

## Relevance

As a mandatory requirement students studying AECC-Environmental Science course are required to visit any environmental site (pristine environment/ polluted site), based on which a project report needs to be submitted by individual student which carries MM20.

### FIELD VISITS 2015-2016

❖ **Topic:** Field Visit To Kamla Nehru Park (Delhi Ridge).

Date: 30-10-2015

Course: B. Com (H) Sem-I

Number of Students: 100

❖ **Objective:**

a) To study the forest ecosystem (semi-arid)

b) To identify the potential threat to Kamla Nehru Park

❖ **Outcome:** Students learnt to identify the flora and fauna of forest ecosystem. They identified and document the potential threats to the forest ecosystem such as plastic pollution by park visitors, the encroachment made inside the forest by outsiders, menace of monkey and spread of invasive plants inside the reserved forest.



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❖ **Topic:** Field Visit To Kamla Nehru Park (Delhi Ridge).

Date: 20-10-2015

Course: BSc Physical Science (CS) and BSc PS (Chem) Sem-I

Number of Students: 85

❖ **Objective:**

c) To study the forest ecosystem (semi-arid)

d) To identify the potential threat to Kamla Nehru Park

❖ **Outcome:** Students learnt to identify the flora and fauna of forest ecosystem. They identified and document the potential threats to the forest ecosystem such as plastic pollution by park visitors, the encroachment made inside the forest by outsiders, menace of monkey and spread of invasive plants inside the reserved forest.



❖ **Project:** Field Visit To Sultanpur National Park, Haryana (Important Bird Area).

Date: 04-11-2015

Course: BSc (H) Mathematics -Sem-I

Number of Students: 135

❖ **Objective:**

a) To Study the Wetland Ecosystem

b) To identify and count the birds of Sultanpur National Park

❖ **Outcome:** Students identified and documented terrestrial and aquatic birds. They learnt the importance of wetland in conservation of biodiversity and ecosystem health.

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Students identified, water-birds like Grey heron, Painted Storks, Cattle egrets, Red wattle lapwing, Common Coot etc.





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❖ **Project:** Field Visit To Najafgarh Drain

Date: 10-10-2015

Course: B. Com (Prog) -Sem-I

Number of Students: 100

❖ **Objective:**

c) To Study the Aquatic Ecosystem

d) To identify the key factors affecting the aquatic ecosystem

❖ **Outcome:** Students identified and documented the flora and fauna along the drain. They qualitatively assessed the water quality of Najafgarh Drain. They identified the factors that are polluting the Najafgarh Drain at the study site. Students identified

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birds like Cattle egrets, Red wattle lapwing, Black winged Stilts, Black kite, and House Crow etc.



❖ **Project:** Field Visit To National Zoological Park (Delhi Zoo)

Date: 15-10-2015

Course: B. A (Prog) -Sem-I

Number of Students: 199

❖ **Objective:**

a) To document the native fauna of Indian Sub-Continent



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- b) To study the Ex-situ conservation strategy adopted by NZP
- ❖ **Outcome:** Students visited and document the enclosures of Reptiles, Birds, Mammals (Herbivorous, Carnivorous and Omnivorous) and identified some of the Endangered and endemic animals like Oriental Pied Hornbill, Lion tailed Macaque, Asian Elephant, Black Buck, Royal Bengal Tiger, Hillock Gibbon etc. Students learnt the conservation breeding programs run by Central Zoo Authority in NZP.



- ❖ **Report:** Field Visit To Yamuna Biodiversity Park (YBP)

Date: 02-02-2016

Course: B. Sc (H) Botany -Sem-II

Number of Students: 25

- ❖ **Objective:**

- a) To study the wetland ecosystem of YBP
- b) To study the ecological restoration of degraded ecosystem of Yamuna flood plains.

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- ❖ **Outcomes:** Students visited the YBP on World Wetlands Day 2016. They interacted with the field team of YBP and learnt about the native flora and fauna of Delhi. They studies the ecological restoration carried out in YBP using phytoremediation.



Project Report Submitted by Students (Based on field visit individually or in group)

1).

- ❖ **Project:** Visit To National Zoological Park (Delhi Zoo)

Course:

Course	Number of Students
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BA (H) Hindi Sem-II	66
BA (H) Sanskrit Sem-II	45

❖ **Objective:**

- c) To document the native fauna of Indian Sub-Continent
- d) To study the Ex-situ conservation strategy adopted by NZP

❖ **Outcome:** Students visited and documented the enclosures of Reptiles, Birds, Mammals (Herbivorous, Carnivorous and Omnivorous) and identified some of the Endangered and endemic animals like Oriental Pied Hornbill, Lion tailed Macaque, Asian Elephant, Black Buck, Royal Bengal Tiger, Hillock Gibbon etc. Students learnt the conservation breeding programs run by Central Zoo Authority in NZP.

2).

