

# Types of Ecosystems

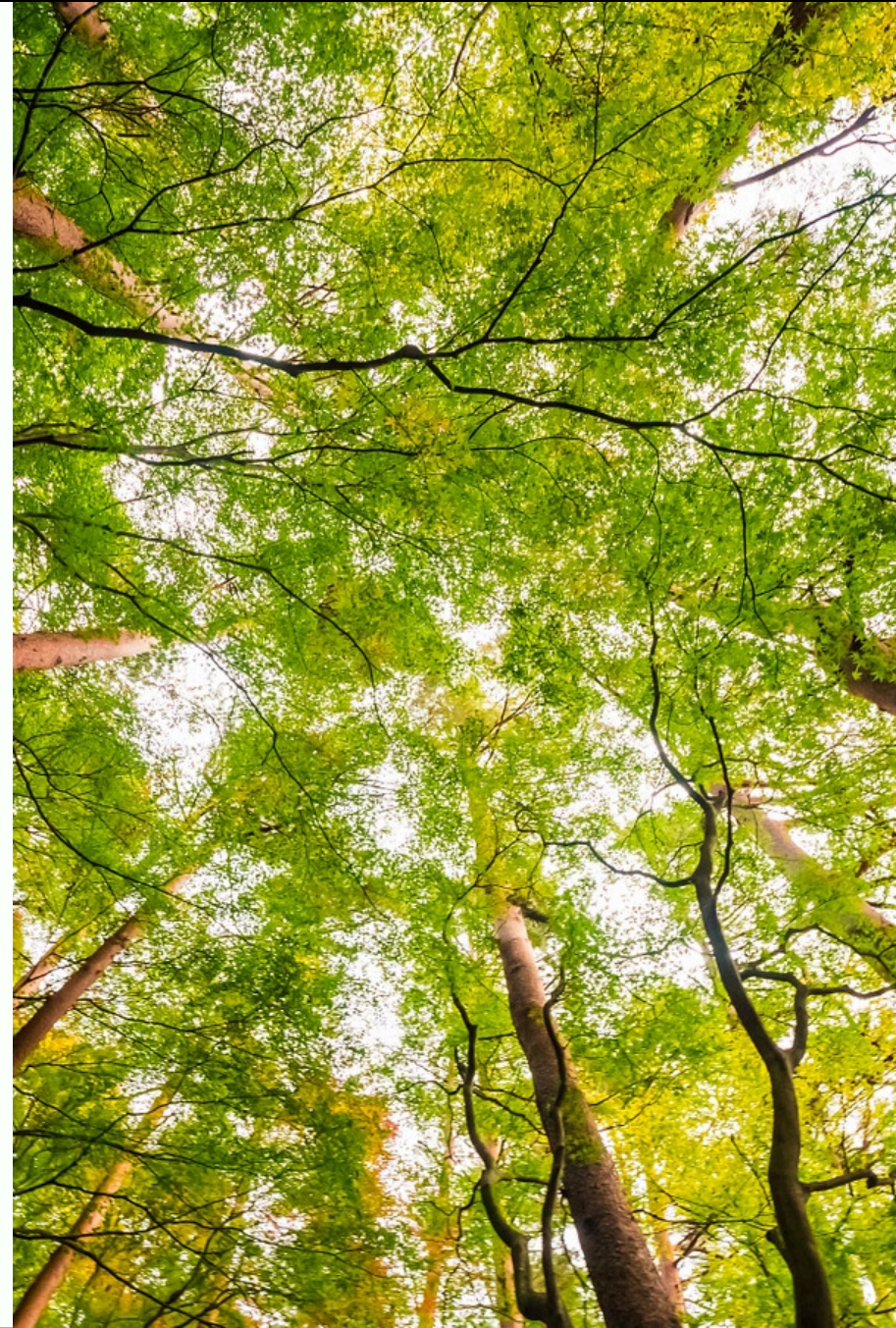
Nicola Palmieri



# **Introduction**

## **Ecosystems**

**Good morning everyone, I am Nicola Palmieri from the association "Il Pianeta Naturale" (The Natural Planet), partner of the European project WAVE approved by the Erasmus+ KA 210 program. Today I want to introduce the different types of ecosystems present on our planet Earth.**



