

Vincent Wildlife News



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A new and exciting study on polecats is now underway

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The latest on the three Bechstein's living on a Dorset Wildlife Reserve

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Welcome

from The Vincent Wildlife Trust CEO, Natalie Buttriss



If I had expected 2016 to be a little quieter following our 40th Anniversary celebrations last year, I was seriously mistaken. The year started with an exciting step forward for the Trust. Following funding from the Esmée Fairbairn Foundation, we announced the recruitment of new Programme Managers – one for bats and the other for mustelids. The appointment of Anita Glover and Steve Carter in these positions increases the

capacity of the Trust and builds on the great work already being done by current staff and volunteers.

Developing our core mammal conservation programmes will enable us to 'reach out' more in future years. Not that we have been sitting back of late! Our media coverage continues to be at a national level, with autumn slots on BBC's Countryfile, Channel 4 News and S4C's Garddio a Mwy. We were one of 53 organisations involved in the production and launch of the State of Nature Report – in which our Pine Marten Recovery project was a case study. As a member of Wales Environment Link, we were involved in a Species Champion initiative and recruited Simon Thomas AM to champion the pine marten. Our partnerships with other organisations continue to thrive, and of late we have been turning our attention to further engage with the landowning and game-keeping sectors in the interests of long-term mammal conservation. Those we have approached have responded positively and many productive conversations and long-term relationships have developed.

These are all signs that bode well for the future of the VWT in leading scientifically sound conservation work which focuses on solutions in the field. Although our work is primarily focused on the UK and Ireland, being experts in a niche area inevitably requires us to contribute to a more international agenda. Earlier in the year, I was fortunate enough to be invited to Romania to see some of the interesting conservation work going on there. And in the Autumn, I was invited to the North American Festival of Wales in Calgary. Both experiences reinforced my knowledge that, despite being a relatively small organisation, the Trust can have a big impact internationally. We will continue to ensure that we can punch above our weight to conserve the smaller mammals in need in the world, both at home and abroad.

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We have successfully translocated another 19 pine martens from Scotland to Wales this year as part of our Pine Marten Recovery Project.



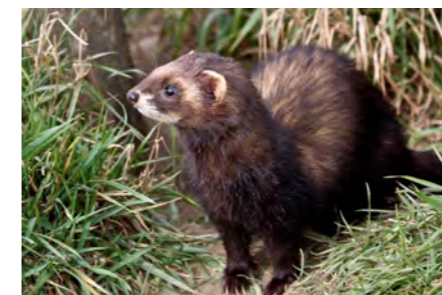
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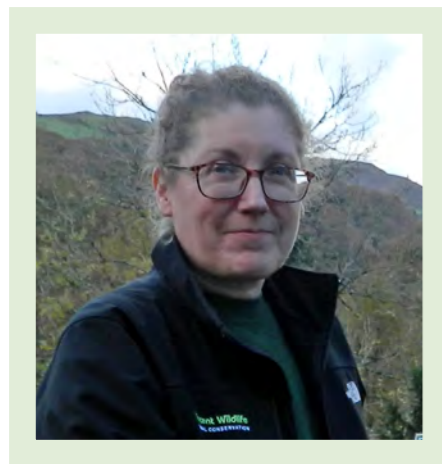
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Saving a native species

by Jenny MacPherson, Pine Marten Project Manager

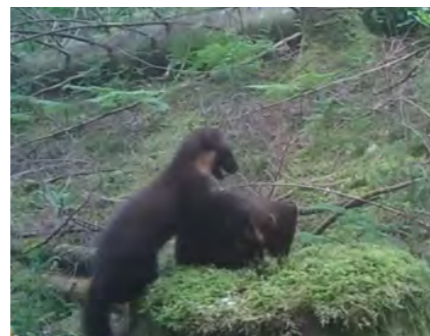


After the excitement of finding our first Welsh born pine marten kits in early summer, there was more good news. Josie, our Field Assistant, managed to track down another female, PM13, who had moved a little way north of the release area. Josie put some baited cameras out to check on her and was rewarded with footage of PM13, together with her very large and boisterous new kit.

This meant that at least half of our remaining females successfully bred in the first year, which is a huge bonus. Once the kits were weaned, we were able to start re-trapping the adult martens to weigh and check them and remove their radio-collars before the batteries ran down. We expected some animals to be easier to trap than others and this proved to be the case. PM07, affectionately known as Miss Piggy, has been very food motivated since we first met her in Scotland. She was seen to take not only the supplementary food that was put out at her release site but also what had been put out for some of the other martens that were released after her. Predictably, she was one of the three animals re-trapped on the first day! Some of the others were rather more challenging, but we have now retrieved thirteen of the twenty collars from the first

batch of animals. All of those re-trapped so far have been in good condition and have put on weight since their release.

The summer seemed to fly by, and soon it was time to begin trapping and translocating the next tranche of pine martens from Scotland. Lizzie, our Mustelid Conservation Officer, and I headed north in the middle of August to set out the first trap sites and begin pre-baiting



Top: The 'Pinewood' pine marten (credit Henry Schofield) Above: PM13 (radio-collared) trying to eat while her kit would rather play.



