloured too – but by how much only time will tell.

Pete Morgan-Lucas



Lupines and Lairds

Will the wolf ever return to Scotland?

The last wolf was reputedly extirpated from Scotland in 1743 and nearly three decades later, the idea of returning this large predator to the heathery landscape has been widely discussed in the media. Is it a romantic concept, impractical or does the idea have some relevance? We asked a variety of people and the results were informative and fascinating.

'I would love to see wolves reintroduced to the UK. Ecologically, there is nothing to stop them living throughout the country today. Politically, it's a different matter. The key task is public engagement and persuasion. Unless there is widespread acceptance, nationally and locally, any attempt at reintroduction will fail. It is not something that can or should be imposed on people. There needs to be broad democratic consent for the idea. The most likely area is the Scottish Highlands, where the deer population is very high, and wolves could make a crucially important contribution to the health and survival of ecosystems there.'

I'm convinced that it will happen one day, but I know that it will take many years to bring people round to the idea.'

George Monbiot, Writer, Environmentalist

'As exciting and wonderful it would be to have wolves restored to Scotland, I do believe that, because of the degree to which wolves tend to conflict with human interests, it would be impractical to restore them to Scotland. I would love to be proven wrong.'

Dave Mech, Wolf Biologist

'In the UK, most land has been or continues to be managed. Large areas have been de-forested, burned, grazed, fertilized and polluted. Most large wild mammals have been exterminated. As a result, most ecosystems are largely dysfunctional for nature and people, being no longer able to provide their full range of 'services' such as clean water, reducing run-off and flooding, locking in carbon etc. Nature conservation has been confined to relatively small, isolated areas which are largely degraded semi-natural habitats. In the uplands in particular these are dominated by sheep, grouse or deer with low ecological and natural value. Rewilding has the potential to reverse these impacts.'

Rewilding is one approach. It might not be suitable or desirable everywhere; for instance where agricultural production is the priority or a particular natural state is required. It is an important addition to the range of approaches that land managers can employ.

In relation to rewilding, the emphasis is on the re-introduction of keystone species. The John Muir Trust supports the re-introduction of keystone species following IUCN guidelines which detail the need for full public consultation, involvement and support. The JM Trust believes that prior to any re-introduction being carried out there needs to be comprehensive political, public and local support. The JM Trust accepts that



Photograph by Helen Todd

- management solutions will be required to mitigate conflicts if they arise. On this basis, the Trust's position on the re-introduction of the following keystone species is:

Beavers: the JM Trust believes that re-introduction across the UK is possible and desirable now.

Lynx: the JM Trust believes that a trial re-introduction project to Scotland should be implemented within the next five years.

Wolves: the JM Trust believes that there is no ecological barrier to their reintroduction into remote parts of Scotland but a public education programme, scientific assessment and public consultation will need to inform any subsequent trial reintroduction which should only be considered following assessment of the Lynx reintroduction.

Rewilding and Reintroduction policies
Mike Daniels, John Muir Trust

'The Scottish Government has no plans to reintroduce wolves into Scotland. We would never consider reintroducing any such species without full consultation with all those likely to be affected.'

Scottish government spokesperson

'Scotland is now a world leader in how reintroductions are assessed and decided, with both a code and a stakeholder forum specifically designed to guide reintroductions. We have already had a number of highly successful reintroductions in Scotland, including sea eagles and red kites and a number of lower-profile but still important local reintroductions, like the scarce woolly willow. There is also an ongoing trial reintroduction of Eurasian beaver. The National Species Reintroduction Forum (NSRF), which SNH chairs, also discusses possible future reintroductions, from wolves to pine hoverflies.'

SNH has no plans to reintroduce wolves to Scotland at this time. If any third party wanted to pursue a wolf reintroduction, they would need to follow a number of steps under the Scottish Code for Conservation

Translocations (which are based on international guidelines) and apply for a licence from SNH. Throughout the process, many issues would need to be assessed, including habitat availability, the impacts on existing wildlife and people's livelihoods, animal health and welfare, and public opinion. The applicant would also need to carry out a public consultation before applying for a licence.

We would table any such proposal to the NSRF to get their views and advice. This group is made up of a wide range of Scottish conservation and land use organisations from the NGO and public sectors.

We would then advise Scottish ministers on any licence application. There are pluses and minuses to reintroducing any species. Wolves could, for example, help reduce deer numbers in Scottish woodlands but, on the other hand, some land use organisations have concerns about the impact of a reintroduction on livestock.'

Andrew Bachell, SNH's Director of Policy & Advice

'For those enjoying outdoor recreation, whether walking, climbing, cycling, kayaking or riding a horse, Scotland's natural environment provides a fabulous setting. Our upland landscapes in particular, with their world-famous hills and mountains, lochs and glens, offer boundless views and wide open spaces. But the current interest in land reform and the ongoing rewilding debate are causing many people to question the traditional land management practices which influence our habitats, landscapes and the wildlife that lives there. And that includes proposals to reintroduce native species which once roamed in these areas, such as wolves.'

To be sure, Scotland is no untouched wilderness. There is plenty of archaeological evidence showing just how many people used to live in these now remote areas, from the ancient paths crossing the country to the mossy ruins of stone cottages. While rural populations are now scarce, plenty of people still have an economic interest in these areas, including farmers, estate workers or those employed in the tourist industry, and our access legislation gives everyone the right to enjoy responsible recreation on almost all land. For any reintroduction programme to be successful it is crucial that the scheme is truly sustainable, gaining support from local communities as well as ensuring that the wider public interest in land is upheld.

Would wolves be good news for people? Many of us have already experienced the thrill of walking in areas where wolves roam, such as Scandinavia or the Pyrenees. At Ramblers Scotland we support reintroductions of native species in principle, but this is very much on a case-by-case basis. For example, we have been supportive of the Scottish Beaver Trial in Argyll, but for many years have opposed proposals by

Mr Paul Lister of Alladale Estate, to bring back wolves. This is because in this scheme the animals would not range free but would be contained within a large enclosure. This enclosure causes concern because of the significant landscape impacts of a 37-mile long electrified fence over three metres high, and the fact that the restrictions proposed for walkers would be directly in opposition to the Scotland's access legislation.

Nevertheless, there's an argument that the reintroduction of predators like wolves would help with the process of rewilding our uplands, increasing biodiversity and making ecosystems more resilient to the effects of climate change, primarily by reducing deer numbers. Culling of deer on some estates, such as at Glen Feshie in the Cairngorms, has already led to a massive transformation and the natural regeneration of woodlands. However, given the vested landowning interests in Scotland, it's easy to imagine the resistance that proposals to bring back wolves face. And in any case, perhaps we should be focusing our efforts on preserving some of our existing native wildlife which is only just hanging on precariously, such as wildcats or capercaillie?

While support for the concept of rewilding is growing, the reintroduction of wolves feels like a step too far at the moment. The cultural, social and political context is as crucial to the debate as any environmental benefits that wolves may bring. It's unlikely any programme would succeed until all aspects are resolved.'

**Helen Todd, Campaigns & Policy Manager,
Ramblers Scotland.**

'As a social anthropologist with a research focus on human-animal relations, I have long been interested by how people have experienced and imagined wolves and how these animals are differently figured and differently configured across human cultures. That interest has been largely academic – an attempt to understand social and cultural beliefs and practices. Now, however, I am interested in how anthropological perspectives and understandings of what wolves represent in human cultures might have a part to play in the context of conservation debates relating to wolves.

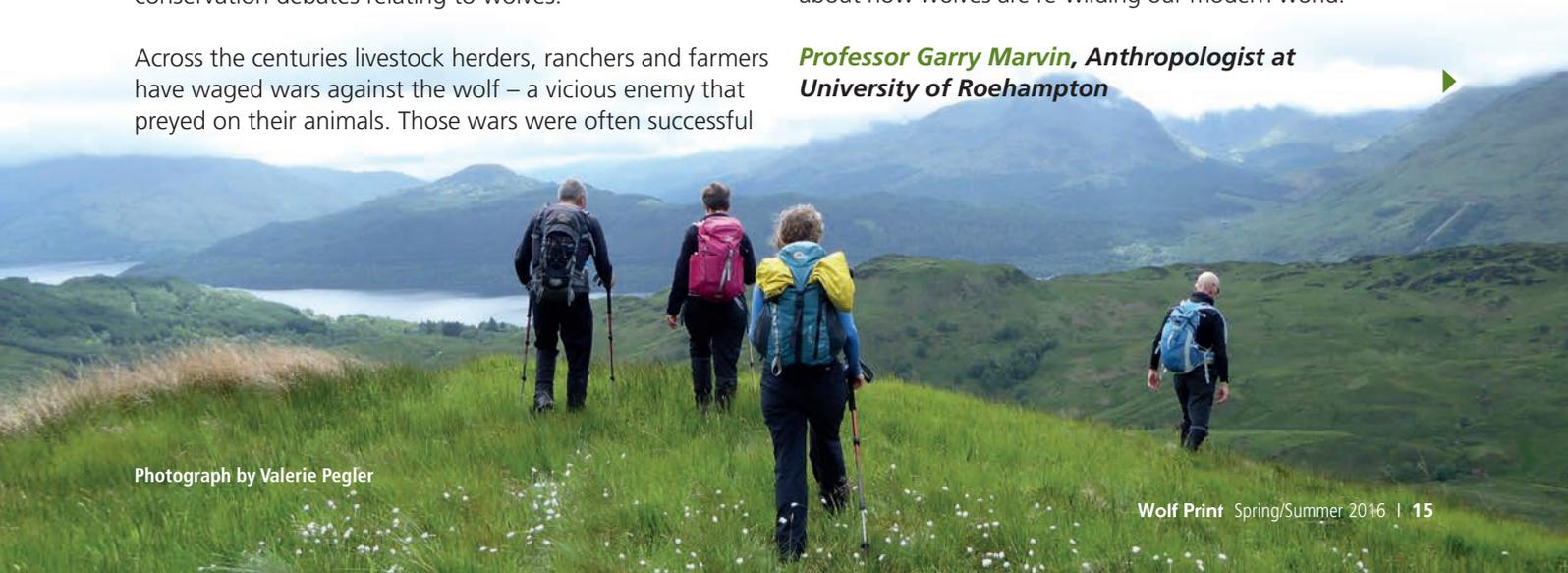
Across the centuries livestock herders, ranchers and farmers have waged wars against the wolf – a vicious enemy that preyed on their animals. Those wars were often successful

and the wolf was eradicated from great swathes of its traditional ranges. But they did not completely disappear. In many parts of the world they gained a protected status and with that protection against immediate killing they began to re-emerge. But, wolf wars are not over and groups of people, with different interests, both rejoice or reject their re-emergence.

