

# **Wildlife Institute of India**

## **Wildlife Conservation - WII Project Fellow Syllabus**

- Basic concepts of ecosystems
- Major Wildlife habitats in India
- Energy flow
- Nutrient cycles, and trophic levels
- Species Interactions: Competition, Predation, and Mutualism
- Carrying Capacity
- Metapopulation concept
- Niche Concepts
- Overview of Sampling and Experimental Design
- Population demography and dynamics
- Probability Theory and Distributions
- Biogeographic zones and affinities of flora and fauna in the Indian subcontinent
- Parametric and Non-Parametric tests of Difference, Correlation and Regression Analysis
- Conservation Applications of Genetics
- Nature and Structure of Biological Communities
- Conservation outside Protected Areas
- Small and declining population paradigms
- Ecological Restoration
- Climate Change
- In-situ and ex-situ conservation
- GIS and Remote Sensing Basics
- Population Enumeration Technique
- Definitions of plant and communities, populations, and individuals
- Succession
- Factors governing species diversity
- Vertebrate Biology
- Population and Habitat Viability Analysis
- Bio-molecules

## **WII Project Assistant Grade II Syllabus Wetlands**

- Wetland Theory

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- Classification and Riparian Functions
- Policies Affecting Wetlands
- Wetland hydrology and hydrogeology
- Biogeochemistry
- Wetland Biota
- Wetland Management
- Ecosystem Development
- Inland Wetland Systems
- Water Reuse
- Wetland Creation
- Coastal wetland systems
- Wetlands for wastewater treatment
- Biological Adaptations to Wetland Environments
- Valuation of wetlands

### **Aquatic Species - Wildlife Institute of India Project Personnel Syllabus**

- Sensory Structures
- Aquaculture - Osmotic Regulation & Nitrogen Excretion
- Water Quality Survey
- Fisheries Resource Management
- Fish Processing Technology
- Physical Properties of Water
- <https://www.freshersnow.com/syllabus/>
- Limnology & Locomotion in Water
- Chemical Properties of Water
- Aquatic Habitats
- Meteorology
- Climatology and Geography
- Marine Biology
- Genetics and Breeding
- Coastal Zone Management
- Therapeutics in Aquaculture
- Aquatic Animal Health Management
- Fish Nutrition and Feed Technology

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- Respiration in Aquatic Organisms