

20 March 2025

Kate O'Sullivan
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Dear Kate

Thank you for coordinating the engagement of the Exmoor Society with the Two Moors Project and for bringing concerns to our attention. The project takes very seriously any concerns raised and we have worked hard to take these into account during project planning and applications for consent. They have often shaped the project and will continue to do so.

I hope you or a representative of the Exmoor Society will be able to attend the Pine Marten Group meeting on 11th June. This is a stakeholder forum set up by the project to ensure a dialogue between the project and stakeholders where updates can be provided, and concerns and opportunities can be explored. My colleague Tracey Hamston has sent an invite to you and your trustee Nigel Hester who has confirmed attendance.

The project's Field Officer for Exmoor, Ali North, carries out landowner advice and support and would be very keen to arrange visits to any of your members. This enables bespoke advice to be provided dependent on the situation. The project can provide adaptation and mitigation guidance, has a small community grant offer and has a limited budget for mitigation where this meets relevant criteria. Ali would be happy to discuss this with landowners and land managers – please do pass on her details to your members – anorth@devonwildlifetrust.org.

I would point your members to the project's reports and studies, which have informed the consents and have been published on the [Devon Wildlife Trust Reports and Documents](#) web pages under the Two Moors Pine Marten Project Reports tab. These provide detailed evidence on a wide array of topics. To respond to the specific concerns raised, I have collated them into the table below.

I look forward to continuing to work with you and the Exmoor Society during the Two Moors Project.

Yours sincerely

Ed Parr Ferris
Conservation Manager & Two Moors Project Manager
Devon Wildlife Trust

Concern raised	Response
1. Project Management	
1.1 Not responding to previously raised concerns	<p>Apologies for not directly responding to the concerns raised in May 2023, following the sector workshops held - this was an omission by the project. The project had various communications with the Exmoor Society at that time and this was not picked up. The project offered webinars to address some of these which were held on 13 September and 5th October, 2023. These are still viewable online https://youtu.be/kpe9QuZs9sc?si=lQfbnaUcWnWrMC38 and https://youtu.be/llvR9-ALj5I?si=KL7HERNHOfjXMKOD . However, we recognise we should have responded separately to the email. We have copied this response to those whose contact details were shared.</p>
1.2 Perception that meetings are a box ticking exercise reducing the possibility of local buy-in to species reintroductions	<p>The engagement process held from 2022 onwards has been integral to both the project development and the consenting processes. Concerns and opportunities voiced by stakeholders and communities have directly influenced project make-up leading to amendments and additions to the project and to consenting requirements. Examples include: increased Field Officer capacity to enable greater and deeper working with stakeholders; increased community elements to ensure wider understanding of woodland management and role of predators; additional surveys of nightjar and woodland bats to enable better baseline understanding and monitoring of potential interactions; nestbox scheme mitigation trial to understand impact on bird occupancy rates; grey squirrel surveys to provide baseline understanding and monitoring of potential interactions.</p> <p>The IUCN Guidelines on Reintroductions and Conservation Translocations provided the basis for project working from its inception – the project partners take this seriously and hold it as the key principle of project delivery.</p>
1.3 Ecological project in which there is a change created and then the long-term consequences are left to be managed by the local community	<p>The project has taken a great deal of learning from previous projects, particularly those in Wales and the Forest of Dean alongside programmes internationally shared through the Martes Working Group. These all take a very long-term approach to resourcing and support. Additionally, Devon Wildlife Trust has led many species and habitat recovery projects, notably the River Otter Beaver Trial, where project objectives are clearly only achieved through long-term support following the initial project. We take this responsibility very seriously and work on the basis that these types of projects come with long-term requirements. We have demonstrated our commitment to this approach on multiple projects as have the project partners.</p>

