



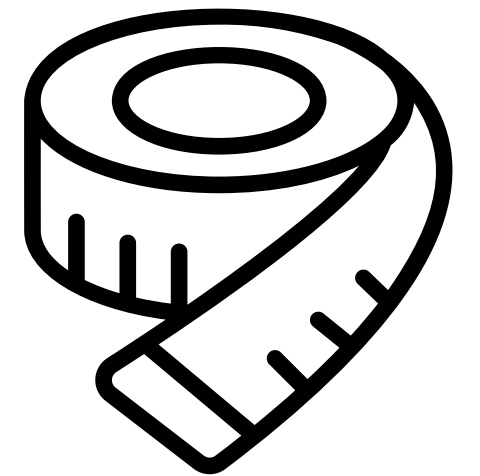
Student Ambassador Programme

WORKSHOP 2

BIODIVERSITY BASELINES

31st JANUARY 2025/ 12PM GMT

**NATURE
POSITIVE
BY 2030**



Housekeeping

- Please do turn on your camera if you feel able to – we'd love to make this as interactive as possible
- Do introduce yourselves in chat, and ask questions as we go through!
- We'll have a short intro then breakout rooms and a student speaker – feel free to ask questions throughout
- We'll be launching a poll towards the end of this workshop to ask for some feedback
- We'll be reaching out to several of you to invite you to speak briefly in future sessions, based on the information you provided in your applications



Agenda:



Welcome and introductions



Introducing the NPU Pledge



What is a biodiversity baseline?



This month's actions: pledge, iNaturalist & photos



Breakout groups: discussions and sharing back ideas



Student experience: Avani sharing experience attending IPBES Youth Workshop and Q&A



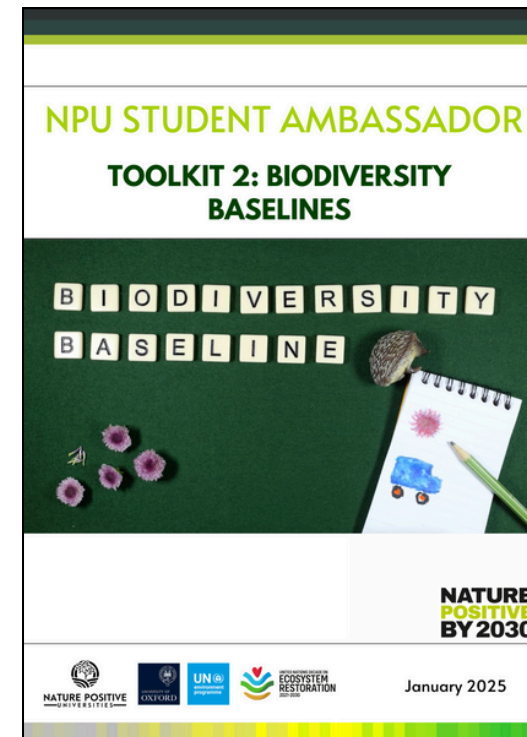
Summary of next steps - workbook form, toolkit and next workshop



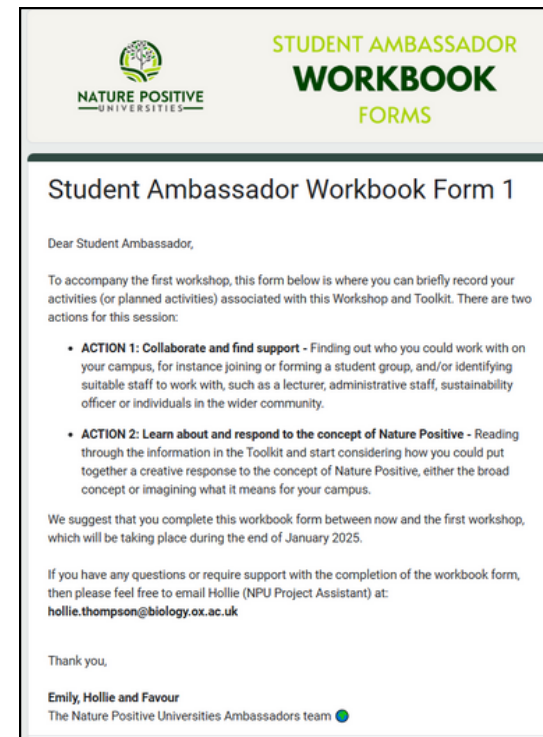
Recap: Ambassador programme



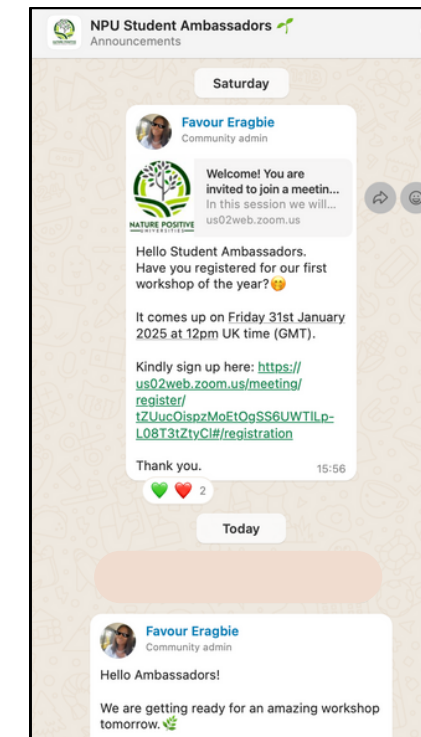
Green Skills workshops



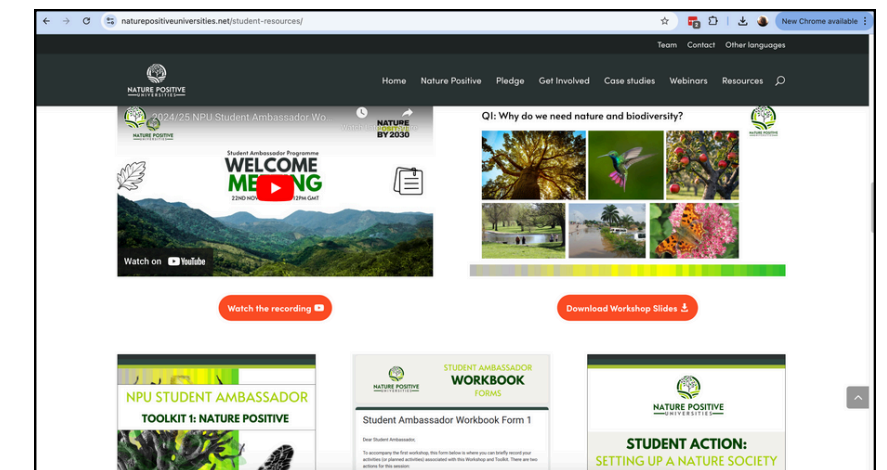
Action Toolkits



Workbook forms



WhatsApp chat



Student resources webpage

Who are the NPU Student Ambassadors team?



