UnderStory - Storying woodland use, management and expansion: a methodology

RESAS1.4.3c [Report on innovative digital storytelling methods for AM]

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Introduction

Exploring how multi-media techniques – including where relevant minicam video ethnography - may allow the hard-to-capture values such as spiritual and symbolic attributes (linking to RD1.4.1) associated with woodland and its ESS to be assessed using DSM so they can be used as part of AM and decision-making.

Linkages to other work

The process and product of storymapping will proceed in collaboration with the work in:

- O1.4.3c to map woodland expansion options and consequences for ESS and biodiversity based on the MELODIC model (D5), Participatory mapping workshops to assess social impacts of woodland expansion and connect social and ecological knowledges of woodland quality and connectivity (KE2), and further post-workshop mapping woodland expansion options and consequences for ESS and biodiversity (D6) [Key contact: Alessandro Gimona]
- O1.3.3 to develop and test CaperMap, a Capercaillie habitat preference map/model [key contact: Scott Newey]
- O1.3.2 to investigate processes and relationships of Ecosystem services supply, which uses the same study sites and produce an understanding of the co-production of multiple benefits from woodlands [key contact: Anke Fischer]

Contents

UnderStory - Storying woodland use, management and expansion: a methodology (working title)

Background

Woodland management challenges

Managing woodland for multiple objectives presents persistent challenges, two of which we specifically seek to address. One is the need for stakeholders to better share, understand and empathise with each other's perspectives, knowledges and ways of knowing, amongst different scientific disciplines, practitioners and communities. Without this mutual awareness and knowledge the development of the common understandings and language necessary for constructive and on-going Adaptive Management may be seriously hampered. DSM thus is anticipated to map onto the AM cycle in 3 key ways: (a) as a way to engage stakeholders (b)as a way to integrate different types/sources of knowledge, and (c)to help articulate the issues about which decisions may need to be made, and inform discussions of how to address them. In addition, the agency (role and influence) of the nonhuman tends not to be well accounted for in (usually humanist rooted) participatory or discursive processes of engagement.

Harnessing the power of story for adaptive management of land

It is often said that humans are hardwired for story. As Lambert (2010, 1) underlines, "Stories are the large and small instruments of meaning and explanation that we store in our memories". Storytelling is typically enrolled into community engagement and research processes because it is a fundamentally social, immersive and memorable way to highlight, make and develop connections between people - and people and environments - and in ways that evoke the power of situated experience and emotion, and promote empathetic attunement and self- and mutual learning, sometimes across significant differences. Stories are particularly valued as a way to reflect on and attend deeply to particular experiences and connect the personal to the general, thus are seen as a valuable tool of policy awareness and advocacy. Moreover, participants often report the DS process being transformative in that they feel differently about aspects of their and other peoples' lives. These are characteristics that have great potential in enhancing AM processes, but as yet are little explored in the environmental management realm. Of the key stages in AM, DSM is highly relevant to the development of a shared knowledge base and learning from experience. The challenge for AM is to integrate the different knowledge sources and formats which arise from the diverse forms of knowledge and ways of knowing. Digital Storytelling Mapping has potential as a mechanism for capturing and communicating certain types of knowledge and communicating this in order to help learning and build knowledge capital.

Mainstream digital storytelling (DS) practice involves digital, short-form media production that focuses on the creation of workshop-facilitated, individual, first-person narratives, often of less privileged voices, which is usually put together with images whether still or moving (or audio or written artefact), and then screened within (and, if desired, beyond) the group. Digital stories are typically of 2-5 minutes duration and use combinations of audio recording, photographs and video (and sometimes music) to tell the story working through inter-personal story-sharing exercises. The story is written and narrated by the teller. Often the images are produced by participants and/or can use existing images and images created through the teller's direction. The fully participatory mobilisation of the method takes place at a 3-day workshop but can be done less intensively. The process used varies but typically involves the key stages of: elements of a good story, 'story circles', development of a script, creation of video or montage and a screening (after Gubrium 2009[i] and Lambert 2010[ii]):

Many DS exercises do not have screenings beyond the participant group and the benefits are primarily with the in-group process of story sharing and production. However, it is acknowledged that "With careful facilitation, community story screenings can generate deep and strategic discussion and function as opportunities to map out strategies for how audience members can take action on important issues. This work can be supported by sharing stories online and via social media methods or broadcasting them on local radio to reinforce what people have seen and heard at screening events" (p.2, Storytelling Program Impacts, www.storycenter.org).