	<p>The Two Moors Project will require ongoing support following the initial project, particularly around stakeholder adaptation and support but also critically species monitoring. This will likely be delivered through partners and at least one Field Officer type role – although this will be determined as the project reaches its final year shaped by need and resources. The consents for the project include some expectation of this and the licences also run beyond the project end. All the project partners, including Exmoor National Park Authority, will continue to be very present and active in the landscapes they operate in and will continue to provide the support for landowners, other stakeholders and communities alongside any specific ongoing Field Officer type role.</p>
<p>1.4 The approach of the project is divisive and has led to an ‘us and them’ culture</p>	<p>This is sad to hear and certainly not the project’s intention. We have worked hard to have a presence within the communities we are working in and to work closely with both our partners in those landscapes but also the stakeholders and communities there. Our Exmoor Field Officer and Exmoor Community Engagement Officer are living and working on and around Exmoor and are dedicating themselves to reaching out to the communities there. The Project Lead has also developed many close ties to the communities on Exmoor both during this role and before that.</p> <p>During the project’s feasibility consultation and engagement, we spent over 2 years reaching out and asking for comments, concerns and input around the project and we heard and listened to many hundreds of people, whose input directly shaped the project.</p> <p>We have more recently established the Pine Marten Group which provides an opportunity for dialogue with key stakeholder representatives, where we share updates on the project and listen to concerns and opportunities raised and discuss how to progress actions around these.</p> <p>We will continue to work closely with all communities in the project areas, but welcome any other suggestions on how we could better do this.</p>
<p>1.5 Proposal to reintroduce the pine marten is being proposed because it is a charismatic species that can lead fundraising efforts</p>	<p>There are two main reasons for seeking to reintroduce pine marten to the South West. Firstly and primarily, this is a critically endangered species in England and Wales which became regionally extinct due to human activities, but we are confident that the causes for extinction are no longer present so the species could survive and thrive here again. Without a reintroduction however,</p>

	<p>the species is unlikely to reach the South West at least in the next 25 years and realistically much longer.</p> <p>Secondly, pine martens play a key function within woodland ecosystems which is currently missing. Nature recovery requires the complex natural processes that create dynamism and niche creation within our habitats and ecosystems – without these we will only ever have much simplified and unbalanced systems that support lower diversity and dwindling abundance of species. The pine marten's role as an upper mesopredator and seed disperser is not currently found in our woodland ecosystems.</p> <p>Clearly, conservation uses charismatic species as flagships for nature recovery funding - securing financial support for nature conservation is challenging and these offer obvious opportunities. Such flagship species allow funding to be brought into habitats and ecosystems which would be unlikely to reach those otherwise. However, the project partners have all delivered projects for less charismatic species including plants, fungi, invertebrates and less attractive animals even though these are harder to fund.</p> <p>While the Two Moors Project is raising awareness of and delivering support for woodlands, woodland management and woodland ecosystems, the primary goal of the project is the return of this important species and the functions it delivers.</p>
1.6 Meeting with the farming community as the breadth of consultation was felt to be insufficient.	<p>The project always welcomes engagement with the farming community. We have met with the Exmoor Hill Farming Network on Exmoor and corresponding group on Dartmoor and are happy to join more such meetings. The NFU is represented at the Pine Marten Group with both Hill Farm Networks invited. The project has reached out to the farming community during the pre-release engagement and through our two Field Officers who are carrying out one-to-one advisory visits, group sessions and drop-ins – these will be ongoing throughout the project. If anyone would like to arrange a site visit or meeting, please contact the project on pinemartens@devonwildlifetrust.org.</p>
1.7 Any introductions to the South West should be delayed until impact studies are produced from	<p>The reintroduction to the South West is part of the National Recovery Plan for Pine Martens in Britain and has been informed by the previous reintroductions in Mid-Wales and the Forest of Dean alongside learning from Ireland, Scotland and Europe. The Wales and Forest of Dean projects have</p>