# What is an Ecosystem

## Definition

**An ecosystem represents an integrated system where living organisms and the physical environment are in constant communication and reciprocal interaction, continuously exchanging matter, energy, and information flows. It's like a grand natural orchestra, where each element plays its part contributing to the harmony of the whole.**



# **Ecosystems**

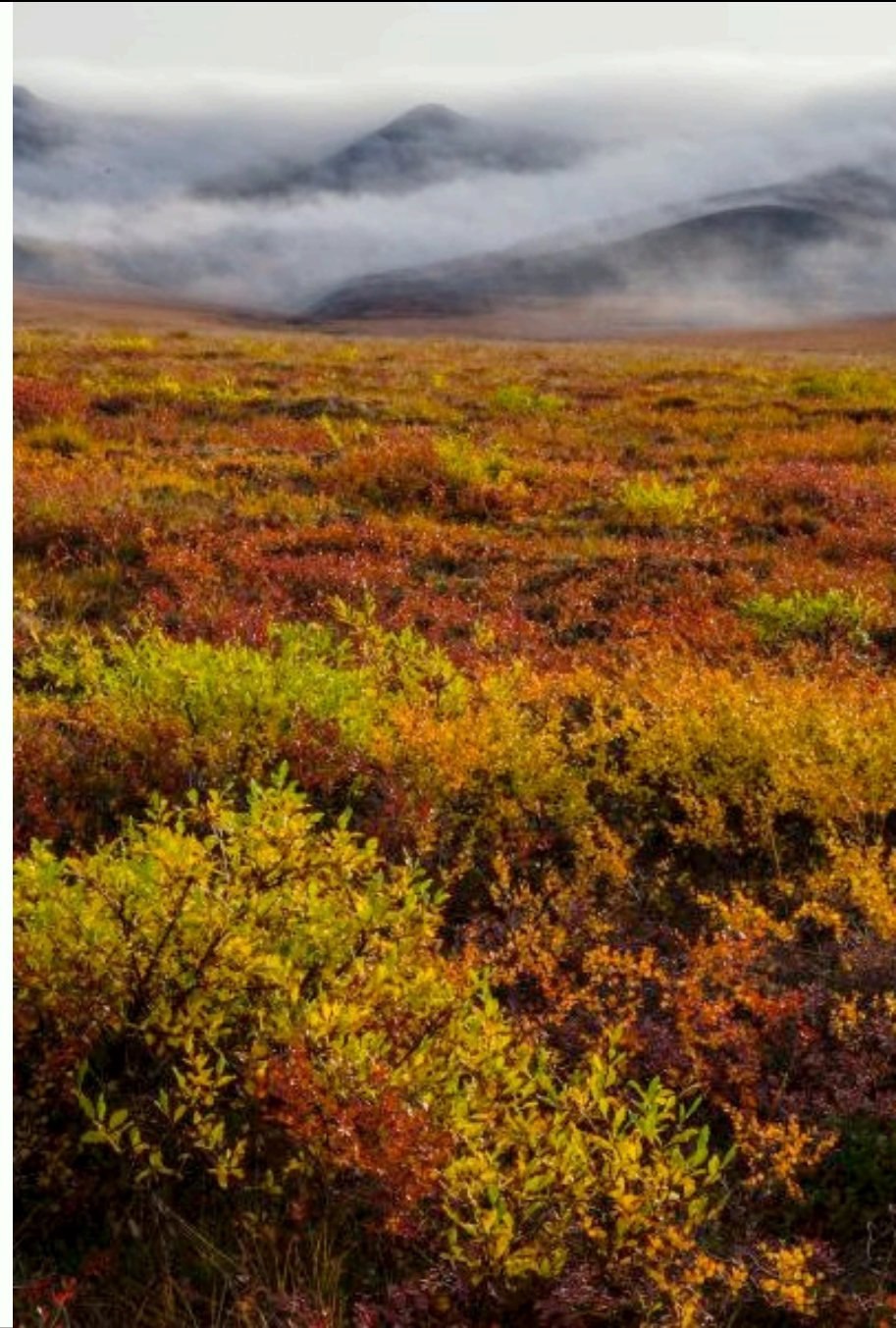
## **Terrestrial**

### **The African savannas, the steppes**



# **...Terrestrial Ecosystems**

**The tundra - which extends from high latitudes to...**



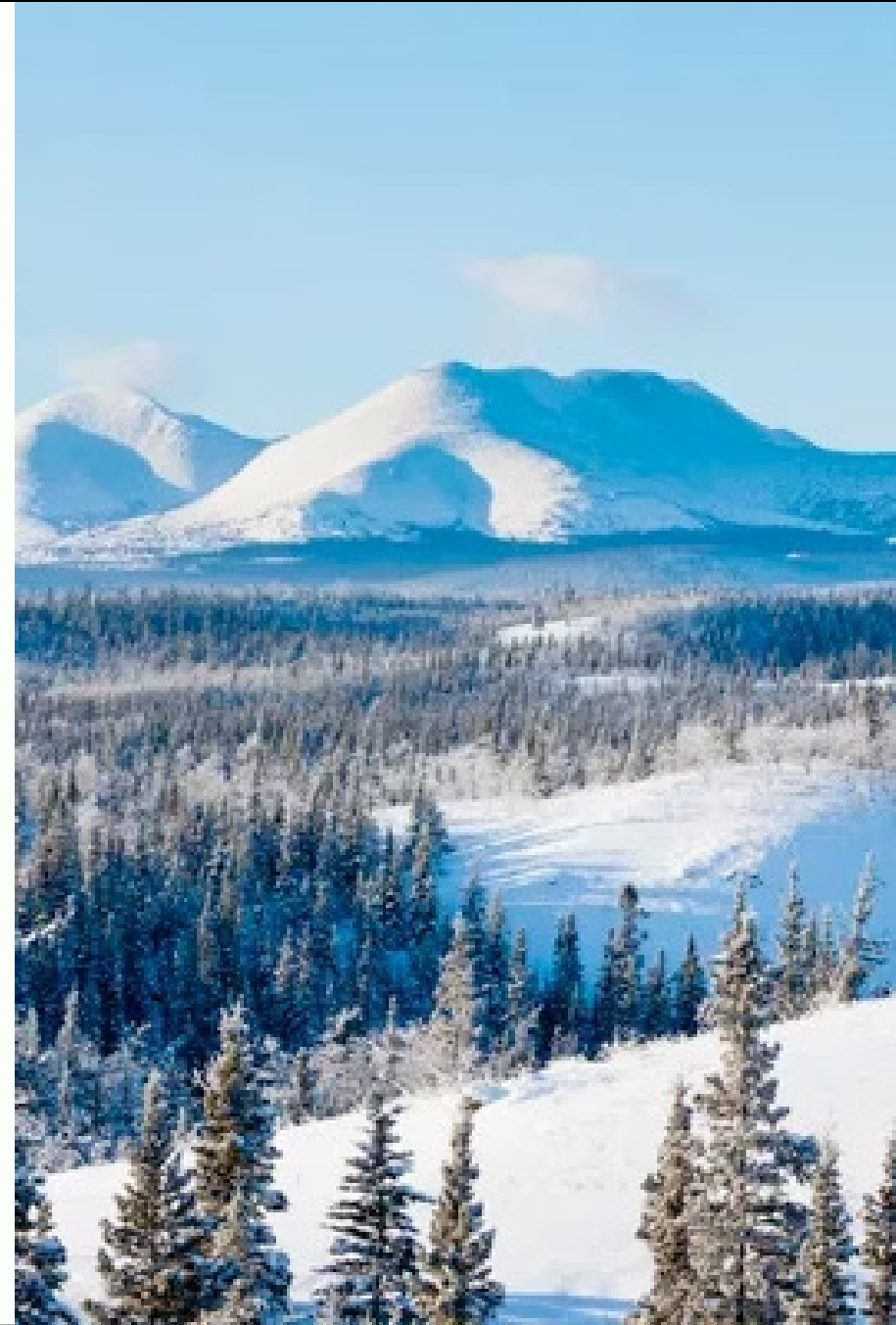
# **...Terrestrial Ecosystems**

**The tundra - which  
extends to the polar  