Emily Stott
Coordinator
University of Oxford



Favour Eragbie
Student Ambassador
Coordinator
University of Benin



Hollie Thompson
Project Assistant
University of Oxford



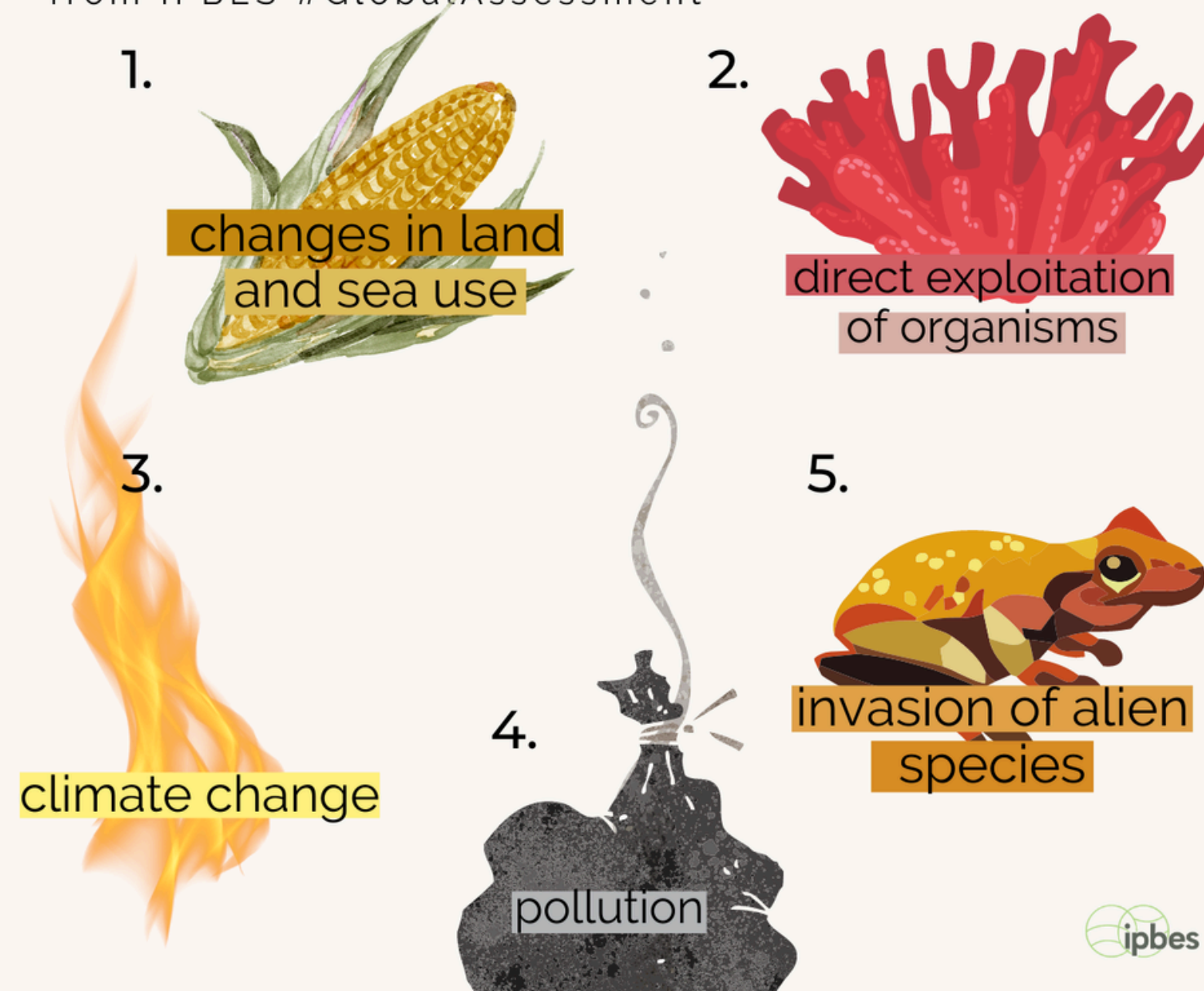
Your peers: 450 Student Ambassadors from 42 countries!



Recap: what are the direct drivers of biodiversity loss?

