

# Climate and Sustainability Assembly – Becoming a Nature Positive University: Report



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# Background

Climate Assemblies place people and communities at the centre of decision making and action on sustainability. They have emerged as a means of getting direct input from individuals and stakeholders and have stimulated new ideas for climate action.

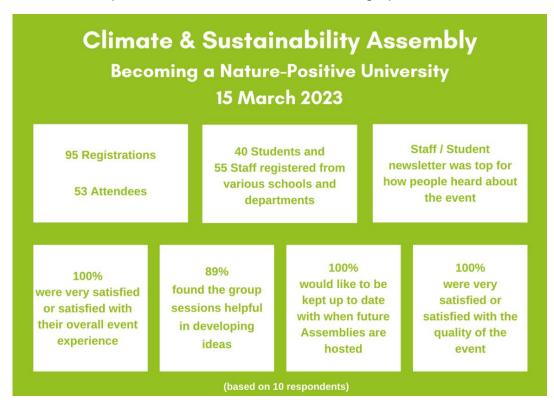
Climate assembly; Scotland Climate Assembly); and in cities and regions (Aberdeenshire Glasgow). In Aberdeen and the North-East of Scotland, climate assemblies are being delivered at the ward level and in local community settings including recent assemblies in Tillydrone, Seaton, Woodside and Torry, supported by NESCAN in partnership with the University and funded by the Scottish Government Just Transition Fund.

As part of our Aberdeen 2040 commitment to 'encourage everyone within our community to work and live sustainably' (c.16) we launched our inaugural Climate and Sustainability Assembly on March 15<sup>th</sup>, 2023. The purpose of the assemblies is to regularly engage with the University community over the development of policies, initiatives and behaviours that support the delivery of Aberdeen 2040, supporting commitment 16, commitment 17 (educate all our students and staff to be leaders in protecting the environment) and commitment 19 (achieve net zero carbon emissions before 2040). Assemblies also fulfil a pledge from our COP26 and COP27 initiative where staff and students endorsed assemblies as a priority action on campus. Assemblies will run every academic semester and engage with staff and students to identify topics to help us shape a greener and more sustainable future for our university.

The topic for our first assembly was 'Becoming a Nature Positive University' exploring how can we make our campus a greener and more inviting place for both people and nature and exploring ways we can reduce our environmental impact. It responds to the global biodiversity crisis, with three quarters of global land area significantly altered by human activity and one million species threatened with extinction. The Living Planet Index has identified that global wildlife populations have plunged by an average of 69% between 1970 and 2018. The assembly comes off the back of the UN Biodiversity Conference COP15, where UN Under-secretary General Inger Anderson states "Nature and biodiversity is dying the death of a billion cuts. And humanity is paying the price for betraying its closest friend." UK biodiversity indicators highlight the deteriorating or stagnant state of multiple habitats, species, and protected areas, emphasising the important role and obligation to manage our estate towards positive biodiversity outcomes.

# Format of Event

The assembly aimed to explore the challenges that nature is facing both globally and at a local scale, the impact our university has on the environment, and the role that we as an organisation can have in addressing these problems. This event was open to staff and students, with representation summarised in the infographic below.



The format of the event was designed to encourage participation and sharing of ideas on what a nature positive university would look like and the mechanisms of achieving these ideas. We mixed expert presentations with deliberative sessions that addressed two questions 'what does a nature positive university mean to you?' and 'identify two priority actions or activities that would support a nature positive university'. As a part of the process, we trained 10 student facilitators to support these sessions in two training events, noting that this could contribute to building graduate attributes in leadership and sustainability. The format of the event included:

1.00pm	Welcome by Tavis Potts				
	Keynote: Liz Campbell, Aberdeen Biodiversity Centre.				
	Keynote: Roger Owen, NESBIP, pre-recorded.				
1.40pm – 2.10pm	Breakout Session 1 (30 minutes) –				
	What does a nature positive university mean to you?				
2.15pm	Plenary Feedback from each group.				
	Keynote: Alex Stuart University of Aberdeen.				

