

## Isle of Wight Beaver Introduction Project Steering Group

Minutes from Meeting 29<sup>th</sup> March 2023

### Attendees:

<i>Name</i>	<i>Role/Organisation</i>
<i>Matthew Chatfield</i>	Independent Chair
<i>Mark Larter</i>	Deputy Chair / Natural England
<i>Izzie Tween</i>	Beaver Officer / HIWWT
<i>Jamie Marsh</i>	HIWWT
<i>Mark Simmons</i>	AONB Catchment Sensitive Farming Officer
<i>Colin Boswell</i>	CLA
<i>Caroline Knox</i>	East Yar Farmer Cluster
<i>Katiana Saleiko</i>	Forestry England
<i>Grace Booth</i>	Isle of Wight Council
<i>Jennine Gardner</i>	Local Access Forum
<i>Richard Wilson</i>	Newchurch Piscatorial Society
<i>Robyn Munt</i>	NFU
<i>Mike Greenslade</i>	National Trust
<i>Keith Ballard</i>	RSPB

### Apologies:

<i>Name</i>	<i>Role/Organisation</i>
<i>Ian Boyd</i>	ARC Consulting
<i>Nigel George</i>	ARC Consulting
<i>Lucy Charman</i>	CLA
<i>Adam Cave</i>	Environment Agency
<i>June Davison</i>	Isle of Wight Association of Local Councils
<i>Colin Pope</i>	Isle of Wight Natural History Society
<i>Carol Flux</i>	Island Rivers
<i>Mark Roberts</i>	Island Roads
<i>Darrel Clarke</i>	Isle of Wight Rights of Way
<i>Brendan Jones</i>	Southern Water
<i>James Attrill</i>	South Wight Farmer Cluster
<i>Lisa Banfield</i>	Wildheart Trust

### Introductions and Welcome:

- MC welcomed all attendees and asked for apologies
- IT introduced KS FE's Species Reintroduction Project Officer who will be representing FE in place of LS from now on.

### Review of Previous Meeting's Minutes:

- Minutes from December's meeting agreed to be a correct record
- Actions from previous minutes resolved:

- IT to follow up with University of Exeter hydrologists to assess carrying capacity of territories for the Eastern Yar and the Island
  - UofE are currently modelling carrying capacity for the Cairngorms, a project which will take three months, but they will look to replicate their work for the Island once this is completed.
- Anyone interested in attending southwest fieldtrip to email IT to confirm numbers
- IT to coordinate with DWT

## Update from Statutory Agencies:

- ML is continuing to liaise with NE's national team, and updated that the decision on sanctioning wild release is still pending, and NE does not have a timeline for when that decision is likely to be made. NE is working to ensure that if that decision is made, NE will be in a position to accept wild release licences by the end of this coming September 2023
  - CK commented that during recent ecological community evidence sessions there is constant referral to Defra's Reintroductions and other conservation translocations: code and guidance for England (based upon the IUCN Guidelines for Reintroductions and Other Conservation Translocations), in which it recommends projects to *"Take particular care if your conservation translocation involves the release of organisms onto islands"* and that *"As a general rule, you should not introduce a new species to any island."* CK asked for further justification on why the Isle of Wight should host a beaver introduction in light of this.
  - ML responded that he had been contacted by NE national colleagues to notify him of a suggestion emanating from the Island that Defra's code and guidance (and therefore the IUCN guidelines) was not being considered relevant here on the Island and that a release could go ahead on the Isle of Wight without regard to the above-quoted section of Defra's guidance. ML refuted this by submitting to the NE national team the previous minutes from this steering group's meetings in which considerable discussion and additional notes were added relating to the relevancy of Defra's code and guidance (and consequently the IUCN guidelines), that stated that in fact the Island needs to set the bar higher in terms of its assessment, reflecting the Island's geographical status and its resultant vulnerability to adverse impacts from species (re)introductions.
  - CK opined that the relevance of Defra's guidance relating to islands was not given sufficient weight when this was raised at the steering group's meeting in Sept 2022
  - ML countered that the relevance of Defra's guidance relating to islands was recognised at September's meeting, and that after the meeting he reviewed Defra's code and guidance, and consulted with NE's national team regarding their thinking and position towards the Island as being a suitable release location, which resulted in addenda being added to the minutes of September's meeting to clarify NE's position, here stated again for clarity:

***"Natural England's position more widely is that the (re)introduction guidance as it relates to off-shore islands does not prohibit a release application. There is however recognition, in accordance with that guidance, that the Isle of Wight's particular ecology and special species interest will need specific consideration and impact assessment in the application."***

- IT clarified that given the ecological implications of a potential beaver release onto the Island considering its biogeography, the ecological assessment aspect of the

licence application may need to be more robust than other such licence applications. She noted that the ecological impact assessment that she is currently writing is an agenda item for the day's meeting during which the group will be given a chance to review the subject headings and suggest further chapters to ensure a robust and thorough document that will address any such concerns.