In Europe, in Norway, Greece, France, and more recently in Germany and The Netherlands, the wolf is a newly contested creature. Conservationists, ecologists and environmentalists seek to ease wolves back into their traditional ranges but these ranges are not configured in the ways there were when wolves were eradicated. People have lost their experience of living with wolves and livestock owners have raised their animals for generations or centuries without being prepared for wolf predation. Conservation projects that seek to protect animals are unlikely to succeed if they do not pay attention to the social, cultural, economic and even political views of those people who must live in the proximity of protected wild animals.

In the case of wolves, these creatures must live in a world of other wild animals, domestic livestock and people. Where and how they might live is now determined by those who are for them or against them. Too often wolf ecologists and conservationists tell local people about wolves and often become exasperated by what they consider to be ill-founded understandings, views, and resistance. Local people often feel they are being lectured, spoken down to by scientists who do not understand their cultural views and concerns. Returning to my earlier point, I believe that anthropology, with its close engagement with local cultures can help in the discussions over wolf conservation. There are examples of good practice and the perspectives and approaches of what is termed the human dimensions of wildlife that encourages respectful discussion rather than political enforcement is certainly a way for interested parties to come to workable solutions. Wolves can co-exist with people - they do so in many parts of the world and they have done so for generations in many parts of the world. What knowledge, experience, understanding can be drawn from those who have wolves as part of their lives? I suggest a good deal and that listening to them and learning from them would be a valuable, or more, an invaluable contribution to the debates about how wolves are re-wilding our modern world.'

**Professor Garry Marvin, Anthropologist at
University of Roehampton**



► 'On a personal level I would love to have wolves living here in Britain, even right next door to where I live on a former farm in the Devon hills. On a professional level as director of a conservation charity, I am much more circumspect about the prospect of a reintroduction of large carnivores other than the lynx.

There is no doubt wolves, as adaptable and intelligent opportunists that do not require remote wilderness, could survive in many areas of the UK, and would be of significant ecological benefit in the slow process of restoring the natural environment and biodiversity of the British Isles, degraded by hundreds of years of intensive use by people since large predators last roamed wild here.

The major barrier to bringing back wolves is human perceptions of large carnivores and their impact on our economic activities: in Europe, wolves sometimes kill domestic livestock and pets, and also prey on deer and other game that hunters like to shoot. Statistics show that the economic impact of this is largely insignificant at national level, but at local level in rural areas the impact is much greater, both economically and psychologically, particularly for people who frequently come into direct contact with predators, such as farmers and hunters, and this cannot be ignored.

There is much good work going on to try and address this, and achieve coexistence between people and large carnivores, for example measures to prevent livestock being killed using guarding dogs, predator-proof electric fencing and a range of traditional and innovative techniques. Ecotourism initiatives encourage rural communities to value 'their' wildlife as tourist rather than hunting quarry, education programmes seek to improve attitudes to predators in the next generation, and stakeholder workshops bring opposing parties together to try and work out a compromise.

These are ongoing processes, but nowhere has a lasting balance been found yet, and in some areas of Europe a backlash of opinion is building against expanding wolf populations.

I would suggest that it is better to spend limited resources on continuing to work towards a workable model of long-term co-existence in areas where wolves already exist, rather than on a reintroduction to the UK that would be no less controversial.

In the meantime, this is not to say we should do nothing - a movement for 'rewilding' of the British countryside is gaining momentum, together with encouraging trial reintroductions of the beaver in both Scotland and England, and I believe that a similar trial introduction of the lynx, an animal that does not carry the cultural baggage of other large carnivores, would have a good chance of success. Reintroductions of

lynx in Europe have proved much less controversial than the recovery of wolves, which have never been reintroduced in Europe, but have expanded naturally through dispersal from existing populations.

Ultimately, the decision whether or not to bring back wolves and other large carnivores will be up to us - our island geography rules out natural recolonisation. We will have to decide why we want them; to fulfil a currently vacant ecological niche? To meet our obligations under international conventions? As a symbol of our repentance for the damage we have caused to the landscape in their absence? Or to satisfy our own desires to see or be close to wolves without travelling abroad? We will have to decide who is going to pay for it (and whether we can afford it), and how much we are prepared to tolerate management of restored populations, and this will inevitably mean some individuals will be removed, probably by lethal means, to limit numbers and restrict their spread - current European guidelines include controlled hunting of wolves as a conservation and management tool. Robin Rigg of the Slovak Wildlife Society succinctly summed up the current situation during a recent talk in the Highlands when asked if Scotland was ready for wolves: 'Ecologically yes, socially and politically, no...'

Richard Morley, Director, The Wolves and Humans Foundation

'I'm working out of my simple shepherd mode. As a shepherd though it would be at this present time a mistake to introduce the wolf to the highlands. Let us first put back the forests. I fear for the livestock, and think we need to learn from the mistakes in France before we implement it. Yellowstone worked because it's a huge wilderness. Scotland is not large and is worked by livestock owners. I can only see heavy losses even if we put livestock guarding methods in place. This would not help the wolf in the long run.

Much as I would love to hear the howl of the wolf amongst the glens. I'm not sure we are ready.'

Troy Bennett, Shepherd

'Wolf reintroductions have been highly noted recently but it has more been about successful reintroductions, especially with the recent controversy about the reintroduction of wolves into Scotland. However, there is another side to the story and that is the failed wolf introductions which are not as well documented, but are just as important.

Here at the Trust we are helping with the wellbeing of wolves in the wild by raising and donating funds to projects abroa. The Trust would not support a project which had a high chance of failure, as it could lead to





Photograph by Helen Todd

the unnecessary killing of wolves, which obviously the Trust would want to avoid.

One of the attempts at in the reintroduction of red wolves started in 1987 at the Alligator National Wildlife Refuge, where the first captive bred wolves were released. Fourteen red wolves were captured, to be redistributed amongst more than thirty wildlife parks and zoos across the US, to encourage breeding. Compared to the 1995 Yellowstone National Park attempt to reintroduce the grey wolf, this reintroduction project did not see as much opposition, and was greatly supported by the public. In 1998 the last four red wolves were captured within the Great Smoky Mountain, ending a nine year struggle of reintroduction. However it was biology not politics which ultimately led to the failure of the reintroduction. The thirty-seven wolves released into the wild were not able to find sufficient food among the vast landscape, thereby many of the wolves left the area in search of sufficient food for their survival.

Unfortunately for the reintroduction project, the wolves that stayed in the Great Smoky Mountain area soon died of starvation, disease and parasites. From the thirty-seven wolves originally released at the end of the project six had died and thirty-three pups were born; only four of the pups were found, others were either missing, dead or presumed dead. Unfortunately despite the attempts from the government to reintroduce the red wolves, they were extinct from the Great Smoky Mountain, and the surrounding areas, at the turn of the 20th Century.

In addition to the Great Smoky Mountain failed red wolf reintroduction, the 1998 Mexican attempt to

reintroduce the grey wolves was also unsuccessful. This project was met with great opposition, mainly due to the bad reputation of wolves in the wild; many farmers were aware of the dangers that their livestock would be under, with the reintroduction of the grey wolves. They were fearful. By the mid-1970s the grey wolves had become extinct in Mexico. The 1998 reintroduction project was led by the US Fish and Wildlife Service, where eleven Mexican grey wolves were released into the wild as part of the project. Due to only the small handful of wolves released the genetic variance was low, and the rise in the number of newborn pups has been extremely slow. In addition the threat from humans and the many natural threats to the survival of the grey wolf, the numbers from this reintroduction project has not risen above one hundred. Furthermore these wolves are still being met by a big opposition; therefore unfortunately this will only lead to a slow increase for this endangered animal in the wild.

Along with the opposition that the Mexican grey wolf project has seen, the project in Southern Colorado also has suffered from great opposition, to the extent that the reintroduction of the grey North American wolves have not yet been reintroduced, and the project has continued to be put on hold until such opposition could be rectified. Nevertheless it is not all doom and gloom as there have been successful wolf reintroductions; most notably that of the 1995 Yellowstone National Park. Although it was not the easiest of reintroductions, it has managed to overcome various speed bumps to become one of the most successful wolf reintroduction programmes, helping with the survival of wolves in the wild.'

Calum O'Flaherty, UKWCT volunteer

Ravens and wolves

An insight into this unique wolf-bird relationship



Wolves have always fascinated me, not surprising considering I have been a volunteer at the Trust for many years now. Looking at wolves, it doesn't take long to see how behavioural patterns and relationships develop with other species. One such species is *corvus corax*, or the common raven.