The direct drivers of change in nature with the largest global impact

from IPBES #GlobalAssessment

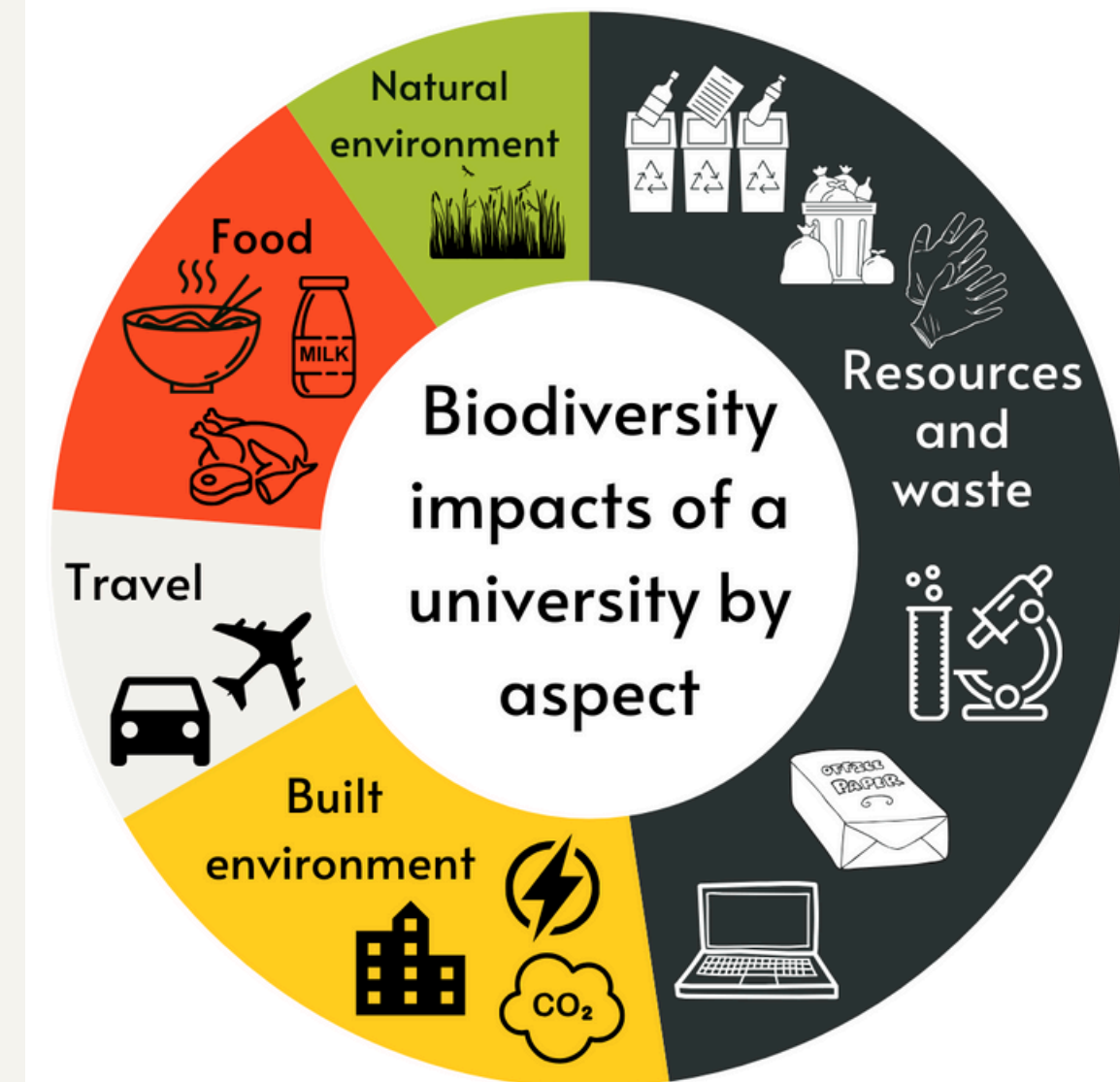
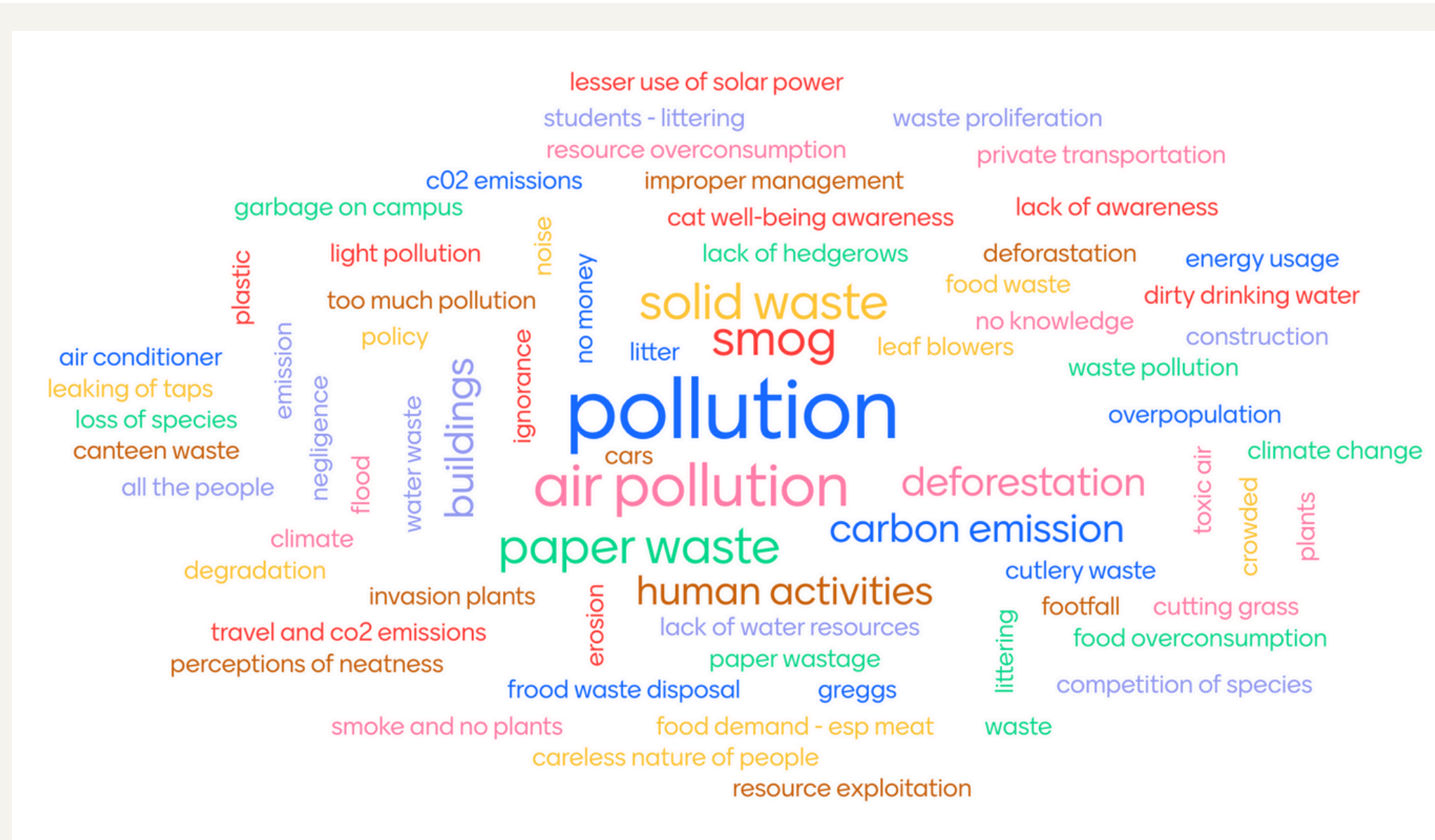


<https://www.ipbes.net/models-drivers-biodiversity-ecosystem-change>

Recap: what are a university's pressures on biodiversity?



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“What are the pressures on nature related to your campus?”
(Workshop I wordcloud)

Biodiversity footprint
(more detail in Toolkit)

Nature Positive Pledge



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1

ASSESS THE
BASELINE

Carry out a baseline of your institutional biodiversity impacts

2

SET SMART
TARGETS

Specific, time limited, measurable targets for nature

3

ACT AND
INFLUENCE

Bold actions for nature using the Conservation Hierarchy or 4Rs: Refrain, Reduce, Restore, Renew

4

REPORT
ANNUALLY

Report transparently on your progress on your university website



UNITED NATIONS DECADE ON
**ECOSYSTEM
RESTORATION**
2021-2030

#GenerationRestoration

Nature Positive Pledge



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The Nature Positive Pledge: What does it mean?

Part of being a Student Ambassador is working and advocating for your university to sign the Nature Positive Pledge, if they haven't done so already. Information about which universities have already made the pledge can be found later in this Toolkit.

This is a pledge made by senior management of a university, such as a Vice Chancellor, Rector or Head of Sustainability, committing to start a Nature Positive journey. Your university doesn't have to have taken action already to take the Pledge, but must be willing to start the steps below.

Actions towards Nature Positive will require collaboration between many parts of an institution, such as grounds and estates teams, catering and gardening staff, academic experts, students and sustainability managers.