- ML clarified for the record that the IUCN guidelines and Defra's code and guidance do not say that you cannot introduce or reintroduce species onto islands.
- KS had no updates from FE
- GB had no updates from IoW Council

## Presentation on steering group's southwest fieldtrip

- Attendees on HIWWT's southwest fieldtrip (15<sup>th</sup> – 18<sup>th</sup> March 2023) represented the NFU, National Trust, CLA, Forestry England, Natural England, IoW Council, Young Farmers and the IoW AONB.
- Three locations were visited: the Cornwall Beaver Project enclosure on Woodland Valley Farm in Ladock, Cornwall; the Devon Beaver Project enclosure near Germansweek, Devon and several sites within the River Otter catchment where beavers are living wild.
- Several local landowners were consulted including Chris Jones, a Herefordshire beef cattle farmer and former employee of the Beaver Trust; John and Elaine Morgan, small scale farmers and owners of the SINC (designated for the culm grassland priority habitat) on which Devon's enclosure was built; Matt Holden, Devon Wildlife Trust's Beaver Officer; Chris Yolland, a gamekeeper on Clinton Devon Estate; Sam Bridgewater and Sam Briant-Evans, conservation lead and farm manager of Clinton Devon Estate (CDE); and Dan Davey, farm manager of Bicton Agricultural College.
- MC read LC's key takeaways on the fieldtrip in her absence:
  - "It is critical that there is joined up thinking from all neighbouring land owners along the stretch of water, as dam management will have an impact on land both up and downstream on both sides and so a strategic approach to benefit all parties is needed."*
  - "There is a zero tolerance from the Devon project for dams near public highways including PROW which are removed immediately to stop flooding and safety issues"*
  - "Potential for impacted land managers to gain funding through Higher Tier Stewardship – SW12 – making space for water, however this option would not be open to everyone in its current form – hence the need for Bicton/Clinton Devon to apply for FIPL funding. SW12 would offer funding for 20 years – not too dissimilar to the 30 year BNG benchmark"*
  - "£5000/pa is the budgeted costs for man hours to manage the Beavers at Clinton Devon, (excluding all capital costs of machinery hire for remediation works, crop loss, track subsidence, combine harvester down time etc etc etc)"*
- ML recollected here that the cost quoted by Sam Bridgewater of CDE was between £3-5,000 annually
- IT clarified that £5,000 in costs was budgeted for each year and could be taken as an average, but in some years not all of this was used.
- MC questioned whether £5,000 was therefore a maximum rather than an average
- RM added that £5,000 is not representative of the true cost given that much of CDE's land is tenanted, and that this number reflects only CDE's budget, not that of their tenants
- ML further added in response to LC's comment that the £5,000 included capital costs

- JM confirmed that the £5,000 did include capital costs citing Sam Bridgewater's example of tree removal costing £1,500, but that such expensive instances did not occur every year leading to variability in expenditure, thus giving an average of £5,000 pa
- MS clarified that the word "excluding" in LC's comment was thus not accurate.
- CK added that after having interviewed farmers in Scotland, their costs are comparable to £3-5,000 annually, which does not include time spent monitoring. She further added the £3-5,000 is a lot for farmers at this time given the loss of BPS payments
- RM added that during the fieldtrip on Thursday 16<sup>th</sup> March rather than joining the wider group at the Devon beaver enclosure, she visited other landowners in the River Otter area to gather their opinions. She mentioned that CDE do not pay the tenant dairy farmer that manages seven units across CDE for his men's time managing beavers, thus highlighting that the above-mentioned £5,000 is not representative of having beavers on CDE.

➤ **ML requested that in order to give a better-balanced understanding of the real cost of beaver management, that RM share her findings from her meetings with other farmers during the fieldtrip**

- RM responded that her findings are that the true cost of beaver management is pretty unquantifiable
- CK added that the cost of fencing their three reservoirs has been priced up at £100,000, which represent three out of the ten reservoirs in the Arreton valley, which is a phenomenal amount of money to ensure the longevity of those structures
- ML agreed with the necessity to capture accurate estimates of what the cost of a beaver introduction might be, and here highlighted the importance of the above action for RM to share her findings in order to steer the group on this topic

*"The speed and scale of change as a result of the damming – 6 months to effectively flood 2.5 acres and 12 months to create a 50m wide dam that changes the course of a 3m wide ditch to a 50m wide wet wood"*

MC then read out LC's further comments:

*From various discussions held whilst on the field trip, I would like to understand how the proposals being made for release on the island differ from the existing projects that are being used as examples. The Devon project is in many ways an unrealistic comparison in that the key sites are owned by very large landowners and as such "making space" for water/ beavers has much less impact on their income and farming business as the tourism and educational benefits outweigh the loss of summer grazing pasture. 2.5 Ha set aside from 10,000Ha is a very different proposition to 2.5 Ha from 137 (average IOW Farm size) with many smaller farms sub 20 Ha. Critically – all of the reference sites are based on the mainland.*

- MG read his comments from the fieldtrip, but qualified that his comments are to be viewed over a longer term, are subjective, and that he was only able to visit the Cornwall Beaver Project enclosure during the fieldtrip which has been in place for six years:

*"Capturing water in the landscape in the way that a beaver habitat does, brings more benefits than challenges, especially when it comes to extreme weather event management."*

Here he added in particular light of drought resilience, with the advantage of being able to pump water out of beaver ponds to mitigate water shortages and associated crop resilience

*"The landscape the beavers create is beneficial to the entire ecosystem and greatly encourages the biodiversity we so desperately need."*

Here he added that biodiversity loss aligned with climate change are the greatest challenges we currently face, due to decisions made over the past 50-60 years, which while necessary at the time, with more evidence now we can do better and should be reacting to these crises.