Above: Hannah Bathgate, Peter Struthers, Lizzie Croose and Becky Cantle. Above right: Karis rebaiting a trap (credit Nick Upton)

ahead of trapping commencing at the start of September. We were extremely lucky to have the help of some keen local volunteers, including Matt Wilson, Lewis Pate and a team of trainee rangers from the Nevis Landscape Partnership (seen above). We also welcomed Karis Hodgson to the trapping team this year on her first trip to Scotland.

Trapping began in earnest at the beginning of September. On arrival at the house (called "Pinewood") that was to be our base for the next few weeks, we noticed a fresh pine marten scat outside the front door, which we took to be a good omen. This turned out to be from a pine marten that was resident in the woods behind the house, and, according to the house owner, could be a bit of a nuisance and often went through the bins - until marten proof lids were fitted to the bins. We never saw the marten doing this, but Henry Schofield, our Conservation and Science Manager, set up one of his cameras for a few nights and took some lovely photographs of it.

After helping the team from Chester Zoo to put up the soft

Right: PM25 takes his first steps to explore his new home in Wales (credit Nick Upton).



release pens, Dave and Josie took a break from preparing the Welsh sites to come up to Scotland for the first round of trapping and to transport the first batch of martens back down to Wales. These came from the Morvern peninsula, which meant that the start of the martens' journey to their new home involved a short crossing on the Corran ferry.

Trapping went very well throughout September, with the exception of a couple of minor hitches. At one site we had to move the location of some of the traps that had been disturbed during

pre-baiting and, on checking our cameras, found that the culprits were wild boar. Another day we arrived to re-bait and there was a music 'rave' going on in the forest, fortunately away from where we planning to trap, but the music could be heard from some distance. Luckily, it didn't seem to have deterred the pine martens from visiting our traps, as the bait had gone from most of them. By early October, we had safely translocated another 19 martens (nine females and ten males) to the release sites in Wales, and then the hard work of keeping track of all of them began.



Radio-tracking in Wales

by David Bavin, Pine Marten Project Officer



We recently finished the second tranche of our pine marten translocation, and so far all 19 have made it through the most dangerous period of their establishment where they travel extensively and expose themselves to the most risk. Though still nerve wracking, this year's releases have felt much less stressful; after the previous year of tracking, we have a good deal of experience under our belts. This doesn't mean we can relax – the martens keep us on our toes – but it does mean we have a better idea of how and where the martens like to travel. We currently have regular tabs on the majority of animals, with just a couple slipping through our net and getting lost in the haystack. We are tracking every night however, and from what we learnt last year, the martens tend to stay put in a spot they deem suitable through the winter months, stretching their legs in the spring. Last year this tended to be within 20km of the release site, so we are confident that we will find the AWOL animals with some concerted search effort.

Last year, most of the available woodland around the release site

became occupied, and remains occupied by those first year animals. We have re-caught most of them to remove their collars, and have been relieved to find them in good condition; healthy and heavy. This does mean, however, that this year's releases have had to spread further afield to find vacant woodlands, often being channelled coastward by the east-west valleys, and over the Cambrian mountains to the east. As we hoped, the gaps that didn't



site by PM01! With the entirety of Wales (and possibly north-west England!) to hide in, he is successfully evading us. I recently found PM16, a female from the first tranche, in a beautifully rugged patch of ancient woodland that constitutes the NRW reserve Allt Rhyd y Groes, south west of Llyn Brianne. What makes this so satisfying is that I identified the site as being ideal for pine martens around three years ago, and put up den boxes just in case! We also had

get filled in last year have now been filled, and we have resident animals on the Hafod estate, our core site, which remained unoccupied last year after a string of illegal fox hunts.

We are still rounding up some of last year's martens; when faced with a blank canvas, some of the very first releases roamed far and wide in the spring – the record stands at 100km from the release

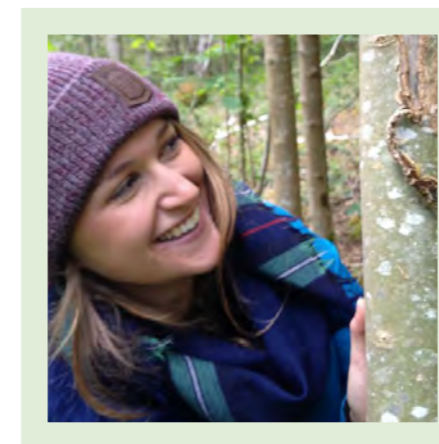
Above: David Bavin and Josie Bridges setting up a camera trap whilst radio-tracking in mid Wales (credit Nick Upton)

a very reliable sighting from the same woodland by an experienced observer before we bought our martens down; perhaps she has found a mate down there... There is a lot to discover, and I am sure there will be many more surprises to come!



