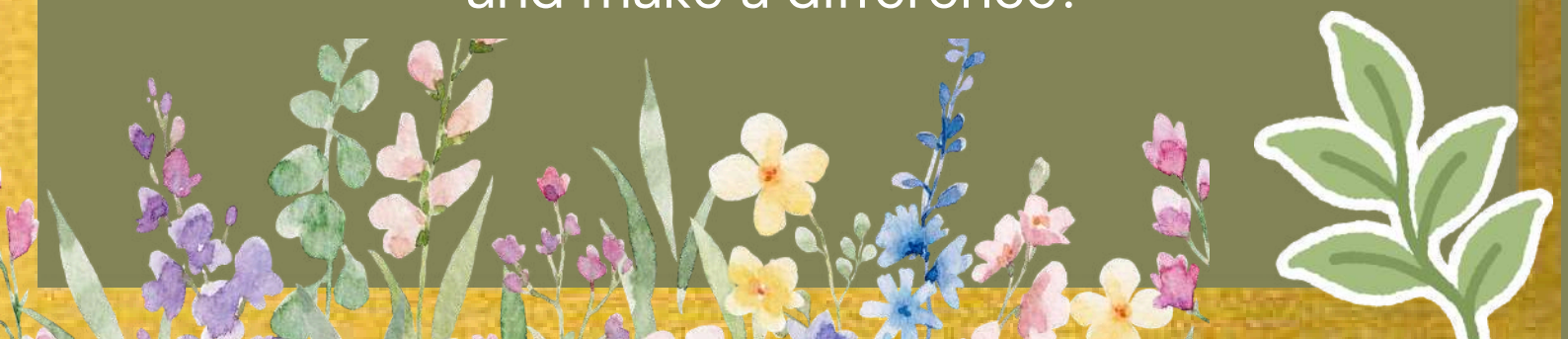




FACILITATORS GUIDE

How can we educate ourselves on biodiversity loss
and make a difference?



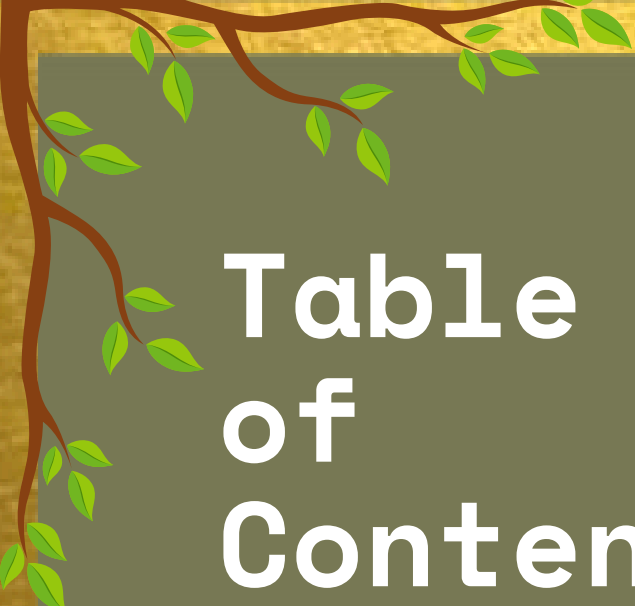


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Meet our team

The people who worked behind the scenes

Our group is made up of four very environmentally conscious LUC students who all believe in the importance of sustainability and the conservation of biodiversity, and striving for a better, more ethical planet. Our names are Victor, Eabha, Clementine and Klara, and we are all first year students here at LUC studying global challenges. This game is therefore very important for us, as it is a way for us to voice our opinions about major issues, have a platform, and make a difference in trying to solve global challenges.

We chose our game topic because we collectively agreed that biodiversity loss is a global challenge we are all interested in and want to tackle, so it aligned closely with all of our values and aspirations. We hope you enjoy our game, *No Time to Be Slow* !



No Time to be Slow:

The vision behind our game

Our game tells a fictional story, but is based on real life situations and a real setting. The game is set on a remote island called Isla Escudo de Veraguas, off the Caribbean coast of Panama, which is the only place on earth where the species our game is based on can be found: the three toed pygmy sloth.



A three toed pygmy sloth enjoying itself!