extremes  
with perpetually frozen  
soil**



# **...Terrestrial Ecosystems**

## **the Siberian taiga**



# **...Terrestrial Ecosystems**

**Completing this rich  
panorama are the rocky  
or sandy deserts,  
whether hot or cold.**



# **Factors Determining Diversity**

## **What Determines Ecosystem Diversity?**

**But where does this incredible diversity of ecosystems come from? It all depends on a fascinating interplay of forces: climatic factors like temperature and precipitation, the duration of daylight hours, latitude and altitude, continentality, along with geological and ecological factors.**



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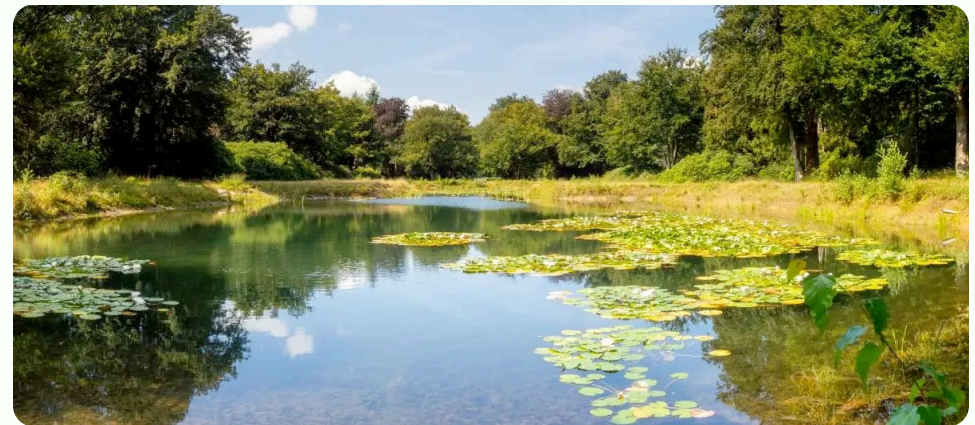
**Each unique combination of these elements creates distinctive local conditions that determine which plant and animal communities can best adapt and thrive - and this is precisely how the main ecosystems we have listed are born.**



# **The Aquatic Kingdom**

## **Aquatic Ecosystems**

**The aquatic kingdom is no less diverse. Freshwater ecosystems come to life in rivers, lakes, and ponds**



# **The Aquatic Kingdom**

## **Aquatic Ecosystems**

**while those of salt water  
manifest in coastal seas, in  
boundless oceans, in  
multicolored coral reefs, and in  
wetlands rich in life.**