Accordingly, DS is increasingly used in social science and the humanities – especially in the health, civic engagement and higher education spheres. It is currently being propounded and explored as a particularly powerful way of organising and curating knowledges so as to facilitate meaning-making processes (such as building common ground or mutual understanding upon which decisions can be made - and sometimes even therapeutic encounters - as well as generating artefacts (e.g. audio accounts or videos) that can influence, motivate and inspire others. De Leeuw et al. (2015) list the different elements of DS that make it powerful. These include:

- Engaging the culture and context of communities
- Exploring common narratives
- Relatively non-hierarchical way of discussing difficult topics
- Bridging tool and aid to relationship building endeavours
- Inspiring social change
- Being less threatening and allowing discussion of difficult or taboo subjects
- Confidentially or connecting to wider publics

DS has a potential role in pushing current conventions of knowledge making, building a much needed methodological response to the "expanding body of non-representational theory that privileges embodied experience and direct and primary witnessing of a molten in-flux world that requires new modes of representation (Thrift 2008) …[and] seeking to acknowledge multiple and emotionally resonant ways of knowing and being in practice, research, and knowledge-making and sharing (Durie 2001; Dyck and Kearns 1995; Wepa 2015)." (de Leeuw et al 2015, 155).

It has been noted that digital storytelling presents opportunities for collective and collaborative endeavours, but so far this has been done more within than between divergent communities. It has been done with communities of practice as well as communities of place, but typically where there are strong commonalities rather than conflicts between those actors. And it is unusual to see the exercise taken down the avenue of interacting, interweaving or otherwise relating those stories to each other in a single DS project. Bringing DS into contested situations where different perspectives and trade-offs have to be explored is therefore an area of great innovation potential. The burgeoning field of i-docs could be seen as one line of experimentation developing a hybrid in the spectrum between photovoice and documentary.

Our focus is to explore DS as a basis for practices of discussion, connection, learning, awareness, meaning making, perhaps empathy and finding some common language – and ultimately decision-making - across stakeholders with conflicting interests and perspectives, within the DS process. Traditionally DS has been done within peer groups or groups with strong commonalities rather than bringing them all under one roof. There is a need to explore the potential of DS for helping to develop a better platform of understanding for adaptive management. Crucially storying is not just about the form and content of resulting product. The very act of constructing a multi-media story product could pay dividends for AM as a tool facilitating numerous active agents all negotiating meanings and practices together (ie stakeholders engaging with each other and the decision-making process). The

method has many of the benefits of a focus group in deliberating different experiences of a topic but allows a much deeper engagement with various hopes, struggles and realisations, providing a structure and resource for substantive listening and responding.

Our other novel focus is also to use DS – traditionally a human-centred tool - to explore more-than-human issues, where the environment and various species are important actors in their own right. The methodological gaps in addressing the need to bring more-than-human perspectives into decision-making are increasingly highlighted in the literature (e.g. Buller, 2015). For example, one could choose to simulate how capercaillie experience human activity and disturbance e.g. along the lines of the Notes on Blindness VR project: http://www.notesonblindness.co.uk/vr/. In any case, there is much to learn from VR regarding the importance of response and interaction, and blurring of roles of makers and audiences in the weaving of increasingly intricate stories; an arguably neglected potential in DS, with the mantle perhaps being taken up to some extent in i-doc (see http://i-docs.org/2016/03/27/interactive-documentary-what-does-it-mean-and-why-does-it-matter/).

DS has traditionally been used to tell individual stories with less emphasis on engaging actively, equally and iteratively with the audiences of the stories. Thus, in this way our DS exercise has aspects in common with Participatory Video, but has the flexibility of not being tied to the medium of video, and can work effectively to bridge stakeholders who are difficult to bring together in person. A further evolution from traditional DS is that the exercise is not (solely) producing a multi-media product to speak truth to power but seeks to use the process to get on a level with powerful actors, share stories with them in both directions, and thus develop a better platform of understanding for adaptive management of different perspectives, forms of knowledge and ways of knowing.

