

# MIKOKO ACTIVITY ANALYSIS

**Content Developer:** NT. Olais K. Raphael (5H3OKR)

**Contacts:** [et@mikoko.or.tz](mailto:et@mikoko.or.tz) | 0787 283 759

**Facilitator:** Confirm via email to become club facilitator [yes@mikoko.or.tz](mailto:yes@mikoko.or.tz)

**Age:** 8 – 11 Years

**Visit:** <https://yes.mikoko.or.tz/program.html>

**@Mikoko Development Foundation | Young Environmental Scientist**

**Category:** Science & Social Science (Arts)

**Activity:** Biodiversity 1

**Goal:** Empower youth become competent towards understand nature and biodiversity around his or her natural environment.

## OBJECTIVES

- Enable youth well understand the meaning of natural environment
- Help youth understand about species diversity, genetic diversity and ecosystem diversity
- Enable youths identify various organism in an ecosystem
- Enable youth understand the importance of biodiversity to living and non-living organisms
- Youth become competent in describe, thinking and analyses concepts related to biodiversity.

## METHODOLOGY

- Youth engaged in hands-on activities related to biodiversity and environment as provided by the activity guide manual.
- Youth to be involved in learning by doing method and allow them critically participate in STREAMS model.

## INDICATORS/TARGETED RESULTS/OUTCOMES

- ❖ Youth are able to explain the knowledge of biodiversity
- ❖ Youth are able to describe genetic, species and ecosystem diversity
- ❖ Youth are able to identify various organisms in an ecosystem
- ❖ Youths are able to list importance of biodiversity to living and non-living organisms in the environment

## Mikoko Youth Program Dimension

Cognition	Physical
<ul style="list-style-type: none"><li>- Acquire enough knowledge to explain the concept of biodiversity.</li><li>- Develop ability to ask and answer related questions to biodiversity.</li></ul>	<ul style="list-style-type: none"><li>- Develop body awareness, body balance, and muscle control during outdoor programs.</li><li>- Become aware of body coordination during hands-on projects.</li></ul>

<b>Moral</b>	<b>Creativity &amp; Innovation</b>
<ul style="list-style-type: none"> <li>- Build team working spirit and good communication behavior.</li> <li>- Respect ability among other youth individuals and groups.</li> <li>- Develop ability to understand, respect, protect and management of biodiversity.</li> <li>- Improve gender empowerment among youth groups.</li> <li>- Improve youth justice, tradition, customs and beliefs.</li> </ul>	<ul style="list-style-type: none"> <li>- Understand physical environment and space with effective application of new useful tools.</li> <li>- Develop problem-solving skills with effective creative tools to help solve the existing problem in real world.</li> </ul>
<b>Language Development</b>	<b>Psychological</b>
<ul style="list-style-type: none"> <li>- Improve communication and writing skills</li> <li>- Identify ways of language communication with biodiversity-based terminologies.</li> </ul>	<ul style="list-style-type: none"> <li>- Shape youth behavior related to biodiversity protection and management.</li> <li>- Improve youth interaction and learning ability among youth groups' ages and gender.</li> </ul>
<b>Emotional</b>	
<ul style="list-style-type: none"> <li>- Improve youth emotions affected by behavior groups and life styles.</li> <li>- Improve youth feelings on natural environment.</li> </ul>	

### Trainer's Instructions

Trainer shall ensure group of youth divided into proportional capacity and given instructions according to Mikoko Youth Nature Outdoor Program (YNOP) instruction manual available to all Mikoko Authorized Trainers. Biodiversity is the reality of life so club coordinator has to ensure students are connected to nature through outdoor programs. Arrange this activity to be simple as much as you can to the dedicated group of students.

For children aged between 5 to 7 years please make sure they are only sing and making arts related to biodiversity and before the drawings please prepare some songs that they will sing while clapping hands and use their body actions to describe biodiversity like plants, animals, bats and other components of biodiversity such as microscopic bacteria.

## PART I

### Activity Introduction

Biodiversity idea has to be introduced to children aged between 8 to 11 years. Therefore, Biodiversity is the rich variety of life on earth. There is variety in genes, variety among species, and variety of ecosystems. Everything is interconnected, or dependent on everything else!