# Transition Ecosystems

## Boundary Environments

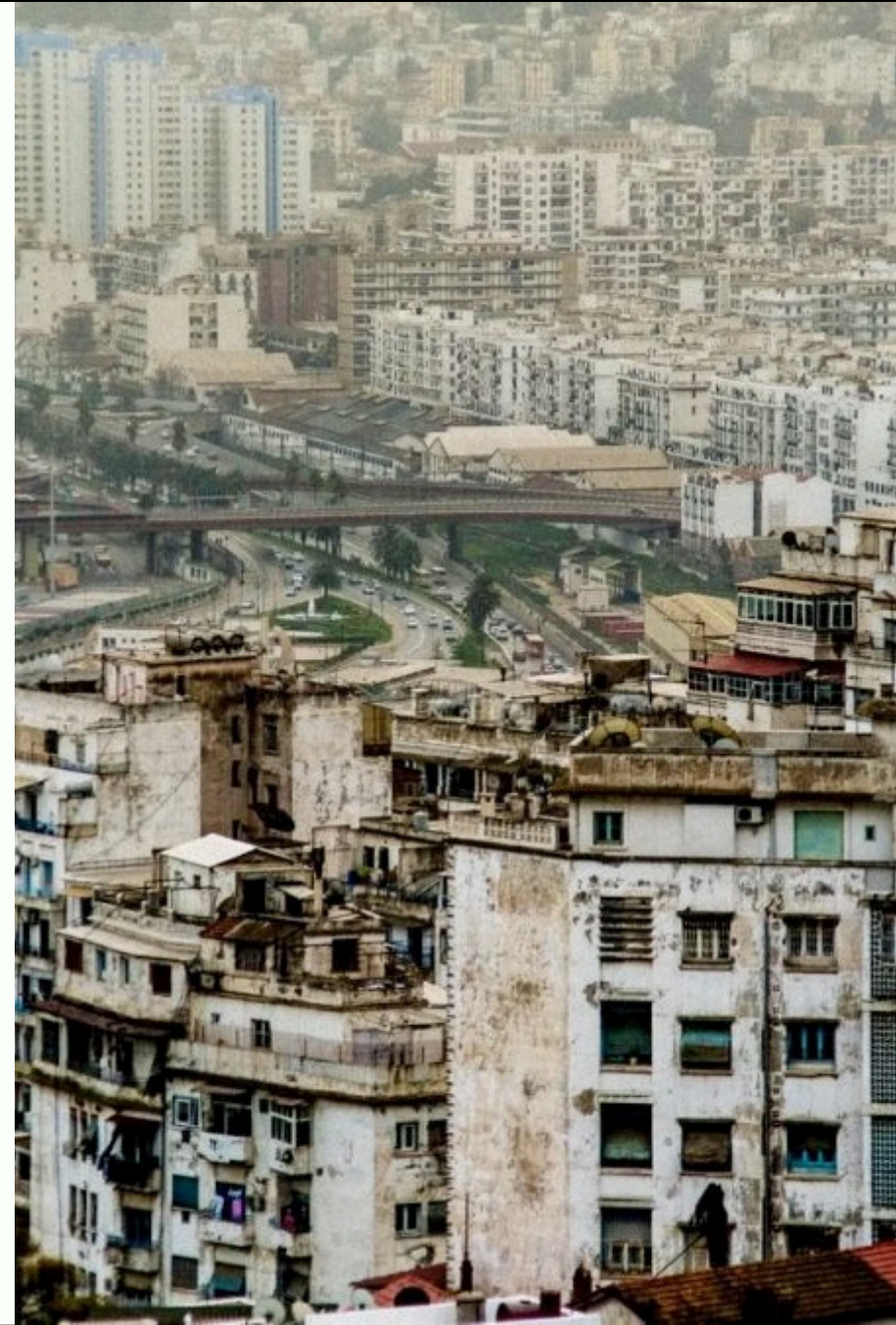
**Particularly fascinating are the transition ecosystems: the deltas of great rivers, estuaries where fresh and salt water meet, mangrove forests dancing between land and sea, and all those temporary aquatic environments where water arrives and retreats following ancient rhythms.**



# **Anthropogenic Ecosystems**

**Ecosystems created by humans**

**Humans have created their own ecosystems, often very different from natural ones, leaving a deep imprint on the terrestrial landscape. Metropolises can be considered true ecological cemeteries, where often only the human species survives.**



# Anthropogenic Ecosystems

## Human-Created Ecosystems

**Industrial areas, agricultural systems with their cultivated fields and orchards tell a different story: from intensive agricultural systems - true temporary deserts - to extensive and organic ones that seek to maintain a more respectful dialogue with nature.**



**Thank you for your attention**