Story*mapping* is relatively novel strand of inquiry and engagement, enrolling elements of both DS and participatory mapping, to create a spatially explicit way of curating and exploring the stories collected. This also will help incorporate the more-than-human dimension. Spatial dimensions of stories are thought to be enhanced through judicious use of digital media anyway. For example, the Mobile Video Ethnography pioneered by ourselves in the outdoor recreation sphere, and by others, has been recognised as evoking and bringing explicitly into analysis elements of location, embodiment, mobilities, and the situatedness of practices in particular environments that can otherwise be neglected. It has also highlighted how interweaving the recording and reflecting upon moving images can create rich layers of understanding between those. It is likely that engagement will involve a screen that includes scenarios of woodland expansion with clickable points that link to stories about particular places. These scenarios will have a biophysical and a social component. The first will rely on the biophysical understanding of the area and take into account a number of benefits and trade-offs derived from different expansion options. The latter will use interactive mapping tools (in development) to capture preferences for particular scenarios and to integrate biophysical results with participants local knowledge. Because Digital Storytelling is place based or at least associated with an environment that embodies particular characteristics it is therefore potentially spatial allowing it to be linked to the biophysical modelling. This will allow us to explore how to integrate the knowledge based on people's experience of the environment with the biophysical knowledge of the ecosystem and its functions and services

Use of POV video (e.g. with go-pro cameras) as one of DS recording tools could echo experiments in VR in which by implicating ourselves in particular environments – especially whilst evoking embodied and tacit knowledges - we can explore questions surrounding our perspectives on the environment and its change, as well as our actual and potential agency to play a role in this change.

We will explore the potential to use VR headsets associated with scenarios of woodland expansion as a mechanism to allow people to visualise and evaluate these scenarios. VR scenarios will be localised relative to Landscape scale woodland expansion. We will test the utility of linking to VR from clickable points on the map to explore woodland expansion scenarios and capture stakeholder responses.

Aim

To allow the articulation and exploration of different stakes in, and perspectives on, woodland management and/or expansion, with a particular view to established a common understanding of the issues between conservation, recreation, development, planning, and sporting interests.

Research Questions

1. How do visual and storytelling techniques shape possibilities for (a) the adaptive management of woodland (b) the working through of land use conflicts?
    - Is it possible to build more interactivity and feedback looping into traditional DS approaches?
    - Is storymap rich enough to invite multiple engagements and the kind of interaction conducive to AM? (E.g. melding with VR in creating environments that invite audiences to participate and be an influencer rather than observer)
2. Can DSM help with a) stakeholder engagement, b) developing a shared and integrated knowledge base and c) help with the learning and collaboration?
3. How might adaptive management of woodland, and other resources, be aided by such methods in the future?
4. What difference does (a) a mapping element, and (b) mobile and POV video make to use of digital storytelling techniques?

Method

Case study area Cairngorms National Park: two possible focal woodland issues

Due to dovetailing this deliverable with the work outlined in the HLF Capercaillie bid (a partnership bid led by the CNPA), we are obliged to design a contingency methodology with two parallel strands according to the resources and focus associated with the respective work briefs: one focussed on a community of place, the other bringing together different communities of interest. The strand actually taken will depend on whether or not the HLF bid is successful. This will be known in September when HLF project will begin immediately if funded. The two possible strands are:

1. (If HLF successful) a DS exercise with Carrbridge community in which storymapping will be used to enable a range of community members to express their experiences, challenges and desired futures for woodland management and connectivity relating particularly to outdoor recreation and protected species conservation (capercaillie in particular), and in so doing bring a community perspective to an issue that has hitherto been dealt with as an ecological and land management issue. As appropriate, and resources allowing, the community of place stories can become interwoven with the stories of communities of interest;

2. (if HLF unsuccessful) a DS exercise involving woodland expansion/management stakeholders exploring where CNP woodland can and should go and the implications for (particularly cultural) ESS (this would have some similarities to participatory mapping and PV, striking a balance between the limited participation of the former and the often very-resource-intensive participation of the latter)

NB. The fine-tuning of the methodology will have to be done in Sept when we the HLF funding outcome will be known. The detailed protocols likewise can only be developed once the aims of the stakeholders have been discussed and agreed.

