

Tayside Beaver Study Group – 8th Meeting
Minute of Meeting
Thursday 6th March 2014
SNH, Battleby

Present

David Bale (DB, Chair – SNH)
James Scott (JS, SNH)
Helen Dickinson (HeD, TBSG Project Officer)
Alan Ross (AR, SWBG)
Ian Lorimer (IL, SEPA)
Scott Petrie (SP, SLE)
Ian Mackintosh (IM, NFUS)
Hugh Dignon (HuD, SG)
Roisin Campbell-Palmer (RCP, RZSS)
Simon Jones (SJ, SWT)
David Summers (DS, TDSFB)
Sean Dugan (SD, BSWG, SFCC)
Danielle Casey (DC, SNH)
Ross McEwing (RMcE, RZSS – Senior Conservation Scientist Wildgenes Lab)
Simon Girling (SG, Head of RZSS Veterinary Department)
Adam Naylor (AN, Veterinary Resident, RZSS)

Review of health and genetics studies to date

RMcE presented the results from DNA testing of free-living beavers in Tayside. Eighteen animals were tested. The results show that:

- All beavers tested were Eurasian (*Castor fiber*), all from the Bavarian region;
- There are 3 distinct genetic units (explained as 3 unrelated families; does not mean they are from 3 different collections or that there were 3 separate escape/release events);
- Genetic diversity is relatively high – sufficiently high to support any reintroduction without augmentation at the start.

RMcE added the caveat that these results are from a representative sample of the population and some of the figures may be artificially high. Any reintroduction programme would have to be carefully managed and monitored in terms of genetic diversity and inbreeding.

SG updated the group on the interim health screening results. The main diseases screened for were those that could be transmitted to humans, could have an impact on livestock, and those that are not endemic to the UK. As there is no one procedure for detecting all diseases, the animals underwent a range screening methods including radiography, ultrasound and laparoscopy. Thirteen live individuals were tested and 5 dead (through post-mortem screening). There were no positive results for any of the following diseases: *Echinococcus multilocularis* (EM), Giardiasis (beaver fever) Leptospirosis (European serovars), *Mycobacterium bovis*, *Mycobacterium avium* subspecies *paratuberculosis*

("Johne's disease), salmonellosis, or other faecal bacterial pathogens. Results from tularaemia (*Francisella tularensis*) are pending. Some animals tested positive for the beaver specific caecal trematode *Stichorchis subtriquetrus*. All beavers examined were in good condition. The Tayside population as a whole appears to be breeding healthily with no current signs of significant diseases or parasites.

Some animals displayed abnormal incisor bite planes. The reasons for these abnormalities and the relatedness between the beavers showing symptoms will be the subject of a separate study, the results of which will be included in the final health screening report.

Trapping for both genetic and health studies is ongoing and final reports will be available later in the year. The group credited RCP with her continued efforts in pursuing these projects.

JS informed the group of Fera and SASA's monitoring programme looking at fox carcasses in Tayside for signs of EM.

Plans for further trapping this spring

RCP provided an update on trapping, informing the group that the programme will continue until 18 April 2014. The final trapping sites have been identified and there is scope to set more if sites become available in the next 2 weeks. Carcasses for post mortem testing will be accepted beyond the end of the trapping programme.

The group acknowledged the time and effort required and thanked RCP and HeD for their flexibility and commitment to the trapping programme. RCP highlighted the practical challenges including water level fluctuations, sporadic beaver activity and trap interest, and the limited number of approved sites. The group agreed the methods used and challenges faced should be noted as part of the learning process and fed into SNH's study on practical beaver management.

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Promotion of mitigation advice / trials

RZSS and Derek Gow Consultancy have received funding to produce practical beaver management guidelines. This has developed into a collaborative project including SWT, and a number of European beaver experts. SNH are considering the inclusion of this work in future beaver management research. The 1st stage, to be completed by the summer, is a literature review of current beaver management guidelines. The contract has yet to be let but another part of the project will be an SNH in-house analysis on legality and licensing, based on the assumption that beavers would become a European Protected Species (EPS) if reintroduction was approved. Publication of this work will not pre-empt any decision by the Minister on the status of beavers.

HeD updated the group on mitigation activity since the last meeting:

- 1 flow device and tree fencing still in place
- Lack of sites on which to trial mitigation techniques
- Once trapping programme has ended, hoping to put in place anti-game tree paint, using a European brand plus and home-made variety

- Would like to trial a flow device with fish passage element, electro-fencing and crop protection
- The main issues are dams and burrowing into floodbanks but people are still reluctant to report examples of these.

The group agreed that it would not be the best use of the Project Officer's time to seek new sites on which to trial mitigation. Group members were instead asked to encourage land owners and farmers to contact HeD to have their issues documented and to discuss options for trialling mitigation techniques on their land.

- AP – HeD, IM and IL to collaborate on investigating known possible examples of burrowing in floodbanks, exploring exact cause, the impacts and any possibility of mitigation.
- AP – DB to write a letter on behalf of the group to the Scottish Farmer to promote the group to the public and encourage engagement in the process.

HuD stated that the remit of the group is to focus on the current situation on the Tay, to document the issues, to advise and mitigate where possible but not necessarily to seek to resolve all the current issues.

SP informed the group of the planned SLE 'Walk and Talk' on 18 March. This is an information sharing session and, to date, 27 land owners have signed up for the event. Participants will be encouraged to complete the questionnaire. IM informed the group that NFUS also plan to hold an event later in the year.

Second Population Survey

JS raised the question on whether a second population survey was needed and/ or desirable. There is an expectation within SNH that another survey would take place but the group must consider whether it is viable in terms of budget, value for money and timescale.

