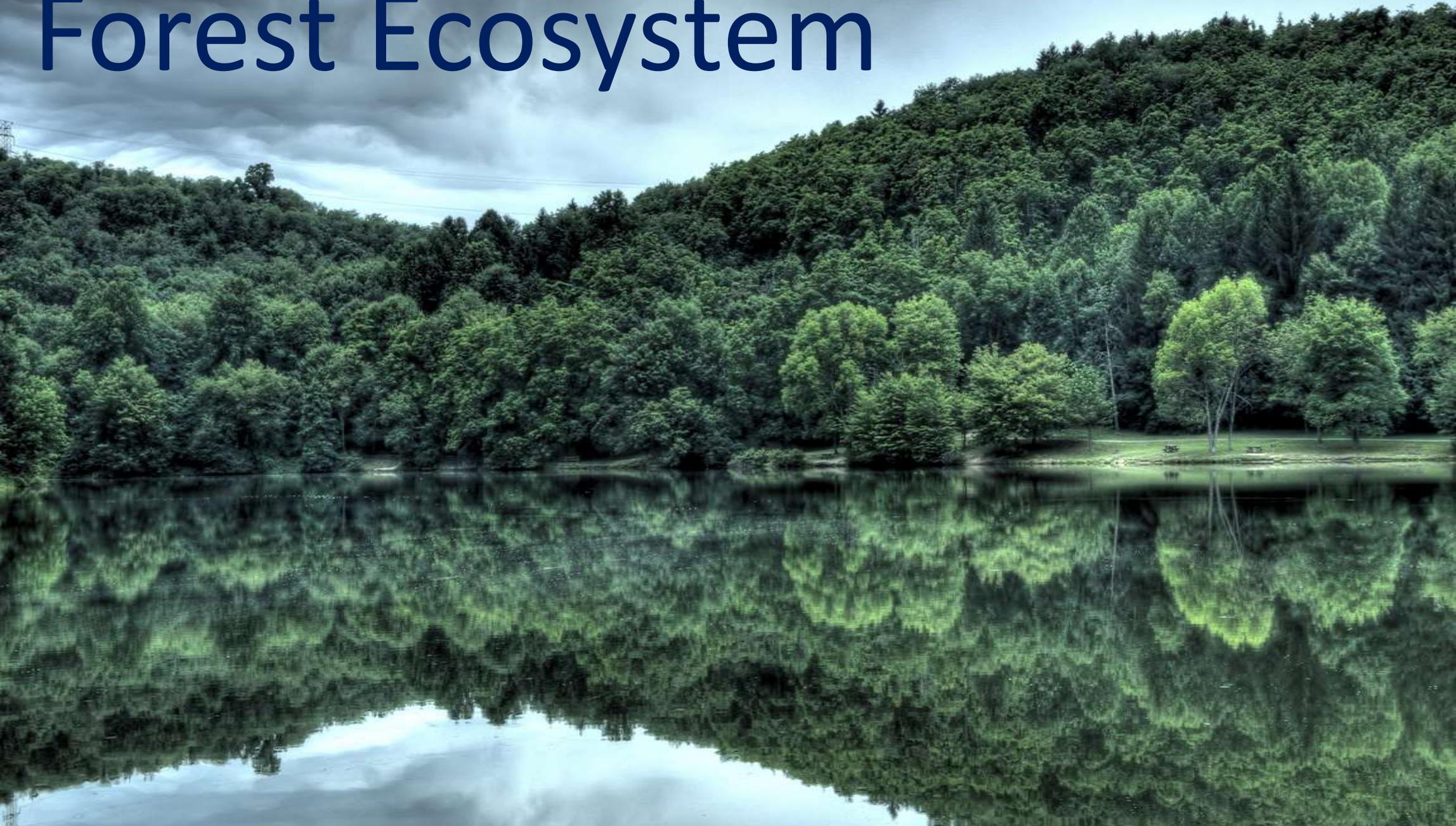


# Forest Ecosystem



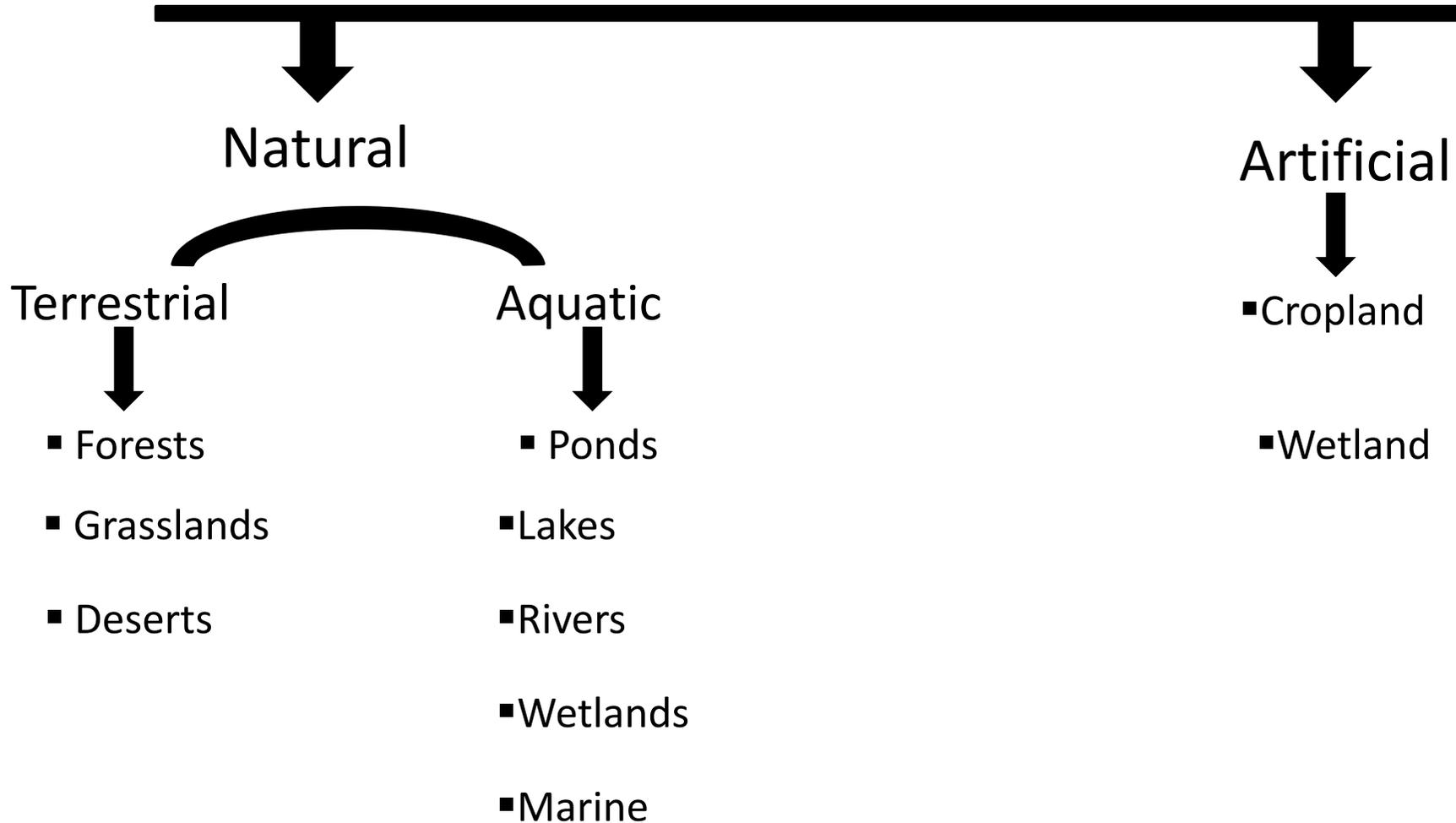
# What do you mean by an Ecosystem?

- Eco means environment and System means interacting, interdependent complex.

# Ecosystem – Main Characters

- An 'Ecosystem' is a region with a specific landscape form such as forests, grasslands, deserts, wetlands or coastal areas.
- The nature of an ecosystem is based on geographical features such as – hills, mountains, plains, rivers, lakes and coastal areas.
- It is controlled by climatic condition such as the amount of sunlight, the temperature and the rainfall in the region.