*“Enclosures artificially limit the spread of the animals and create a slightly misleading picture as to their true impact and beneficial effects.”*

MG here added that having only visited the Cornwall Beaver Project enclosure he did not gain a balanced view of what beavers' impact would be across the landscape, but that others attending the River Otter sites the following day would have a better perspective on this. He mentioned that within the enclosure the impacts were quite concentrated, but given this concentration it was clear to see the ecosystem benefits especially in terms of scrub management, gorse die-back from inundation etc, that take time and money to manage currently.

*“It doesn't matter how many miles of high security fencing you put up, they're going to get out.”*

- MS read his comments from the fieldtrip and qualified that his principal interest in the trip was to understand more about the beneficial impact on water quality and the research on beaver dams filtering silt out of river waters, thereby reducing the impact of fertilisers and pesticides downstream, against the impact on farmers and landowners and their attitudes on beavers. He further qualified that he attended only on the Friday and saw evidence from the River Otter landholdings.

*“Impacts upon the farming operations resulting from the presence of beavers were largely minor and tolerated by the two agricultural holdings.”*

He further added that he was waiting for adverse comments from the landowners but didn't get any.

*“Where impacts were more significant (raised water levels over productive fields) action was taken to reduce or eliminate the effects of beaver occupation e.g. removal of dams or the installation of a beaver ‘deceiver’.”*

Here he qualified that where raised water levels were having a real problem on the land, that action can be taken to reduce that impact.

*“Both farm holdings had accommodated the presence of beavers and staff (Farm manager, Conservation Head, Game keeper, Farm Dairy operator) expressed no particular concerns. Instead, their views were accepting of beavers or viewed them favourably.”*

Here MS added that he was waiting in particular for negative comment from the gamekeeper, which did not arise, although MS wondered that perhaps the landowners consulted with were not from an unbiased sample

*“Adverse economic impacts upon the farming enterprises were minor although the removal of a beaver damaged or fallen trees could be costly (c. £1,500 in one example). The positive economic impacts including improvements to water quality and a reduction in flood risk to an adjacent village were not known.”*

*“Some flooding of land described on our visit may have been incorrectly attributed to solely beaver activity. Aerial photographs and LiDAR data showed historical water impoundment although subsequent occupation by beavers may have exacerbated the extent of waterlogging”*

Here MS added that old maps show the control of the watercourses with sluices indicating water manipulation for drainage.

*“When assessing the economic impact of beavers, this was observed in the context of the farming operations we were shown. Some loss of avoidable productivity by the farming operation can be greater than that resulting from beaver occupation.”*

Here MS opined that the farming operation here could be so much more efficient without the self-imposed damage to the land, citing the topsoil runoff through the gateway at the field access, and that when compared to the negative impact of beavers, tweaking the farming methods could improve the economic return from the land.

*“The farm’s land use over a relatively short timespan (< 90 years) had much changed leaving little space for beavers or any other wildlife: woodlands grubbed, wet pasture converted to arable cropping and field boundaries removed. Habitat removal has increased interaction between the farm and beaver occupation.”*

MS clarified that the wildlife on the farm has been very much narrowed into a small area due to habitat change thus provision for wildlife has been scaled back .

- KS read out her comments on the fieldtrip, but qualified that her background in species reintroduction is with bird species, and that this is the first time she has seen the impacts of beaver reintroduction:

*“The vast difference in habitat creation and landscape change between enclosed sites and wild sites. Within the enclosed sites the masterpiece of habitat creation was so evident, but out on the River Otter I personally thought that the landscape hadn’t changed drastically, and you wouldn’t know beavers were there unless you took a closer look or knew what to look for.”*

KS added that the impacts of beavers within enclosures were highly concentrated compared to the wild population.

*“One comment that I thought was a great takeaway is that landowners need to remember that beavers can’t be managed in isolation and that neighbouring holdings need to work together in order to manage the population correctly. Pushing the beaver family onto someone else’s land isn’t productive.”*

KS here highlighted the importance of working as a team to manage beavers on the landscape

*“The last takeaway for me was one of the comments said by Matt, explaining that beavers will not settle, fell trees and dam the waterways changing the landscape as they move up the catchment; they will scope out the areas and only settle in the most suitable areas. Thus, being a great point to explain to landowners.”*

Here KS highlighted the patchy impacts of wild-living beavers, with tree-felling impacts restricted to areas of establishment as opposed to along the entire length of watercourses.

- GB read a summary of her comments which were statements of fact taken from the three days of viewing both enclosures and the wild population:

*“Generally beavers have been living in England for the past 10 years. In this time territories and impact remain small in scale, ie not extended outside of 2-3km territory.”*

*“Currently present in protected parklands, farmland, within villages and on watercourses adjacent to publicly accessible Greenways.”*

*“Never extend more than 30m from river bank. Looking at loW mapping this shows very limited range from watercourses.”*

Here GB mentioned that she was struck by how limited the impact was on the landscape outside of the watercourses, and how few protected sites on the Isle of Wight would be impacted when compared to the amount of habitat on the Island that wouldn’t be affected.