There are numerous Native American stories and paintings that show the raven and wolf together; they can be seen throughout history and folklore. The Vikings had ravens on their battle banners, as they were considered a good omen. Even the Norse God Odin was known as "Hrafna-gwd" or raven god, often depicted with two wolves on either side and ravens on each shoulder.



Although these are depictions of ravens with wolves side by side in folklore, researchers have often observed the two species together. Ravens may follow wolf packs for several miles, waiting for them to take down a kill. Yellowstone Biologist Doug Smith, who often studies wolf hunts from his light aircraft, frequently sees ravens following the hunting packs.

Researcher Dan Stahler observed that ravens were almost always present at kill sites. In one study, which involved leaving out carcasses, he found that no raven was present where wolves were absent at the food sources. If a raven did discover the carcasses, they circled above briefly and then left. If wolves were present however, then so were the ravens. Another Researcher Bern Heinrich discovered an elk carcass that had been shot. The ravens had pecked at the eyes and tongue, the only part that ravens can access, as their beaks are not strong enough to break through skin. He gave them a helping hand by cutting open the carcass for them to get at the meat. Returning a few days later and expecting to find a large number of ravens, there were only a few, and the carcass remained untouched. In his book 'The Mind of The Raven', Heinrich describes the hunting season, where piles of animal guts are left in plentiful piles. However, ravens will not go near a kill if there are no wolves present.

Seemingly, wolves provide food and protection for the ravens and this works both ways. Wildlife filmmaker Jeff Turner told Heinrich: "I can sneak upon a wolf but never on a raven. They are *unbelievably* alert." Perhaps

the ravens work as an extra alarm system, alerting the wolves of danger while they devour their meal as quickly as possible.

Ravens will often seek out wolves, alerting them to a carcass, using a special claw for the wolves until they follow them to the designated area. The wolves' powerful teeth then easily open carcasses, allowing the ravens access to the juicy meat inside.

There seems more to the wolf-raven relationship than symbiosis. Both species seem incredibly social not just within their own species but also with one another. Biologist David Mech often observed ravens chasing and playing with wolves. In his book: 'The Wolf: The Ecology and Behavior of an Endangered Species' he wrote: "Once, a raven waddled to a resting wolf, pecked at its tail, and jumped aside as the wolf snapped at it. When the wolf retaliated by stalking the raven, the bird allowed it within a foot before arising. Then it landed a few feet behind the wolf, and repeated the prank."

This is only but a tip of the iceberg into this wonderfully funny and intelligent bird and its relationship with the wolf, and there is still far more to learn about the two. For a more in depth read I highly recommend Bern Heinrich's books: 'The Mind of The Raven' and 'Ravens in Winter' and David Mech's book: 'The Wolf: The Ecology and Behavior of an Endangered Species'.

Francesca Macilroy
Wolf Print Assistant Editor



Understanding the behaviour of wolves in human-dominated landscapes in Galicia, NW Spain.

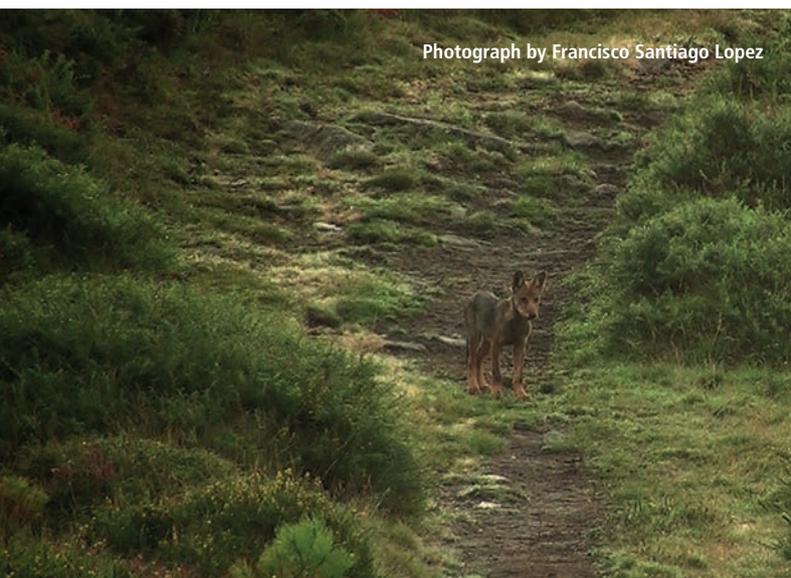
With the support of the UK Wolf Conservation Trust, between September and November 2015, four wolves have been captured and provided with GPS collars in Costa da Morte, Galicia, NW Spain (two males and two females).

In Galicia, wolves live in high human-dominated landscape with significant values of human, settlement and road densities along with a remarkable level of habitat transformation, mainly due to agriculture, forest and livestock

practices. In this area, some wolf packs feed mainly on anthropogenic sources of food. Our objective is to understand how wolves react to human infrastructures in highly humanized landscapes where the conflict between wolves and people

has been evident for a long time and where the conservation of this species may be influenced by multiple factors.

Francisco Santiago Lopez



Photograph by Francisco Santiago Lopez



Photograph by Francisco Javier Lema

Guardians of the Roof of Africa

The Ethiopian Wolf Conservation Programme

As regular readers will know, 2015 marked the 20th year of The UKWCT. Coincidentally, 2015 was also the 20th year of one of our main beneficiaries, the Ethiopian Wolf Conservation Programme (EWCP). To understand the crucial work undertaken by the EWCP and learn more about the future of Africa's most endangered canine species, in November 2015 UKWCT's Associate Directors, Lara Palmer and Jonathan Palmer visited the Bale Mountains in Southern Ethiopia.

Straddling the East African Rift Valley, with much of the land ranging between 1500m and 4500m, The Ethiopian Highlands are rightfully known as the Roof of Africa. Here, in the unique isolated Afroalpine ecosystems above 3000m, the endangered species of the Ethiopian wolf live. Evolved to thrive in the now increasingly declining

Afroalpine pockets, Ethiopian wolves could almost be described as victims of their own success. In becoming so specialised to these Afroalpine pockets, their survival as a species is intricately linked with the survival of these ecosystems. Unfortunately, with now only around 450 left in the world, they are more endangered than the giant panda, mountain gorilla

or snow leopard. It is against this backdrop that the EWCP is working to ensure the future of this species.

Upon arrival at Addis Ababa we travelled 400km south, where, after seven hours of driving, we ascended into the misty mountains of the Bale National Park. Our first night was spent on the edge of the park at the EWCP



HQ, where we were warmly hosted by EWCP Field Coordinator Eric Bedin. Despite living in near complete isolation, Eric, as a Frenchman, still treated us to cheese, potato soup and even red wine (grown in Ethiopia's Rift Valley!). Also accompanying Eric in providing a welcoming reception was Jorgelina Marino, an integral part of the EWCP both in the field in Ethiopia and at Oxford University, where she works in the Wildlife Conservation Research Unit.

Over the course of our first night we were informed of what our expedition would entail. Jorgelina, alongside Bale's EWCP Senior Monitoring Officer Alo Hussein, was to lead us for the next few days trekking across the National Park mountain plateaus. For Lara and I the trek was an opportunity to directly see the landscape where the Ethiopian wolves live, so as to understand the threats they face and the measures the EWCP employs to counter these. For Jorgelina and Alo, the trek was an opportunity to train

two local wolf monitors in how to run a transect - an exercise in collecting on the ground data to be passed back to, and analysed by, the broader scientific community and the EWCP team. Important information to record was (i) the location of any wolves, (ii) signs of new human inhabitation, (iii) sightings of livestock, and (iv) sightings of domestic dogs - points (ii) - (iv) being threats to the stability of the Afroalpine environment and directly to the wolves themselves.

Each day for the next three days we were to trek 7-8 hours covering around 20km a day while recording the transect. Starting with a night at the Sanetti Monitoring Station at 4100m, we quickly felt how high we were, the altitude sickness making us feel a sensation similar to a hangover - headache, queasiness and slight disorientation - before we eventually acclimatised. Experiencing this altitude, it was easy to understand how some of the world's best runners

could come from Ethiopia; a race at sea level when you train at this height would be a walk in the park.

The landscape was wild, remote, eerily quiet and stretched far into the horizon - an incredible backdrop for our trek. With large open expanses of skies and few clouds, the days were warm while by night the temperatures plummeted to around -8°C. For accommodation, at the beginning and end of our five days trekking we stayed at two separate wolf monitoring stations, whereas for the two nights in-between we put up a 'fly-camp' and slept in tents. It was the tented evenings that were really memorable. Sitting round the campfire discussing the day's sightings and the future of the wolves we were treated to vast starry skies, while in the mornings, when awakening from our tent, we were greeted with crisp frozen ground, clear blue skies and the sound of squeaking rodents warming in the morning sun.



Photograph of Alo Hussein, Senior Monitoring Officer, EWCP
Photograph by Lara Palmer



(From left to right) Said Naser, Monitoring Trainee, EWCP. Alo Hussein, Senior Monitoring Officer, EWCP. Hamsa Mama Monitoring Officer, EWCP. Jorgelina Marino, Research Coordinator, EWCP
Photograph by Lara Palmer

While outbreaks of rabies have been stabilised, a new disease transmitted from dogs, Canine Distemper Virus (CDV) has been increasing in the Bale region at an alarming rate. On our final day Jorgelina, Alo and the rest of the EWCP team conducted two post-mortems on wolves found in the Park.

Although the tissue samples had yet to be tested, everyone was convinced that this was yet more evidence of the increasing CDV outbreak manifesting itself. Adding to concerns, since returning back from Ethiopia, we received reports that confirm the seriousness of the outbreak: the disease has spread across plateau with many wolf deaths in the area.