# Types of Ecosystems



# Forest Ecosystem

- The Non- living factors (Abiotic)

- Eg- Rocks and Mountains

- The Living factors (Biotic)

- Eg- Plants and Animals

## Types of Forests

- Coniferous Forests

- Broad Leaved Forests

A. Evergreen Forests

B. Deciduous Forests

C. Thorn Forests

D. Mangrove

# Coniferous Forests

- Grow in the Himalayan mountain region
- Temperature is low.
- Have tall trees with needle-like leaves and downward sloping branches so that the snow can slip off the branches.
- Have cones instead of seeds and are called gymnosperms



# Broad Leaved Forests

- Broad leaved forests have large leaves of various shapes and have several types.



# Evergreen Forests

- grow in the high rainfall areas of the Western Ghats, North Eastern and the Andaman and Nicobar islands. monsoon lasts for several months.
- Shed a few of their leaves throughout the year.
- No leafless phase.
- Only shade loving trees can grow in the ground layers as canopy overlap.
- Forest is rich in orchids and ferns abounds in animal life and is most rich in insect life



# Deciduous Forests

- are found in regions with a balanced amount of seasonal rainfall.
- lasts for only few months.
- most of the forests in which Teak grow are of this type.
- trees shed their leaves during the winter and hot summer months and regain their fresh leaves just before the monsoon.
- Light can penetrate easily onto the forests floor.



Photo: Åke Nilsson

# Thorn Forests

- are found in the semi- arid regions.
- Trees are scattered and are surrounded by open grassy areas.
- can conserve water.
- Have long and fibrous roots to reach water at great depths.
- reduce loss of water – some species have small leaves and some have thick waxy leaves.
- have thorns – protect plants from herbivores.



# Mangrove Forests

- grow along the coast especially in the river deltas.
- are able to grow in a mix and saline and fresh water, in muddy areas.
- have breathing roots.
- prevents soil erosion.



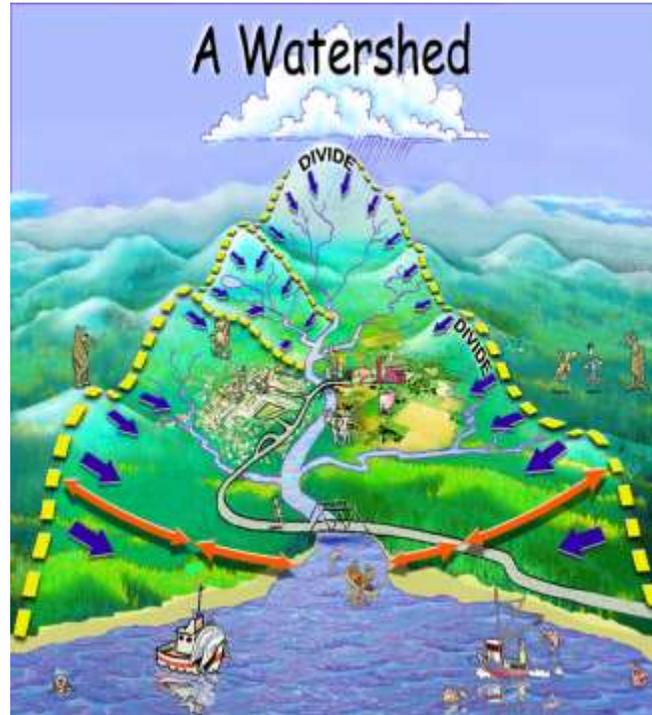
# Uses of the Forest Ecosystem

- Fruits
- Flowers
- Food
- Medicines
- Bamboo and cane for baskets
- Fodder
- Wood
- Gum
- Raw material for a variety of things – Industrial products and chemicals.



# Services provided by the forest

- Control flow of water
- Watershed protection
- Help increase ground
- Water level
- Prevent soil erosion
- Control temperature
- Absorb co2
- Gene pool



# Threats to the forest ecosystem

- Deforestation
- Poaching
- Overexploitation of resources
- Development activities (mining, dams)
- Changing land use patterns
- Fragmentation
- Habitat degradation



# Conservation of forest ecosystems

- ❖ Use resources carefully
- ❖ Alternate source of energy for fuel wood
- ❖ Afforestation
- ❖ NP and Wildlife Sanctuaries
- ❖ Control population

Be a part to keep  
the balance of the Forest Ecosystem