*“Tree loss can be mitigated through fencing and paint. Beavers will gnaw on larger trees including mature oak but tend to fell and browse much younger trees. Preference for willow but are generalist browsers”*

- CK added that beavers will ring larger trees, sometimes systematically in places
- GB acknowledged that beavers will go for mature trees but that such trees can be protected

*“Studies have proven improvements to biodiversity and water management and quality.”*

*“Enclosures - Do escape - Requires more intensive management for animal welfare purposes - Reduces opportunity for gains provided by beavers”*

*“In the wild - Range of territories is still fairly limited - Where do require management this has been provided in a partnership manner. For example collapsed burrows filled in quickly by contractors, outfalls cleared by Wildlife Trust Officers or landowners incorporate into land management practices anyway.”*

Here GB contrasted that the impacts of beavers were much less noticeable when out in the wild, and that she can understand why HIWWT are pursuing a wild release rather than an enclosure as it makes much more sense from an ecological perspective, so GB would be supportive if that's what happens.

*“Impacts: Devon County Council highways and RoW are advised on any issues but do not raise any concerns. There a burrow on a RoW needs attention roughly 2 or 3 times a year.*

*Farmland margins will become waterlogged where there are dams.”*

- RM questioned that as opposed to not raising any concerns, that since the land is owned by CDE, DCC and RoW don't want to touch the collapsed burrow, and she further highlighted that the Island does not have a large estate to pick up the management cost of this

- GB agreed, but that this would need to be addressed through partnership working

*“Ancient woodland trees and flora could be compromised and further studies are necessary. Scottish HRA was concluded potential for impact and monitoring is ongoing.”*

*“Next steps: 10 year license would provide some comfort and assurance that impacts can be properly addressed”*

*“Ecological impact study would further address any concerns”*

GB here highlighted the importance of an ecological assessment with particular regard to groundflora and the balance between ecological gain vs loss.

GB further added that since writing these comments the Local Nature Recovery Strategy Guidance has been released. She shared her feedback internally with other IoW Council colleagues in tree management, rights of way and highways and that their comments and concerns need to be raised (**\*to be circulated as an appendix for transparency since these were not read at the meeting**), but that in terms of climate, landscape and landuse change, we need to start thinking holistically and that the LNRS guidance could be a good tool to do that, and that from the council's perspective beaver management can be aligned into management that happens anyway. GB then mentioned the cost to farmers, and that Chris Jones said that from his perspective he was happy to deal with the impacts of beavers for his neighbours as this is just part of regular rural farming community life.

GB further highlighted that in Devon beavers were living in a protected and historic landscape (**\*East Devon AONB**)

- RM then summarised Kinsley Hollis' comments on the trip (representing the Young Farmers):

*“Regarding Woodland Valley Farm KH commented that the beaver enclosure had little effect on the existing wet woodland habitat, but was disappointed in the quality of the infrastructure and was not surprised at all to hear that the beavers had escaped, and that thicker gauge wire and closer post spacing would have helped alongside a more substantial culvert cover.*

*Regarding the Devon Beaver Project KH noted that the enclosure was larger and the infrastructure much better, and he was not surprised that the managers were confident that there had been no escapes there. Beavers had had an impact on the trees but nothing as drastic as he'd expected. It looked as if beavers had wetter the area and were now using beaver canals to move around and had felled and coppiced trees for fodder, and that it felt a lot more natural than the previous enclosure. The beaver population was managed by means of trapping by Derek Gow and seemed to be well managed.*

*Regarding the River Otter, we met with the two Sams from CDE where Dr Sam Bridgewater explained that beavers had developed an amazing wetland habitat and were an amazing driver of change throughout the estate's floodplain. Sam Briant-Evans (head of agriculture) explained how beavers had moved into their holdings from next-door after disturbance, they tried to move them on as well but due to the time of year and the farming workload the dam removal hadn't been maintained and beavers had gained a stronghold causing change to the landscape. Sam B-E explained that they had sectioned the farm into green, amber and red zones where green areas were fine to be inhabited by beavers, amber areas were not ideal but tolerable, and red zones were where beavers were not allowed and must not take hold. This system seemed to be a great way to manage expectations. When asked Sam B-E said he wouldn't choose to have beavers on the farm, but explained that the beavers were there to stay and had to be managed. The estate seemed to be covering the cost of beaver management by around £5,000 a year, but this cost seemed to be the cost of their own time, not that of their tenants.*

*Regarding the site visits, the first area on CDE was a wetland area made wetter by a sizeable beaver dam which impacted on agricultural land. There was a collapsed burrow that could be damaging to equipment and vehicles.*

*We then saw CDE Home Farm and walked towards the land owned by Bicton Agricultural College where the farm manager explained that the college farmed students, so that the impact of beavers on their land was of little consequence to their farming system. In conclusion, it was great to see the impacts of beavers on the area, especially the wild population on and around the River Otter, although the time spent looking at the enclosures was helpful, it was hard to imagine what the changes would be if there wasn't the restraint in fencing. Two key points to take away: If beavers were to be released on the Island, could they be sterilised to allow time to prove their worth given the opportunity to win round neighbouring landowners with a view to future release of a breeding population. This would be a great way to allow a wild release without the population exploding and affecting a greater area.*

*The damage to trees wasn't half what he thought it would be, even in a fenced enclosure, the coppiced environment of willow and alder was better managed than any by far than could be by himself. The delicate management of small wetland habitats seemed to be developing all the time and wasn't a single attempt at management like what is done without beavers around."*

- RM added her own comments and that her biggest takeaway is that she could find very little comparable between the River Otter catchment and the Island with particular regard to farm size and land ownership, and that the Island does not have the equivalent of CDE in terms of how beavers are managed and the expectations of land use. The land managers seemed pretty resigned to having beavers but when questioned about it they made clear that they wouldn't have wanted them, but they have got them so they're finding ways to deal with them. The take-home from that is that for mainland catchments, beavers are inevitable, whether as the result of reintroductions or not, it is the case of when you have a



beaver, not if. Whereas for us on the Island it is a choice, and that has to be given really careful consideration.