The Nature Positive Pledge: Steps of the Pledge

When a university makes a Pledge, they commit to the following steps to work towards becoming Nature Positive as an Institution:

- 1 ASSESS THE BASELINE** Carry out a baseline of your institutional biodiversity impacts
- 2 SET SMART TARGETS** Specific, time limited, measurable targets for nature
- 3 ACT AND INFLUENCE** Bold actions for nature using the Conservation Hierarchy or 4Rs: Refrain, Reduce, Restore, Renew
- 4 REPORT ANNUALLY** Report transparently on your progress on your university website

The Pledge timeline involves university action and collaboration between staff, students and the public, so this may mean not all stages of the process are feasible for Student Ambassadors to undertake. We highlight areas that Student Ambassadors can empower themselves and others through the Baseline and Actions stages of the Pledge, as well as taking other actions for nature.

The Nature Positive Pledge: Who has already made the Pledge?

Since our launch at UN Biodiversity conference COP15 in Montreal, December 2022, we've received pledges from 154 universities across 45 countries, most recently from Monash and Murdoch universities in Australia, and KAUST in Saudi Arabia.

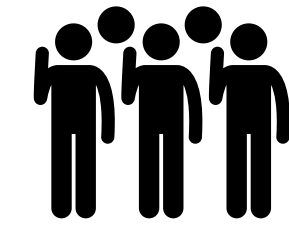
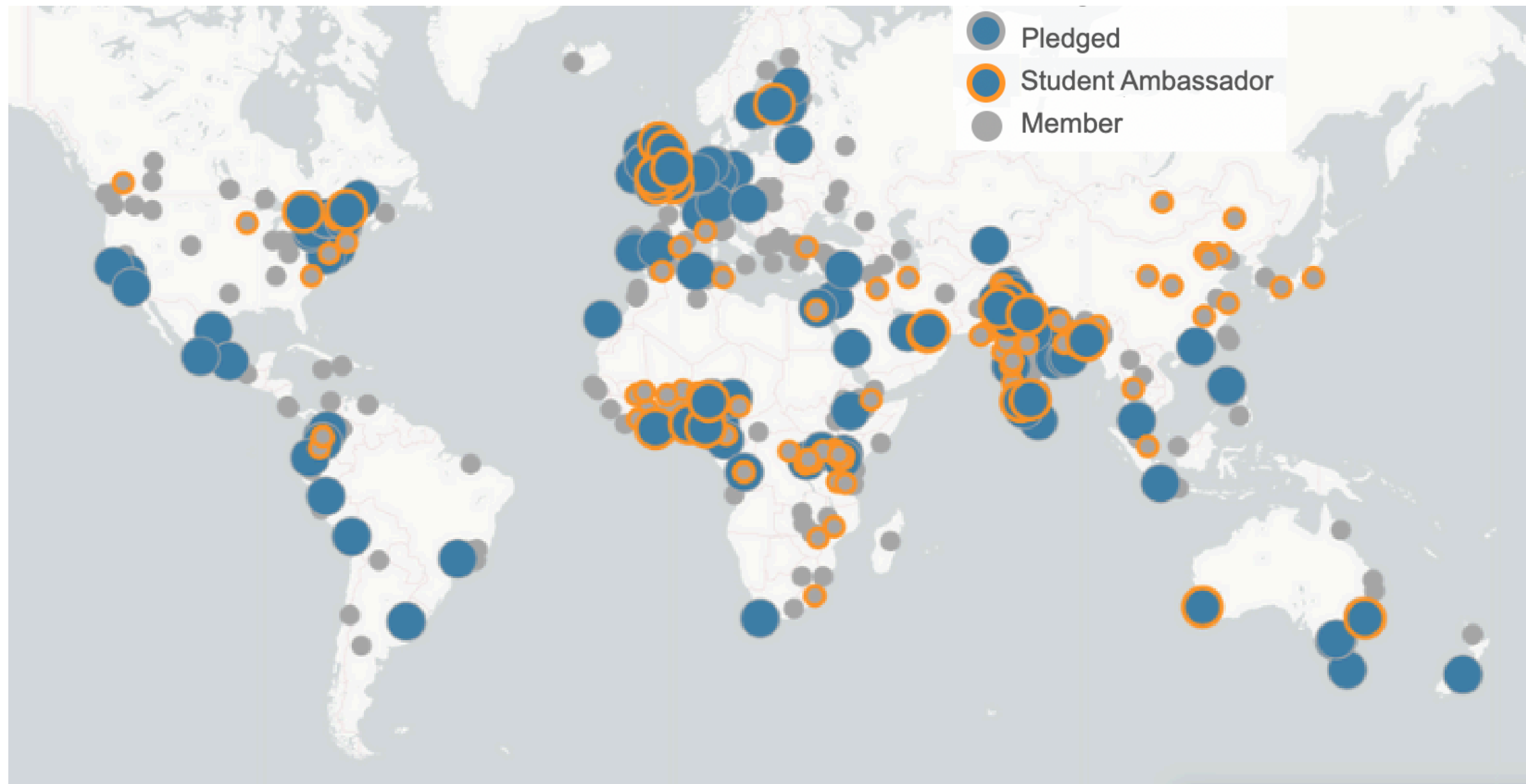


The members map on our website displays all different types of membership with Nature Positive Universities. Blue dots represent the 154 universities who have made the pledge (also available as a [list on our website](#)), orange circles show universities where there are students who have signed up to be a Student Ambassador with us for the 2024-5 cohort. Grey dots show our wider community of members.

Who has already made the Pledge?



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154 Pledges



45 countries

Also available as a [list on our website](#)