	'Biodiversity innovation in HE Sector'			
3.00pm	Breakout Session 2: "Please identify two priority actions or activities that would support a nature positive university?"			
3.50pm	Plenary Feedback and Discussion			
Record this section.	Closing comments: Morag Beers, Director of Estates, University of Aberdeen.			



## Session 1 Feedback

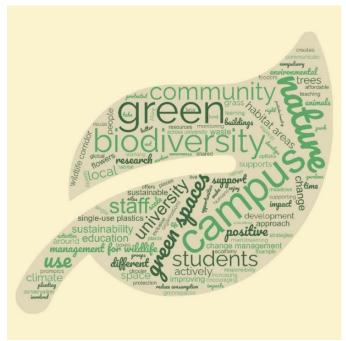


Figure 1 Word cloud from session transcripts 'what does a nature positive university mean to you?'.

This session explored the question 'What does a nature positive university mean to you?' Facilitated groups reflected on this open-ended question for 3 minutes and identified two ideas that were contributed to the session boards. The results in this session have been aggregated across all groups into 6 themes. A word cloud from the transcripts visualises the deliberations, noting the weight given to terms such as campus, community, students, staff, active management, and a positive approach. In essence an inclusive, whole of campus approach, is required to deliver a nature positive institution.

From the five breakout groups we the following themes.

## 1. Common Principles for a Nature Positive University.

This theme (Fig 2 below) represented a general overarching view of several high-level principles that should guide action and awareness in developing our response. These principles were aligned with a value led University that 'leads by example', 'prioritises sustainability and biodiversity protection', 'understands and manages our impact' and uses biodiversity to represent our values in action.

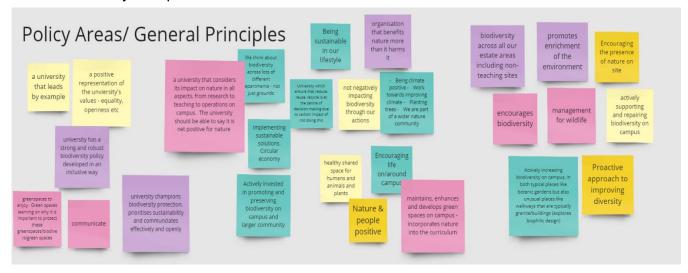


Figure 2 Summary notes for theme 1 principles

In expressing our values, the University would commit to actively 'promoting and preserving biodiversity on campus and the broader community', 'maintain, enhance, develop greenspaces on campus', focus on both known sites and 'unusual spaces' like

walkways, carparks and buildings, and actively 'encourage nature across all of our estate.'

#### 2. Grounds

The theme of 'grounds' was raised in all the groups, representing a range of views on practical improvements to our estate and changes in the way the estate is managed.