The three toed pygmy sloth is in series danger of extinction. The mangrove trees on Isla Escudo de Veraguas are essential for the sloths survival and habitat, yet unfortunately, human activity, like fishermen and visitors logging endangers not only the sloths, but all native species of the island. Sloths are also hunted by seasonal visitors such as lobster divers and indigenous people. They have been on the International Union for Conservation of Nature Red List as “critically endangered” since 2006.

The most recent data on these sloths show that there could only be 48 left in the wild – a further decrease from the last 2013 estimate of 79. They are disappearing at an alarming rate, and our game uses this real world scenario to show the urgency and concreteness of the issue of biodiversity loss, and what we can do to prevent species like these sloths going unnoticed and becoming extinct. This is more than a game, it is a reflection of real world issues.



An important part of our game: the IUCN Red List

The IUCN Red List, officially known as the IUCN Red List of Threatened Species, is the world's most comprehensive and authoritative global database tracking the conservation status of plants, animals, and fungi across the planet.



Founded in 1964 by the International Union for Conservation of Nature, a global organization bringing together governments, scientists, and NGOs, the Red List works by having teams of experts rigorously assess each species against a set of scientific criteria, looking at things like how fast its population is declining, how small or fragmented its geographic range is, and how likely it is to go extinct within a given number of years. Based on this assessment, every species is placed into one of nine categories:

- | | | |
|-------------------|--------------------|--------------------------|
| 1. Not Evaluated | 4. Near Threatened | 7. Critically Endangered |
| 2. Data Deficient | 5. Vulnerable | 8. Extinct in the Wild |
| 3. Least Concern | 6. Endangered | 9. Extinct |

With over 160,000 species assessed and 44,000+ currently threatened, it acts as a global early warning system that guides conservation funding, legal protection, and government policy worldwide.

Source: [IUCN Red List of Threatened Species](#)



Some facts about the pygmy sloth and the island:

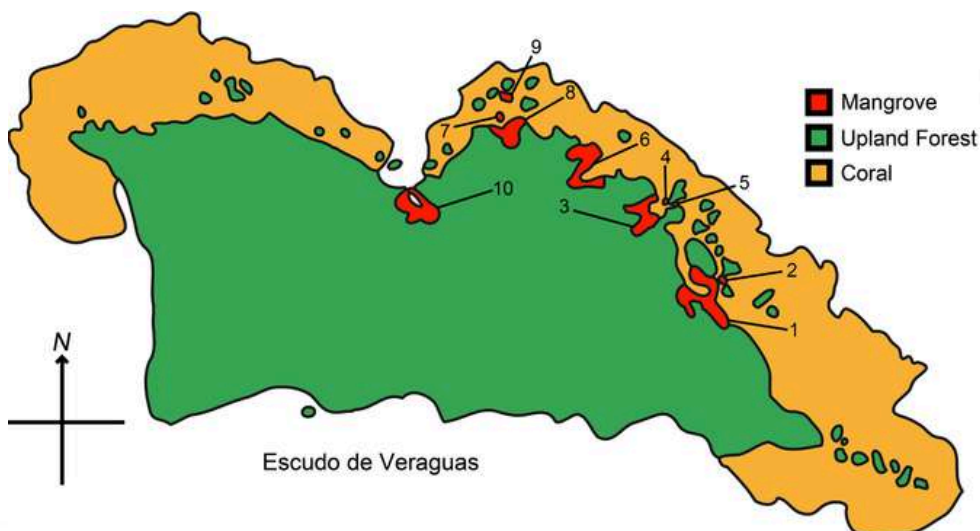
The biggest threats to the sloth are:

- 1) Destruction and fragmentation of their natural habitat
- 2) Their exploitation for food
- 3) The presence of feral cats
- 4) Lack of adequate legal protection

Isla Escudo is very hard to get to, and its forest remains largely unexplored. The pygmy sloths inhabit and feed from the red mangrove trees, which are often logged and only account for 0.024% of the total island area (1.67 ha).

Pygmy sloths are considered one of the worlds most critically endangered animals

They are the dwarfed version of the brown-throated three-fingered sloths from mainland Panama, and are endemic to Isla Escudo, which is 17.6 km off the coast of mainland Panama. They are around 40% smaller than the mainland pygmy sloths.