❖ **Project:** Solid Waste Management in Delhi NCR  
Course:

Course	Number of Students
B. A (H) Economics-II	44
BA (H) Pol. Sc-II	57
BA (H) History Sem-II	68

❖ **Objective:**

- a) Survey of solid waste management in your locality
- b) Role of ragpickers in management of solid waste

❖ **Outcome:** Based on the survey of local area student, learnt to collect field data based on questionnaire, they assess the awareness of locals about the solid waste management. They identify the problems in managing solid waste in their locality. Student interviewed their local body authority and inquire about the initiative taken by them to address the solid waste problem.

3)

❖ **Project:** Study the Aquatic Ecosystem in Delhi NCR

❖ **Course:**

Course	Number of Students
BSc (H) Biochemistry Sem-II	28



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BSc (H) Chemistry Sem-II	37
BSc (H) Physics Sem-II	66
BA (H) Geography Sem-II	47

❖ **Objective:**

- e) To Study the flora and fauna of aquatic ecosystem of your nearby area
- f) To identify the key factors affecting the aquatic ecosystem

❖ **Outcome:** Students identified and documented the flora and fauna of lakes, river and pond of their nearby area. They qualitatively assessed the water quality of water body. They identified the factors that are polluting the water body at the study site. Students identified birds like Cattle egrets, Red wattle lapwing, Black winged Stilts in the water bodies. After the project students were able to differentiate between artificial and natural ecosystem.

4).

❖ **Project:** Perception of Youth Towards Climate Change  
Course:

Course	Number of Students
BA (H) English Sem-II	110

❖ **Objective:**

- a) To assess the awareness of youth about climate change
- b) Role of youth in mitigating climate change

❖ **Outcome:** Based on the survey of local area and college campus, student learnt to collect field data based on questionnaire, they assess the awareness among youth about climate change. The students by undertaking this project learnt that environmental awareness of youth is important to mitigate climate change. Without behavioural change of youth the task to mitigate climate change would remain incomplete.

5).

❖ **Project:** Survey of Birds of Delhi NCR  
Course:

Course	Number of Students
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BSc Life Science Sem-I	104
BSc (H) Zoology Sem-II	41

❖ **Objective:**

c) To study the abundance and distribution of common birds of your locality in Delhi NCR

d) Identify the potential threat for birds in your area

❖ **Outcome:** Based on the survey of local area students learnt to identify and count the birds. They documented the abundance of House Crow, Sparrow, Rock Pigeon, Common Myna and some other common birds of their area. They reported absence of house sparrow in most of the Delhi, however in Delhi NCR like Gurgaon, Sonipat their abundance was in good number.

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**2016-2017**

Project Report Submitted by Students (Based on field visit individually or in group)

1).

❖ **Project:** Visit To National Zoological Park (Delhi Zoo)

Course:

Course	Number of Students
B. A (Prog) -Sem-I	193
BA (H) Hindi Sem-II	41
BA (H) Sanskrit Sem-II	48

❖ **Objective:**

e) To document the native fauna of Indian Sub-Continent

f) To study the Ex-situ conservation strategy adopted by NZP

❖ **Outcome:** Students visited and documented the enclosures of Reptiles, Birds, Mammals (Herbivorous, Carnivorous and Omnivorous) and identified some of the Endangered and endemic animals like Oriental Pied Hornbill, Lion tailed Macaque, Asian Elephant, Black Buck, Royal Bengal Tiger, Hillock Gibbon etc. Students learnt the conservation breeding programs run by Central Zoo Authority in NZP.

2).

❖ **Project:** Solid Waste Management in Delhi NCR

Course:

Course	Number of Students
B Com (H) Sem-I	86
BSc (H) Mathematics Sem-I	118
BCom (Prog.) Sem-I	104
B. A (H) Economics-II	52
BA (H) English -II	45
BA (H) Pol. Sc-II	50
BA (H) History Sem-II	46

❖ **Objective:**

c) Survey of solid waste management in your locality

d) Role of ragpickers in management of solid waste



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- ❖ **Outcome:** Based on the survey of local area, student learnt to collect field data based on questionnaire, they assess the awareness of locals about the solid waste management. They identify the problems in managing solid waste in their locality. Student interviewed their local body authority and inquire about the initiative taken by them to address the solid waste problem.

3)

- ❖ **Project:** Study the Aquatic Ecosystem in Delhi NCR

- ❖ **Course:**

Course	Number of Students
BSc (H) Botany Sem-II	32
BSc (H) Biochemistry Sem-II	33
BSc (H) Chemistry Sem-II	31
BSc APS (Computer Science) Sem-I	62
BSc PS (Chemistry) Sem-I	54
BSc (H) Physics Sem-II	64
BA (H) Geography Sem-II	48

- ❖ **Objective:**

- g) To Study the flora and fauna of aquatic ecosystem of your nearby area
- h) To identify the key factors affecting the aquatic ecosystem

- ❖ **Outcome:** Students identified and documented the flora and fauna of lakes, river and pond of their nearby area. They qualitatively assessed the water quality of water body. They identified the factors that are polluting the water body at the study site. Students identified birds like Cattle egrets, Red wattle lapwing, Black winged Stilts in the water bodies. After the project students were able to differentiate between artificial and natural ecosystem.

5).