Longer term threats, including climate change, are mostly those that impact upon the entire Afroalpine ecosystem, although hybridisation from domestic dogs is another concern. As people move into the park, their accompanying livestock grazing modifies the fragile Afroalpine ecological conditions, disrupting the wolves' food chain, reducing the number of wolves that can survive off the land.

Working to mitigate against both the short and long-term threats, the EWCP created a ten year National



Conducting a post mortem training, Alo Hussein, Jorgelina Marino and the EWCP Team
Photograph by Lara Palmer

Over the five days we were lucky enough to come across, and noted as a part of our transect, many individual wolves. In contrast to the North American and Arctic wolves at The UKWCT, owing to Ethiopian wolves' main prey being so small - mostly rodents, including the endemic giant mole-rats - they have evolved both physically (slim in build with a long narrow snout), and in behaviour, to hunt individually. However, on our final day, we went out for an early morning drive in a 4x4, where we saw 18 wolves in the space of two hours. At one point we were treated to the sight of a pack meeting to socialise, scent mark and rally as to mark out their territory. While we thought we were lucky in seeing so many wolves, we were told that having so many sightings was unsurprising, as despite

their low number, the area in which they live is comparatively small.

Over the course of our transect we not only recorded sightings of wolves but also any new inhabitation into the National Park. As Africa's second most populous nation with over 100 million people and growing, encroachment is a constant problem. People settling in the Park, bringing with them domestic dogs and livestock to graze, has a detrimental knock-on effect to the ecosystem, giving rise to both short and long-term threats to the Ethiopian wolf. The most significant short-term threat is the transmission of disease from domestic dogs. Although now largely under control via an EWCP vaccination programme, in recent years large rabies' outbreaks have caused wolf populations to plummet.



Ethiopian wolves by Lara Palmer



(From left to right)
 Johnny Palmer, Associate Director, UKWCT
 Eric Bedin, Field Coordinator, EWCP
 Jorgelina Marino, Research Coordinator, EWCP
 Neville Slade, Project Manager, Bale Mountains Conservation Project
 Photograph by Lara Palmer

Action Plan in 2011 to ensure the long-term stability of the Afroalpine ecosystems and Ethiopian wolves that live within them. The plan includes (i) a rabies vaccination scheme that has seen up to 5,000 dogs vaccinated per year, (ii) inoculations against CDV, (iii) sterilisation programmes for hybrid wolves, (iv) community



and school education programmes to teach and involve locals, giving them ownership and pride over their land and encouraging conservation, (v) teaching dog husbandry, (vi) data collection through monitoring the wolves in the field, giving insight into the behaviour, breeding and health of the species, particularly for monitoring disease, and (vii) strengthening the capacity of the Bale Mountains National Park – funding patrolling and the maintenance of infrastructure. As aforementioned, the rise of CDV is the most serious and immediate threat the wolves face and the EWCP are currently focusing all resources in response to this.

Over the course of our trip we saw how the knowledge, passion and dedication of the local Ethiopian team are the backbone to the project. In witnessing two new wolf monitors being trained with such enthusiasm, as to take up the wolf's cause, we were reassured for the long-term survival of this species. However, in seeing the harsh conditions in which the EWCP work, and the multiple complex challenges they face, especially the current CDV outbreak, the future of the species is



Johnny Palmer & Lara Palmer by Jorgelina Marino

anything but certain.

The Ethiopian wolf depends on the EWCP mitigating against a multitude of both long-term and short-term risks. With limited resources, all support the EWCP receives has a large and direct impact in protecting the future of these unique animals. The UKWCT is proud to have been a supporter of the EWCP since 2007 and in this time has donated over £39,000 to help fund their work. To learn more about Ethiopian wolves, the work of the EWCP and help support the cause via donation, please visit www.ethiopianwolf.org

Johnny Palmer,
 Associate Director, UKWCT

An **ADVENTURE** in Croatia (Part 1)

Working with captive wolves has always been an incredible experience. Witnessing daily the behaviour of one of the most enigmatic mammalian species has never been a labour. So I was delighted to visit a project that the Trust supports in Croatia and witness the hard work carried out by their directors, volunteers and other staff.

FRIDAY, 4TH SEPTEMBER, 2015

I arrived in Croatia's capital Zagreb and met with Professor Josip Kusak, who I had met previously on his earlier visit to the UK. Soon we were heading to Plitvice Lakes National Park, roughly two hours' drive from Zagreb. Along each side of the motorway it is law that there are fences to stop wildlife jumping out into the road, Josip told me that Croatia is very keen on connecting each side of the motorway via bridges going over the motorways.

Plitvice Lakes National Park is world famous for its incredible lakes and waterfalls and brings in over a 1.1 million tourists annually. Yet how many tourists realise that just a few miles past the waterfalls and further up the mountain is prime bear, lynx and wolf habitat?

Late in the evening, I reach my destination, my home for the next ten days. It's a rather large wooden and stone structure with predominantly no electricity or running water. Getting out of the car and looking up at the sky is something that I will never forget: with the lack of electricity within miles of the cabin, the stars are beautifully clear, the noise of insects is high and the night very dark. It is perfect, a true escape. I reflect on the busyness of everyday life in the UK. Inside I meet Pete Haswell, who I met earlier in the year at the Trust along with his student and Alfred, Pete's dog. Alfred has been trained to sniff out scat. We spend the first night playing a traditional Croatian board game and partaking in a few social beers, catching up and discussing the summer so far.

“...the stars are beautifully clear, the noise of insects is high and the night very dark”

The main aim of my visit is to spend ten days with Professor Kusak, witnessing what the project does and learning as much as I can about the behaviour of wild wolves, the attitudes of the people living in that same environment and the general management techniques used by people who keep livestock in close proximity to predators.

SATURDAY 5TH SEPTEMBER, 2015

The very first day is a complete washout due to torrential rain, leaving little to do but prepare equipment, test equipment and talk to Pete and Josip about the area and the wolves they are currently tracking. Pete is completing a study in foxes' giving up densities and foraging habits. Meanwhile Josip is gathering data on two packs of wolves, via two collared wolves known as Ivanka and Andjelko. Ivanka is a female wolf collared from a pack to the northern side of the park and Andjelko is a male wolf collared from the southern region of the park. Both these yearlings provided movement and other spatial data for each pack in residence in the park. During the afternoon rains, we head out in the Land Rover to try and locate the wolves using signals



from their radio collars via telemetry equipment. Whilst driving down the forested roads, it is important we impact the area as little as possible. The wolves are incredibly timid so it is important, if we can, not to leave our smells in areas they frequent. This primarily involves wearing long sleeve jumpers/shirts and jackets at all times when outside the Land Rover, alongside designated stopping areas for bathroom breaks.

During the outing we didn't get a signal from any wolves in the northern area of the park. Josip



explains that this was not all that surprising. Unfortunately after the northern pack had their cubs this year, this region of the forest was due for logging. The area is split into different sections and each section is logged once every ten years, leading to a sustainable logging environment with minimal impact on the natural forest. Ultimately, the wolves were unlucky in the area they chose to den this year.

It is a strange concept driving through areas and looking for signs of wolves one minute and then coming across a house with three guardian dogs and a flock of sheep outside. It is what the Croatians call 'wolf weather'; essentially misty/foggy and wet, so traditionally wolves will exploit this kind of weather to try and grab an easy meal using the weather as cover. The shepherd tells Josip that every

night when the local church bells go off, there is a chorus of jackals howling. This is fascinating as jackals aren't officially in the park, giving an example of how richly diverse the local area is in biodiversity.

SUNDAY 6TH SEPTEMBER 2015

The biodiversity of the area was further highlighted when collecting data from the many camera traps out in the field. Camera traps are a fantastic way to work out the general animal species in the area and in this case a useful way to see if the wolves in the area have had cubs and if so, how many. Sifting through the many photos of bear, lynx, deer and boar, I was not disappointed to see a lot of the photos included wolves; not just adult wolves either, but young too. Many of these photos are of the

youngsters playing around; even in the photos you can see the playful nature of the cubs in full swing as they enjoy the games which will ultimately aid them in their skills for surviving.

This was only the beginning of my ten-day visit to Croatia. I quickly became enthralled with what is one of the most beautiful countries I have ever visited...

**Pete Haswell is conducting a series of investigations in order to examine the impacts wolves have on other species (their prey and smaller mesopredators). There is a camera trapping study and occupancy modelling to examine space use between wolves and other species. Pete is also examining wolf activity patterns from telemetry collars and the activity patterns of other species from remote cameras in order to study the temporal relationships between wolves and other species. Alongside these studies there is also an investigation into the foraging behaviour of foxes (using 'Giving up Densities') and how they respond to the simulated presence of wolves (wolf urine as a risk cue). The diet of foxes within the park is also being examined to identify the direction of any potential trophic cascades.*

Mike Collins, Wolf Keeper UKWCT

Further adventures in Croatia coming soon to Wolf Print

Ancient Traditions

The wolves of Abruzzo

In the beautiful villages dotted in Abruzzo's Gran Sasso Mountains in Italy, where people have lived for centuries on woodcutting and sheep farming, stories about wolves have always fuelled the imagination. The complicated relationship between man and wolf is an ancient one. Amongst the 'sacred spring' Italian population the wolf was considered a totemic beast, the wildest and strongest of creatures. This was so ingrained, that up until recent decades newborn children were given a wolf's tooth as a lucky amulet.