1. Assess the baseline



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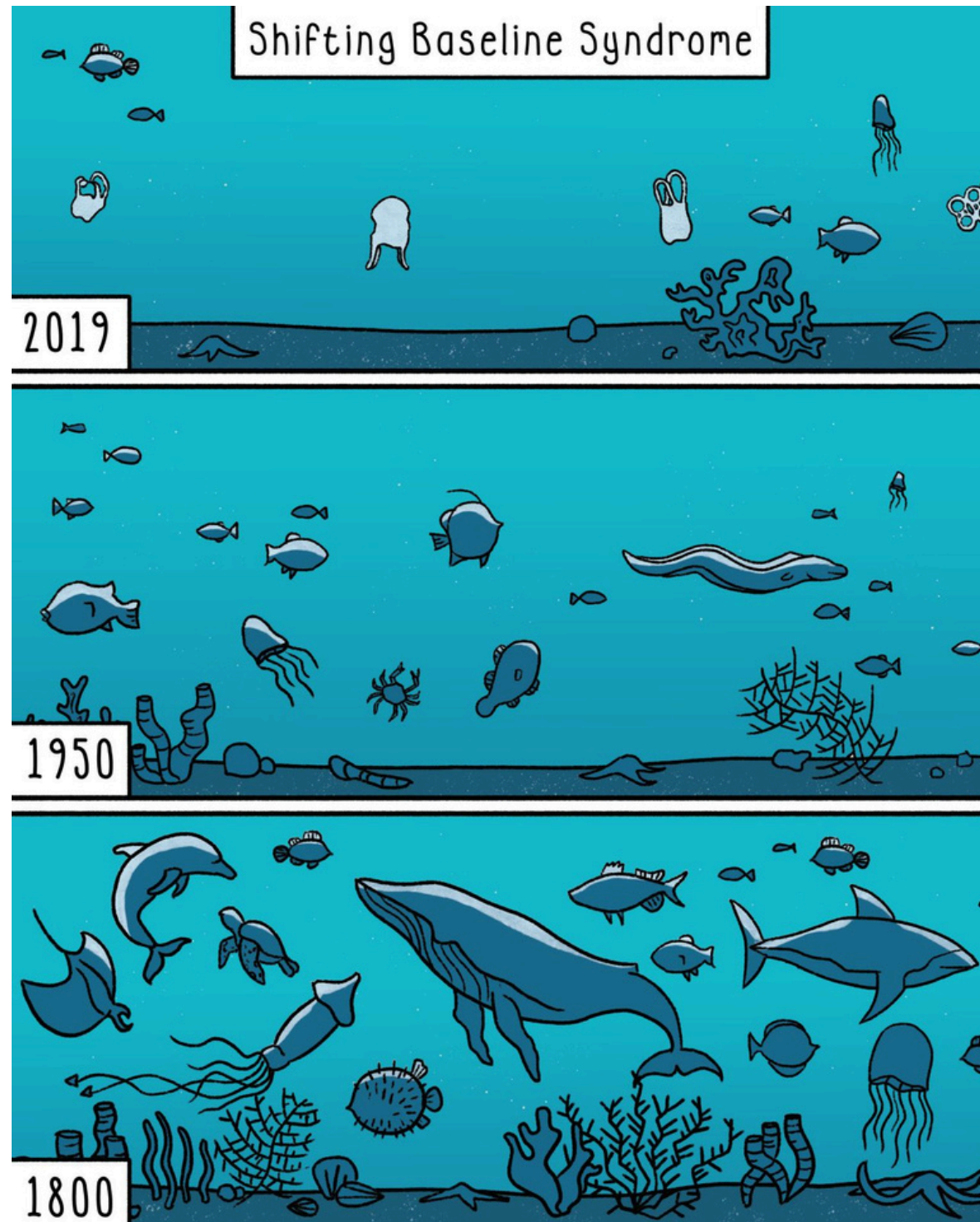


Available in English and Spanish on [our YouTube channel](#)

1. Assess the baseline

What is a biodiversity baseline?

- A snapshot in time, enabling us to measure change and impact by recording the state of nature and activities
- This can help inform action now and in the future
- There are many ways to go about it depending on resources and ambition.
- This could be contributing to a university baseline or on a personal level for yourself or your group to measure progress.
- The principle is to work towards **MEASURABLE** biodiversity uplift or environmental change, known as **NET POSITIVE** outcomes



1. Assess the baseline



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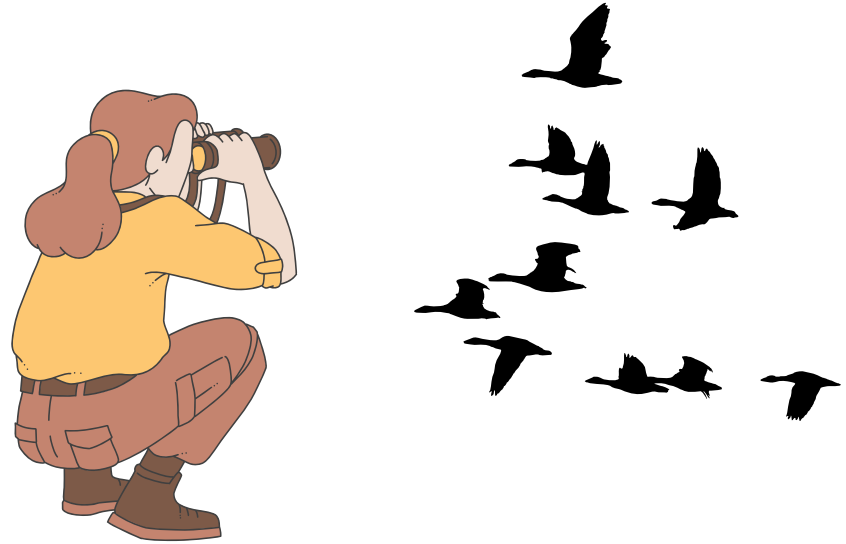


Figure 1- Example land cover map of Wolfson College



Many approaches:

- Mapping habitats
- Recording species
- Ecological surveys
- Citizen science
- Canopy cover
- Plantable area
- Before / after photos



More baseline case studies in toolkit:



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1. Assess the baseline

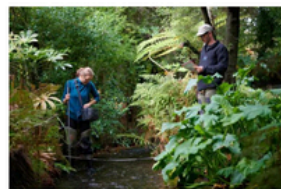
Case Study: 1000 species in 1000 days at Dawson College, Canada

Students from Dawson College in Canada ran a 1,000 Species in 1,000 Days initiative. Students, faculty and staff all contributed their talents and curiosity to get as many species identified on campus as possible with the count after one year being 820 species, with 3,916 total observations and 279 people contributing to the project. The goal of the initiative is to highlight biodiversity in an urban setting.



Case Study: Predator Monitoring and Management, University of Canterbury, New Zealand

Predator monitoring investigations were carried out in June 2022 to understand current predator presence. A predator trapping line was setup in July 2022 along one waterway to reduce predator numbers based on the results of the monitoring. Rat/mice traps, mustelid traps, and possum traps were all implemented on this line. This predator work was done with the support and input from the student body EnviroSOC, who helped with monitoring and installation of the line, and then continued support of clearing and maintaining the line. Since the beginning of the programme, 18 hedgehogs, 48 mice, 18 possums and 115 rats have been caught.