Pine martens and grey squirrels

by Catherine McNicol, PhD Student



I am continuing to investigate the impact of the native pine marten on the invasive grey squirrel. Working alongside the pine marten team in Wales, I have been collaring and tracking grey squirrel movement since September 2015. The aim of this study is to reveal any spatial responses of the squirrels to the presence of a 'novel' predator. At this stage, it is too early to draw any firm conclusions on the interactions occurring. This is three-year study and although the second field season is coming to a close, there

is still a lot of data to analyse. As a general observation, I feel that the trapping success close to pine marten release sites has declined since last year. However, this may be entirely due to the high abundance of natural food and the relatively mild conditions this autumn. Preliminary results suggest there may be some interesting interactions occurring, but until data has been processed from this year I shall be keeping my cards close to my chest.

Another aspect of my work is to investigate the change in pine marten diet as a result of translocation. The VWT team and I have been working hard to collect pine marten diet samples in both Scotland in Wales, providing us with freezers full of interesting animals. Further to this we have also been collecting pine marten scats. No doubt these samples will keep me busy in the lab over the winter months.

The dry and unseasonably warm conditions this autumn have made field work thoroughly enjoyable. Trapping by-catch this year has continued to surprise me, from polecats to pine martens, hedgehogs to hares and rats to robins, I am never sure what to expect. I hope that the next six months give me some concrete findings which I will be able to share in my next update.

Above: The Hafod Estate is one the areas in which Cat is working. Below: Cat's by-catch included one of our translocated pine martens.



Building a bib-liography

by Josie Bridges, Pine Marten Project Field Assistant



It is difficult to believe that a whole year has passed since the first martens arrived on Welsh soil.

This year the Welsh radio-tracking team (David and I) had the opportunity to come up to Scotland and experience the whole trapping and translocating process. Last year we were non-stop in Wales and so didn't get the chance

to see the Scottish side of things. As a result, it was decided that we would spend the week before the translocation started setting up and pre-baiting trap sites, and then drive the first four animals across the border and deliver them safely to their release pens. It was exciting to see the process of how the animals were tempted into the sites and then trapped, and to actually see the martens up close; in Wales our sightings are few and far between. I was less excited and more anxious about the trip back to Wales. The responsibility of having four martens to drive 500 miles through the night was a little worrying. Fortunately, everything went exactly as expected, bar some pretty heavy fog on the M6, and being able to stop every few hours to feed the martens was such a highlight.



Above: Josie radio-tracking (credit Nick Upton)
Below: Setting up the pine marten release pen with Chester Zoo.

Since then we have been settling back into Wales and back into the nocturnal routines of radio-tracking again, and so far the animals this year have been much more settled from the outset. We expected this and suspect it is because the newly translocated martens can detect last year's individuals and have started to set up territories around them, rather than exploring everywhere and anywhere before settling (as last year's did). Compared to the frantic nights of searching and stress last year, everything seems to have been relatively relaxed over the last two months. We are also trialling some new GPS collars this year which we hope will have greater success in the often complex Welsh landscape. These should be able to give us some interesting fine-scale movement data on where our new animals are travelling to.

For the majority of the last year, we have been able to keep track of our animals with their VHF radio-collars, and it was very reassuring to be able to get a signal on them each day and know that they

were alive and in suitable areas of woodland with plenty of food and shelter. As we have re-trapped more and more of phase one's animals, and removed their collars, it has been getting increasingly difficult to let go of the constant contact we are used to having with them. We have followed these animals almost every day since their release and now to have to go back to 'old school' methods to keep in contact with them has been challenging. We still have camera traps out for some of our regulars from last year, and it is heartening to often get footage of them looking truly wild without their collars. It is getting trickier to tell the individuals apart, however, and on camera we have to rely on getting a decent shot of their bib markings. All martens have individual bibs (the orangey-cream fur around their throats) and we photographed our marten's bibs as they were having their collars put on, so we could compare it to any future footage of martens out in the wild in Wales. We are compiling a 'bib-liography' of good quality wild bib shots of our martens so when local members of the public spot one of our martens or get it on camera (which is starting to happen!) then we can send them pictures with which to compare.

Beyond the tracking, we have also been giving many talks locally and in October I attended Manchester Science Fair as a part of Chester Zoo's Act for Wildlife team. The Act for Wildlife team were responsible for building the martens' release pens and have put a huge amount of hours and effort into our project, so it was lovely to be able to repay the favour and lend them a hand. The Science Fair is held every year at the Museum of



Science and Industry and focuses on new innovative and interactive science that will encourage and inspire young people. We were set up in the steam room of the museum, which is a huge disused railway station. This meant I could hide a radio-collar on the opposite side of the room and send off interested people to find it using only the radio-tracking equipment. This proved very popular and although we complain that the Welsh landscape is the hardest terrain to track in, I am forced to admit that a huge echo-filled room made mostly of steel and full of hundreds of people is much more difficult!

We also gave visitors a chance to play our 'bib-liography' game, where they could match up our ID bib shots of animals with wild camera trap footage and stills. And of course we brought along Scotty, our taxidermy pine marten, who was a hit as ever. People who have never heard of martens are always



Above: Photographs from the Manchester Science Fair.

surprised by how big he is. By contrast, people who do know of pine martens are often surprised by how small he is: martens are so rarely seen in the wild that often the only reference is video footage and photographs which can often make them seem bigger than they actually are – which is about the size of a small domestic cat.