RM added that she can see and completely acknowledge the benefits but that these are broadly third party, they're not directly beneficial to the landowners where the costs are predominantly sitting. A beaver introduction would be burdening a smaller group with costs, to the benefit of a wider group, particularly on the Island where farmers don't have large land holdings and cannot sustain such costs. RM highlighted the current lack of managing costs in the long run through Countryside Stewardship options, which even with the SW12 Making Space for Water 20 year payment option does not cover the permanent degradation of land through landuse change into a beaver wetland.

- IT concluded by thanking all attendees on behalf of HIWWT for those able to find the time to observe beaver impacts first-hand on the field trip, and that all attendees' comments will be taken on board and recorded in the minutes. IT highlighted the range of landowners who were consulted, but echoed ML's comments in welcoming other landowners' perspectives if RM was happy to share these as per the above action.
  - RM flagged one farmer who had been involved with beaver management on the River Otter from the outset and had worked collaboratively with CDE, but who felt let down by the process of beaver management, that CDE had moved onto the next project and that land managers had been left to do deal with the beavers, that the beavers aren't going anywhere and had become well established and the farmer now needs to live with the consequences. RM also mentioned that while Bicton were able to farm students and find an alternative way to monetise the presence of beavers through education on management, the above farmer and his men were the ones managing the beavers and trying to find a way to farm alongside them.
  - CK flagged issues with health and safety and insurance, and that there are still great unknowns, and how this ties in with farmers sending their personnel out on the ground to manage beavers. CK said that there is no insurance to cover a person working in a body of water
  - RM flagged that down in the River Otter land managers are still learning after all these years, and working with beavers that are working their way higher up into the catchment, but that for them, they have to deal with the consequences when they happen, but for us to make an active choice to bring beavers onto the Island with that many unknowns she finds baffling.
  - CK highlighted the presence of prime agricultural land in the Arreton Valley, that in her opinion bears no topographic resemblance or landuse type to the River Otter, that the valley has vulnerable structures on it, and that she also remains baffled.
  - IT acknowledged the validity of these comments but highlighted that there are many opportunities for learning from the multiple catchments that beavers now occupy on the mainland, but also that there is a wealth of evidence from continental Europe and the US where beavers were never extirpated where communities have coexisted alongside beavers forever
  - RM questioned whether these case studies include islands
  - IT responded that there are populations of beavers living on Islands in the Baltic off the coast of Estonia. IT did acknowledge that these islands likely have a lesser human population than the Isle of Wight, but that there are places where beavers coexist alongside higher population densities such as in the Netherlands, which is a small country where there is heavy infrastructure but that supports ~5,000 beavers, thus proving that coexistence is doable.

- CK mentioned EFRA information that was released last week, that people in Bavaria recommend that before beaver release, the infrastructure protection is put in place to protect vulnerable assets, and that they have absolutely no qualms on shooting beavers that are in the wrong places, and that they are a big believer in right release, right place, right reason. CK does not see the right reason for releasing beavers on an island.
- IT again flagged the ecological and ecosystem service benefits that beavers have been proven to deliver
- CK responded that there are different ways to achieve the ecological benefits
- IT opined that there is a complexity in the habitats that beavers deliver that cannot be replicated by humans, which KH also flagged in his comments from the fieldtrip, notwithstanding the downstream benefits in flash flood and water quality mitigation, that admittedly may not be felt by the upstream landowners with beavers on their land
- ML added that from a purely ecological perspective he was astonished at the spatial and temporal complexity of habitat that beavers create, and that he and KH deliberated this in situ on the field trip and neither thought this could be achieved mechanically. He further clarified that ecologically the outcomes of the sites visited both within the enclosures and within the River Otter catchment were overwhelming. ML acknowledged that there is a requirement for a project and an effective partnership to ensure management. He added that one of the questions he took away was whether or not the problems beavers create are realistically resolvable in a short timeframe, and whether the partnership that will deliver the solutions will be strong enough to do this
- MG added that this is where the introducing agency, HIWWT in this instance, to manage the transition period, and that there does need to be a discussion around financial compensation and active management. He clarified that inevitable in ten years' time there will still be problems, but that there would be a 5-10 year transition period during which active intervention will be led by the introducing agency, as this is the responsibility that comes with licence application.
- IT added that there continues to be management by DWT along the River Otter in Devon even given that the ROBT licence has expired now, she highlighted that we met both their Beaver Officer and field officer while on the fieldtrip, and that they also dedicate resources towards managing the beaver population free-living in the Tamar. DWT do remain, continue to support, work with and deliver management outwith the licence period, and that is a model that HIWWT will be looking to replicate.
- RM responded that the dairy farmer she consulted with was fed up of phoning DWT who then don't turn up, and thus trained up his own men to manage the beavers and that it was more worthwhile to pay for their time to ensure the work was done in a timely fashion, which is absolutely paramount. She then acknowledged that the eagle project officer has gone above and beyond to engage with farmers and that even if the probability of eagle activity is unlikely, he still turns up, because if you don't turn up, landowners will stop phoning and will have to deal with the problems themselves, which incurs costs and causes tension.
- ML mentioned that compared with the eagle project, beaver management licencing will be robust, and that all riparian landowners can be licenced to carry out management.