the reintroductions in the Forest of Dean, Wales, or from comparable areas in Ireland and Scotland.	<p>carried out intensive monitoring and produced various reports and staff from these projects have also been involved in development and delivery of this project, ensuring learning from these influence this project's approach. There is extensive literature review available for pine marten activity and interactions, which have informed the project's feasibility study and Habitats Regulations Assessment. Devon Wildlife Trust has also established the National Pine Marten Projects Group, which allows the sharing of best practice and learning between projects together with latest updates from academia and the scientific community. These processes allow the project to be informed by latest evidence.</p> <p>The Mid-Wales project reintroduced pine martens 10 years ago (2015-2017), the Forest of Dean six years ago (2019-2021) and so we have a thorough understanding of this period following reintroduction. Additionally, reintroductions carried out in Southern Scotland in the 1980s provide further evidence of pine marten activity and interactions 40 years post release. The individuals and organisations involved in all these projects attend the National Pine Marten Projects Group and have directly informed this project.</p>
2. Ecological impact	
2.1 What impact will they have on other vulnerable species	<p>Please see the Habitats Regulations Assessment for main ecological study and the Feasibility Study for additional species beyond those associated with European Sites and key SSSIs.</p> <p>Main risk areas are in human mediated environments – bat roosts in buildings and nest boxes for birds and dormice. The Two Moors Project has assessed and carried out proactive mitigation on vulnerable bat roosts including installing anti-climb sheeting, tip-trays and baffles. The project is also working with PiedFly.Net to understand the impact on bird occupancy rate of nest boxes following application of tried and tested predator mitigation (hole extenders).</p> <p>It should be noted that pine marten are a key part of a healthy, functioning woodland ecosystem and will bring beneficial effects for native species populations in that system.</p>
2.2 More nuanced effort required to restore habitats for wider biodiversity is being made	Devon Wildlife Trust has been working to restore habitats and carry out species conservation for over 60 years. The project partners all have similar or greater history of conservation activity. While many of these have been successful, our landscapes are missing key ecological processes, without

<p>secondary to this narrow goal and may even be damaged by the reintroduction</p>	<p>which we see degraded and imbalanced ecosystems leading to ongoing declines in nature. One aspect of this is missing species. When species like pine marten are lost from an ecosystem, the system rebalances to a simpler system which favours fewer, more dominant species, restricting opportunities for rarer niche species. Examples include: tree cavity nesting competition between abundant resident early breeding songbirds with rarer later breeding migrant species; abundant corvids act as effective songbird nest predators and also strip fruit from woodlands outcompeting other species. While pine martens will predate anything opportunistically, they will have greatest impact on easy to find, easy to catch and therefore common, abundant species over rare species. All the partners continue to carry out nuanced habitat and species conservation alongside this project.</p>
<p>2.3 What lessons have been drawn from previous releases such as the impact on capercaillie in Scotland</p>	<p>Capercaillie are a good example of the complex issues facing nature in decline. Capercaillie have previously (in the 18th century) gone extinct in the UK and required reintroduction in the 1830s. Since the 1970s (prior to the recovery of pine marten in Scotland) their populations have been declining. Key factors in this decline include habitat loss and fragmentation, fence strikes (1,2), human disturbance and climate change (particularly the delay in warming of spring temperatures alongside spring wet weather increase).</p> <p>Predation of capercaillie by a range of species, was not seen to be a critical factor in declines before about 2005, but as the capercaillie population has declined and become more fragmented due to other factors, predation is seen to be impacting a relatively larger proportion of the remaining population. Predation is certainly a factor in capercaillie declines, but its impact has increased as populations have declined due to other factors.</p> <p>Climate change reduces breeding success, reducing capercaillie populations. Reduction of habitat also reduces capercaillie populations but also concentrates predators with their prey and reduces nest site availability increasing nest vulnerability. Fence strikes provide carrion which draw predators towards prey populations. It is important to note that, while predation occurs throughout, its impact has become magnified due to the impact of other factors.</p>