Source: Escudo Island / Kaviar S, Shockey J, Sundberg P (2012) Observations on the Endemic Pygmy Three-Toed Sloth, *Bradypus pygmaeus* of Isla Escudo de Veraguas, Panamá. PLoS ONE 7(11): e49854. <https://doi.org/10.1371/journal.pone.0049854>

What is our global challenge?: Biodiversity Loss

The storyline our game uses of the pygmy sloth and Isla Escudo de Veraguas is important, because it zooms in on a specific scenario of biodiversity loss. Zooming back out, we want to give you the bigger picture of the challenge of biodiversity loss, what it means, and why it is important.

Biodiversity refers to the variety of all living things on Earth, every species, ecosystem, and genetic variation, that together form the web of life. Biodiversity loss is the rapid decline of this variety, driven by habitat destruction, climate change, pollution, overexploitation, and invasive species, and it is currently happening at a rate far beyond what is natural. This matters because biodiversity is the backbone of everything humans depend on: the pollinators that produce a third of our food. the forests and oceans that absorb our carbon emissions, the natural compounds behind 70% of cancer drugs, and the healthy ecosystems that prevent disease outbreaks. Over half of global GDP is tied to nature in some way, and the loss of species and habitats doesn't just damage the natural world, it destabilises the foodn health, climate, and economic systems that human societies are built on.



Our Methodology

We began by researching biodiversity loss as a global challenge, exploring reputable sources such as the United Nations, the World Health Organisation, and the WWF Living Planet Report 2024. Through this research, we learned that biodiversity loss is one of the most urgent crises facing the planet, with wildlife populations having declined by 73% in just 50 years, threatening food systems, human health, and climate stability. As our understanding of the issue deepened, we recognised that simply presenting facts was not enough to engage people meaningfully, particularly younger audiences. We felt that a game could turn complex ecological systems into something interactive and emotionally engaging, allowing players to experience the consequences of biodiversity loss firsthand rather than just reading about them. Our ideas developed from wanting to raise awareness into wanting to create genuine understanding and empathy through play.

The more we learned, the more we gained ideas for how to structure our game in a way in which younger and diverse audiences could learn as well, and our research enhanced our game more than we anticipated it would. It was also very useful in creating the cards and filtering through which information to include and which was less relevant.



Design Challenges



Our team worked very well together on a whole, however inevitably we did face some design challenges along the way. The main challenge we faced was related to the rules and play of the game. For our challenge cards, at first we had some procedural issues. During the prototype play, we noticed that the judging of the points for the cards seemed unfair, as it was our team giving out points based on subjective ideas of which answers were good or not, with no guidelines or grading criteria for points. The feedback we were given showed us that people thought this was unfair, and that we would need to change this. This confirmed our already existing doubts about the process. It was hard for us to find a plausible and fair way to do the grading, but we decided points would just be rewarded based on if the player gets the answer right or not, and we would use a timer to make the stakes feel higher.

It was also difficult to decide how the roles would be represented, since we did not want to portray the company as 'evil' or make it sound really biased. We want to teach players about the dynamics of biodiversity loss, without targeting or labelling companies as always being 'the bad ones.' So we played around a bit with the storyline to make it seem more neutral, and that there could be good outcomes for the environment with the company still in the picture. This gave a more balanced overview of what our game represents in terms of roles and actors in biodiversity loss. The company can take actions that are bad for the environment and biodiversity, but can also change their methods to align more with regulations and environmental ethics. Not all of their actions have to be 'bad.'

On a more practical level, it took us a lot of time to decide how the cards and board should be designed, and making and printing them took a long time, which was time we could have used perfecting other more important aspects of the game. To overcome this, we simply had to dedicate more time to making the game than we thought we would.

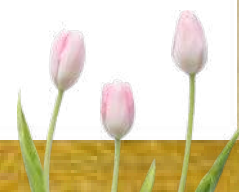


Target players

Biodiversity loss is a universal issue, affecting all age ranges and people from all backgrounds, even if it affects some people to disproportionate levels. We want to target our game towards people who know of biodiversity loss, that it exists and what it is, but on a shallow and surface level, since this game will help them delve deeper into the issue, what it actually means and entails, and how it plays out in the real world. Our game is good for anyone who knows that biodiversity loss is an issue and that it exists, but has not actually seen how it manifests in real life or specific details about why it is so bad. This is an educational game, and therefore should be accessible for everybody, since education about important topics related to the environment, like biodiversity loss, is essential for a better and more equitable, safe and thriving world.