- CK raised that HIWWT will not take part in the destruction of beavers, and that this responsibility may thus have to fall on the landowner, which will incur the wrath of the public and PETA and make individuals lives unbearable.
- IT clarified that NE's perspective on culling is that they are very unwilling to get to the point where lethal control is necessary, which sits in direct comparison to the situation up in Scotland where due to the nature of the illegal release and rapid explosion in beaver numbers without the appropriate monitoring and management mechanisms in place, that NatureScot have been trigger happy in their use of culling licences to solve problems, which is not sustainable in that culling is occurring year after year in suitable habitat where a vacuum causes more beavers to move in. NE are unwilling to issue culling licences, with none issued thus far for any of the wild populations of beavers living in England over the past 20 years. They are keen for this to continue, to thus avoid having landowners and managers in that unbearable position.
- JM commented that one of the standout points to take away from the trip was the slight shift in rhetoric particularly in Devon. Currently the project is focussing engagement on water quality, river corridors and wetland restoration above and beyond the presence of the beavers themselves, which is reflected at the national level with CS options over 20 years to restore river buffers and margins, and that establishing a 10m buffer would resolve ~90% of beaver related conflict
- CK countered that for farmers in Scotland with low lying land, giving away a buffer strip amounts to giving away the ability to drain land, which could be the case in low-lying flatter areas on the Island
- JM noted that a buffer strip that traps sediment and stops runoff into watercourses thus protecting rivers from pollutants has to be a positive benefit for farmers as well
- CK said that that could be done without beavers
- JM said that being rewarded with fair recompense through an appropriate level of compensation by having riparian buffers has to be desirable, and that riparian edges aren't always easy areas of land to farm either
- RM qualified that the problem is with land drains, and that at East Budleigh, the reason the dairy farmer had had to give up on potato cropping was because the beavers had silted up the drainage and he could no longer use them.
- ML added that there is a clear concern about beaver impact and that an element of compensation is required. ML has been encouraged to use the Eastern Yar as a case study site which can be presented to the national NE team, to investigate potential beaver impact on landuse, rights of way and roads, to come up with an ideal set of options, prescriptions and recommendations to reconcile conflicts that may arise and allay any fears. He cited the importance of quantifying the magnitude of any potential problem, given that beaver activity is restricted to the riparian edge, and that it's important to gain an understanding of how significant or not these concerns are. This case study could inform the design and final role out of environmental stewardship to support beaver coexistence, which is important to do across the country.
- CK offered to take ML to see a reservoir, ML acquiesced
- ML referred to modelling work that may be imminently released on the spread of wild living beavers across England.
- RM commented that beavers are going to be on the mainland, but that they're not going to be here on the Island.

- Here IT added that beavers have been documented in the literature to have (and are modelled to be able to) swum across sea straits that are wider than the Solent to colonise Islands:
  - Huertas Herrera A., Lencinas M.V., Toro Manriquez M., Miller J.A., Martinez Pastur G. (2020). Mapping the status of the North American beaver invasion in the Tierra del Fuego archipelago. *PLoS ONE* 15(4): e0232057. <https://doi.org/10.1371/journal.pone.0232057>**
  - Stringer A.P., Blake D. & Gaywood M.J. (2015). A geospatial analysis of potential Eurasian beaver (*Castor fiber*) colonisation following reintroduction to Scotland. Scottish Natural Heritage Commissioned Report No. 875 [https://www.researchgate.net/figure/Islands-within-6-km-of-mainland-Scotland-and-within-6-km-of-these-to-illustrate-the\\_fig3\\_279751505](https://www.researchgate.net/figure/Islands-within-6-km-of-mainland-Scotland-and-within-6-km-of-these-to-illustrate-the_fig3_279751505)**
- CK countered that while deer do regularly attempt to swim across the Solent, we do not have a population of deer on the isle of Wight.
- RW asked if it was part of the licensing process to construct the Countryside Stewardship option case study that ML proposed
- IT clarified that this is not a licensing requirement, but a practical way to make beaver tolerance and coexistence a feasible reality
- CK added that many landowners of riparian land own small parcels for pony paddocks etc and are not eligible for CS
- ML countered that this may well be one of the conclusions that comes out of the exercise and that therefore support may need to be broader in its scope
- RM questioned how NE can carry out an exercise to support a licence application when NE are the independent body reviewing the submission of said licence
- ML sees the exercise as informing the licence application, not supporting it, which has relevance at the national scale above and beyond the Eastern Yar catchment. He further suggested that this steering group is quite unique in being able to draw together representatives from such diverse backgrounds, with diverse interests and priorities, and that there aren't many other places in the country where such a meaningful exchange can take place.
- Upon questioning by CK, ML clarified that this case study exercise is his idea, which he posited to the local area team upon which he was encouraged to proceed
- IT commented that such an exercise would seem to have relevance across England given LC's comments from the field trip regarding how current CS options don't work, and how we saw this at Woodland Valley Farm where Chris Jones had created riparian buffers but had to really twist the options to make it pay. Chris wanted riparian buffers notwithstanding the presence of beavers for habitat connectivity and runoff management, but that he almost had to break the system in order to make the options fit. In her opinion given the wider benefits of riparian buffers to wildlife of many different species, such a case study exercise to improve CS would seem to have a lot of merit.