- ❖ **Project:** Survey of Birds of Delhi NCR

- Course:

Course	Number of Students
BSc Life Science Sem-I	141

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BSc (H) Zoology Sem-II	36
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❖ **Objective:**

e) To study the abundance and distribution of common birds of your locality in Delhi NCR

f) Identify the potential threat for birds in your area

❖ **Outcome:** Based on the survey of local area students learnt to identify and count the birds. They documented the abundance of House Crow, Sparrow, Rock Pigeon, Common Myna and some other common birds of their area. They reported absence of house sparrow in most of the Delhi, however in Delhi NCR like Gurgaon, Sonipat their abundance was in good number.

**2017-18**

**Field Trips**

Visit to Center for Environmental Science and Climate Resilient Agriculture, ICAR-Indian Agricultural Research Institute, New Delhi

Date: 02/02/2018

Course: BA (H) English and BA (H) Economics

Number: 99

**Objectives:**

- To understand the nature of artificial/ agricultural ecosystem.
- To observe the model of sustainable agriculture
- To study the impacts of climate change on agriculture
- To observe the facility of plant phenomics centre.

**Outcomes:**

To be able to identify the difference between natural and artificial ecosystems

Understanding the sustainable agriculture model

Various facilities to mitigate ground-level carbondioxide sequestration methods



Visit to Sahibi river channel and flood plain (Najafgarh drain)

Date: 03/04/2018

Course: BA (P)

Number: 137

**Objectives:**

- To observe and document the state of the river (now converted into a drain)
- To observe and identify the vegetation and birds in that area.
- To identify invasive species of shrubs and trees along with its proportion with the native species.

**Outcomes:**

- Understanding the concept of river channel and flood plain with gradient of a river.
- State of ecosystem in such degraded ecosystem
- Native vs invasive species concept.



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❖ Visit to Sahibi river channel and flood plain (Najafgarh drain)

Date: 18/09/2018

Course: BSc (H) Mathematics I Semester (Sec A & B)

Number: 110

**Objectives:**

- To observe and document the state of the river (now converted into a drain)
- To observe and identify the vegetation and birds in that area.
- To identify invasive species of shrubs and trees along with its proportion with the native species.

**Outcomes:**

- Understanding the concept of river channel and flood plain with gradient of a river.
- State of ecosystem in such degraded ecosystem
- Native vs invasive species concept.



❖ Visit to National Zoological Park (Delhi Zoo)

Date: 22/09/2018

Course: BA (P) I Semester

**Objectives:**

- To observe ex situ conservation strategy of endangered fauna
- Native animal species
- Status of conservation

**Outcomes:**

- Concept of importance of conserving biological diversity

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- In situ and ex situ conservation strategies
- Threatened species differentiation according to IUCN



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**2018-19**

❖ Sparrow Counting Exercise on occasion of the world sparrow day

Date: 20/03/2019

Course: Students studying AECC Environmental Science II Semester

Number: 54

Objectives:

- To observe last few dwelling places (habitat/niche) of house sparrow
- To count the numbers in the surrounding areas of college
- To identify sparrow hotspots

Outcomes:

- State of conservation of such birds
- Concept of ecological habitats and specific niche
- Relationships of organisms in an ecological niche



❖ Visit to Sahibi River channel and its flood plane

Date: 25/09/2019

Course: BSc (H) Mathematics I Semester (Sec A)

Number: 43

**Objectives:**

- To observe and document the state of the river (now converted into a drain)
- To observe and identify the vegetation and birds in that area.
- To identify invasive species of shrubs and trees along with its proportion with the native species.

**Outcomes:**

- Understanding the concept of river channel and flood plain with gradient of a river.
- State of ecosystem in such degraded ecosystem
- Native vs invasive species concept.

❖ Visit to Sahibi River channel and its flood plane



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Date: 27/09/2019

Course: BSc (H) Mathematics I Semester (Sec B)

Number: 53

**Objectives:**

- To observe and document the state of the river (now converted into a drain)
- To observe and identify the vegetation and birds in that area.
- To identify invasive species of shrubs and trees along with its proportion with the native species.

**Outcomes:**

- Understanding the concept of river channel and flood plain with gradient of a river.
- State of ecosystem in such degraded ecosystem
- Native vs invasive species concept.

Site: Sahibi River front near Shivaji  
College, NCT Delhi

Class: BA (P) Sec B  
(I Semester)

Number of Students: 25

Teacher: Dr Ashwani Sharma

**Date of Visit: 28/09/2019 (TT: 3 hrs)**

**Objectives:**

- To observe and document the state of the river (now converted into a drain)
- To observe and identify the vegetation and birds in that area.
- To identify invasive species of shrubs and trees along with its proportion with the native species.

**Outcomes:**

- Understanding the concept of river channel and flood plain with gradient of a river.
- State of ecosystem in such degraded ecosystem
- Native vs invasive species concept.

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**2019-20**

Visit to Kamla Nehru Ridge (protected scrub forest) in Delhi

Date: 07/03/2020

Course: BA (H) English II Semester

Number: 25

Objectives

- To study types of forests in urban areas
- To identify typical vegetation
- To locate some native animals

Outcomes

- Difference between various types of forests and their locations
- Characterises of open or scrub forests
- Invasive and other native species of trees
- Natural settings disturbances