- AP – JS to produce a short paper outlining the options for and feasibility of a second population survey, including likely cost, value for money, and what questions could and could not be answered. Group members' thoughts to be sought by email.

Planning for Further Productivity Studies

HeD informed the group of a 10 month student placement whereby a Glasgow University student will be hosted by RZSS and will, inter alia, carry out much of the productivity study field work. The study will be a repeat of last year's, running from May to August, and will expand on the knowledge gained so far. Volunteers will be used where available.

Are there any gaps that need to be filled in terms of gathering information for reporting to the Minister?

The group agreed: the biggest gap is the lack of engagement from land owners and farmers who are experiencing adverse impacts; and the need to continue to canvass for examples of positive impacts too. HuD highlighted that the remit of the group is to record what is actually happening in Tayside, not to gather opinions of groups or people either for or against the presence of beavers.

Beaver-Salmonid Working Group Project Officer Update

SD provided an update on BSWG activity and thinking:

- The Tayside beaver / salmonid habitat overlap map is near to completion.
- There is a lack of research in certain areas; the next step is to carry out a review of new literature.
- There is a requirement for a baseline monitoring in Tayside.
- The BSWG is continuing to look abroad at examples of beaver management to gain relevant knowledge and information; they are collaborating with the SNH beaver management review; they have produced a beaver-salmonid management flow diagram and are working on a beaver dam assessment protocol.
- Data from the MSS/BSWG Lunan Burn study are currently being analysed and full results will be available shortly.
- The group has aspirations for further research and collaboration with TBSG and TDSFB.
- The BSWG report is at the draft stage; they are interested to hear TBSG's discussions on how they propose to structure their report.

SJ added that Robert Needham, Field Officer at the Knapdale Scottish Beaver Trial, has secured the PhD position with Southampton University studying the effects of beaver dams on fish passage.

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Defining the TBSG contribution to the Ministerial Report

HuD expects TBSG, BSWG and others to produce a comprehensive report, covering a range of scenarios and likely outcomes for different courses of action. In relation to emerging information, he is inclined to be open and transparent throughout the process as long as those involved in the various bits of work are happy to release their findings.

DB proffered that sub-groups would be commissioned to write up sections of the TBSG part of the report which would then be signed off by the whole group.

- AP – DB to clarify with Martin Gaywood (SNH, NSRF) the structure of the report and timescales for submitting the TBSG contribution.

New and Outstanding Action points

REF	ACTION	LEAD	STATUS
Previous Action Points			
AP3/4	Take forward exploration of separate tagging of captive beavers and wild beavers and possible approaches.	JS	ONGOING – All beavers caught as part of health screening process are PIT tagged. Possible tagging associated with licence conditions being explored for collections - JS
AP3/7	Contact Paul Ramsay to explore the possibility of electrofishing of his streams, to gain knowledge of the effects of beaver dams upon migratory fish. Inform the Beaver-Salmonid Working Group of this work.	SD / DS	ONGOING – Paul Ramsay is keen for this to take place; DS will make initial investigations after June to identify what fish are present at Banff.
22 November 2013 Action Points			
AP7/1	Raise the issue of trapping and re-releasing when speaking to SLE and NFUS members, with a view to producing a list of confirmed sites should another round go ahead. They will also request that any carcasses found are made available to the group as soon as possible.	SP / IM	DISCHARGED
AP7/2	Contact the local vet to investigate the possibility of using their services should another round of screening go ahead.	JS / RCP	DISCHARGED
AP7/3	Speak to Constable Blair Wilkie, Tayside Police Wildlife and Environment Officer, local SGA and SSPCA about the importance of samples being made available from dead or injured animals.	JS	DISCHARGED
AP7/4	Update website - with information on clearing dams for drainage purposes at this time of year, explaining the risk of removing food caches and exposing lodges; - with enhanced mitigation advice, including what cannot be done; - with mention of the questionnaire and details on how to obtain a copy; - with list of press articles.	HeD / JS	ONGOING – all members of the group are asked to visit the website and feedback thoughts and suggestions to HeD.
AP7/5	Consider separate and joint stakeholder engagement events and confer with Helen and James to produce a programme of events for 2014. Events should be spread throughout the geographical area of beaver presence. They could be linked to other events already in place and should aim to engage all audiences. Draft programme to be circulated for comment shortly after the festive holidays.	SP / IM	ONGOING – SLE event on 18 March and NFUS event later in the year.
AP7/6	Keep an audit trail of where the questionnaire has been advertised and promoted.	HeD	ONGOING
AP7/7	Produce a draft programme for next year's lodge productivity study.	HeD	DISCHARGED
AP7/8	Write an article for the Tayside and Grampian section of the SNH Nature magazine	HeD	DISCHARGED

AP7/9	Contact Frank Rosell for advice on the cost of electrofishing in Norway.	RCP / SD	DISCHARGED
6 March 2014 Action Points			
AP8/1	To collaborate on investigating known possible examples of burrowing in floodbanks, exploring exact cause, the impacts and any possibility of mitigation.	HeD / IM / IL	
AP8/2	To write a letter on behalf of the group to the Scottish Farmer to promote the group to the public and encourage engagement in the process.	DB	DISCHARGED – David emailed the Scottish Farmer on 13 th March.
AP8/3	To produce a short paper outlining the options for and feasibility of a second population survey, including likely cost, value for money, and what questions could and could not be answered. Group members' thoughts to be sought by email.	JS	
AP8/4	To clarify with Martin Gaywood (SNH, NSRF) the structure of the report and timescales for submitting the TBSG contribution	DB	