	<p>This raises an important principle of nature conservation, where two co-evolved native species of conservation concern, both at risk due to human activity, should not have to compete for conservation effort – there is no justification for selection of one over the other. Both should be supported through mutually beneficial approaches.</p> <p>Clearly increasing area and quality of habitat will have beneficial effects for both capercaillie and pine marten. Removal of fences and restriction of human activity can both be achieved relatively easily, reducing impact on capercaillie. Research into non-lethal methods of limiting the impact of predation on capercaillie are showing very positive results, with further studies ongoing.</p> <p>Taking a long-term science-led ecosystem approach to species recovery is a key learning from reviewing this example. It is clear that many overlapping and complex factors can have varying impacts over time and that some key principles can be seen: increase in area and quality of habitats will be beneficial to all parts of the ecosystem; reduction in human impacts will be beneficial to all parts of the ecosystem; seek mutually beneficial appropriate and proportionate interventions to address predator-prey challenges.</p>
2.4 Case studies show that it is usually a combination of factors - climate, predators and habitat loss - that lead to species decline	See above response 2.3 on capercaillie.
2.5 The introduction of another pressure on already vulnerable species may be a tipping point for some populations.	<p>Pine marten are an opportunistic, abundance-related predator. While they will predate most species opportunistically, the energetic gain (cost-benefit) is much higher from selecting abundant, easy-to-find, easy-to-catch larger prey than rarer, smaller, harder to catch and/or cryptic prey. As pine marten populations naturally have low densities in the landscape, the encounter rate with rare species is very low, meaning the risk is also very low.</p> <p>The exception to this is where rare species make use of anthropogenic features (e.g. bat roosts in buildings and birds using nest boxes) which can act as a searchable feature making these species easier to find in the landscape. But these features can be and are being mitigated from predators, subject to research to understand occupancy effects for the rare species being protected.</p>

	<p>Pine martens also bring ecosystem benefits which are likely to benefit many rare species – see above responses.</p> <p>This does not rule out pine marten impact on rare species but limits its likely population-level effect.</p>
2.6 Risk assessment of the impact of the pine marten. It would also allow there to be an assessment of any competing and possibly conflicting conservation aims – for example the effort to recover curlews on Exmoor - to allow informed decisions as to which should be supported.	<p>Please see responses 2.1 and 2.3 above.</p> <p>The project has engaged with the Curlew Headstart project, Duchy of Cornwall, RSPB, BTO, Devon Birds and Somerset Ornithology Society.</p> <p>Ground nesting birds are susceptible to predation from a very large number of species and, as such, pine marten would not represent an additional pressure but, potentially a competing pressure with other predators. However, as curlew usually seek to nest in open habitats well away from woodland cover, and pine marten rarely hunt beyond 200m from woodland cover (and usually less than half this), the encounter rate with curlew is likely to be very low. As with other ground nesting birds, curlew face many challenges in Exmoor and elsewhere. Increasing numbers of corvids, which are highly effective nest predators, is an issue for many bird species including curlew. Pine marten are likely to predate corvids which may release pressure on other bird species.</p>
2.7 The evidence of ecosystem benefits presented was felt to be sketchy and inconclusive. The shift in the balance of species since pine martens vanished from the South West, makes it hard to argue that their reintroduction will lead to a ‘rebalancing’ and a return to a previous more diverse ecology.	<p>See Habitat Regulations Assessment Part Two Section 1 and Forest of Dean Feasibility Study Section 4.1</p> <p>Pine marten survived in the South West during periods with considerably lower woodland cover (Domesday woodland cover in Devon was 3.8%) than the current rate of c.12%. At the time pine martens went extinct (approx. 1880) there was c.5% woodland cover but much of this was intensively managed and plantations were widespread. While plantations still make up approx. 50% of woodland cover, there has been considerable restoration and creation of native broadleaved woodlands and less intensive woodland management allows space for prey species to thrive. Additionally, many woodlands are now managed to support biodiversity goals, through government grant schemes and NGOs.</p>
3. Grey Squirrels	