Pine marten symposium

by Kate McAney, Mammal Development Manager (Ireland)



In February, Dave Tosh, National Museum of Northern Ireland, and I took it upon ourselves to organise the 2nd All-Ireland Pine Marten Symposium. As Dave had been working on projects involving both the pine marten and red squirrel in the Armagh area, we decided it would be worthwhile to have the 2nd symposium there. Fast forward to October 14th when the audio visual theatre of the Tí Chulainn Cultural Activity Centre in south Armagh was packed to

the rafters with speakers and delegates from all over the island of Ireland and from England, Wales, Scotland and France. The idea to hold the event at the Tí Chulainn Centre was suggested by Therese Hamill, the Ring of Gullion Area of Outstanding Natural Beauty Officer, who quickly became the third person on our organising committee. Financial support was provided by Newry Mourne and Down District Council, the Ring of Gullion Landscape Partnership, the Heritage Lottery Fund and The Vincent Wildlife Trust.

Once the venue and date for the symposium had been decided, the next important task was to advertise the event and how better than to have an eye catching logo that featured the image of the pine marten but also that of the surrounding area. This was designed by Helen Kidwell,

Communications Assistant with the VWT, who skilfully adapted the iconic Ring of Gullion logo to enclose an image of a pine marten.

Before describing some of the scientific presentations and demonstrations that comprised this two-day event, it's probably necessary to say a little about The Ring of Gullion because, as one delegate commented when invited to attend, 'How could I resist visiting a place that sounds so Tolkien!'. Slieve Gullion rises 576m above its surroundings, dominates the landscape of south Armagh and lies at the heart of a volcanic centre that was active around 58 million years ago. The ring of hills that surround Slieve Gullion follow a circular fracture in the Earth's crust and is an unique geological landform in Ireland and Britain.

Above: Organisers and speakers from the 2nd All-Ireland Pine Marten Symposium.

The 2nd Pine Marten Symposium, although a less explosive event, was nonetheless a dynamic affair. Thirteen speakers presented oral papers on the first day that described practical conservation measures, management issues, research into diet, interactions with other species, distribution studies and the use of DNA analysis for long-term monitoring of populations. Delegates shared their own experiences and concerns on a variety of issues during question time, highlighting the need for ongoing research and dialogue.

The first paper was delivered by Allan Bantick OBE (Cairngorm Wildlife) and provided a valuable insight into how humans and carnivores can live side by side, either when the latter are reintroduced to their former territory or, as is the case with the pine marten in Ireland, when the population recovers unassisted. One of the issues regularly raised in relation to the pine marten in Ireland is the threat it poses to game fowl held in pens prior to release. The VWT has been working with the Kilcormac Gun Cub in a

joint project to test the efficacy of electrical poultry netting at pheasant pens as an additional deterrent to predators, including the marten. Kevin Sadler, a member of the gun club, reported the results of this study to the symposium and presented video footage that clearly showed both foxes and pine martens detecting the live current and quickly leaving the area of the pen - no pheasants were lost to predators between the months of June and September while the netting was in use.

Claire Poirson (Coordination Mammalogique du Nord de la France) described the work that her organisation is undertaking to protect the pine marten, which involves gathering data on its distribution, protecting its habitat and raising awareness about the species. Claire's group are erecting artificial den boxes as a conservation measure and this topic formed the basis of a workshop on the second day presented by Johnny Birks (Swift Ecology), John Martin (MyotisMart Ltd) and Dave, which also involved delegates travelling out to Slieve Gullion Forest Park for a practical

demonstration on the health and safety issues to consider when erecting such boxes.



Above: Johnny and John running the workshop on den box safety. Below: The Ring of Gullion Area of Outstanding Natural Beauty.

During the course of the symposium, delegates were able to view the rich artwork created by school children from St. Mary's School in Mullaghbane. The children had participated in a pine marten themed art competition, the results of which lined the walls of the centre and featured some very vivid depictions of the interactions between martens, red and grey squirrels! The competition was sponsored by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, as was a range of cultural events on the Friday evening, including a lecture on the area's rich archaeological heritage by Una Walsh and music, dancing and storytelling by The Ring of Gullion Traditional Arts Partnership and members of the band Bothán.

There will be a 3rd All-Ireland Pine Marten Symposium and, although the date and venue have not yet been identified, what is known at this point is that the success of the event in south Armagh will be difficult to repeat.



New faces at the VWT

Steve Carter, Mustelid Programme Manager



I am delighted to have joined the VWT in September of this year as the Mustelid (weasel family) Programme Manager, one of two new roles for the Trust made possible through a generous grant from the Esmée Fairbairn Foundation. My main role will be to manage and develop the

Mustelid programme, which is currently focused on the Pine Marten Recovery Project and a study of the threats that polecats may face as the UK population returns to its former range. During my first two months at the Trust, I have been fortunate to have had hands-on experience with both projects, assisting the team with the capture and transportation of wild-caught pine martens from the Scottish Highlands to a release site in mid Wales, and with the capture and radio-collaring of polecats.