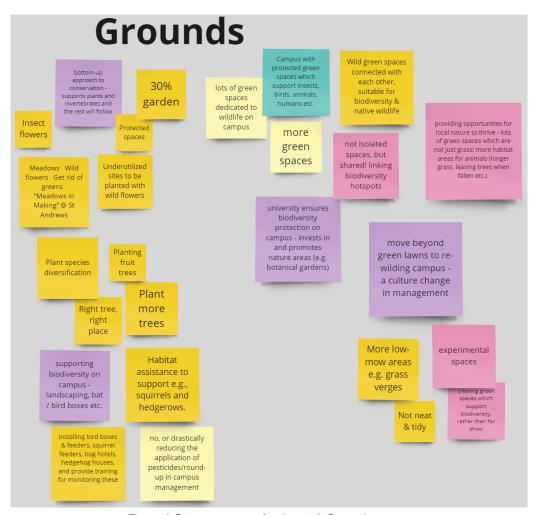


Figure 3 Summary notes for theme 2 Grounds

Suggestions ranged from interventions such as planting more trees, insect-friendly flowers, fruit trees and diversifying floral species. Building animal-attracting habitats including hedgerows, bird boxes, squirrel boxes and 'insect hotels' was also discussed. Observations included that we needed to identify the right areas for these attractions and that we should take an ecological network approach to campus with the 'right things in the right place'. Several participants noted that we should move away from a culture of 'sterile green lawns' to a rewilding mindset and supporting biodiversity rather grounds being 'for show'. This would involve discussion and education on the benefits of restoring sites, why biodiversity is important on campus and addressing concerns on 'messy' rewilded areas vs clipped lawns that look good but have very little functional biodiversity. It was also noted that this approach would also have an experimental and educational dimension, crossing over with the Aberdeen 2040 commitment 17 'educating our staff and students to be leaders in protecting our environment.

## 3. Community



Several themes relating to biodiversity, our campus and our relationship with the community were raised. The campus is a public space and provides a wellused green space for the broader public. Our community, both in terms of students, staff and the broader public, benefits from local greenspace and activities such as education, fieldwork and public engagement. It was noted that the University should further engage in local biodiversity challenges and debates e.g. St Fitticks Park, ensuring our sustainability principles and

global expertise is applied in the local context of the North-East of Scotland.

## 4. Buildings

In session 1, in terms of general principles, buildings and green infrastructure were seen as central in a nature positive university. The shape and nature of our estate is discussed in more detail in session 2. It was noted that biodiversity should have equal weight and be considered in tandem with infrastructure renewal and master planning. The university should take an approach that works with natural systems in its design and estate.



Participants also noted that having

a resource efficient, decarbonised and circular economy campus underpins our approach, noting the reduction of single use plastics, better recycling and reducing carbon footprints.

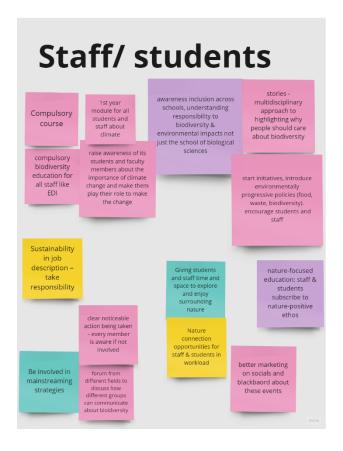
#### 5. Research



The educational benefits of a nature positive university were raised a features of a nature positive university. Participants noted that the University is a leading institution in the topic, noting it as one of our five 2040 interdisciplinary themes. Views were expressed that our research should also inform local issues on sustainability and that while important to research biodiversity topics globally we should be also applying these principles and outcomes to Aberdeen. The biodiversity crisis, in addition to the climate crisis, should be integrated into all levels of teaching. The opportunity to restore nature on campus also offers research projects for students at all levels, particularly in mapping our estate and monitoring the impacts of our interventions.

#### 6. Staff and students

There was substantive discussion in the groups of how a nature positive campus can support staff, students and our culture. This ranged from a stronger link to education at all levels, providing new student experiences and graduate attributes related to Aberdeen 2040 and providing new spaces for reflection, collaboration, and wellbeing. New opportunities like food growing or garden clubs provide spaces for interaction and reducing stress and give our community reflective time in nature with is pivotal for wellbeing. Groups identified that we should formalise sustainability into job descriptions, training and education.



## Session 2 Feedback

Session 2 focussed on the practical actions that the university can look to implement across our campuses.

During the preceding presentation, 12 different biodiversity interventions were presented, including guidelines around aspects such as initial costs involved, level of benefit to wildlife, maintenance costs and levels of community involvement. Participants were also able to introduce their own topics or interventions included within a Biodiversity Action Plan (BAP) for the university. This led to many other suggestions to include within the development of the BAP out-with the 12 proposed actions.