Techniques & activities

Traditional DS involves generating individual stories over 3 days. Our approach is inspired by DS but in order to fit with the resources that we - and the participants - have to offer (less time, more video capacity, more mapping capacity), the following set of tasks is suggested;

1. Researchers construct own example story of their own experiences of woodland use/management to show to actual and prospective participants

TECHNIQUE FOR GENERATING RESEARCHER EXAMPLE STORIES

- Katrina & Scott do story circle/pairs to establish the main points they wish their woodland-related story to cover
- They select the media most appropriate for telling their story (e.g. writing, audio recording, still photography, moving images (3rd person or Point Of View) or a combination of these)
- They break-out to record their story
- They come together to share – and then refine the curation of – their story

2. Researchers map out prospective participants and possible power dynamics/gradients

PROSPECTIVE PARTICIPANTS

It is crucial to consider carefully at the beginning and throughout: who or what will be heard, and by whom, through this DSM exercise. This includes considering how participatory the exercise ought to be in order to balance giving voice to those with least voice v. issue of elite capture.

We have been building stakeholder relations for this project for the last year, which in turn build on many relationships established in previous and parallel projects (see our O143c output Deliverables D1: Report on stakeholder engagement to help co-construct the research agenda in the Cairngorms based case study on accessible rural woodland expansion and D2: Report on benefits from woodland derived by communities from case study areas and the main trade-offs). The precise recruitment strategy will depend on whether woodland management or expansion is the focus, so the following sets out the key stakeholders we would seek to recruit for each:

Woodland management:

- Residents of Carrbridge community, including:
  - Members of different cohorts re age, gender, socio-economic status, sexuality, ethnicity and other background (including children of nursery, primary school and secondary school age, as well as older residents who may not use the woodland directly anymore)
  - Different kinds of outdoor recreation user or modes of woodland appreciation (which could include non-use or former use) (including walkers, runners, dogwalkers, mountain bikers, bird watchers, wildlife photographers)
  - Community representatives (e.g. members of Community Council)

- Members of the Scottish Capercaillie Group (formerly known as Capercaillie BAP Group), including:
  - RSPB
  - SNH
  - FCS/FES
  - GCWT
  - CNPA
  - Private land managers
- Badenoch and Strathspey Conservation Group
- Members of HLF capercaillie bid not mentioned above:
  - UHI researchers
  - Comms experts
- Rangers, guides, instructors, access officers and other outdoor access professionals (e.g. including Alison Greggans, David Clyne, Adam Streeter-Smith, rangers on FES and Rothiemurchus)

Woodland expansion:

- Cairngorms Connect partners (Glenfeshie Estate, RSPB Insh Marshes and Abernethy Reserves, Forest Enterprise and the SNH Invereshie National Nature Reserve)
- East Cairngorms Moorland Partnership partners (Mar Lodge, Mar, Invercauld, Balmoral, Glenavon and Glenlivet).
- Relevant CNPA staff (incl. Andy Ford, David Hetherington, vice WBW, Matthew Hawkins)
- Relevant FCS staff (incl. Kenny Kortland, Colin Leslie, Keir Smith)
- Relevant SNH staff
- Relevant GCWT staff
- Forest business consultants
- Badenoch and Strathspey Conservation Group

A letter and information sheet/YouTube link will be sent to all prospective participants outlining the aims, approach and what would be expected of participants (and will be subject to JHI ethics process).

NB see also below on incorporating accounts of nonhuman agency

3. Researchers fine-tune the design of recruitment materials (how exercise will be presented to prospective participants) and consent forms

4. Researchers recruit participants

ILLUSTRATING POTENTIAL VALUE OF PARTICIPATION

A letter and leaflet (possibly with supporting YouTube links of previous examples) will be developed to outline the potential benefits of participation and to explain how the DSM process would start and may proceed. This will be circulated to the identified stakeholders for recruitment and followed up with a phone call.

5. Workshop-A: introduction to DSM and the woodland issues we seek to address, discussion around maps of woodland and its possible expansion, collection of initial stories

Key to the workshop protocol is building a series of break-out and convergence points for participants (see separate document on Workshop-A Protocol). It is crucial to create safe and transformative spaces that enable a balance to be struck between the core practices of inspiring, articulating, listening, reflecting, sharing, recording and discussing, as well as a way for researchers to reflect on how this may enhance AM.