Prior to joining the Trust, I worked on a number of mammal conservation projects, from dormice to pine martens, whilst based at Royal Holloway University

of London. Following completion of a PhD on the impacts of introduced predators on endangered species in the UK and on Mauritius, I spent 12 years studying badgers, the largest of the UK mustelids, principally working on the development and field deployment of TB vaccines for badgers whilst at the Animal and Plant Health Agency. However, I have always had a particular interest in the smaller members of this fascinating, elusive and challenging guild of predators and I look forward to working with the team to further improve the conservation prospects of pine martens and polecats, as well as getting to grips with their less well-studied relatives, stoats and weasels.

Anita Glover, Bat Programme Manager



This summer, I joined the VWT as its Bat Programme Manager - so I am Steve's counterpart, managing the VWT's programme of bat conservation and research. This is an exciting time for the VWT, as the new roles are providing the capacity to build on past success and develop the Trust's work in new directions.

My interest in bats started as an undergraduate zoologist, when I had the opportunity to work on bat research projects in Scotland and Madagascar. I carried out my PhD research on the ecology of cave roosting bats in the Yorkshire Dales, at the University of Leeds, becoming a keen caver along the way. Prior to the VWT, I worked at the University of Leeds on a range of knowledge exchange and impact projects, from habitat suitability modelling for bats and wading birds, to biosecurity and invasive non-native species.

Since joining the VWT, I have been able to visit more than half of the 40 reserves the Trust manages for horseshoe bats, including all of those in Ireland! These sites

are an inspiration, and a lesson in how well-conceived conservation measures can protect and enhance important bat populations. Now there is a need to go beyond our reserves, to work in the wider landscape and in partnership with other organisations, to ensure that these populations are resilient to the effects of climate change and other anthropogenic threats. Another challenge is how we monitor population changes in our rare woodland bats - Bechstein's and Barbastelle. Developing innovative methods to monitor these elusive species is one of our priorities and I am excited to see where this work will lead.

From pine martens and polecats to bigger predators

by Lizzie Croose, Mustelid Conservation Officer



I'm very excited to be taking a short sabbatical from the Trust, starting in the new year. Having worked mostly on pine martens and

polecats, I will be experiencing quite a change - working on bigger predators (with much bigger teeth!) in North America. I will be spending three months working with the Michigan Predator-Prey Project, which researches the role of predators, weather and habitat on white-tailed deer survival in the Upper Peninsula of Michigan. Specifically, the project aims to estimate survival and cause-specific mortality of white-tailed deer fawns and does and estimate the proportion, number and age of fawns predated by black bear, coyote, bobcat and wolf.

All of this information is used to inform effective management strategies for white-tailed deer and the predators. I will be joining the project in January until April, covering most of the winter fieldwork period, when temperatures can get down to -30C with very high snowfall. A real change from the mild climate here in the English Midlands and even the Scottish Highlands! I hope to have some exciting new experiences and learn lots of different skills during my sabbatical which I can put to use when I'm back working for the Trust in April.

From Mallards to Martens

A book celebrating 40 years of The Vincent Wildlife Trust

'From Mallards to Martens' is a celebration of the mammal conservation work carried out by the VWT over the last 40 years. The Trust was founded, funded and led by Vincent Weir from its inception in 1975 until the early 2000s. The book records the Trust's work on the conservation of mammal species in need, including the otter, water vole, polecat, pine marten and the bats.

Christmas Offer
£22.99 incl. p&p

Send a cheque to 'The Vincent Wildlife Trust' 3&4 Bronsil Courtyard, Eastnor, Ledbury, Herefordshire HR8 1EP

Alternatively you can buy a copy at full price online from NHBS.





A new PhD study on polecats

by Katie Sainsbury, PhD Student



A new and exciting study on polecats is now underway, as part of a PhD studentship with the University of Exeter. The aim of the study is to better understand polecat behaviour and foraging, and quantify the hazards polecats face from human activities. To do this, we are catching and radio-collaring polecats in Worcestershire and Herefordshire and then radio-tracking them.

We have been placing live traps in several grid squares which are

then set at dusk and checked at dawn. This involves a lot of walking around muddy fields, climbing over barbed wire fences, lying down in hedges and trying (and failing) to avoid getting stinging nettles in the face. Occasionally this is all rewarded by catching a polecat! So far, we have caught five polecats and fitted them with radio-collars. As well as fitting a collar, for each polecat we record the sex, age, weight, body measurements and insert a PIT tag (micro-chip). One of the challenges we've faced is fitting the radio-collars, as the shape of their neck is so tubular that ensuring a good fit is difficult: if the collar is fitted too loosely then the polecat can pull it off over its head, but if it's too tight, it could risk rubbing and irritating the skin around the polecat's neck. So far, two polecats have shed their collars but luckily we managed to find them down rabbit burrows and retrieve them after a bit of light excavating!

Once the polecats are fitted with radio-collars and released back where we caught them, we locate them at night by radio-tracking. It has become something of a polecat soap opera and seeing where the polecats go, and what they get up to each night is really interesting. We've detected some den sites in rabbit burrows, recorded polecats crossing main roads and foraging in fields. Standing in the cold and dark and hearing a signal from a polecat that is moving around in the field next to you is very exciting! We will continue tracking and collecting data on the polecats until the end of the year and then re-catch them to remove their collars. We have been really fortunate to have the help of lots of dedicated volunteers on the project who have helped enormously, so thank you all. Watch this space for updates in the new year!