<p>3.1 In what timescale will pine martens have the ‘push’ impact on squirrels that will reduce the need for other forms of squirrel trapping</p>	<p>The best evidence for pine marten impact on grey squirrel populations comes from Ireland and to a lesser extent from Scotland. Pine marten were legally protected in both countries during the 1980s with the enactment of these laws and subsequent start of recovery seen from the early 1990s. In Ireland pine martens showed a large increase in range across the country from the turn of the century onwards, with decline in grey squirrels at a national scale, and red squirrel recovery, seen alongside this. So impacts started to be seen from 10-15 years after initial protection and natural recovery. It should be noted however that it is likely that at local scales, changes may be seen quicker as pine marten populations tend to congregate as they seek breeding opportunities, with regional/national scale slower as individuals move out from these focal areas. There is some anecdotal evidence of this, where grey squirrel numbers have shown rapid declines within under 5 years of pine marten return. But clearly this will be very variable.</p> <p>While this should not be over-stated due to uncertainty around how pine marten may interact with grey squirrel in SW England, and the time lag of any impact likely being over a decade across this area, it appears likely that some level of landscape-scale reduction is possible with the return of the pine marten. It is worth noting that the release of pine marten onto Exmoor will likely speed up the local impact on grey squirrel in and around those areas. With returning goshawk also impacting grey squirrel, the return of native predators, while providing short-term challenges as we adapt to changing management requirements, offer a potentially significant support in reducing grey squirrel which may reduce our reliance upon lethal trapping known to result in impacts on other wildlife.</p>
<p>3.2 Pine Martens may help in squirrel control, but on their own they are not sufficient, at least not in the early years of introduction.</p>	<p>As explained in response 3.1 above, pine marten recovery at a regional scale will take a number of years (10-25) with resultant impacts on woodland ecology and grey squirrel seeing a similar time lag. However, at a local scale these impacts may be seen much quicker, particularly as goshawk also recover.</p> <p>We are clear that pine marten will not be the panacea for tackling the grey squirrel problem, although they will likely play a very significant role, and so other control methods will be required. In Scotland evidence is emerging that pine marten (and other natural predators) are having a very large impact in the wider countryside, allowing targeted control effort to tackle areas less impacted such as in towns and cities.</p>

<p>3.3 How to realistically control squirrel in the short/medium term and how native woodland restoration can work at scale without dead trapping</p>	<p>Natural England and Forestry England recommend alternative methods of control in areas where pine martens are present. Alternatives include live trapping (with legal traps) and targeted shooting (avoiding dreys where pine martens may den).</p> <p>These approaches are being actively pursued at scale by foresters in Devon. The project will seek opportunities to provide peer-to-peer learning from their experiences.</p> <p>The Red Squirrel South West Project has taken place on Exmoor and is looking to find solutions around alternatives to kill traps working with partners like ENPA and NT but also with a range of woodland owners. Although funding for this project runs out at the end of March 2025, currently the project is looking at funding options to extend it. The project is committed to sharing best practice with the woodland owners' community.</p>
<p>3.4 Controlled shooting of grey squirrel - it is extremely difficult to find people to do outside jobs</p>	<p>The project is keen to work with stakeholders to address this issue. The project and project partners are aware of land managers already carrying out shooting as an effective control method of large numbers of squirrel, both on its own and alongside trapping. We will start by working with those landowners/managers who are already using shooting as a control method to understand how to increase capacity within the sector.</p>
<p>3.5 As Pine Marten are protected, if they are introduced lethal trapping will be impossible in case PMs are caught and killed which would be an offense.</p>	<p>The lethal traps used to trap grey squirrel are non-specific and therefore can (and do) result in bycatch of a wide array of non-target species including birds and mammals. As pine marten can enter grey squirrel traps, there is a risk of killing which would constitute a crime under the Wildlife and Countryside Act 1981. However, there are alternatives as described in response 3.3 above making ongoing control of grey squirrel possible, albeit we recognise this will take a shift in approach, culture, training and expectations.</p>
<p>3.6 Lethal traps set inside tunnels. These tunnels have excluder apertures of 50mm to minimise the risk of non-target captures, but pine martens can squeeze through these apertures and are seen to be</p>	<p>Pine marten may enter through holes of 45mm diameter and sometimes slightly under this. In any area known to have pine marten (or other protected species) land managers and owners must therefore avoid the use of lethal traps (of any type) which have an entry aperture which would allow entry by pine marten or other protected species. Trapping pine marten constitutes an offence under the Wildlife and Countryside Act 1981.</p> <p>Alternatives are available – see response 3.3 above.</p>