Intervention	Initial Cost	Benefit to Wildlife	Maintenance Costs	Community Involvement?	Votes
Reduced Mowing of Grass Areas	-£-£-£	99	-£	İ	10
Low Growing Wildflower Areas / 'Living Lawns'	-£ / £	III	-£	İİ	11
Native Wildflower Area (Seeded)	££	111	-£	ii	5
Sustainable Drainage System Pond	££ / £££	999	£	į	0
Sustainable Drainage System Rain Garden	££	III	£	İ	9
Biodiverse Green Roof	££	III	£	İ	1
Green Wall	£££	ŊŊ	£££	İ	0
Bulb Planting	£	II	-£	ii	0
Mixed Native Hedging	££	III	£	İİ	0
Native Tree Planting	££	111	££	ii	0
Wildlife Habitat Creation	£	99	£	iii	8
Community Food Growing	£	Ŋ	££	iii	3

Figure 4 - voting results for the proposed 12 biodiversity interventions

From the voting related directly to the 12 interventions, there were clear favourites:

- Changing the management of traditional grass areas whether this is achieved through reduced mowing, introducing new low-growing wildflower areas, or to a lesser extent introducing more traditional wildflower areas.
- SuDS Rain Gardens improving infrastructure around campus which would mitigate the impacts of periods of heavy rainfall, reducing flooding risks while providing biodiversity benefits through the use of native plant species to make attractive floral displays.
- Wildlife Habitat Creation the addition of both natural habitat areas (e.g., climbing plants on walls, standing dead wood, log piles, dead hedges) and artificial animal homes (e.g., bird, bat, hedgehog, and amphibian homes) to the campus.
- Community food growing use of greenspace to provide staff, students, and the wider local community with opportunities to grow different fruits and vegetables for human consumption.



Figure 5 the top-voted biodiversity interventions from session 2

From the session 2 discussion, ideas were collected and subsequently sorted under 7 broader themes (with participant votes / preferences indicated by red dots on the ideas): Landscaping & Hard Infrastructure; Engagement & Food Growing: Supply Chain, Transport/ Energy & Wider Policy.

## 1. Landscaping & Hard Infrastructure

Suggestions focussed on the replacement of 'sterile lawns' with low-growing wildflower areas/ traditional wildflower areas and areas with a reduced frequency of cutting. Participants wanted to see the campus grounds managed in an environmentally sensitive way, with an emphasis on reducing current negative impacts (intensive cutting of grass, spraying of road verge, removal of leaf litter).

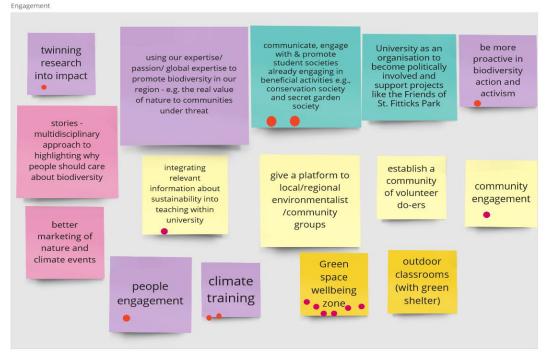
Landscaping Hard Infrastructure



Figure 6 - Landscaping & Hard Infrastructure suggestions from session 2

They also favoured the introduction of more flowering native plants, trees, shrubs, and bulbs across campus. There was the need for greenspaces to be connected through 'nature/wildlife corridors' such as mixed native hedging, and for the introduction of more animal homes.

For hard infrastructure, SuDS featured heavily, with participants concerned about the high level of impermeable surfaces across campus and increased flooding risks due to



Food Growing think about from farm to fork have food growing on site to help reduce supply needs community garden including participation from local communities (not just students and staff) community food growing offer public allotment sites e.g. sunnybank park food growing

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climate change. Creating new ponds/fountains and converting existing roofs into Green Roofs were also identified as solutions.

## 2. Engagement and Food Growing

Supply Chain

Participants had strong feelings that engagement was an area we should focus on both internally and externally. Internally, we need to focus on engaging staff and students around biodiversity and sustainability in general through teaching and our operational practices. We need more (well-advertised) events around Nature and Climate and to be better at telling 'stories' around the research we carry out and why it is important – making sure that interdisciplinary links are highlighted across the organisation. Basic 'Climate training' was suggested for all staff and students to improve awareness. As an organisation we should strongly promote the use of our outdoor spaces for both teaching and 'well-being zones' where people can regularly connect to Nature.