Above: Polecat (credit Anne Newton)

Polecat - incisive intelligence

We talk to Global Managing Director and Co-founder Bronwyn Kunhardt



Can you tell us a bit about what Polecat does?

Polecat is a Reputational Risk company. We use Big Data and Artificial Intelligence to inform the world's biggest companies of emerging trends and risks related to topics such as Environment, Social, and Governance issues.

What made you choose the name 'Polecat' for the company?

I met a polecat in 2007 in a garden in Dorset. We called him Burt Reynolds because he had such a swagger. Not only was he beautiful to look at, he was incredibly brave (especially when we were roasting sausages on the bonfire). He really punched above his weight, had impressive focus and completely sorted out the rats on the compost heap! At the time we were starting the company, that felt like a really great symbol for us.

What sort of clients do you work with?

Polecat works with some of the world's biggest companies and organisations – Shell, J&J, KPMG, AON, GSK, NHS, etc. They want

to understand and be proactive about what is being said about them in areas like water scarcity, climate change, human rights, safety, etc. They are great to work with and learn from, and it's always important that we know we're making a difference to how they make decisions on such intangible concepts with speed and confidence.

Why is it important to you to support The Vincent Wildlife Trust?

We are a company of outward bound people! Lots of climbers, fell runners, wild campers, and

Is there a story behind your polecat mascot?

We have a few mascots – one for each of our offices. Sometimes we get very amusing videos sent in by Polecat people charting his latest adventures! I've got a feeling he'll make an appearance at this year's Christmas party.



swimmers and hikers. The natural world really matters to us, especially local wildlife where our office in Bristol is. We wanted to partner with an organisation that cared about polecats, had a local presence (Wales), and from whom we could learn more about our namesake and give something back to ensuring their sustainability.

What exciting things are coming up for Polecat in the near future?

We're working on a Virtual Reality experience where we are taking the concept of a coral reef and what affects its sustainability and applying that as a way to look at an organisation's health. This brings into play our interest in sustainability – not just a company's sustainable future but also the planet's.



The three 'old ladies'

by Colin Morris, Nature Reserves Manager



Rather like a favourite soap opera, I thought I'd update everyone on the three 'old' Bechstein's bats living on a Dorset Wildlife Reserve in West Dorset.

The three animals in question would be entering their sixteenth year in 2016, but sadly T7324 and T7326 have been nowhere to be seen and I feel they really have

gone to the great tree-roost in the sky. Although saying that T7324 went missing for over 12 months and turned up again, so it's still not out of the question that they will turn up again sometime in the future. The only survivor of the three is T7358. Initially ringed as a juvenile in August 2000, she is still going strong and had her tenth baby this summer. She has been recaptured on 43 occasions and is quite relaxed about being handled. One distinguishing feature she has is that the tip of her left ear is missing. The size and shape of the 'wound' suggests she may have been bitten by another bat. I've often recorded noctules roosting alongside Bechstein's bats and noctules are big powerful animals, with a strong bite, sharp teeth (and a short temper...!).

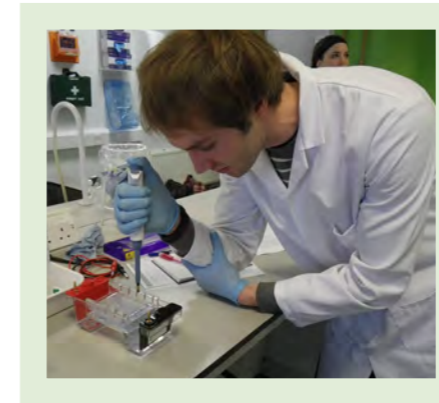
The next oldest females are U5846 and U5873. Both were born in 2003 and are now over 13 years old. They have had ten and seven babies respectively. Some of the other 'youngsters' are maturing, and one prolific female to watch out for is Y8545: she was born in 2005 and gave birth to her first baby aged two. She has had a total of nine babies in eleven years.

One of the mysteries is where do the male bats go? Once weaned the males are rarely seen again. However, late in 2015, in a woodland just 3km from this one, a male bat was recorded in a bat box that I initially ringed in 2005 - my oldest recorded male Bechstein's bat.

Above: T7358 showing her distinctive 'war-wound'.

Bechstein's bat PhD

by Patrick Wright, PhD Student



My PhD focusing on Bechstein's bats started almost two years ago. Over the summer, I was busy collecting more samples for my PhD. This involves conducting box checks or trapping in woodlands where Bechstein's bats are known to be found. The samples I am

collecting are used to better inform us on the health of the British Bechstein's bat population. By using molecular markers, we will be able to tell how closely related the populations across Britain are, and whether any are showing signs of isolation or inbreeding. We will then use this genetic information to quantify the effect that the surrounding landscape, such as roads or urban areas, are having on the genetic connectivity between populations. It is hard to believe that my second and last field season is already over, but I'm looking forward to the next part of my project where I will finally piece together all the data that was collected over the past two years.



Above: Bechstein's bat (credit Patrick Wright)

Roger Ransome

Celebrating 60 years of research

One person who knows the world of the greater horseshoe bat more than most is Roger Ransome.