## Presentation on beaver management licencing

- Here IT presented upon the CL50 beaver management licencing training she attended in February (**attached**).
- Regarding the No Satisfactory Alternative rule, CK questioned whether this would apply if beavers were to have broken a levee, dug a hole through a reservoir or otherwise compromised a water structure.
  - IT replied that causing serious damage such as in those examples was absolutely a reason to take management action, but clarified that in order to comply with the No

Satisfactory Alternative rule, exploring of options higher up the management hierarchy may need to be explored or justified as to their unsuitableness before jumping straight to the final levels such as culling. For example, if infilling a burrow can satisfy the management objectives, then this should be done before proceeding to trapping. Similarly, if a qualified operative can trap the beavers for translocation, this should be done before applying for a culling licence. She clarified that in some places of zero tolerance, simply infilling burrows may not be a suitable and sufficient action in which case trapping would be justified, but that a demonstration of considering all the options may be required to comply with the NSA rule.

- MS asked whether people were getting trained up in order to offer beaver management as a service to farmers
  - IT replied that many people have been trained up and received CL 51 and 50 licences, but that NE have focussed their licencing on landowners, managers and agencies, since they are loathe to allow private consultancies to become licenced and charge a premium for services under a licence that is freely obtainable. Currently NE are preventing private companies from capitalising on the licencing by controlling sign-ups in order to make management as accessible as possible to all landowners without needing to rely on external companies that would charge for their services.
  - In response to RW's question as to how many islanders have these licences, IT replied that to her knowledge currently just she has been trained, but there is scope and opportunity for others to receive training too.
- With regard to dam manipulation and fitting of flow devices, MS asked whether the EA were party to the licencing
  - IT replied that in this case study of the flow management device pictured on CDE, the EA were not involved as the watercourse was not main river, but that consultation with the council was required to obtain Ordinary Watercourse Consent, and that this was granted. EA consultation and permitting would be required for structural works on main river such as installing culvert protection or flow devices.
- With regard to trapping and CK's question on whether IT had used the Bavarian style beaver trap in America, IT replied in the negative. IT used Hancock traps predominantly, and snares on occasion if time was of the essence to remove beavers from where landowners would otherwise resort to lethal control, but both of these methods are banned in the UK.
- In response to RW's question on who delivers the licencing training, IT replied that it is Natural England
- In response to CK's question on who pays for the training, IT replied that the training is free, but there is a time element involved, particularly for the CL51 and 50 licencing that runs over multiple days, and that accommodation was needed to stay overnight down in Devon.
- RW asked if NE might come to the Island to deliver training. IT replied that they might, in the future, if we release beavers, but that currently it is required to attend training in a place where there are beavers living in order to understand what beavers do and how to manage them accordingly. She clarified that the CL 50 and 51 training has taken place in Devon, but that NE are keen to encourage as many people as possible to get trained up so are taking the CL52 training on the road to other catchments with wild living beavers including the Avon and the Kentish Stour so that local farmers and landowners can easily access this training.
- In response to whether IT can deliver the CL52 training, IT replied in the negative. Under her CL50 class licence IT could have accredited agents and assistants working outside of or under

her supervision following appropriate training given by her, but class licencing training for CL52, 51 and 50 is carried out and licences granted solely by NE.

- GB questioned whether there would be a separate licencing process for development given beavers' EPS status.
  - IT was unsure, but had not heard of such a licence.
    - IT to ask NE for clarification on this

## Update on beaver management strategy and ecological assessment

- IT to send out the BMS as a PDF since the link to share the document was not available to external parties.
- GB asked whether SINCs should be included within the ecological assessment
  - IT replied that within the document the focus so far has been on statutory designations and considerations, given that the wild release criteria workshop was led by a national team and focussed on national perspectives
  - GB added that many SINCs will overlap with priority habitats, but that TPOs would be another local designation to consider
  - IT replied that TPOs from a planning perspective hold a lot of weight, but in the context of beavers, that damage would be considered an act of god in the same way that if the tree were to blow over in a storm
    - IT to send out draft of the ecological assessment when the first draft is complete.
- RM questioned whether anything from the recent fieldtrip to the southwest had changed HIWWT's perspective with regard to the beaver management strategy
  - JM answered that it was very useful to see all the sites and speak to the estate, and that the site visit at the Home Farm led by Bicton Agricultural College had a lot of parallels to the Eastern Yar given the old railway line acting as a massive bund through that catchment system. JM said the field trip had broadened horizons on impact and coexistence which was very helpful, but that the more information we have the better prepared we can be, so JM is keen to understand some of the other farmers' views as well that RM met. JM highlighted that the landowners the steering group met were those willing to work with DWT, but that it would be helpful to hear from those that weren't forthcoming in meeting us through DWT.
    - CK offered to collate Scottish farmers' views too.
  - IT added that it was useful to meet the landowners since she had visited all the sites but hadn't met all of the people before, and that it was interesting to understand the motivations of those that had chosen to have an enclosure on their land. She highlighted that from the landowners we met, there hadn't been a huge amount of conflict, with no lethal control licences being issued in the west country. It seemed that landowners were taking beaver management in their stride, given the problems they have caused such as culvert blocking, and that it was interesting to hear their balanced view, which she wasn't necessarily expecting. The contrast between the enclosure and wild release raised concerns about animal welfare within the enclosures, where during the drought last year water need to be trucked to ensure sufficient depth, and the onerous obligations of checking fencing to prevent escapes and the difficulties that entails to enclose a species so adept at burrowing and swimming. She highlighted that there were headaches associated with wild release, such as the collapsed burrow on the RoW that needed infilling, but that in general it