Over the centuries, the perception of the wolf as a sacred and magical animal was gradually eroded. It was then considered more of a bloodthirsty and cruel predator stalking sheep, a case of 'wolves versus men' and 'nature versus culture'. One of the most dramatic and enduring myths was that of the lycanthrope, or werewolf. In Abruzzo, tales and superstitions are an interesting and knotty combination of the real danger presented by wolves and the residual sense of wonder from its historically sacred image. At the beginning of the twentieth century, hunters were freely allowed to extirpate the wolf population. After the Second World War, the wolf population was close to extinction. In



the 1970s, a policy of wolf conservation finally began and a decade or so later, wolves came back to Abruzzo and now packs of them roam freely on the Gran Sasso.

Shepherds and wolves

Between Gran Sasso, Monti della Laga National Park and Majella National Park, the tradition of the migratory shepherd used to be ingrained in the landscape. In 'transumanza' or 'transhumance' – shepherds would move livestock from lowlands to upland pasture as the season changed. Shepherds were very much the enemy of the wolf: they spread tales that often sprang from imagination and not always fact. If man and wolf share one thing in common, it is a need for survival.

Canis lupus and tourism

It is important now in twenty first century Abruzzo to educate local people that the wolf, far from still being their enemy, can actually encourage tourism and pride. Wolfstour is a local tour operator who specialise in hiking, cycling, canoeing and nature treks. One of their tours is also entirely dedicated to the wolf: 'Men and Wolves – our relationship with the animal world within Abruzzo pastoral culture.' The tour begins in the Wolf Visitor Centre in Popoli which is managed by Il Bosso, situated in the heart of the Majella National Park and looking out onto the Morrone Mountain Chain, where some spaghetti westerns were filmed. Here, visitors can experience an unforgettable walk through green space and crisp, clean mountain air, to listen for the evocative howl of the Abruzzi wolf.

The tour

The excursion has three components, two preparatory sessions and a nocturnal visit. In the afternoon, there is a guided tour to "Centro



Visite del Lupo" (Wolf Museum) in Popoli where there are wolves, bears, wild boars and eagles. This is followed by dinner with traditional Abruzzo tales and delicious local food, then at night the most exclusive part of the tour begins: under the moonlight, biologists and experts reproduce the wolf's howl to attract the shy Abruzzi wolf, while you learn about this enigmatic creature's life and get to help with photographic trapping.

Federica Giuliani

www.wolftour.it
visitabruzzo.altervista.org

Abruzzo needs more tourism and encouragement with their efforts at wolf conservation and education.

All photographs property of Wolfstour and Il Bosso

NOTE FROM EDITOR:

I had an excellent guide in Abruzzo in 2013 – Alessio Turchi, who helped me with inspiration for a travel article in the Independent on Sunday: <http://www.independent.co.uk/travel/europe/abruzzo-poetry-in-motion-in-central-italy-8603826.html>.





Poland – A Success story?

‘Is there any prospect of our ever being able to reintroduce wolves to Scotland?’ asks student Alex Entwisle, 23, on a field trip to southern Poland from his college in Wiltshire. The animal science students have spent the day observing scat and paw prints in the spruce-clad Beskidy mountains of the Polish Carpathians.



There are now an estimated 1,500 wolves in Poland. The number has doubled in 15 years. Conservationists from Britain, Germany and the Netherlands are beating a path here.

DNA tests have established that Polish wolves are travellers. ‘One wolf reached the Netherlands, where unfortunately it was hit by a car. They have a tremendous range. They need space. The average territory required by a Polish pack is 250 sq km (96 sq miles),’ said biologist Robert Mysłajek, a guest of a British charity, the Wolves and Humans Foundation, Mysłajek toured the Scottish Highlands in September and took questions from villagers about the Polish experience. ‘The big difference between Scotland and Poland is that we eat pork. We do not have many sheep here.

‘We have a lot of ungulates – 300,000 red deer and more than 800,000 roe deer. We also have a massive overpopulation of wild boar – about 200,000 – and these are ravaging farmers’ cereal

crops. Here, wolves are part of the solution,’ he says.

Mysłajek says the improvement in Polish wolves’ survival chances has been considerable, but remains fragile. Packs are mobile across borders and hunting still goes on in neighbouring Russia, Lithuania, Belarus, Ukraine and Slovakia.

Poland’s new national-conservative government, elected in October, is hostile to wolves. ‘The environment minister, Jan Szyszko, makes no secret of being a hunter. There are 120,000 licensed hunters in Poland, and they are influential in parliament.

‘The hunters claim wolves are a pest and that there are 4,000 of them in Poland, which is a spurious figure based on an unscientific count. This government is capable of turning back the clock. They will go for wolves before brown bears or lynx, just because they can.’

Source: (edited) Alex Duval Smith, *The Observer*



Hungry Like The Wolf – A wolf’s quest for sustenance

While assisting in clearing some of the rubbish left at Ward Hunt Island by various North Pole expeditions, Bryan was with a team that found the body of a male wolf, with teeth broken down by opening the old, but still full, tin cans that were scattered around the tundra. They also found cans that had been opened by wolves and some that had just been punctured. The rubbish was all removed and the wolves had to move away from a diet of fast food.

Source: *Arcticphoto.com*

Wolves 'roll' into Switzerland

For the first time since wolf sightings were reported 14 years ago, an adult wolf with three cubs has been photographed in the Southern Swiss Canton of Ticino. The wolves are returning to Switzerland!

There are an estimated 18 wolves in the Swiss cantons of Valais and Granbunden. Occasional sightings have been reported in other areas.

Source: *Wolves and Humans*



Helping the Mexican Wolf

New measures

Annual counts of endangered Mexican gray wolves in New Mexico and Arizona began in 2005. The counts provide an update on the species' recovery in the Southwest, while also giving biologists a chance to collect valuable information on certain animals that are temporarily captured. Biologists fit those animals with tracking collars, draw blood samples and measure them, all of which aid research and management of the population.

Being able to track the canids is key to figuring out appropriate areas for future releases of captive wolves into the wild because those new additions can't be put into territory already claimed by another pack, said Sherry Barrett, Mexican wolf recovery coordinator for the U.S. Fish and Wildlife Service.

The successful release into the wild of adults raised in captivity is fundamental to maintaining the diversity of the Mexican gray wolf population and

preventing detrimental impacts of inbreeding, Barrett said. If animals that are too closely related begin mating, it can result in outcomes like birth defects or smaller litter sizes, she said.

Blood samples collected from the animals are used to scan for diseases and for genetics tracking. Some samples also are sent to the University of New Mexico's Museum of Southwestern Biology for use on future projects and research, said Susan Dicks, a staff veterinarian and biologist with

the U.S. Fish and Wildlife Service.

Teeth measurements help wildlife managers identify whether a wolf was responsible for an ungulate killing while paw measurements are useful in answering questions about tracks left in the sand or snow, Dicks said. Knowing the body size and weight of the animals is useful for tracking trends in the population over time, she said.

Source: *Emery Cowan, Twin Observer*





A resident's view of the wolf cull issues on Vancouver Island, Canada

I recently talked to a First Nations lady from Canada about the controversies surrounding the cull of wolves on Vancouver Island. I started by telling her about our wolves at UKWCT.

Pat R was on the road from Tofino when a wolf suddenly ran out of the forest and across the road in front of the car. She chose not to report this to the wolf authorities as she was concerned about raising an alarm and possibly contributing to more arguments for a wolf cull. The First Nations people revere the wolves and wish to protect them.

'Northwest of Tofino lays Vargas Island Provincial Park and this attracts hundreds of campers and visitors a year. There have been concerns about high wolf activity and the reports indicate that the wolves are showing increasing interest in campers' food and are coming too close to the campsites at night. There have even been reports of visitors feeding wolves so that they can get better

photographs. This makes the wolves (and other animals) food conditioned and habituated to humans'. There are now guidelines from the British Columbian Conservation Federation for wolf safety:

1. Avoid attracting wolves by having a solid plan for storing your food and cooking equipment day and night.
2. Do not bring pets to Vargas or Flores Islands. Pets attract wolves.
3. Do not clean fish next to your camp. Dispose of carcasses out to sea if possible.
4. NEVER approach wolves. Do not allow a wolf to come any closer than 100metres. Keep your group together and wave hands or make loud noises if they start to approach..
5. If on the water do not approach wolves that are swimming or foraging. Use binoculars for a closer view.
6. Avoid camping or recreating near carcasses. It is important to allow a wolf to feed undisturbed and carcasses are one of their most valuable food sources.

'Not long ago a cougar hunted a child in the Tofino area and another followed a deer into a populated area and my daughter watched as it had to be removed. This has caused many people, quite wrongly, to fear the possibility that wolves could represent a threat to their children. City folk are not accustomed to having large predators visit their back yards! It will be interesting to see how the subject of predator species is dealt with, most specifically the wolves.'

'Some folk think that instead of culling the wolves they should just let the wolves deal with the over population of deer. They reason that when the deer diminish in population the wolves will leave the territory in search of other prey. Will they though?'

'More and more residential development is occurring, the infringement of humans into the historic territory of the wolves. Humans of course look at the wolf as encroaching on their territory, whereas we know the reverse is true! When I first came to Tofino 40 years ago there was forest everywhere and few dwellings. The wolves reigned supreme. Sadly, the opposite is evident today.'

It was a privilege to get an insight into the reality of human/wolf relationships in her area. We have to realise that wolves have a right to live in peace as much as we do.

Wendy Brooker, interviewing Pat R



'Arguments on both sides are coming up re a wolf cull on the Island. Recently there has been an increase in the deer population and wolves have moved into the area in response. This includes populated areas such as Tofino. Wolves are now close to our homes, hunting and killing our dogs. So this seems to be creating a tipping point. Hunting pet dogs lead residents to worry about the possibilities of children being hurt.'