1. Assess the baseline

Case Study: University of Melbourne biodiversity baseline data project

University of Melbourne established an online dashboard for their university community tracking their progress towards their "No Net Loss" target for campus biodiversity. They record a range of biodiversity measures such as:

- Tree canopy cover area (m2)
- Plantable area (m2)
- No. plant species
- No. trees and tree species inventory
- No. fauna and fungi species
- No. of 'areas of significance'

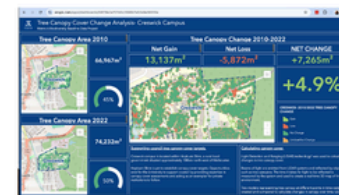


Figure 1: Example land cover map of Wolfson College

CATEGORY	COLOUR
Water	Blue
Mowed lawn	Brown
Meadow and uncult grass	Yellow
Wetlands and water meadows	Pink
Herbaceous borders and flowerbeds	Pink
Hedges, shrubs, and trees	Green

Case Study: Campus habitat map, Conference of Colleges, University of Oxford

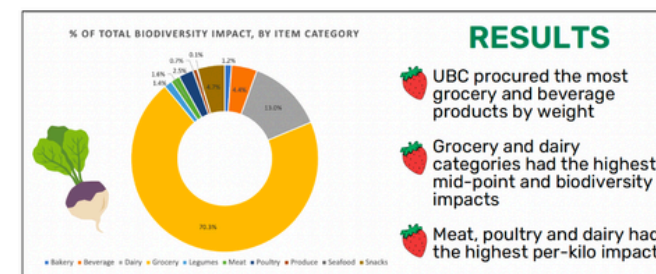
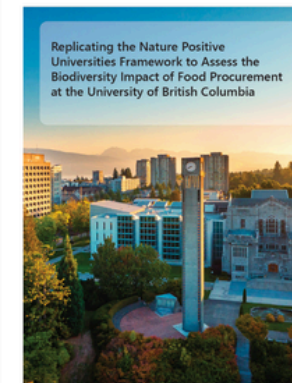
The Conference of Colleges Sustainability Working Group at the University of Oxford conducted a college biodiversity audit, which included a land cover audit. Staff used Land Cover maps and Google Earth images to record landcover types using a colour-coded key.

1. Assess the baseline

1b) Calculating the university's biodiversity footprint

Case Study: University of British Columbia (Canada)

Research students at UBC assessed the environmental impacts of their food procurement using Oxford's conceptual framework, looking specifically at the GHG emissions, land and water use, air and water pollution of food procured by UBC Food Services (UBCFS) outlets (including dining halls, restaurants, retail and catering) between January and December 2022. They used the impacts to estimate the extent of biodiversity loss associated with food procurement and identify areas for reduction of negative impacts.



RESULTS

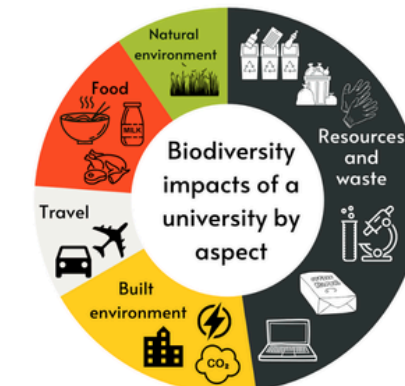
- UBC procured the most grocery and beverage products by weight
- Grocery and dairy categories had the highest mid-point and biodiversity impacts
- Meat, poultry and dairy had the highest per-kilo impacts

Final report available here:

https://www.naturepositiveuniversities.net/wpcontent/uploads/2024/04/NPU_UBC_FinalReport.pdf

1. Assess the baseline

1b) Calculating the university's biodiversity footprint



- Natural environment** - These include impacts to existing biodiversity present on site, grounds and facilities management relating to green spaces, including loss of habitat for new construction projects or biodiversity uplift activities such as creation of new habitats or nature areas.
- Built environment** - These include fuel, electricity and water use in university-owned and managed buildings and mining and transport of resources involved in construction and infrastructure.
- Food** - These include impacts related to growing and transporting all food consumed on site, eg in university canteens, cafeterias and departmental catering and conferences.
- Resources and waste** - These include impacts related to procurement of goods and services used in all university activities, such as IT equipment, server space, paper, laboratory equipment and supplies and furniture, at all stages from production to disposal.
- Travel** - These include impacts related to staff and student travel including commuting between home and work, conference and business travel.

Workshop 2 Actions:

1. **PLEDGE:** Find out if your university has pledged and connect with relevant staff to investigate interest in making a pledge.
2. **iNaturalist:**
 - a. Register on iNaturalist and start recording wildlife
 - b. Join the iNaturalist Student Ambassador group
 - c. Speak to your university about joining the NPU-Campus Biodiversity Network (you will need a campus map)
3. **PHOTOS:** Take campus photos and think about interventions
4. **CITY NATURE CHALLENGE:** Take part in the City Nature Challenge (25-28th April)
5. **BIOBLITZ:** Plan a Bioblitz for your campus or nearby area

Ambassador Actions:

As a Nature Positive Universities Ambassador, we want you to help make Nature Positive change in your university. The actions in our toolkits are designed to provide inspiration for what you might like to do in your role, but we encourage you to take the approach that you think will work best.

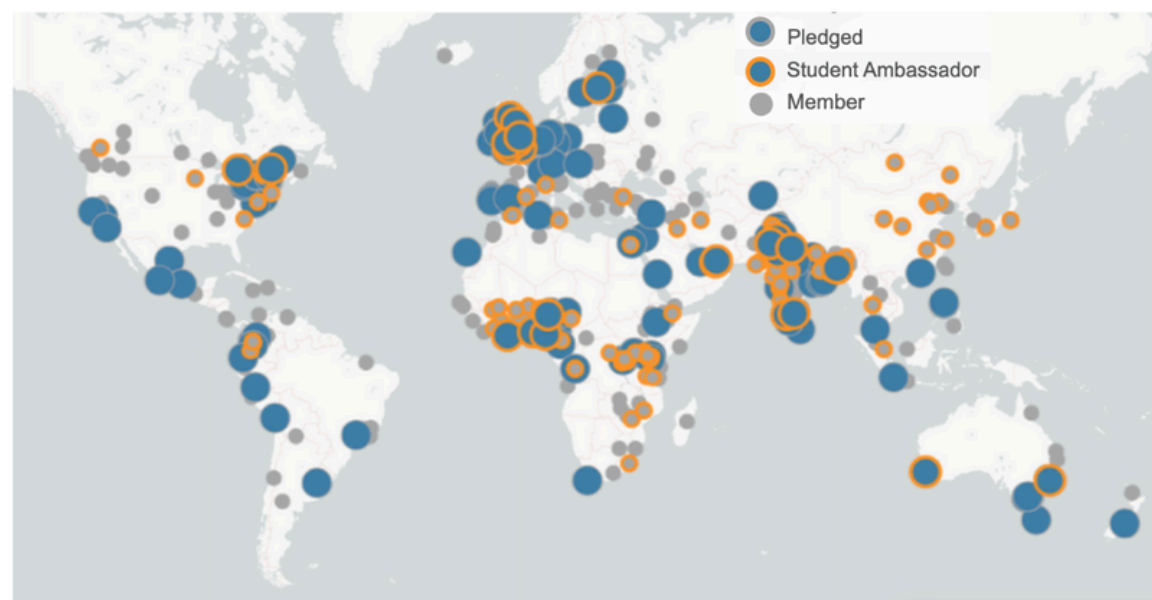
This second Toolkit on the theme of “Biodiversity Baselines” contains five suggested actions, which we’d love you to work towards over the next month. We ask everyone to complete actions 1-3, and 4 and 5 are optional tasks, depending on interest and your time and resources. The following pages contain more detail of these tasks.