at risk where squirrel trapping is taking place	
3.7 Trapping is not a long term solution, but it buys time, allowing plantations to be safeguarded against squirrel attack until a permanent solution can be devised. There are various schemes underway – Gene editing to produce only male squirrels and contraception. It may also be possible to develop a lethal trap that can exclude Pine Martens. But all of these will take time, possibly 10 years	<p>See responses 3.1, 3.2 and 3.7 above.</p> <p>Grey squirrel trapping, unless carried out at a strategic regional scale, does not lead to the control of grey squirrel populations, but can help reduce immediate pressure during the summer following trapping, when peak bark stripping activity occurs. Trapping is required every year as influx of squirrels from neighbouring un-trapped areas repopulates the trapped area to similar levels.</p> <p>Because of the overlap in grey squirrel and pine marten size, aperture exclusion is unlikely to be possible. However emerging technology using Artificial Intelligence that assesses camera footage to determine species to allow entry to the trap is being explored but is unlikely to be widely available soon. Similarly, oral contraceptive technology is currently being investigated but also is unlikely to be widely available soon.</p> <p>The return of both pine marten and goshawk alongside live trapping and controlled shooting offer the best option.</p>
3.8 Clarification is asked for on the areas where dead trapping would be prohibited. Can a clear dispensation be given to allow for the continued use of lethal squirrel trapping in areas with Pine Marten. Can the release be delayed until a solution to squirrel control is found	<p>While pine marten will establish and defend territories, these are highly dynamic and variable and individual martens will frequently shift away from a territory due to various factors and can move to immediately adjacent areas or move large distances. As woodlands within the South West are often fragmented and dispersed among other open land uses and habitats, this often increases both territory size and dispersal distance. Therefore, once pine martens are known to be within an area, they should be considered to be active across the whole area regardless of specific monitoring data.</p> <p>The Two Moors Project has GPS data showing movement of a single marten covering 150km within a few weeks, returning to previous areas after exploratory movement. Current maximum known dispersal distance from the original release sites on Dartmoor is approximately 55km. It is therefore sensible to look at an area of approx. 100km radius from known records of pine marten as being the ‘active area’. Taking account of the Dartmoor released martens and known covert released martens, the active area in the project area covers all of Devon and west Somerset.</p>