Cross-Fostering: a New Strain of Wolf Conservation

Sometimes legal protection, captive breeding and reintroduction aren't enough to save the endangered wolf.

With a reduced gene pool it's more vulnerable to diseases, deformities, and more likely to cross-breed with other species. Take the hybridisation of red wolves and coyotes, for example, or the Isle Royale pack, whose sickly cub has a hunched posture from in-breeding. Most Scandinavian grey wolves are also descended from just five individuals, meaning that many alpha pairs may now be siblings. Due to quarantine laws, importing or relocating wolves is not always an option, and difficult terrain and culling can make natural migration almost impossible. Thankfully, the above efforts may form a new solution.

Cross-fostering involves adding or swapping pups among packs so that there is more genetic diversity. It can also increase the survival chances of a captive-bred pup, as it would be nursed and socialised by a wild pack and gain a stronger immune system. However, the secretive and territorial nature of wolves make it a risky and challenging process, as Schultz et al. discovered in 2007.

Published in *The Canadian Field-Naturalist*, their study attempted to

place four wild 13-14 week-old pups with a neighbouring pack when their own was relocated after attacking livestock. They were introduced to one another via a shared feeding site, but all but one of the pups was eventually killed by the other wolves or by disease, and the lone survivor was later culled in adulthood.

Happily, the first cross-fostering attempt in Europe was a different story. Scharis and Amundin's 2015 study in *Zoo Biology* placed eight 3-4 day-old pups among packs in Scandinavian zoos, and their survival rate was little different to that of the biological pups. Although it used a small sample size of captive-bred wolves, the study suggested that for greatest success the pups should be no more than eight days younger than their foster siblings, and less than three weeks of age - the period between 3-7 weeks is when wolves begin to recognise their young. Pups were also introduced directly into the mothers' dens. This is easy enough for a pack in captivity, but would this work in the wild?

According to the U.S. Fish and Wildlife Service's red wolf recovery

programme, it's a resounding "yes". By 2010, they had introduced a total of 26 captive-bred red wolf cubs.

Thanks to strict monitoring of the wolves they were able to estimate when and where a pack had given birth, and when the mother was away, added the new pups to the litter. As in Scharis and Amundin's study, they made sure that the pups were of similar age, were less than three weeks old, and as an extra precaution, smeared the foster pups' urine on the wild pups for a consistent scent. In almost all cases, the mother accepted the new young. Unfortunately, there may always be a risk of the fostered wolves being illegally shot or culled later in life, and timing is essential for cross-fostering to work. However, without the legal protection, captive-breeding and reintroduction programmes set up by wolf conservationists, this new method of conservation would not be possible, showing that diversity, both tactical and genetic, is essential for saving wolves from extinction.

Jessica Jacobs

Note from editor: In our next issue we will be exploring the stages of a wolf cub's life, from playing in the den to how they adapt to their role as predator.

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Interview with Sarah Hall, author of *The Wolf Border*



Sarah Hall

What was your starting point for the book?

It was a mixture of things. Most people have an animal they love. Mine was the wolf. I loved to think of wolves wild in Cumbria. I have also lived in North America and so I was interested in eco-systems. People seem to now feel strongly about who owns the environment. What do we owe it, what should we do with our landscapes and how do we affect it? How do human beings grant power over the environment? I am also interested

in animal intelligence and knowing how complex people are, it interested me that Rachel (the main character) botches up all her relationships.

How and where did you conduct your research?

Research is important but narrative is paramount. So I did a little narrative first, then a little research. Also, while researching, other things that interest you often come up. I had a giant book of wolves – too much information really, but it was brilliant. I went to

North America but sadly didn't get to meet the Sawtooth Pack. Then I came to Reading! Vicky Allison, who worked at the Trust at that time, was very helpful. She even proofread the first draft and told me things such as a vet wouldn't need full body protection for a small procedure in the field. However, I kept it in to make it more dramatic. I didn't walk with the wolves though – I wanted to trick my imagination that they were wild and felt that being too close would spoil that. But I still admired how beautiful they were and that they are perfectly made; such perfect proportions.

Did you set out to make Rachel difficult?

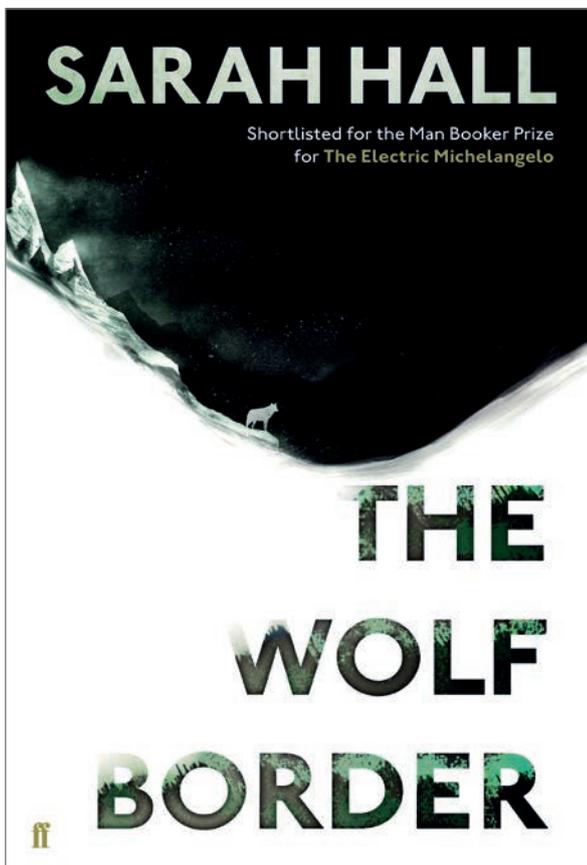
Female characters in so much of literature are often not drawn well or allowed to be difficult. I loved the idea of a woman in an extreme form of work and I was interested in exploring different corners of a woman, all the complexities, including flaws. Having the baby gave her to some extent more patience – she changes. Her relationship with her brother, also a complex character, is also complicated. Their surname is Kane – which is a reference to Kane and Abel, another difficult sibling relationship.

I loved Rachel's mother too – both children were brought up by this strange and promiscuous mother but they become very different.

I was interested in the question of how you raise women in particular to be independent. Binny's type of parenting doesn't always work and in her brother's case it causes damage. I even sent those parts to a psychologist friend to ask if I had got it right – after all, men are complicated too!

Thomas Pennington, the aristocrat, is also an interesting and knotty character!

I was very interested in the powerful aristocratic character who has land, is head of a hierarchy and is part of the power scenario that involves land in Britain. I was thinking of characters like Richard Branson, so rich now they can be benevolent. But does Pennington really want reintroduction



or is he playing, doing a lot of things at once?

Borders are multi-stranded thematically throughout the novel.

Yes, we are moving away from what wilderness is and our 'deeper human experience' is being eroded as a result - as writers like George Monbiot are observing. I grew up in Cumbria and at least had lots of outside, wild experience. There was dark, there was cold and we used candles - it gave me something as a writer and as a person. That upbringing, that sense of wildness now seems exotic because we have so little of it. Are we more 'civilised'? Can we really be civilised if we continue to hack into that space? That's why the

Scottish debate on reintroduction was so fascinating to me - bringing back predators, changing the landscape. I re-imagined of course - the estate I use is huge and no single estate currently has that amount of land. I invented the Game Enclosure Act to get around the issue of live prey.

The ending, for me, was perfect.

I don't think we know what will happen in perhaps 30 years - maybe the public will be more open to it. Do we hold up our hands and say that sheep farming is over? In Scotland the smallest number of people own the most amount of land.

Where next for you, Sarah?

A collection of short stories next year or possibly 2017. There are a few ideas for future novels swirling around too...

Thank you for your time.

Sarah Hall was born in Cumbria and has accumulated many awards for her work, including a Betty Trask Award and Commonwealth Writers' Prize for Haweswater. The Electric Michelangelo was shortlisted for the Man Booker Prize, The Carhullan Army won the 2006/07 John Llewellyn Rhys Prize.

Julia Bohanna

The Wolf Border is out now in paperback from Faber & Faber, £8.99. Now in stock.

Zoe's Rescue Zoo The Wild Wolf Pup

Published by Nosy Crow
Paperback 115pp
RRP **£4.99** ISBN: 978-0-85763-518-1

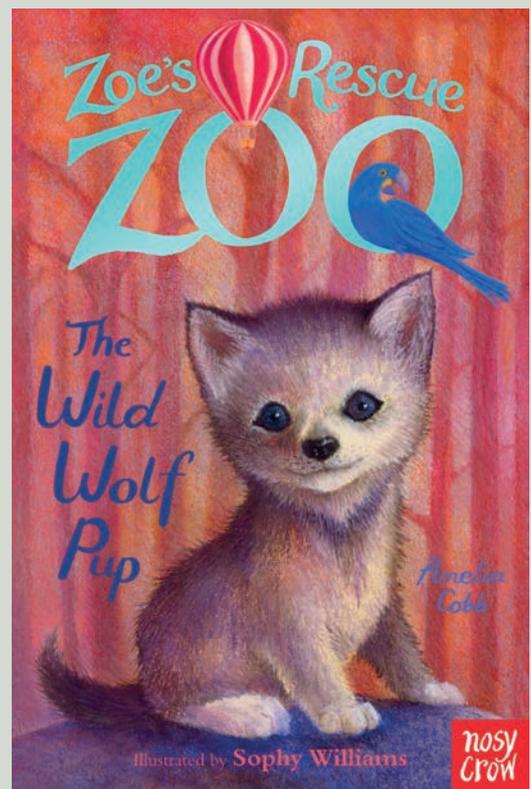
Zoe's Rescue Zoo is a series of books for younger children with an upbeat, gently educational focus on specific animals. This one concentrates on a rescued wolf cub, later named Shadow, who has been separated from his pack in Alaska after a forest fire.