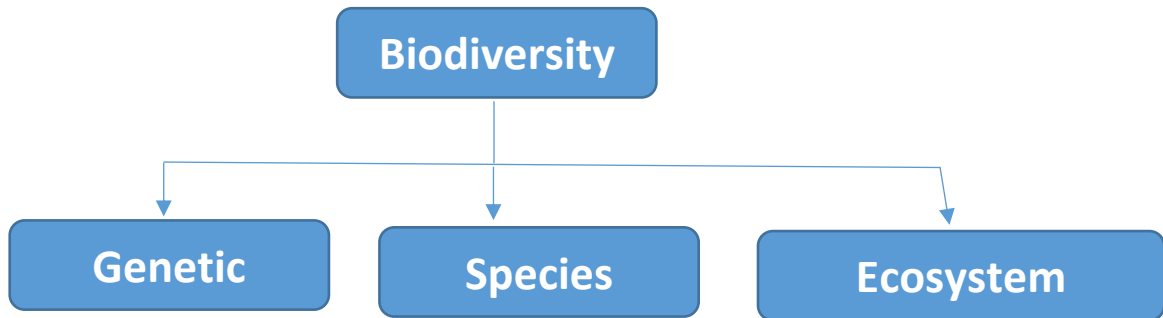


# What are the big ideas about biodiversity?

## 1. Is the rich of life on earth



## Levels of Biodiversity



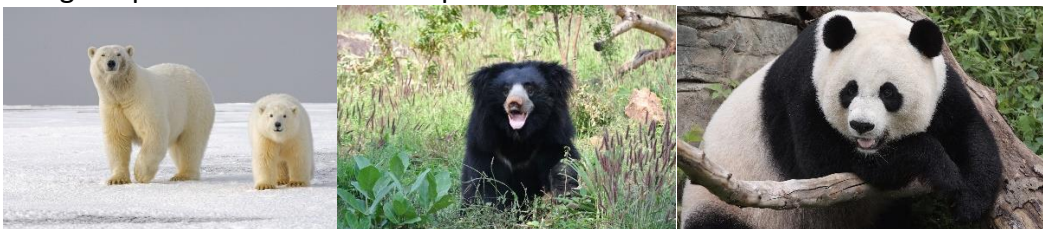
### Genetic (Variety of Genes)

Poodles, beagles, and rottweilers are all dogs. But they're not the same, because their genes are different. The difference in our genes makes us all different.



### Species

Scientists group living things into distinct species. For example, polar bears, sloth bear, and giant panda are all different species.



These finches, from different species, have beaks with different shapes. Each beak is just right for the type of food that finch species eats. The difference in genes makes the difference!



## Ecosystem

### “Variety of and within ecosystems”

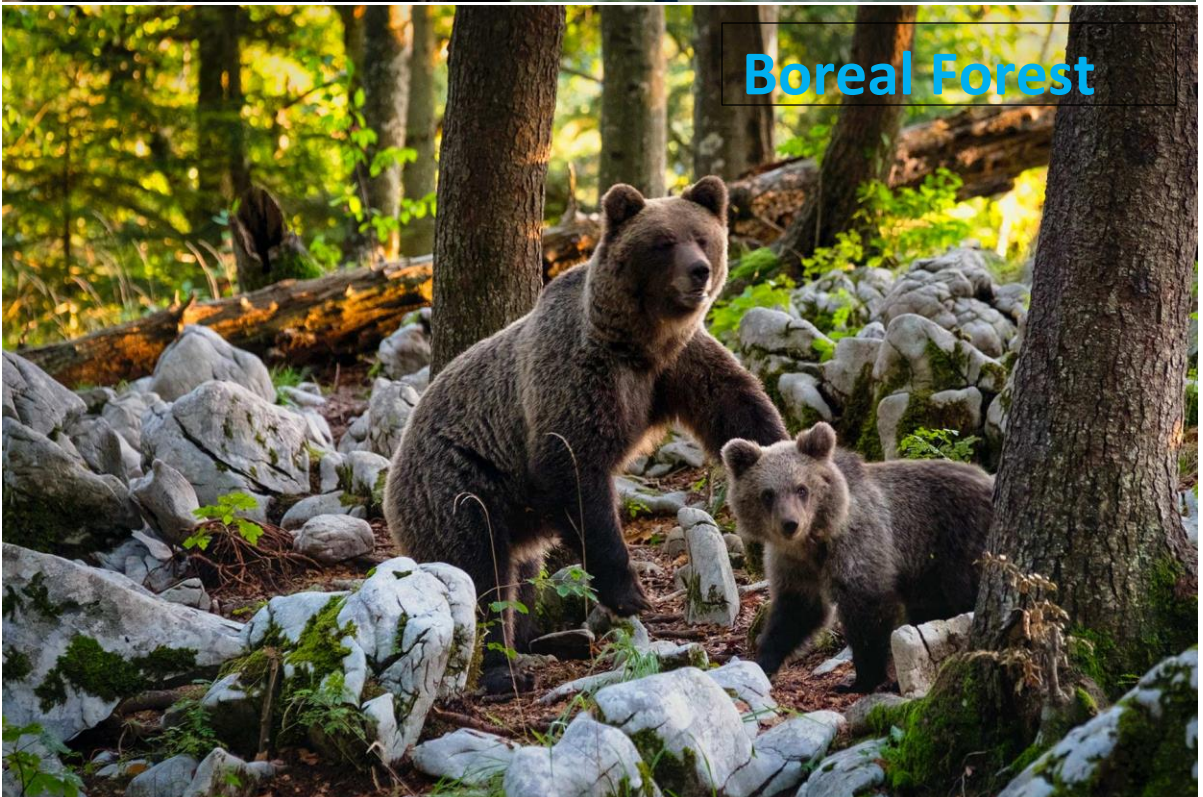
Coral reefs, grasslands, and tropical rain forest are all ecosystems. Each one is different, with its own unique composition of living things.

