

### **LEAF**

Learn about biodiversity through environmental action

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Erasmus+ project presentation

The LEAF project aims to strengthen biodiversity education through the participation of environmental actions. This presentation will explore the objectives of the project, the importance of biodiversity and the role of teachers in promoting environmental awareness.





#### Introduction to the LEAF project

Main project objectives: The LEAF project focuses on three main objectives:

- Increasing environmental awareness: educating communities about the importance of biodiversity and its conservation.
- Developing skills for observing biodiversity: Equipping participants with the skills to observe and document biodiversity in their environment.
- Linking education to the local community: Involving local communities in biodiversity initiatives and promoting cooperation between teachers and community members.



## The importance of biodiversity



#### What is biodiversity?

Biodiversity refers to the variety of life on Earth, including all living organisms from micro-organisms to large mammals.

#### Why is it important?

Climate regulation: Biodiversity plays a key role in climate regulation by maintaining ecosystem balance. Food and medicine supply: several species contribute to food security and the development of pharmaceutical products. Cultural value: Biodiversity enriches cultures and traditions, providing aesthetic and recreational benefits.

#### Conclusion

Understanding biodiversity is essential to recognising its role in sustaining life and the health of our planet.



# Climate change and biodiversity



### Impacts of climate change

Climate change significantly affects biodiversity through: changes in ecosystems, which alter habitats that affect the distribution and interactions of species; declines in species populations, where many species are threatened with extinction due to climate change. and habitat loss, driven by urbanisation and agriculture.

### Adaptation and protection measures

To combat these impacts, adaptation and protection measures need to be implemented to help species adapt to changing environments.



#### **Urban biodiversity**

What does biodiversity in cities mean?

Urban biodiversity refers to the variety of species found in urban environments, including parks, gardens and green spaces.

#### **Problems**

Pollution: Air and water pollution threaten urban ecosystems.

Deforestation: Urban expansion leads to the loss of natural habitats.

Urbanisation: Rapid development reduces green spaces that are vital for biodiversity.





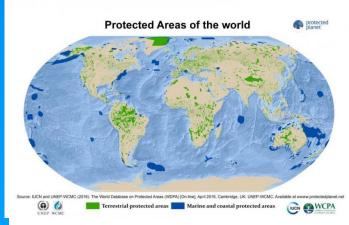
#### **Protected Natural Areas**

What are protected areas?

Protected areas include national parks, Natura 2000 sites and wildlife reserves created to preserve natural heritage.

#### Objective

The primary objective of protected areas is the conservation of biodiversity and ecosystems.





### Advantages of **Protected Areas**



#### **Ecological benefits**

Protection of endangered species: Habitat protection for vulnerable species.

#### **Economic benefits**

Ecotourism and Local Development: Promoting sustainable tourism that supports local economies.

#### Social benefits

Public education and awareness raising: Protected areas act as outdoor classrooms, enhancing environmental education.



# Contribution of local communities

#### Protection actions

Local communities play a vital role in biodiversity conservation through volunteering, participating in conservation activities and restoration projects.

#### Environmental education

Environmental Education Programmes are also vital, as they involve participation in initiatives to educate others about biodiversity.



# Biodiversity of aquatic plants

### Importance of aquatic plants

Aquatic plants are vital for regulating water quality, as they filter pollutants and improve water clarity.

#### Habitat provision

They also provide food and shelter for species, serving as key habitats for various aquatic organisms.





### Participation of teachers

#### Ways to participate

Teachers can engage with the LEAF project by: Participating in LEAF projects. Use of educational materials: Integrating project resources into their teaching practices.

### Additional loyalty opportunities

Consider sharing success stories or testimonials from teachers who have participated in LEAF projects. This may motivate others to get involved and highlight the benefits of engagement.



#### Digital skills and environmental education

#### Modern Tools for Education

The use of digital tools enhances biodiversity education: Applications for species identification: Mobile apps to help identify local flora and fauna. Use of GIS for Area Monitoring: Geographic Information Systems (GIS) for biodiversity data mapping and analysis.

#### Impact of digital tools

Present case studies or examples of how these digital tools have improved biodiversity education outcomes. This may help to demonstrate their effectiveness and encourage their wider adoption.



# Conclusions and proposals



Action steps: to promote biodiversity education, we propose:

- Raising public awareness: Biodiversity awareness initiatives.
- Strengthening conservation policies: Support policies that protect natural habitats.
- Involvement of local stakeholders: involving local communities in conservation efforts.



# Discussion and questions

#### Issues for discussion:

- What did we learn from the presentation?: Reflection on the main conclusions.
- How can we apply the knowledge in our community?: Discussion of practical applications in local contexts.





# The future of biodiversity education

#### Innovative approaches

The future of biodiversity education may include: Project-based learning: Engaging students in practical projects related to biodiversity. Outdoor Education: Using natural environments as learning spaces. Using outdoor activities as learning environments: Integrating biodiversity issues into different subjects.

Encouragement for teachers

We encourage teachers to envision their future biodiversity lessons, incorporating innovative strategies to engage students.

#### Conclusion

Adopting these innovative approaches can significantly enhance biodiversity education and promote a deeper connection with nature.





#### Additional resources for teachers

#### Useful resources:

- Websites:
- World Wide Fund for Nature (WWF): https://www.worldwildlife.org
- International Biodiversity: https://www.bioversityinternational.org
- Further reading material:
- "Biodiversity: A Beginner's Guide" by David Macaulay
- "The Diversity of Life" by Edward O. Wilson
- Professional Development:
- - Online courses and workshops focusing on biodiversity education and environmental action.