Participants felt there should be clearer links between the research we carry out and the actual *impact* of this on the ground at both a local and national/global level. We need to utilise our collective passion and expertise to promote biodiversity widely externally and create tangible action through supporting local environmental groups and organisations. This included political activism - where it was felt we as an organisation should use our expert knowledge and influence to actively advocate for the protection and enhancement of our local environment e.g. St Fitticks Park.

More support should be provided to student organisations which are carrying out beneficial activities for the environment, and the university should look to develop its own community of volunteers. This included development of new community gardens which would be open to the wider local community as well as staff and students.

Transport/ Energy

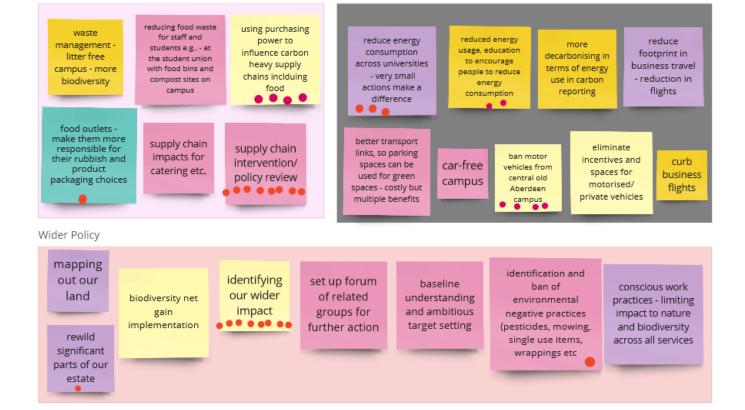


Figure 8 – Supply Chain, Transport/Energy and Wider Policy suggestions from session 2

### 3. Supply chain, transport and policy.

For the final three categories of suggestions, participants again had a strong appreciation of the need for a holistic approach across the entire university when it comes to our broader environmental impact as an organisation and our sustainability strategies. They were keen that the university takes the required time to review a wide array of policies (e.g., procurement processes, waste management, transport policies/links and incentives, energy-saving measures, and master-planning priorities) to ensure that we are adapting our current guidance to take account of biodiversity. A working group was suggested to help develop this baseline understanding of both the land we own and manage, and the many organisational practices which currently have negative environmental impacts. This will enable the university to implement suitably ambitious targets and updated policies, so that our organisation moves to becoming nature positive.



Figure 9 - Word cloud from session transcripts – 'Please identify two priority actions or activities that would support a nature positive university?

# **Summary of Feedback**

- Participants recognized the biodiversity crisis as an important issue that that
  needs to be tackled in line with our Aberdeen 2040 commitments. It was felt
  strongly that it was a duty of our organisation to reduce our negative environmental
  impacts as much as possible, but beyond that, we should be actively looking at
  having a net-positive effect on biodiversity across our estates. We should be a
  university that leads by example, engages in our region, and utilises our academic
  expertise.
- Campus greenspaces are underutilised by staff and students, and do not currently
  prioritise biodiversity. Significant scope to address this within current operations
  and lead to visible education and wellbeing benefits.
- We are not an island our campuses are part of a larger landscape and communities, so our strategy needs to account for this. When we look to develop campus areas for biodiversity, we also need to appreciate how staff, students and the wider community can be utilising these spaces better.
- Communication and engagement on action for biodiversity was seen as an important area that should be developed. It was acknowledged that we need to improve understanding around the importance of biodiversity both within and external to the university. Participants noted the lack of community engagement from the university as a whole, and saw multiple opportunities for engaging staff, students and the community on biodiversity.
- Our effects as an organisation on biodiversity and our wider environmental
  impacts need to be considered holistically. The management of our land is not the
  only way we as an organisation have an impact on our environment, and so we
  need to address wider operational policies and behaviours to tackle this issue
  effectively (e.g., energy use, waste, transport, supply chain, master planning and
  development as well as grounds).
- A Biodiversity Working Group should be set up to develop the university's Biodiversity Policy and Biodiversity Action Plan, with relevant stakeholders from a variety of Schools and Professional Services and potentially external participants.
- To develop an effective Biodiversity Action Plan, it was acknowledged that the first step is to build our understanding of the ecological value of the land we currently own and manage to form a baseline for improvements.
- Participants showed strong support for improving biodiversity across campus grounds. Priorities should focus on (i) changing the management of our grass areas (reduced mowing, low-growing wildflowers and native seeded areas); (ii) the addition of SuDS rain gardens with native floral species; (iii) wildlife habitat creation through the addition of natural and artificial animal homes; community food growing.