Roger has been studying the colony of greater horseshoe bats at Woodchester Mansion in Gloucestershire for 60 years, and this is believed to be the longest study of a population of bats anywhere in the world.

Colin Morris, the Trust's Nature Reserves Manager, and David Bullock, a VWT Trustee and the National Trust's Head of Nature Conservation, attended a lunch



Above: Colin Morris presenting book to Roger Ransome

in Roger's honour and presented him with a card and a copy of the Trusts 40th Anniversary book. At the lunch, Professor Gareth Jones

of Bristol University described Roger's important contribution to science: "His clear thinking and rigorous scientific methods, backed up by 60 years of biometric and DNA studies, have led to a far greater understanding of these complex animals".

Roger was also a founding Member of the Gloucestershire Bat Group in 1983. Former Chairman, David Priddis, describes Roger as "simply an inspiration to the bat world. His breadth of knowledge, energy and enthusiasm seems to know no bounds."

Spotlight on Cwm Berllan

by David Jermyn, Reserves Officer



The roost, then of around 47 bats, was discovered by a local naturalist in the autumn of 1996, when the property was on the market. Prior to the Trust purchasing the freehold in 1998, it had been unoccupied for over 50 years.

Refurbishment took place in 1999 with the following repair and enhancement works undertaken: complete re-roofing (including new timbers), rainwater goods fitted, new doors, hatches and bat access points (front and rear), new floor in house, boundary fencing, a French drain at rear of property, re-pointing, lime washing and a new access track.

Once the boundaries were fenced, mixed broadleaf species hedgerows were planted to provide commuting routes to nearby woodland. The mature hedgerows now also provide additional foraging areas.

Nestled in a remote valley in the south Radnorshire Hills lies Cwm Berllan. A late medieval hall-house believed to date from the 15th century, with attached agricultural bays dating from around 1800. This small Welsh upland farmhouse is home to a rare colony of lesser horseshoe bats (*Rhinolophus hipposideros*).



Top: Cwm Berllan in 1998, prior to repair/enhancement work (credit J. Messenger). Below: The roost in October 2000 (credit J. Messenger) Bottom left: Artist's impression of Cwm Berllan

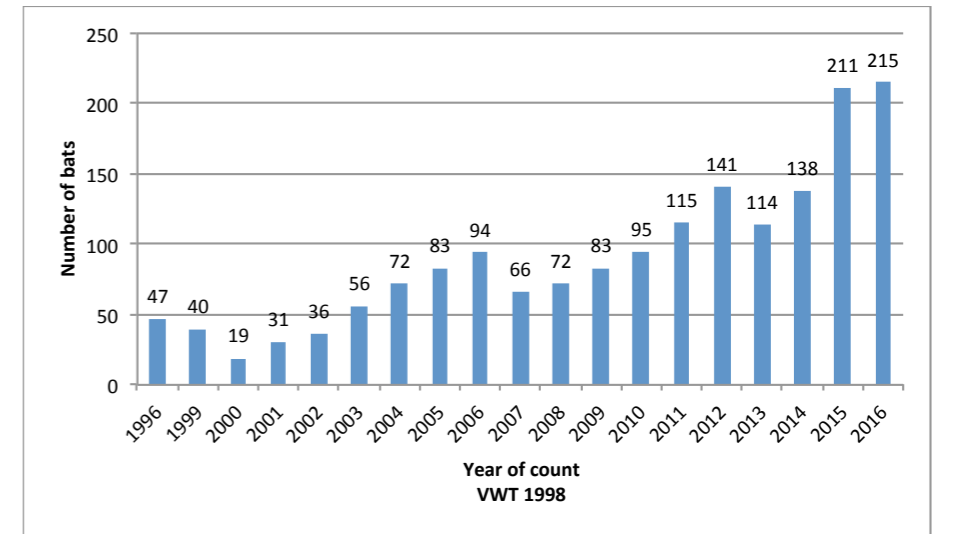


As well as the lesser horseshoe bats, other bat species recorded on the site include good numbers of Natterer's and small numbers of brown long-eared and pipistrelle bats.

Following the renovations, the building was notified by CADW, the Welsh historic environment service, and given a Grade II listing as a result of its architectural interest: as one of the most interesting vernacular houses in the county. The building illustrates the stages of a late medieval open hall through to a small single-storeyed farmhouse.

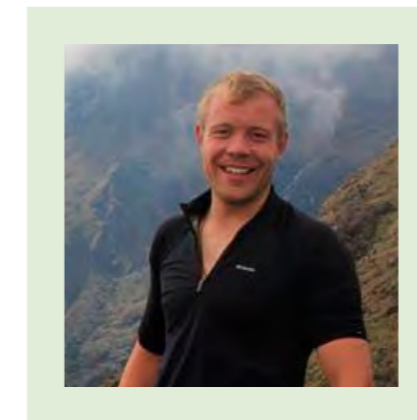
The peak summer emergence counts show how well the lesser horseshoe bats have responded to the VWT's acquisition and enhancement of the old farmhouse.