The protagonist Zoe is a perfect little conservationist, wearing a necklace given to her by trusted Grand Uncle Horace (everyone should have a gorgeously bonkers relative like this) so that she can open every door and gate in the Rescue Zoo. She can also, Doctor Dolittle style, communicate with any of the zoo's inmates.

Little Shadow is a very good representation of a cub: destructive, playful and most of all, eager to be reunited with his family. I loved the idea of him playing with ice cubes, as wolves in the wild have been shown to play quite happily with ice

and snow. There was also a charming little subplot about dressing up for Halloween and raising some money to give Shadow the best surprise he could possibly hope for in life. The Wild Wolf Pup has lots of dialogue to keep the whole thing dynamic and engaging for a younger reader. There are a number of other characters, such as grumpy and equally grumpily-named Mr Pinch the Zoo Manager and a mischievous lemur with a perfectly onomatopoeiac name: Meep.

Zoe's positivity, enthusiasm, kindness and her passion for all living things will make this a popular choice for many children and their parents. Eight neat chapters could also make it perfect bedtime reading for a parent to read to their offspring, too -



perhaps even for very young children. Any would-be actors would be thrilled to attempt all the different voices. I don't have a particular problem with the anthropomorphic element; at this age there is no harm in creatures being cute. A sweet and sincere book for little lovers of all things lupine.

Now in stock.



Spirit of The Wolves

By Dorothy Hearst

Published by Simon & Schuster

Paperback 368pp

RRP £7.99 ISBN-13: 978-1847373281

This is the third book in Dorothy Hearst's captivating Wolf Chronicles trilogy. The first two books (*Promise of The Wolves* and *Secrets of The Wolves*) left me wanting to sit up all night and see what happens in the next installment. Dorothy Hearst has an amazing gift of identifying with her characters; they spring to life as you get deeper and deeper into the story. She has admitted that there is a little bit of herself in some of the characters. She also has a very clear insight into wolf behaviour. The author notes:

"The story would be told by a young wolf, Kaala, who had to make a great choice and a great sacrifice, and that this wolf would have the potential to change the world. I knew she would befriend a human, and that she would get into a lot of trouble for that... there was a young male wolf who was her best friend and who someday might become more."

"The young wolf's voice was very insistent, so I started to type Kaala. She hasn't stopped talking to me since. Wolves can't type very well (they keep hitting the space bar when they don't mean to) so they needed someone to tell their story. I was that person."

"The Wolf Chronicles are based on the fascinating theory of wolf-human and dog-human coevolution. (Stephen Budiansky's *The Truth About Dogs*) and, after a lot more reading, the theory of coevolution became the centrepiece of the series. I have always been fascinated by human evolution, and especially by the great gaps in our knowledge about it. There are a few points in human evolution at which we made a great leap forward

culturally with no corresponding physical change, and I love to theorise about why that might have been; could wolves have met up with humans during those times and given them the knowledge to hunt, create tools, fight etc?"

The series began fourteen thousand years ago at the end of the Ice Age, in what is now Europe, where cub Kaala was born destined to save humankind. Wide Valley wolves' rules were clear: *Never consort with humans; never kill a human unprovoked; never allow a mixed blood wolf to live.* Kaala's mother had mated with an outsider, so all her cubs must die. The dominant male kills Kaala's sisters and her beloved brother – then comes to kill her. The Greatwolves, who speak directly to the ancients and to whom all wolves must answer, come to her rescue, knowing that she alone could form a link with humans and save them from destroying the world around them.

In the second book of the series, Kaala came to understand her destiny. The spirited young she-wolf, a rule-breaker, struggled to earn her place in the Swift River Pack, but was drawn irresistibly towards forbidden humans. She saves the life of a human girl and puts her hard-won place in the pack at risk. The responsibility of keeping peace between wolf and humankind falls to her. Together with her pack, the endangered human girl and an obnoxious raven, Kaala must help

THE WOLF CHRONICLES

DOROTHY HEARST



SPIRIT OF THE WOLVES

wolves and humans of the valley to live in harmony. If they succeed, Kaala will at last prove herself worthy of her pack. If they fail, the Greatwolves who have a secret agenda unknown to Kaala, will destroy them all.

In *Spirit of the Wolves* Kaala has one last chance to keep the peace between humans and wolves and avoid war. She leaves her home in the Wide Valley with her packmates, the human girl she loves and the raven, to face grave new challenges in the land outside the valley. Only by using all her strength and relying on the bonds of love with her companions can she hope to be triumphant. Kaala will have to fight and sacrifice in ways she never imagined in order to get peace. Will she and her companions succeed?

My only wish is that one day Dorothy Hearst will come to the Trust to meet our Tala who is so like her Kaala.

"*Journey of the Wolves*" will be the fourth in the series.

Wendy Brooker

The Wolf Wilder

By Katherine Rundell

Illustrations by Gelrev Ongbico

Published by Bloomsbury

Hardback 319pp

RRP £12.99 ISBN: 978-1-4088-6258-2

'A real wolf runs in the way that a thunderstorm would run if it had legs'.

Once upon a time a hundred years ago, there was a dark and stormy girl. In that intriguing opening line, we meet the daughter of a wolf wilder: the funny, courageous and feisty Feodora Petrovna, or Feo. There is a covert need for the wolf wilders, as in this novel the spoilt rich in Russia use wolves as status symbols and attempt to domesticate them, even teach them tricks. Inevitably, the wolves rebel; Feo and her mother are there to take those confused and cruelly treated creatures deep into the forest and return them

to a natural state.

Feo is more than a little wild and witchy herself:

her friends are wolves, she runs with them and even when she meets humans she likes, such as the young soldier Ilya, everything goes back to the wolves. She thinks about the soldier turning away from his profession: *'He's in the pack. He's learning to be wild.'* A baby has *'hair as soft as wolf fur'*. Her love for her animals permeates everything, is everything.

Feo has an enemy though, the vile General Rakov – 'the tsar's favoured officer'.

When he kidnaps her beautiful mother, she has to ride her wolves to the rescue. She has three adult wolves with her: Grey, White and the bad-tempered Black. The book has shadowy illustrations in those three very shades, which works very cleverly. The wolves weave like ghosts through the narrative and at other times, they are extremely visceral. There is a tiny cub too so we see the nurturing side of Feo, her fierce need to protect and conserve. Onward she goes with friend Ilya and the pack. To the city, to find her mother.

I was struck by how immediately Feo ingrains herself in your heart,

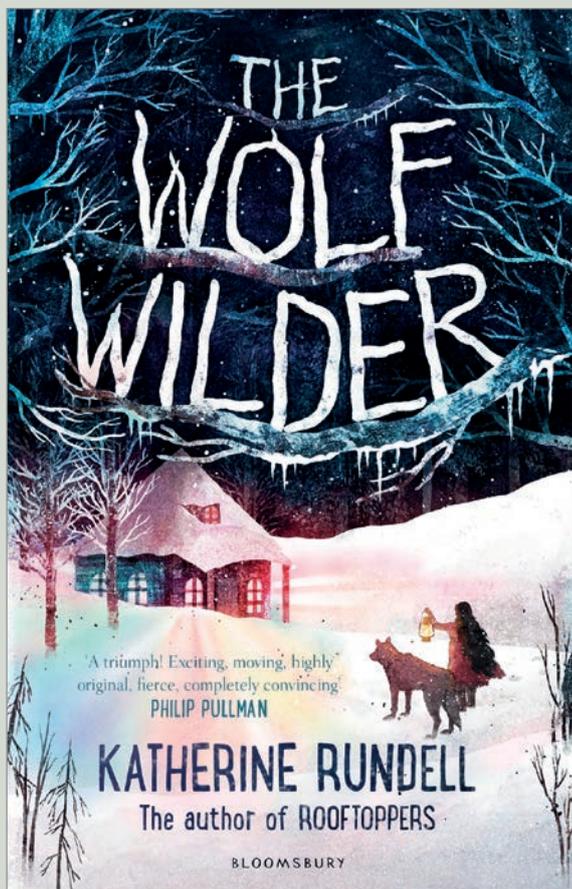


as a true heroine who is humorous, steadfast and honourable, often with an old woman's head on a young body: *'She felt some of the grey weight of the day lift off her stomach.'*

The narrative has enormous immediacy and her young soldier companion complements Feo well, although she is always in control. It reads so much like a good, compelling Russian novel and it is not just the Cossacks, cold or whispered cries of Lapushka (darling)—there is a sense of hunger, the rumblings of revolution, the pride of the poor and the sense of melancholy and danger. It is tempered perhaps for a younger audience but we are all too aware of death, of brutality and injustice. You cannot help but feel the awe and respect the writer feels for the magic of the wolf, how they are *'the witches of the animal world'*. There were numerous acutely elegiac observations, such as: *'A real wolf runs in the way that a thunderstorm would run if it had legs'*.

Add music, dancing and the intensity of emotion – *'she wept as if the world itself had broken'* – The Wolf Wilder forms lucid images that dance in the mind – particularly with the deeply affecting ending. It does some wonders with language and makes you want to put on thick boots and run into the forest, just in case you can glimpse Feo and her gorgeous companions. It definitely has the makings of a classic.

Julia Bohanna



Gifts, clothing and wolfy souvenirs



Pewter Lapel Pin

£4.50

A pewter lapel pin supplied by Cadogan. Size 4cm. Presented on cardboard backing.