Workshop 2 Actions:

1. Find out if your university has pledged and connect with relevant staff to investigate interest in making a pledge.
2. iNaturalist actions:
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5. Plan a Bioblitz for your campus or nearby area

1

Find out if your university has pledged and connect with staff



Check our website map and spreadsheet to see if your university has made a pledge

If it has not, we are happy to help support you to work towards a pledge at your institution. We can supply a letter of invitation, or arrange a video call with a staff member.

If your university has made a pledge, let us know if you would like to be connected with your university contact to see if you can work together.

If your university has carried out existing ecological surveys or has projects focusing on biodiversity, there may be ways to get involved as a volunteer, whatever your subject area.

iNaturalist



2a Register on iNaturalist and start recording wildlife

iNaturalist is an app and website that allows you to identify and record species you see around you. It can be used by anyone, and as well as independently logging the wildlife around you, you can collate observations from different users in a 'Project' – allowing a collaborative exploration of biodiversity in an area.

How to use iNaturalist to make observations:

An observation records an encounter with an individual organism at a particular time and location. This includes encounters with signs of organisms like tracks, nests, or things that just died. When you make an observation, you'll record:

Who you are
You'll need to make an iNaturalist account and please only post your own personal observations



What you saw
Choose a group of organisms like butterflies or better yet a specific organism like the Monarch butterfly. If you provide evidence you can leave this blank and the community can help

Where you saw it
Record both the coordinates of the encounter as well as their accuracy. You can obscure the location from the public



When you saw it
Record the date of your encounter, not the date you post it to iNaturalist

Evidence of what you saw
By including evidence like a photo or sound, the community can help add, improve, or confirm the identification of the organism you encountered. Help the community by taking clear well framed photos, by including multiple photos from different angles

Your observations don't need to include all of these parts, but they do in order to become research quality observations for science. Remember, you should make separate observations for each separate organism you encounter. If you observed something that is not wild, like a garden plant or a lion in the zoo, make sure to mark it as captive/cultivated to prevent it from becoming research quality.

@iNaturalist

2b Join the NPU Student Ambassador group

Join the Student Ambassadors' iNaturalist group



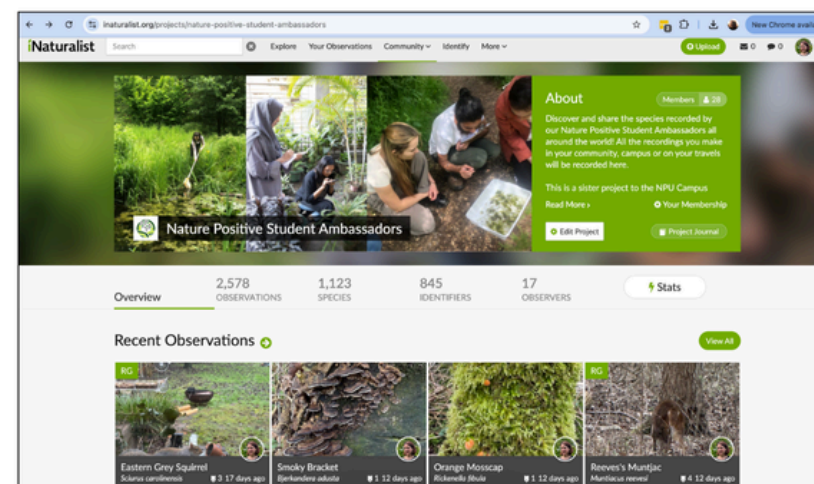
Send Emily or Hollie your iNaturalist ID, then you will be able to join the Student Ambassadors' iNaturalist group to share your observations.



You can record wild flora and fauna anywhere you are for this group- it does not only have to be on campus! You will be able to see the observations of members of our community from all over the world.



Please don't include observations of pets or humans, and make sure to take a few photos from different angles.



2c Speak to your university about joining the NPU-Campus Biodiversity Network

Founded by Vanier College in Montréal, Québec, and launched in 2022, the Campus Biodiversity Network aims to promote campus greenspace observation and protection by using iNaturalist, eBird and eButterfly.

The Campus Biodiversity Network has now partnered with NPU and encourages students, staff, and faculty at educational institutions in Montreal and beyond to champion their institutions' green spaces and connect with others through citizen-science observations.

By creating a project for your university under the Campus Biodiversity Network, all the species recorded within your campus boundaries will be collated together, allowing you (and the rest of the world!) to see what biodiversity is found on your campus. This can show us the kind of nature that exists on your campus, as a baseline (along with other measures) for your university's campus biodiversity.





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3 Take campus photos and think about interventions

A biodiversity baseline doesn't have to be complicated or involve specialist ecological knowledge. As featured in our short film with the example of Government Dungar College, India, taking before and after photos is a really powerful way to document the state of the environment and specific habitats at a point in time, and to record progress and changes visually.

We would like you to take some photos to document green or natural areas of your campus grounds and their current condition. If you do not have much green space, you could focus on areas of buildings that could be enhanced for wildlife, or natural areas close to your university. You might choose to focus on degraded areas and think about how these could be enhanced for people and nature.

You can record your observations and ideas in your workbook and upload photos too. We will follow up with ideas for posting on social media too!



3 Take campus photos and think about interventions

Case Study: Government Dungar College, Bikaner (India)

Government Dungar College embarked upon extensive restoration activities on their campus and beyond through the Familial Forestry initiative. Progress was recorded using before and after photographs detailing the extent of ecosystem change over time, showing the impact of their interventions.



Case Study: University of Konstanz, Germany

In collaboration with their Biology Department, University of Konstanz have been converting gravel roofs to green biodiversity roofs, planting multiple, native species. A biodiversity experiment was set up to compare different native plant species, adapted to relatively dry conditions and test whether it's helpful to start with high biodiversity to increase cover of on the green roof and prevent unwanted species. These aerial photos document before and after the experiments.



The roof in August 2020 and 2022

OPTIONAL!

4

Join the City Nature Challenge (iNaturalist) April 25-28th 2025

City Nature Challenge (CNC) is a four-day Bioblitz style competition where cities across the world compete to see who can make the most observations of nature, find the most species and engage the most people.



The challenge started in 2016 as a competition between Los Angeles and San Francisco, and has since grown into an international event, motivating people around the world to find and document wildlife in their own cities.

City Nature Challenge is a great opportunity to plan a Bioblitz on your campus for these same days, and help count towards your city's efforts recording biodiversity. It could also be a chance to coordinate with others in your city to invite participation and wider community engagement with your event.