The workshop will primarily function as an opportunity to:

- Introduce how storymapping can work and its potential in a land management context
- co-create aims and rest of the storymap process– to state and discuss how participants would like storymap process and products to be carried out, and expressing views on who should see/hear stories and why
- identify, who might be missing from the participant list
- begin to generate participants' stories (ensuring safe spaces for those who have vulnerabilities in telling their stories i.e. staying in peer groups or those with important commonalities)

We aim to adapt these steps to involve more inter-group story-sharing and responding, in order to facilitate development of AM steps and common language etc. This entails adding extra steps to the above format to allow further opportunities to collect stories in situ in woodland places and practices (see next task) build in more iterative space (see workshop-B).

6. Story collection: collection of further or more polished stories of WS participants and the stories of those who could not attend the WS – to be done in groups or pairs of common experience

This is a key opportunity to collect stories that link more directly to particular places, practices, environments and species e.g. through use of collecting stories through mobile video. Linking human stories and agency to the nonhuman and environmental elements is a key area of potential for this method regarding AM.

7. Researcher (& other) experiments in 'speaking on behalf of'/facilitating articulation of important nonhuman or more-than-human actors

EXPERIMENTS IN GENERATING STORIES MORE-THAN-HUMAN AGENCY

- Katrina & Scott brainstorm key more-than-human agencies that are important to incorporate into the storymapping exercise
- They select the media most appropriate for telling stories with/on behalf of the nonhuman (e.g. writing, audio recording, still photography, moving images (3rd person or POV) or a combination of these)
- They experiment with these media to make recordings that witness more-than-human agency
- They curate these into a coherent artefact that can be incorporated into storymap and DS facilitation process

8. Construction and curation of storymap

We will use an interactive mapping tool which allows the collection of information from stakeholders in the form of markers, polygons and 'spray can' marks on a map, associated with annotations

Stories can be embedded in in the digital maps by linking text, sound or image/video files to markers placed on it by participants.

9. Workshop-B: presentation and screening of final storymap and discussion (+ reflection on the storymap as an AM tool and how this could be taken forward)

Workshop and/or mini-story-circle events sharing stories recorded with the aim of engaging with the draft storymap and exploring a mode and common language for Adaptive Management – live and through digital engagement (e.g. user-controlled interaction in own computer or touchtable way)

Finalising storymap using elements of participants' stories they are happy to share with a wider group if relevant

10. 'Pick up': Last chance to create or amend digitally-recorded story-layers or bring in under-represented actors (as agreed at WS-B)

11. Present final storymap to agreed audience(s)

Incl. Who would participants like to invite to a screening?

12. Archive final story map (& upload a public version of storymap if that is the plan agreed with stakeholders)

Equipment, media, platforms

Stories will be collected through media recording the written word, spoken word, still images and moving images, as appropriate and directed by participants. The relevant equipment will include laptops, audio recorders, and cameras (phone, compact, DSLR, go-pro/minicam).

Image editing software we can use is freeware for participants (e.g. iMovie and MovieMaker) and researchers might have access to Adobe Premiere Pro.

There are apps being developed for DS though many are not suitable for community and critical storytelling. Those mentioned at the DS conference included:

- DICHE app: http://diche-project.eu/article/diche-app-make-digital-stories-now-online
- Wevideo https://www.wevideo.com/ (An app for mobile phones that utilises the video function of smart phones)

NB also: http://www.story-mapping.org/resources.html

And https://www.storycenter.org/listening-station

There are many resources on the web purporting to aid digital storytelling – see Scott's review and examples such as: https://elearningindustry.com/18-free-digital-storytelling-tools-for-teachers-and-students

Timetable

Timescales are to some degree stakeholder-dependent but we are working to the following outline plan:

Date/Month	Task	Comments
September 2017	Fine tune methodology according to outcome of HLF bid & finalise ethics permissions Researcher example stories	
October 2017	Recruitment of participants	
Nov/Dec 2017	Initiation workshop (and supporting story events as appropriate) Experiments in generating stories of more-than-human agency	
January 2018	Participants recording own stories (with borrowed devices where relevant)	
Feb 2018	Embedding of stories in first draft of Storymap	