Wolf Face Cushion

£14.75

A wolf face cushion with insert that is printed on one side only & soft plush polyester fabric. Back of cushion is plain beige material. Size 50cm square.



Protection Spell Lavender Incense Sticks

£3.49

A pack of 20 Lavender Spell Incense sticks by Lisa Parker.



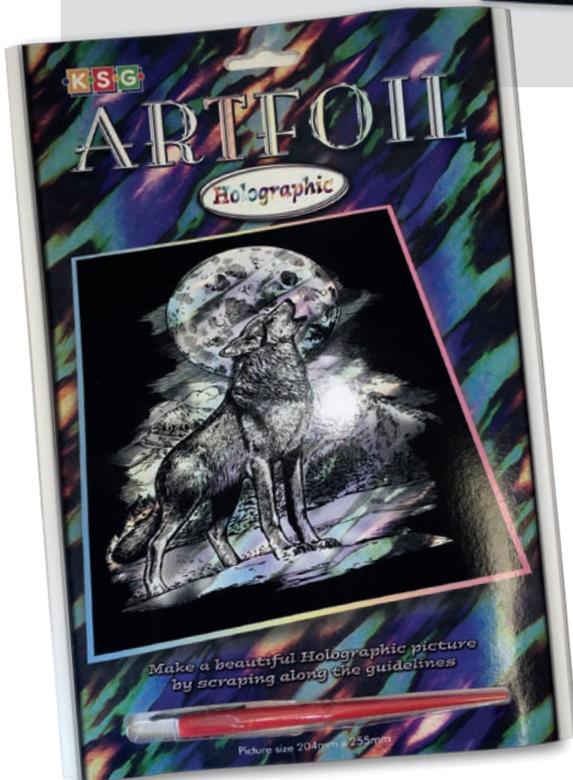
Ascending Song Trinket Box **£4.99**

A pottery trinket box with hinged lid featuring Ascending Song picture on lid. Metallic patterned edging to base & lid. 5.5cm.



Wolf Holographic Arfoil **£4.49**

A scraperfoil holographic picture of wolf howling under a moon. Pack includes scraper blade, handle & illustration. Size 20.4cm x 25.5cm



To view and order any of these items and our other stationery, clothing, books, gifts and souvenirs, visit our online shop at www.ukwolf.org or call 0118 971 3330.

Please note: all UK orders are subject to a minimum P&P charge of £4.50. For overseas orders, please contact us.



Wolf spinning decoration £4.60

A tealight-powered wolf metal spinning decoration. Height 14cm, Width 6.5cm, Depth 6.5cm. Tealight not included.

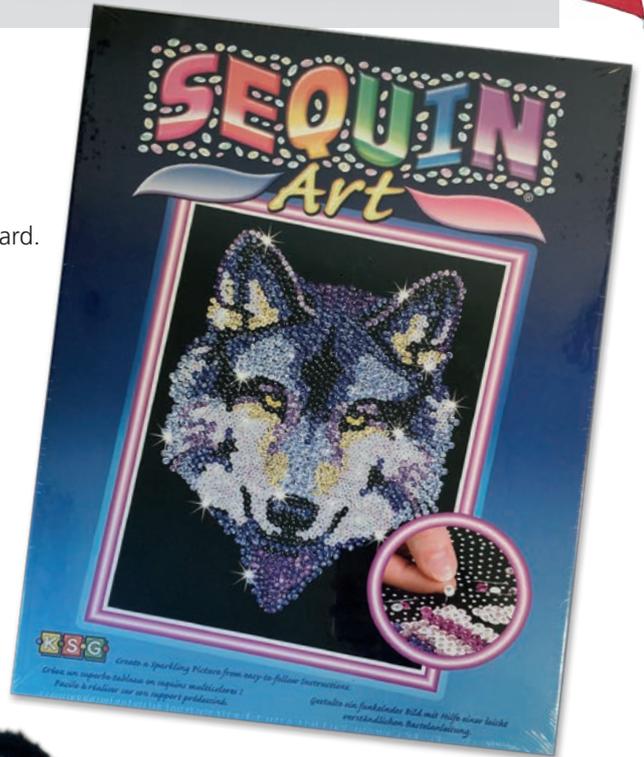


UKWCT Umbrella £12.00

An umbrella designed by the Trust. Alternate panels have the silhouette of a wolf in black printed on it. Available in two colours red or lime green. Collapsible with a soft carry case.

Wolf Sequin Art £15.00

Create a stunning sequin art picture. Full instructions included. Push pins through sequin into black covered board. Size 25cm x 34cm.



Pewter Cufflinks £15.00

Pewter cufflinks supplied by Cadogan. Comes in velveteen display box. Wolf size 4cm.



Children's Wolf Hat £8.75

A children's grey & white wolf hat made by Ravensden. Not suitable for under 18 months old as it has detachable eyes.



50cm Suma Wolf £25.00

A supersoft plush wolf toy by Suma Collection. Wolf is in a lying down pose. Grey wolf body with tan feet, white chest & face in grey, tan & white. Not suitable for small children as it has detachable nose & eyes.



Howl Nights

Feel your backbone tingle and your ears vibrate with the sound of the wolves howling. The evening starts with a presentation on wolf communication; you will then go on a tour of the Trust and have the

opportunity to let out a howl and see if the wolves respond! (Don't forget to dress up warmly for an evening under the stars). The event usually finishes from around 9 to 9.30pm.

8th April, 29th April, 3rd June and 2nd September, 7pm – 9.30pm

£10 per person. Age 8+ – BOOKING ESSENTIAL.



Wolf Viewing & Bat Walk

- Tour the Trust and see the wolves up close
- Wolf photography opportunities and howling session
- Presentation by an expert on the life of bats in the UK
- Walk round the Trust at dusk to see long-eared bats flying

The Trust is home to many bats, many of which live in nesting boxes on trees.

21st May, 18th June and 16th July

£15 per person. Age 8+ – Booking essential.

Note: Please check the website for start times as they vary throughout the year.

UKWCT Wolf Centre 'Visit Wednesdays'

Visit Wednesdays give you the opportunity to come and see the Trust without pre-booking, unlike our other events. You will be able to observe our ten very charismatic wolves – from our three Arctics with their amazing white coats, to our enigmatic black Canadian wolves – and have a guided tour with one of our knowledgeable volunteers.

There will be fantastic photographic views of the wolves in their large, natural-looking enclosures and you'll have access to the raised photographic platform on site. Hear them howling during the day and watch them being fed at 2pm. We have picnic areas for warmer days, a gift shop for you to browse for books and souvenirs, and plenty of free parking.

Wednesdays – Open from 11am to 4pm

ADMISSION: Adults – £8; Members, children (age 3-12) & OAPs – £5; Children under 3 – FREE. Tickets on the gate only. Sorry, no dogs on site.





Arctic Amble

Enjoy a walk with our magnificent Arctic wolves and the wonderful photographic opportunities they provide. View all of the Trust's wolves and spend time getting to know the handlers who work with these amazing animals. Afterwards, there will be time to shop for a wolfy souvenir!

**Check website for future dates,
9am – 11am**
£60 per person. Maximum 16 people.
Age 18+ – BOOKING ESSENTIAL.

Wolf Keeper Experience Days

See behind the scenes at the Trust and shadow the keeper in his daily tasks including cleaning out the wolf enclosures, preparing food and feeding the wolves. Learn more about the Trust and the worldwide wolf conservation projects it supports. Get involved in our wolf enrichment programme, walk with a wolf, snap up great photo opportunities, watch our resident kites circling overhead at feeding time and receive a souvenir event certificate of your day.

Make sure to bring your own lunch, tea and coffee will be provided.



Tuesdays, 10am–4pm, from June onwards.

Please check website for dates.

£150 per person. Maximum 8 people per day. Age 18+ – BOOKING ESSENTIAL.



THE ULTIMATE WOLF DAY: a magical lupine experience

- Spend an amazing day at the UKWCT in the company of our ten wolves
- Walk with **BOTH** the Arctic and Canadian wolves
- The day involves **TWO** walks, allowing you to observe the wolves while they investigate the countryside around the Trust
- Photograph the wolves as they: interact with each other, investigate various scents, paddle in the pond or stream and howl to the other wolves left behind
- Together with our experts, you will then feed the wolves and get involved with our wolf enrichment programme
- See close up how we care for these magnificent animals
- Learn about the worldwide projects currently supported by the UKWCT and in the last twenty years

Make sure to bring your own lunch, tea and coffee will be provided.



Check website for future dates, 10am to 3.30pm
£175 per person, £300 for 2 people. Limited spaces. Age 18+.

Wolf Discovery Day

Spend the whole day studying in depth wolf behaviour close up by observing and getting involved with the welfare of our ten resident wolves. Learn about wolf pack structure, our wolves' personalities and take close up photos.



You will have the opportunity to:

- Listen to a presentation about wolf behaviour.
- Learn personal information on our ten resident wolves.
- Prepare their food and feed the wolves.
- Take part in our enrichment programme for the wolves, which differs daily and observe the behaviours shown. Learn how we keep our wolves healthy and happy.
- Have a tour inside one of our enclosures whilst the wolves are in a different holding area and learn about the habitat we keep our wolves in.
- Undertake wolf tracking and learn how to use our telemetry equipment with our wolf keeper Mike, who has tracked wolves in the wild.
- Have a howling session to encourage the wolves to howl back.
- Have a wrap up presentation about the projects we support. Learn what needs to happen for wolves and humans to coexist in the future.
- Close up photo opportunities throughout the day.

Make sure to bring your own lunch, tea and coffee will be provided.

Thursday 5th May and 19th May, 10am – 4pm £90 Per person. Age 18+.