This game will make it easier for players to know that they can do their part, since it's interactive and you really step into your role to make change in the game. Ultimately, this game is for everyone, since everyone has a role to play in mitigating biodiversity loss, whether you are a CEO of a big company, a regular, law-abiding citizen, an environmental activist, or a high school student. This message is represented through the different roles in our game. Despite them all being drastically different, players see that they are all important for stopping the problem.

The age range recommended for our game is ages twelve and above. The reason we recommend you are at least twelve to play the game is because it is quite a hard game, requiring a lot of knowledge, competitiveness, memory skills and critical thinking. Therefore, people who are not yet in secondary education would probably struggle with it. Twelve is also a good age to start learning about this problem, so the more young people who play our game, the better. Because the young people are the future, and can learn from this game to apply their knowledge in their everyday lives and careers.



Our game: the story

You are one of four characters on the beautiful island Isla Escudo de Veraguas, off the coast of Panama. There is a company, Luxury Villas Co., which aims to transform the island from a remote hidden treasure to a luxury holiday destination by investing in land to build luxury villas all across the island for people to enjoy.

This would mean more logging of the precious mangrove trees that the pygmy three toed sloth and many other species on the island live off of, as well as pollution and a loss of overall habitat and land. Company representatives will be one of the characters in this game. There are three other characters, the Green Shield Foundation, an NGO trying to reduce the harm caused by the company's actions, the locals and a spy who all disagree with the company's plans and the execution of these plans, and worry for the health and preservation of the island's natural environment and biodiversity, especially the pygmy sloth, which is already unique and rare to the island and severely at risk of extinction.

The locals are worried that the development of luxury villas will destroy the biodiversity and natural landscape from which they get their livelihood and culture, and want the company gone. The spy is an insider in the company who is secretly working against them, trying to ruin their plans before it is too late by exposing information that will force them to comply with environmental regulations that stop biodiversity loss.

The main aim of the company is to build their villas and make as much profit as possible, but if this happens, the sloth goes extinct. The other three characters work tirelessly to stop this from occurring and save the sloth from extinction before it's too late... There are ways for the company and nature to exist side by side, but for this to happen, hard work needs to be done and compromises have to be made!

Our game: the roles

The Company

Cut down the mangrove habitat and build luxury villas for profit.

Starts at: Company HQ

Starts with 2 points

The Locals

Protect the mangrove forest, the sloth, and their way of life.

Starts at: Mangrove forest

Starts with 0 points

The Spy

Infiltrate the company, expose secrets, and support the other roles from within.

Starts at: The hideout

Starts with 0 points

The NGO

Hold the Company accountable through research, reports and lobbying.

Starts at: NGO building

Starts with 0 points

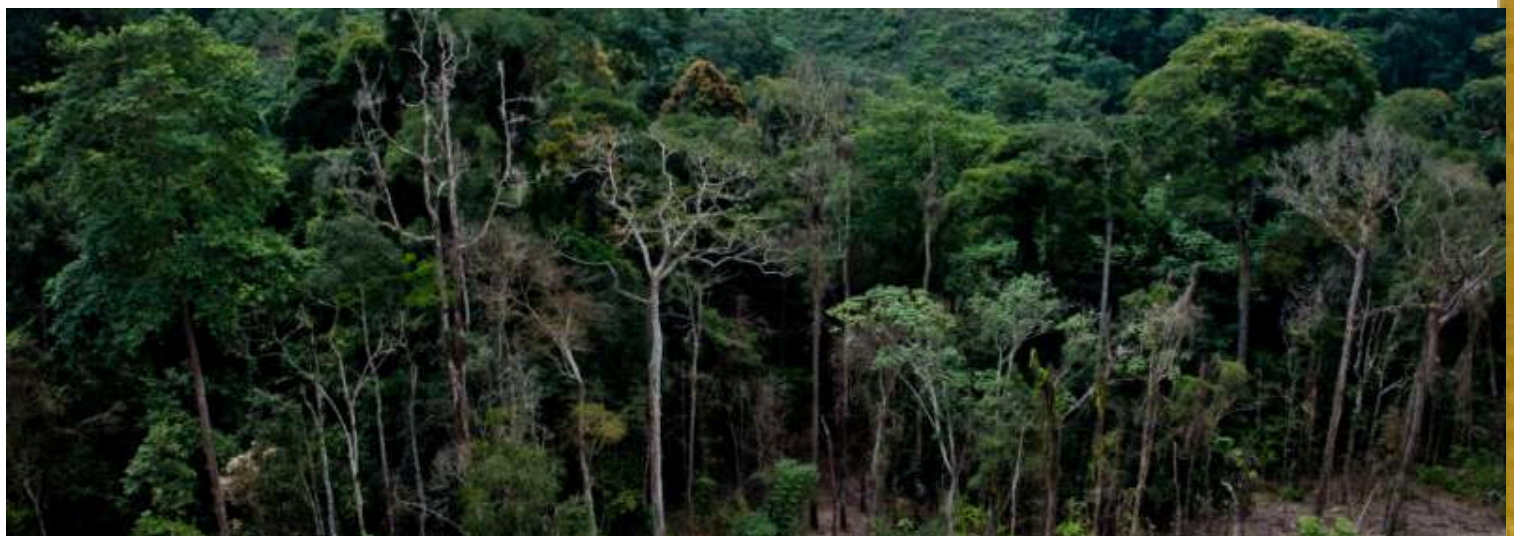
The company starts with 2 points to represent how they initially have more power, money and resources than other roles in real life, which gives them a small advantage to win.