	Adaptive Management workshop & story-sharing events	
March 2018	Opportunity for participants to record further story layers Final storymap presented to participants (and others participants wish to invite)	
April 2018 onwards	Archiving/public or wider launch of storymap as appropriate Integration of storymap further with connectivity and ecological data [could be taken forward in 143 years 3 onwards]	

Supporting documents

Documents required to implement the methodology are as follows (and will be submitted as part of the ethics permission process):

- Letter of recruitment – written elevator pitch for DSM and the opportunity to explore its merit in aiding discussion surrounding woodland management and expansion
- Recruitment leaflet (&/or Youtube clip of researcher examples / links to other DSM examples e.g. http://www.story-mapping.org/thirdward.html)
- Protocol for Workshop-A
- Protocol for ad hoc story collection (including Storycircle and story pairs techniques)
- Protocol for Workshop-B (can only be drafted once WS-A has happened)
- Participant consent form

Staff involved

Katrina Brown, Scott Herrett, Alessandro Gimona, Justin Irvine. Antonia Eastwood may also want to be involved given her training and interest in participatory visual methods.

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[i] Gubrium (2009) mentions the following key elements of DS protocol:

1. Provide overview and examples of DS, and explain the ingredients of a good story (e.g. classic story shapes such as Hero's journey and Lambert's 7 key elements: point of view, dramatic question, emotional content, voice, soundtrack, economy, pacing)
2. Warm-up exercises to encourage participants to consider their own standpoint and experiences on the issue
3. Developing the script for participants' stories (usually a word limit of about 250 words given) – done alone and in small 'story-circle' groups which are safe and confidential spaces in which to tell stories and receive comments. Storycircles often have rules or guidelines to structure listening and the giving of constructive feedback
4. Tuition on technical elements of using relevant hardware (e.g. cameras) and software (e.g. image editing software)
5. Creation of storyboards – visual means of organising the position, order and layering of various audio and visual elements of stories
6. Story elements incorporated into image editing software (e.g. iMovie or Moviemaker)
7. In-group screening: audiencing of digital stories amongst the participants only
8. Further external screenings, depending on participant's aims and willingness to share.

[ii] Lambert's (2010) seven steps of digital storytelling can be summarized as:

1. **Owning your insights**: a process of self-reflection and awareness leading to a clarification of the story you want to tell, the insights you want to convey, and identifying what it is really about (helping participant to address Qs of: why this story? Why now? Who is it for? How does story show who you are and why? What makes it your version of the story? Who am I, now, in the past and in the future? What changes have taken place or need to take place? What is the journey?);

2. **Owning your emotions**: identifying the (sometimes contrasting) emotions evoked by your story and deciding which emotions (and overall tone) to use and foreground in the recorded story;

3. **Finding the moment**: identifying a key moment that conveys the insight and meaning of the story, usually a moment of significant change (e.g. how to show best how change happened and its impact), and consider what was seen, heard, said, thought, felt at that time and any relevant context;

4. **Seeing your story**: encouraging participants to call to mind the images that tell their story and understand why it is powerful and the meanings that are implicit or explicit, literal and metaphorical, in those images, and then working out how those images will be created and used (e.g. in terms of cropping, panning, zooming, collaging, positioning, and other editing;

5. **Hearing your story**: helping participant to consider what sound (audio voice-over and/or music and ambient sound) will enhance the telling the story, including its mood, rhythm and tone, in ways that either complement or purposely juxtapose with the images;

6. **Assembling your story**: using notes and images to produce a script and a storyboard i.e. the narrative and how it will be interwoven with particular sequences and layers of images and sounds (and perhaps use of on-screen text), which involves identifying and getting feedback on what are the essential building blocks of the story to allow the audience to make connections, the right amount of tension or conflict to hold the audience's interest, and the right pacing to evoke the change at the core of the story and allow audience to feel and absorb it. The idea is to encourage the participant to economise on material – only the most important elements - so that their story can come through concisely and with clarity to maximise its power;
7. **Sharing your story**: reclarifying with participants who the story is for, what its purpose is and how it will be presented, whether to specific audiences at discrete events or more publicly through social media or similar. Possibilities for the future life of the story – and perhaps its edits and offshoots – must be thought through. Decisions are also made about the contextualising information that will accompany the story either as part of the digital story or as supporting or introductory material.