Photo: The roost in October 2015 (credit D. Jermyn). Graph: Peak emergence counts at Cwm Berllan NB Counts in 2015 & 2016 undertaken outside the National Bat Monitoring Period.



Greater horseshoe bat PhD

by Domhnall Finch, PhD Student



I am now six months into my PhD at the University of Exeter. I am using spatial ecology and practical conservation to examine how landscape connectivity, habitat suitability and land management influence the distribution and movement of the greater horseshoe bat. Using the help of dedicated citizen scientists, I have managed to complete over 1000 nights of bat surveys this summer

at five greater horseshoe bat roosts in Devon. The results of these surveys are currently being analysed and will be used to ground truth predictive models. These models have specifically been created to examine how habitat features and connectivity influences the movement of the greater horseshoe bat on a landscape scale.

Volunteering for the VWT

The VWT is justly proud of the dedicated band of volunteers who give up their time to help the Trust in its work. Two volunteers describe here their work helping to monitor bats at two of the Trust's major bat roosts.

Katy Oakley, High Marks Barn



I have always been interested in wildlife, and growing up in Devon I became particularly passionate about British wildlife. My first involvement with bats was helping a local bat worker with surveys. Shortly after this, I was accepted onto an Ecology MSc at the University of Bristol. This allowed me to study bats in more detail, and in 2009 I investigated bat activity in relation to types of hedgerows as part of my dissertation. My interest in bats has led to many years of voluntary work with local bat research groups, caring for sick and injured bats and working on bat projects abroad. Through this voluntary work I have built up enough experience to become a licenced bat worker.

I first volunteered for the VWT back in 2010, radio-tracking greater horseshoe bats from a large maternity roost at a secret location in South Devon. Little did I know at the time that some years later I would become the Head Warden for the High Marks Barn reserve.

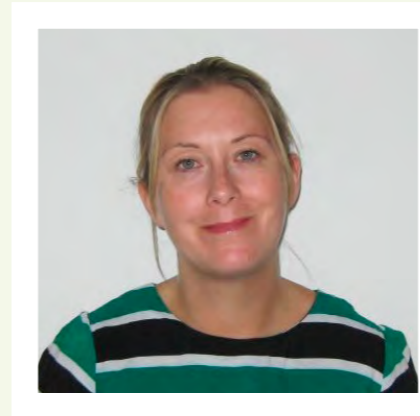
My role as Head Warden involves scheduling a minimum of two colony counts in early June and late August, when bat pups are on the wing. Luckily, we have a group of enthusiastic and dedicated volunteers who are always willing to assist. Colony counts involve sitting in front of the roost entrance just before sunset, whatever the weather, recording the number of bats that emerge and the time that the first and last bats come out. Volunteers are armed with hand-held tally counters, head-torches (which are switched off before the bats emerge) and plenty of sweets for keeping up energy levels! The data collected is used to detect

fluctuations in numbers at the roost site in order to assess the health of the wider greater horseshoe bat population. I look forward to seeing the bats each summer and feel that it is a real privilege to be allowed to monitor such an important greater horseshoe bat roost.



Above: High Marks Barn reserve. Below: Greater horseshoe bat (credit Frank Greenaway).

Kate O'Neill, Rock Farm



As an ecologist, one of the most fulfilling roles I have is as a volunteer for The Vincent Wildlife Trust. I have been a volunteer at the Rock Farm reserve since 2011. We all have busy lives and mine is no exception - I am a Consultant Ecologist and I have twin seven-year-old boys; balancing work and home life can be a challenge at times! However, when it comes to volunteering, I find it gives me a chance to simply enjoy ecology at its best, while at the same time obtaining data which is vital to monitoring the status of the species over time. A couple of years ago, the reserve was visited by the BBC and I, alongside Chrissy Mason and Julia Clarke (now Julia Balfour), met Michaela Strachan. What was most surprising was that all five of us were twins; this includes Colin, who isn't pictured here - what are the odds of that happening?



In my case, Rock Farm is a greater horseshoe bat roost. As head volunteer, it is up to me to organise 2-3 counts per summer, in addition to those organised by the VWT. The counts involve up to six volunteers sitting around the buildings where the bats roost. We ensure that all possible exit points are covered. We then wait for the bats and count all that emerge. As the roosts are large, it can become quite hectic, but hectic in an exciting way.

Organising the counts can take some time as I need to ensure that at least six volunteers are available per survey. However, all of the volunteers are happy to give up a few nights per season to have the opportunity to witness the bats emerging - believe me it is an amazing sight!

Above: Chrissy, myself, Michaela and Julia. Below: Rock Farm reserve (credit Frank Greenaway). Below left: Mel, Pete and Charlie waiting for bats to emerge.





Please support our pine marten project

We have been working for 40 years to safeguard the future of British and Irish Mammals. With your help we are able to carry out research and surveys on those species that need our help, including the bats, polecat and pine marten.

This year we are raising funds for our Pine Marten Recovery Project which

aims to restore a healthy pine marten population to England and Wales. Your support is vital if we are to be successful.

You can donate to the VWT via our website at:
www.vwt.org.uk/donate

Thank you to everyone who has donated this year. Your support is hugely appreciated.

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