# **Next Steps**

• Developing a baseline understanding of biodiversity across our estate. Estates & Facilities created an internship placement for Summer 2023 housed within the Sustainability Team, focusing on ecological habitat surveying of the university's greenspace across campus and some of the larger outlying land-holdings. This is a necessary step required to inform future work to conserve important areas of high biodiversity, as well as prioritising how we can best improve areas of low-value. The intern will also work closely with the Grounds team to help map out our current management regimes across these different habitats and add this information to a GIS map being developed.

As well as developing our habitat data, the Sustainability team will be working closely with the <u>local biological records centre (NESBReC)</u> to look at historical biological records for our campuses and integrate this information into our mapping. The ecological mapping methodology being utilised will allow the university to investigate our current level of biodiversity units, and allow for the calculation of Biodiversity Net Gain (BNG) values from proposed changes in management. This will potentially be useful in the future for master-planning (including the recent Re-imagining the campus board) and prioritising areas for biodiversity improvement.

• Biodiversity Working Group – The university should look to create a small working group of relevant stakeholders to develop a Biodiversity Policy and a Biodiversity Action Plan (BAP). Expected inclusions within the group would be relevant members of staff from: Senior Management, Grounds, Sustainability, Aberdeen Biodiversity Centre, academic staff from SBS & wider schools, Cruickshank Gardens and AUSA. This will allow the group to consider wide-ranging topics related to biodiversity in a holistic manner as suggested by the assembly participants.

The working group may also wish to consider the inclusion of external parties such as the local biodiversity Partnership (North East Scotland Biodiversity Partnership) to ensure that the university BAP aligns with wider biodiversity work across the North East, and also members of the local community councils to engage with the local community. Key focuses of the BAP will be: utilising new mapping of our campuses to create a nature-positive management plan for our grounds (both on and off campus), identifying negative environmental practices and solutions to reduce these, awareness-raising for biodiversity across the university and community engagement.

• BAP development & Nature Positive Universities Alliance – The proposed working group will help develop and regularly review progress for the BAP for our university. The creation of a BAP can potentially coincide with pledging to join the Nature Positive Universities alliance which has members from over 500 universities across 115 countries globally. If the university agrees to commit to this pledge, then the requirements for this would be largely covered by the standard BAP development process using SMART targets/KPI's, with the only additional piece of work being providing a report on an annual basis to the Alliance.

#### Make a pledge to join the Nature Positive Universities Alliance:

We ask that you make a Nature Positive Pledge. By making a pledge you would commit to:

- 1. Carrying out a baseline of your campus biodiversity or wider impacts
- 2. Setting smart targets for nature
- 3. Carrying out actions and using your influence to meet the targets
- 4. Reporting back annually on progress (initially end 2023)

Figure 10 -Nature Positive University Alliance pledge guidelines

- Climate / sustainability training the Sustainability team is currently developing a baseline sustainability e-learning module which includes information around biodiversity, for all members of staff. It is envisaged that after a successful launch for staff, this module will then be adapted and rolled-out to students.
- **Food growing on campus** the Sustainability team is working with the Grounds team and support from the staff BeWell Network to provide opportunities for staff-led food growing on campus. It is envisaged that this could potentially be rolled out to the wider local community in the future if there is sufficient support from staff volunteers.