	<p>Within an active area for pine marten, it is not possible to safely lethal trap grey squirrels without a risk of pine marten bycatch which would be illegal. There is no current method which would exclude pine marten while allowing entry to grey squirrel but see response 3.7 above for novel technology being developed.</p> <p>The development of alternative approaches is likely to take more than 10 years and current covert, and sanctioned releases already mean lethal trapping is high risk and should be avoided across Exmoor. The release of pine marten onto Exmoor will likely speed up the local impact on grey squirrel, reducing need for trapping effort.</p>
<p>3.9 We entered woodland into a Higher tier Countryside Stewardship Woodland Scheme. We are contracted via the scheme's squirrel control supplement to make a significantly increased effort to reduce grey squirrel numbers in our woodlands. In the last year we have made a massive effort, 120 lethal traps have been placed throughout the woodlands resulting in 310 grey squirrels being caught in 2024.</p>	<p>We recognise the huge effort being put into trapping and controlling non-native grey squirrel. This comes at considerable cost for purchasing traps and is often grant funded through environmental agreements under government schemes (e.g. PA7/CWS3 under Countryside Stewardship) which require agreement holders to undertake trapping for 10 years.</p> <p>These agreements and plans contain lethal trapping options alongside live trapping and shooting options and are used nationally including in areas with protected species including red squirrel and pine marten.</p> <p>We are currently working with the Forestry Commission to clarify advice and support for landowners already in agreement in areas with pine marten. We are also working with Forestry England and Natural England to understand best practice approaches around grey squirrel control in areas with pine marten and what to do if pine martens are captured by live traps. We will share information as soon as available.</p>
<p>3.10 Live trapping is not a practical alternative as it takes an unrealistic amount of time and effort by a very hard pushed and limited workforce.</p>	<p>We recognise the increased time taken to carry out live trapping over lethal trapping. It is unlikely that live trapping alone will be effective at controlling grey squirrel across landscapes.</p> <p>Combinations of targeted controlled shooting, live trapping and pine marten and goshawk predation will likely provide the best result in grey squirrel control.</p>

3.11 If squirrel management with dead trapping stops this also means that the public money that has already been spent on woodlands will be wasted	See responses 3.7 and 3.9 above.
3.12 Clarification is asked for on what financial support would be available for squirrel control that has to use live trapping.	See response 3.9 above. The project cannot support all landowners moving to live trapping, but is working with the Forestry Commission to understand what support could be available through existing and new grant schemes.
4. Legal Protection	
4.1 Pine Martens are a protected species under the Wildlife and Countryside Act 1981	<p>Pine marten are protected under Schedule 5 of the Wildlife and Countryside Act 1981, making it an offence to intentionally or recklessly:</p> <ul style="list-style-type: none"> • Kill, injure, or take a pine marten. • Disturb a pine marten in a den. • Damage, destroy, or obstruct access to a pine marten den. • Possess or control, sell, offer for sale, or possess or transport for the purpose of sale any live or dead pine marten or any derivative of such an animal. <p>The Two Moors Project has trapped and translocated pine martens under licence from Nature Scot and Natural England for the purpose of reintroduction of the species to its former range in South West England.</p>
4.2 Pine martens, like badgers, are a protected animal so if there were bTB outbreaks in livestock related to pine martens, culling these animals would face numerous legal challenges.	See Section 5 below and response 4.1 above. The killing of pine martens is illegal under the Wildlife and Countryside Act 1981 and is not a licensable activity.
5. Disease risk	

5.1 The potential role that pine marten may play in TB transmission/the spread of Bovine Tuberculosis	<p>Please see Mycobacterium bovis section (pp57-63) of the Disease Risk Analysis for the Two Moors Project. In summary:</p> <p>There are no known reports of <i>M. bovis</i> infection in pine marten but other mustelid species are known to be susceptible including stone marten, polecat and otter, albeit at very low rates. Pathogen routes are analysed including through aerosol inhalation, bite wound contamination, scavenging infected carcasses (including badgers and deer) and environmental exposure. The pine marten's ecology and behaviour, particularly being arboreal, solitary and having a low-density population impact the risk of infection and transmission.</p> <p>The likelihood of at least one pine marten being exposed to <i>M. bovis</i> is very low and there is a low likelihood of pine martens becoming infected upon exposure. There is a low likelihood of infection spreading from infected pine martens to other susceptible wildlife species at destination, and a very low, if not negligible, likelihood that infection will spread from pine martens to livestock. The probability of dissemination amongst the reintroduced pine marten population is very low.</p>
5.2 The potential disease implications of the re-introduction of Pine Martens to the Greater Exmoor Area.	
5.3 It is highly likely some of the pine martens released in this area will feed on bTB infected deer carcasses.	
5.4 Unless an infected pine marten has been studied and it is proven that they do not spread bTB via urine and faeces, it cannot be right to assume they do not present a serious risk.	
5.5 To release pine martens into the area where there are known to be bTB infected deer carcasses would be totally irresponsible and undermine the Government's 25 year strategy to eradicate bTB. The licence to release pine martens must be revoked until bTB has been eradicated.	
5.6 Pine martens not only have their dens in trees but are known to frequently visit farm buildings and	
	<p>Pine martens will normally den in tree cavities, bird nests, squirrel dreys, timber stacks and root plates of windthrown trees. Where available they will also den among stone and rock clutter, rocky outcrops and drystone walls. Pine martens will usually avoid areas of high human activity</p>