- appeared that landowners were coping, with DWT having had management responsibility for beavers since 2011 in the enclosure and since 2015 with the ROBT
- CK clarified that the River Otter population is now approaching the exponential growth phase
  - RW asked how long until the carrying capacity of the Island is reached.
    - IT responded that the ecological carrying capacity varies depending on the size of the catchment, the quality of the habitat within the catchment, that overtime beaver territories may shrink to accommodate higher densities, and that the social carrying capacity depends on the tolerance of the people involved. IT clarified that in the UK, we haven't reached the point of carrying capacity being met in order to model comparisons for the Island, and that even on the continent beaver populations are continuing to radiate and expand and in many places are not at carrying capacity.
    - RM commented that the social tolerance of beavers in Devon is high because CDE is a large estate and has the resources to devote to conservation and wetland habitat restoration, and that Bicton's perspective to farm students allowed them to accommodate beaver activity. But that a productive farmer, or the householder with a septic tank that no longer drains, or small landowner outside of scheme would all have a lower social tolerance
    - IT agreed that the size of CDE helps build tolerance through absorbing some of the costs. IT pointed out that in the lower Eastern Yar catchment there are large landholdings owned by HIWWT and the RSPB, but recognised that that is not the case in the upper catchment, but highlighted the importance of the CS options and partnership working to support those smaller landowners
    - RM pointed out that HIWWT's 300 acres in the floodplain does not compare to CDE's 25,000
    - IT acknowledged that the whole of the Isle of Wight (**380km<sup>2</sup>**) is analogous in size to the River Otter catchment (**250km<sup>2</sup>**)
    - ML added that during the field trip we met with smaller landowners that had beavers on their property
    - RM countered that Chris Jones makes his living from ecological tourism from the presence of beavers, and that his acreage (**170 acres**) is larger than those typical on the Isle of Wight (**339 acres average farm size**) (**Upon checking the numbers, this does not appear to be the case...**)
    - ML highlighted that the field trip reflected a range of landowners with different motivations and drivers. ML is interested to understand how much adjacent land will be impacted, which he believes the ecological assessment will help to answer, and that he hopes the scope of the report will be broader than just the statutory designated sites, and that SINCs have a relevance as well. ML then mentioned Chris Jones' second enclosure that supported a family of beavers on rush pasture habitat with very few trees, and that in his opinion without being shown he would never have known beavers were in there. He indicated that before beavers were introduced the dominant habitat type was rush pasture, that it continues to be and will remain rush pasture, and that for the landowner this represents no change in landuse since cattle continue to seasonally graze within the enclosure. ML added that the Devon Beaver Project on culm grassland habitat was within ES scheme and that the beavers were delivering the management goals. ML compared this with landowners on the Eastern Yar including HIWWT and the RSPB where beavers will do the work and save on management costs. He added that the ecological assessment

will develop a sounder understanding of impacts. ML expressed his surprise at how little impact the beavers had had on the Bicton site, with its incised drainage ditches and river creating a complex hydrology with derelict scrub on the margins, which he felt was similar to sites on the Eastern Yar. He highlighted the ongoing management of needing to re-ditch the watercourses and clear the scrub to maintain the level of drainage required which represents a cost. And that with the current lack of management in carrying out this work, the situation in the future would become analogous to the situation with the beavers there. He posited that perhaps the management cost associated with maintaining the drainage structures could be offset by beavers felling scrub, which could help offset the costs associated with the more unhelpful behaviour, and that he would like to understand this balance better.

## Any Other Business

- GB questioned whether IoW Council needed to give regular statutory updates as a standing agenda item given that very little work is being done on beaver policy in comparison to the national agencies.
  - ML drew attention to the importance of GB giving updates from IoW council colleagues not present at the meeting citing the example of Rights of Way
  - MC added that the IoW Council meets the qualification of having statutory responsibilities through highways and development that warrants the council's inclusion in the statutory agency category, but fully accepts that GB may not have an update every meeting. He further highlighted that the statutory authorities warrant a separate update in order to distinguish these policy updates from other non-statutory agenda items.
  - GB questioned whether there would be a consultation with statutory agencies during the licence decision making process, and IT replied in the affirmative.
  - ML added that if Rights of Way felt that beavers are a bad idea, that this be shared and explored.
  - IT commented that HIWWT would be happy to arrange a site visit to address any concerns RoW may have.
  - ML commented that RoW are aware of where the RoW network is at its most vulnerable already. Also that it's important to understand that a lot of the old drainage systems in the floodplain are not being maintained by the EA, the local authority, or by the farming landowning community, and that derelict structures are making the floodplain wetter at Alverstone, and that maybe beavers will worsen the situation but maybe they'll make it better. Either way we do depend on the IoW Council to flag concerns so that they can be properly explored.
- IT announced that her permanent residency application has been granted and that she will be rejoining her husband in the States. Further, that although she has not yet given notice, she will be leaving in the near future, but that it has been a pleasure working on behalf of all stakeholders on the beaver project, who will be left in the capable hands of HIWWT who will soon be hiring for her replacement
- RM thanked HIWWT for organising the field trip