Our game: the message

The purpose of this game is to educate players about biodiversity loss. By taking on different roles with different levels of power, players experience firsthand how complex and unequal the fight to protect nature really is. Our game shows that biodiversity loss is not just an environmental issue, but a political, economic and social one too, shaped by powerful corporations, weak governance and structural inequality.

Our game is important because it makes a difficult global issue tangible and personal. Instead of just reading about biodiversity loss, players live it. They feel the frustration of being a local community with limited power, the pressure of being an NGO trying to hold corporations accountable, the hurdles of being a company balancing environmental responsibility with profit maximization, or the moral conflict of being a spy working from the inside. It also sends an important message, that everyone has a role to play in addressing biodiversity loss, no matter how big or small.

Image source: LSE



Learning Objectives:

Affective Learning Objective:

- Teach students how to thoughtfully evaluate the consequences of their actions in regards to biodiversity loss.

Behavioural Learning Objective:

- Enable and motivate students to develop a personal platform to advocate for and raise the issue of biodiversity loss in their everyday life

Cognitive Learning Objectives:

- Help students contextualize biodiversity loss to make it more tangible and less abstract to understand and observe its effects in everyday life.
 - Players will be able to see how biodiversity loss can directly impact humans. For example: human health and food security.
 - Players will be able to analyze the role of a keystone species, such as the wolf or otter, and explain how its removal can trigger a trophic cascade that leads to the collapse of an entire ecosystem.
-

Making it playable in the classroom

To fully implement this game, teachers have to foster a positive and encouraging environment that allows students to enjoy the learning process this game provides, and relevant background teaching or classroom learning about biodiversity loss is recommended, as it will make playing the game more digestible and easy to follow and understand. Since this game is quite challenging and competitive, it is important that teachers take into consideration the age range of their classes and adapt the intensity of the game according to this. For example, if playing with younger students who may get nervous answering the challenge cards within a set time, allowing them to take extra time to answer will not have any negative effects on the actual gameplay and will take students more relaxed and ready to learn, rather than nervous.

There are many small adaptations that can be made to make the game more flexible and suitable depending on the types of people playing it and their ages. The teachers can adapt the game how they see fit, while still following the general rules and guidelines. Teachers may also want to be the ones explaining the game, roles and the story before the game starts, and they can find all this information in this facilitators guide and the rulebook. Each student should receive a copy of each to read themselves, but having a teacher go over the general context of the game before playing it will help it be more comprehensible and easy to follow for them.

Teachers also have the freedom to explain the game and the story as they wish, as there are no set scripts for how teachers present the game. This is because the game is meant to be adaptable and suitable for all different kinds of people with different experiences, learning abilities and ways of understanding things. People learn at different paces and in different ways, and teachers can accommodate this through the game, with their own creative agency over how they present and oversee it. The most important thing for teachers to remember is that while students should feel pressure and be learning, it should also be fun and not too difficult to understand.

Print and Play Materials



- The PNG file of the board

- The cards

- Action Cards
- Challenge Cards
- Quiz Cards
- Information Cards
- Role cards



- The legend for players to see what each colour on the board means.
- Two die and four game pawns
- Rule book and playbook so players can follow the storyline and have all relevant information
- A timer for the challenge cards
- Paper and pencil for each player to keep track of points



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