How to join the City Nature Challenge

More information about the City Nature Challenge and how to get involved can be found the [City Nature Challenge website](#). The list of participating cities and a link to the global project will be posted on the the website in March 2025.

OPTIONAL!

5

Plan a Bioblitz on your campus or nearby site

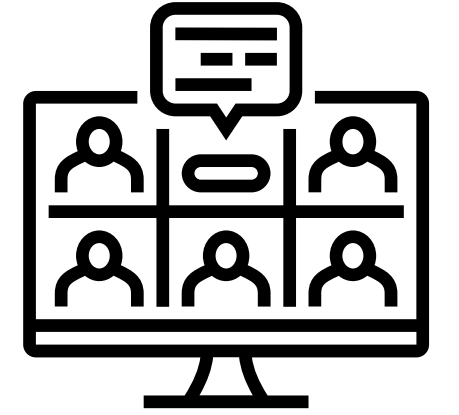
A BioBlitz is an event in which a group of individuals aim to record as many species of plants, animals and fungi as possible in a location, over a defined time period (usually 24 hours). It's an informal and fun way to create a snapshot of the biodiversity that can be found on your campus.

As well as providing a good idea of species richness on campus grounds, a BioBlitz is a great opportunity for participants to learn together and share their expertise and enthusiasm for nature. It usually involves a group of scientists, students, naturalists and members of the public working together. This is a great way of breaking down barriers to engagement with science and raising awareness of the role of biological recording, and gives the public an opportunity to contribute to a genuine scientific survey.



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Group exercise - breakout rooms



You will have 10 minutes to discuss the below in your groups:

1. Introductions - name and university
2. Biodiversity pressures on your campus and ideas for improvement
3. Any experience of iNaturalist, ecological surveys or bioblitzes?
4. Tips for working with staff on campus or wider university collaboration
5. Think of your legacy, how do you plan to work with other students and how can your work be continued by other students in the future?

Nominate a group member or members to share back ideas in the main room.

Time to share with the group



Sharing experience attending IPBES Youth Workshop



**Avani Jyani,
Student Ambassador
Govt. Dungar College, Bikaner,
India**

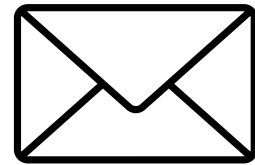
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Next steps:

Look out for our email early next week! We will email with a link to download the following:

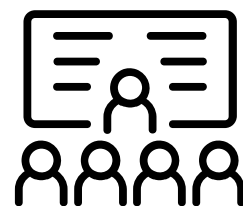


- **A copy of these slides**
- **A recording of this session to watch back**
- **Toolkit 2: Biodiversity Baselines**
- **Workbook Form 2: Biodiversity Baselines**

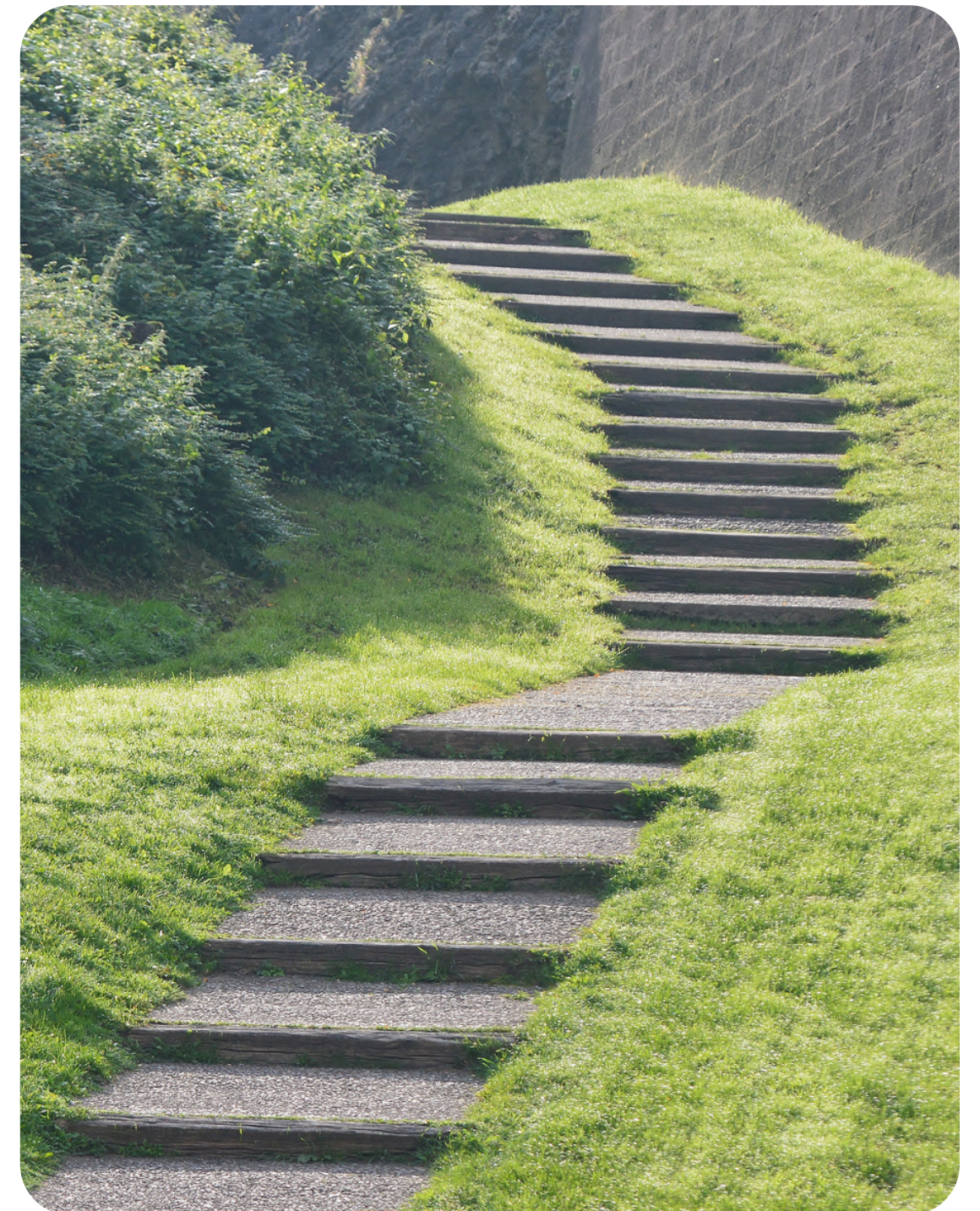


Continue to check WhatsApp group: share your ideas and progress on iNaturalist and baselines!

Next workshop dates and topics:



- [February: Optional coffee meeting- POLL]
- **February 28th : Biodiversity actions on campus**
- **March 28th: Food**
- **April 25th: Waste and resource use**
- **May 30th: Advocacy & community engagement**





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#GenerationRestoration