will make their nests in hay and straw stacks.	<p>particularly where domesticated dogs are present. Where natural denning opportunities are very limited, pine martens will occasionally den in roof spaces particularly of outbuildings and quieter domestic properties.</p> <p>In continental Europe, Stone martens (also known as Beech martens) will more regularly den in buildings, even where there is more persistent human activity, as they are more tolerant of human activity and are habitat generalists. Pine martens rarely occupy these areas and are woodland specialists. It is possible that pine martens in Britain, where there are no Stone martens, may shift behaviour to occupy some Stone marten niches. However, it is unclear to what extent this is likely.</p>
6.0 Impact on poultry and gamebirds	
6.1 Impact on forestry, game shooting, and poultry.	<p>Please see Two Moors Project Feasibility Study section 7.5.5 Risks to poultry and gamebirds. See also section 3 above.</p> <p>Forestry operations are generally not impacted as ecological surveys are required for other protected species with similar requirement for pine marten. Exclusion zones of 100m are recommended around known active den sites during breeding season.</p>
6.2 Pine martens are a significant threat to penned birds. The suggested measure of cutting back from the pens, any tree limbs within the 2 metre distance that pine martens can jump, would have a deleterious effect on woodland and be impracticable.	<p>Please see point 6.1 above. Also please see the guidance from the Vincent Wildlife Trust on various issues including protection of poultry and game species. Further information is also available on the Two Moors Project website.</p> <p>Open top pens can provide access for birds of prey as well as pine marten where trees overhang. Netting is often erected across pens to protect against aerial predators, which can also offer protection against pine marten where appropriately installed. Generally, where possible, pens should be located in open areas which are straight forward to protect with standard electric fencing wires or mesh.</p> <p>Other approaches tried elsewhere are diversionary feeding, auditory and visual deterrents and increasing cover for the poults within the pens alongside lower density stocking. We would welcome discussion around the trialling of some of these methods.</p>

	<p>Protection approaches will vary greatly and it is important to take a bespoke approach to each situation. The project's Field Officers are available for landowner site visits to explore which measures may be appropriate and suitable. Please contact:</p> <p>Dartmoor – Daniel Brown dbrown@devonwildlifetrust.org Exmoor – Ali North anorth@devonwildlifetrust.org Or the project email pinemartens@devonwildlifetrust.org</p>
7.0 Monitoring	
<p>7.1 The proposed monitoring is for six months to a year post release. This was felt to be insufficient for the longer-term impact to be understood.</p>	<p>The 6-12 month post release monitoring refers only to the radiotracking element of this, with that time period relating to battery life and deliberate drop-off of radio collars.</p> <p>The project's long-term monitoring will focus on camera trapping, which will be established so as to continue into the future. The project has 75 camera traps for targeted use and is developing a protocol to enable private camera traps to be used and feed in data to a central system. This citizen science approach has been used successfully elsewhere on many projects globally and, alongside targeted monitoring of key features by the project partners, will allow ongoing monitoring of the pine marten population well beyond the 'release cohort' of animals and beyond the end of the project.</p>