The variety of genes, species and ecosystems make up our planet’s biodiversity.

#### Tropical Forest



#### Boreal Forest





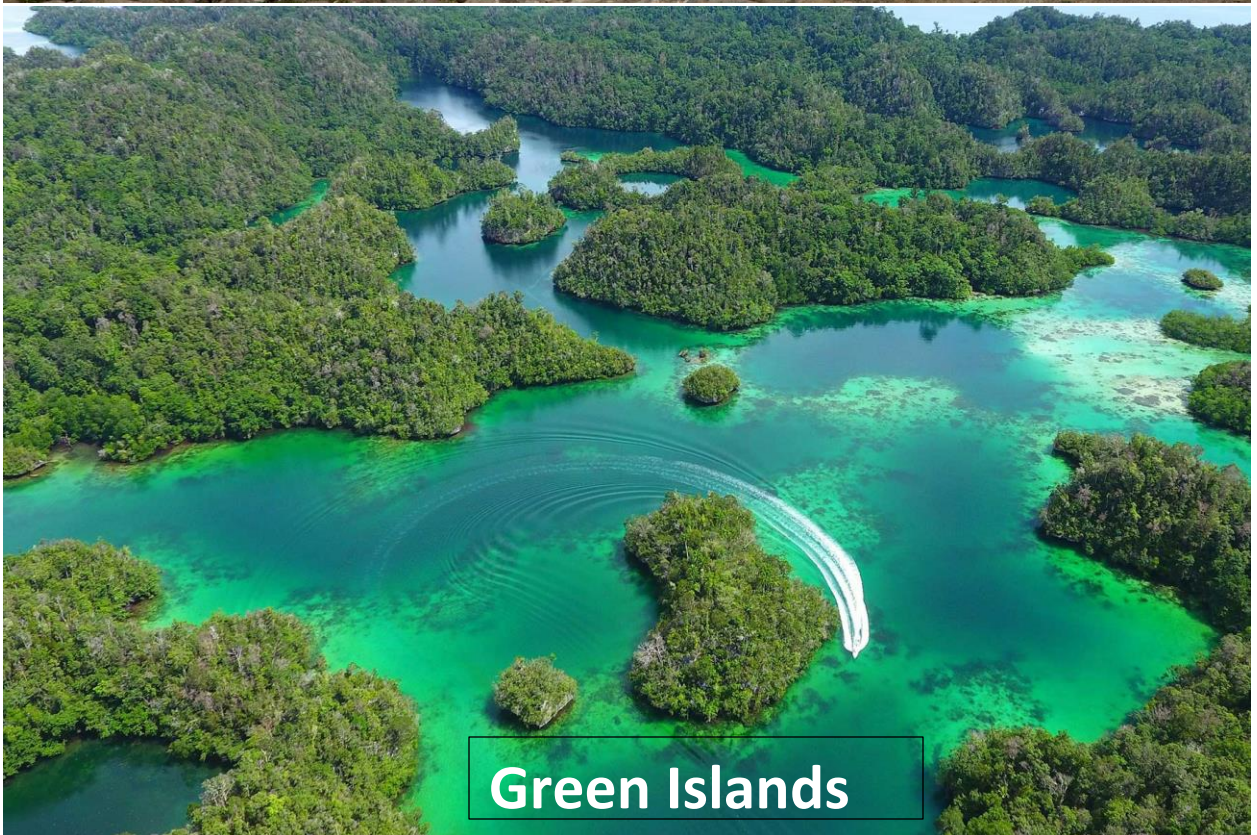
Oceans



Desert



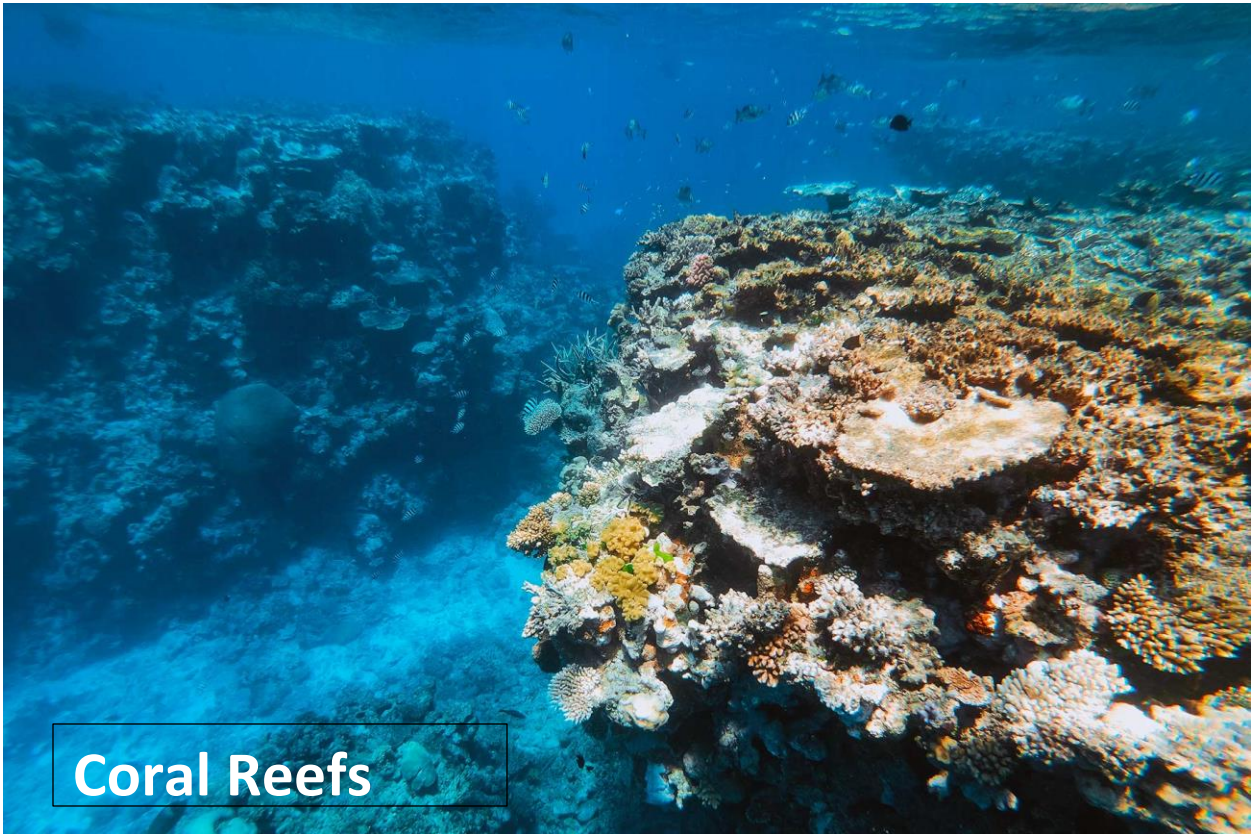
Tundras



Green Islands



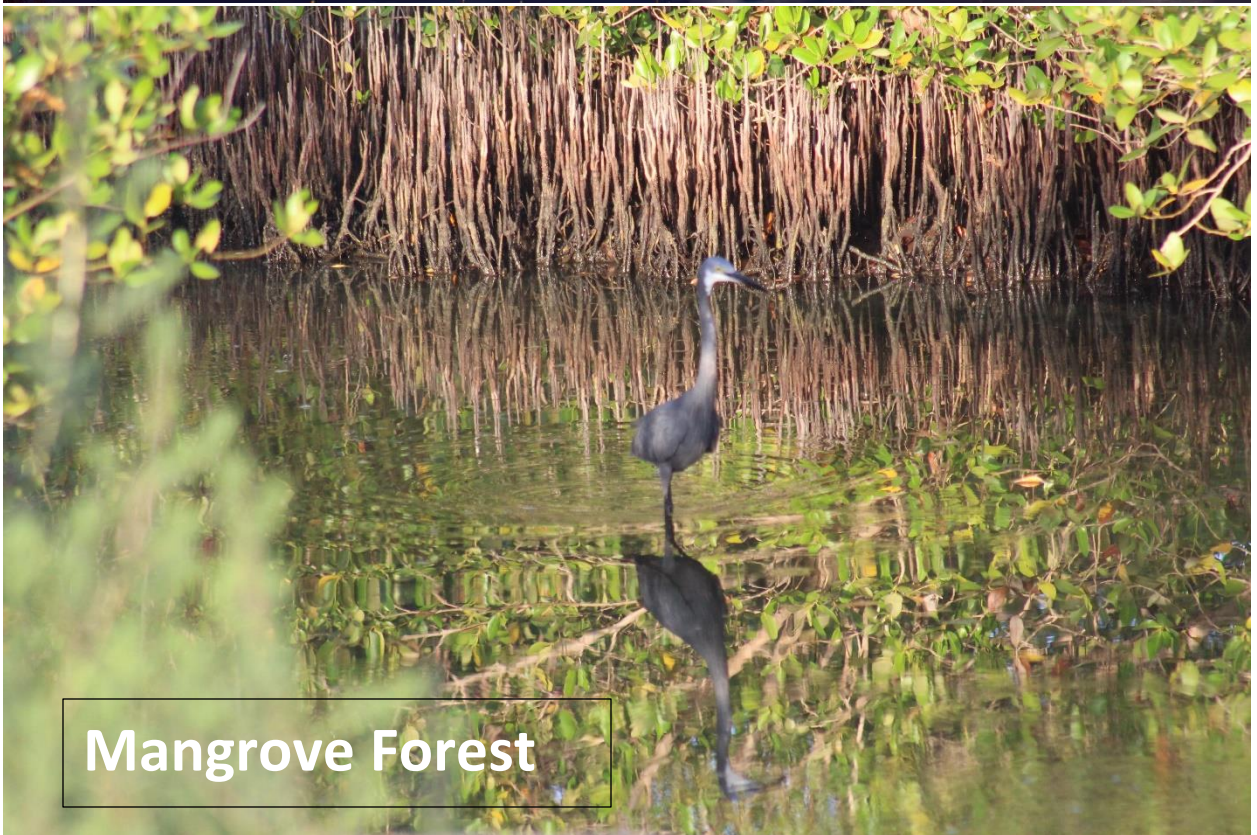
Grass Lands



Coral Reefs



**Wetland**



**Mangrove Forest**

## Conclusion

This activity is very important for kids and youth to understand what is biodiversity before giving them chance to explore what is available in the field. Please observe outdoor safety to kids and youth during the outdoor activity. With any quick requirement please reach activity organizer through [olais@mikoko.or.tz](mailto:olais@mikoko.or.tz) or +255 787 283 759

## The Badge to Achieve at the end of Creative Scientist Sessions:



## Reference

**American Museum of Natural History** (2022)  
<https://www.amnh.org/explore/ology/biodiversity/what-is-biodiversity>

**Pet Place** (2022), Are Rottweilers Good Family Dogs?  
<https://www.petplace.com/article/dogs/breeds/dog-breeds/rottweilers-good-family-dogs/>

**American Kennel Club:** (2022) 10 Fun Facts About the Beagle <https://www.akc.org/expert-advice/lifestyle/things-you-didnt-know-beagle/>

**AZ Animals** (2021) Poodle Animal Pictures <https://a-z-animals.com/animals/poodle/pictures/>

**Istock** <https://unsplash.com/s/photos/polar-bear>

<https://nationalzoo.si.edu/animals/giant-panda>