



MAHISHADAL RAJ COLLEGE

(Govt. Sponsored)

NAAC Accredited 'A' Grade College

DST (FIST) Govt. Of India approved College, NSDC Training Partner

Estd. : 1946

Mahishadal : Purba Medinipur

Phone STD 03224 No. 240220

Ref. No.....

Date:

Online ADD ON COURSE 2020-21

Organised by Department Zoology

Topic: Wildlife Ecology and Conservation

Add on course summary:

REPORT:

Name of the course- Wildlife Ecology and Conservation

Course coordinator: *Dr. Subhamoy Das*, (Associate Professor, HOD, Department of Zoology, Mahishadal Raj College)

Date of commencement: 07.09.2020

Date of completion: - 21.09.2020

Number of participant enrolled: 30

Total duration day: 15

Total duration hour: 30

Evaluation method: - Paper pen MCQ and practical (Online)

RESULT DETAILS:-

Number of student participate in this program: 30

Number of student completes this program: 28

Number of student got certificate in this program: 28

Name of the course: Wildlife Ecology and Conservation

Course coordinator: *Dr. Subhamoy Das*, (Associate Professor, HOD, Department of Zoology, Mahishadal Raj College)



Wildlife Ecology and Conservation

✚ About the course:

Conserving the world's wildlife and protecting the planet are truly grand challenges and the motivation behind all that you will do with this major. This course focuses on student knowledge of the ecology, conservation, and management of wildlife and habitats for the economical, ecological, aesthetic, and recreational values. Conservation of biodiversity is one of the important themes of our course along with a blend of lectures, labs, and field trips.

✚ Learning outcomes:

Wildlife ecology and conservation is an ever-evolving field that not only captures the imagination of nature enthusiasts but also offers a multitude of career pathways. This course opens up various job opportunities in both the public and private sectors. Completion of this course, you have the job opportunity on field of wildlife biologist or ecologist, conservation scientist, park ranger or wildlife officer, environmental consultant, wildlife rehabilitation specialist, research scientist, environmental educator, wildlife manager, conservation planner, policy analyst, climate change specialist, and zoo or aquarium conservation specialist. Networking, gaining relevant experience through internships or volunteer work, and staying informed about current issues in wildlife conservation can enhance your chances of securing a rewarding career in this field.

✚ Target audience:

Any interested students (UG & PG), research scholars, faculty members and, Industrial personals.

✚ Course content overview:

Wildlife ecology is the science behind the practice of wildlife management that seeks to manage wildlife populations. Wildlife ecology began as applied science discipline during the 1920s and 1930s at the University of Wisconsin–Madison with the development of an academic program by Aldo Leopold. Wildlife ecology is the science behind the practice of wildlife management that seeks to manage wildlife populations for the benefit of humans. Although people enjoy viewing wildlife and hunting animals for food and fur, conflicts arise because wild animals kill livestock, cause vehicle collisions, and damage crops. Wildlife ecology has become progressively more quantitative, especially since the 1990s; even so, it still retains a strong orientation toward techniques with an emphasis on statistical methods rather than ecological principles. In the early 1980s the discipline of conservation biology emerged mainly because wildlife ecology was slow to embrace modern ecological theory and broader concerns for the preservation of biodiversity. Since then, however, wildlife ecology has converged as essentially a sub discipline of conservation biology focused largely on the applied ecology and management of wild populations of birds and mammals.



✚ **Schedule:** Total 30 hours

DAY	SCHEDULE
Day 1	Introduction to wildlife, ecology and conservation (2 hours)
Day 2	Ecological structure and interactions (2 hours)
Day 3	Population and community ecology (2 hours)
Day 4	Distribution and abundance (2 hours)
Day 5	Human Ecology (2 hours)
Day 6	Applied ecology (2 hours)
Day 7	Monitoring wild animals (2 hours)
Day 8	Monitoring and managing habitat (2 hours)
Day 9	Management of wildlife diseases (2 hours)
Day 10	Capturing and restraining wild animals (2 hours)
Day 11	Conservation genetics (2 hours)
Day 12	Ex-situ conservation (2 hours)
Day 13	Field trip (Terrestrial Ecology). (2 hours)
Day 14	Field trip (Aquatic Ecology). (2 hours)
Day 15	Doubts clear and Discussion

✚ **Detail Work Schedule**

Date	Day	Contents	Time	Duration	Experts	Designation
07.09.20	1	Introduction to wildlife, ecology and conservation	12 to 2pm	2	Dr. Subhamoy Das	HOD DEP. of ZOOLOGY
08.09.20	2	Ecological structure and interactions	1 to 3 pm	2	Prof. Sagnik Mandal	SACT Mahishadal Raj College
09.09.20	3	Population and community ecology	3 to 5pm	2	Prof. Moumita Jana	SACT Mahishadal Raj College
10.09.20	4	Distribution and abundance	03 to 05pm	2	Prof. Saheli Maiti	SACT Mahishadal Raj College
11.09.20	5	Human Ecology	02 to 04pm	2	Prof. Manik Das	SACT Mahishadal Raj College
12.09.20	6	Applied ecology	01 to 03pm	2	Dr Rajkumar Guchhait	SACT Mahishadal Raj College
13.09.20	7	Monitoring wild animals	03 to 05pm	2	Prof. Sagnik Mandal	SACT Mahishadal Raj College
14.09.20	8	Monitoring and managing habitat	02 to 04pm	2	Prof. Moumita Jana	SACT Mahishadal Raj College
15.09.20	9	Management of wildlife diseases	02 to 04pm	2	Prof. Saheli Maiti	SACT Mahishadal Raj College



16.09.20	10	Capturing and restraining wild animals	01 to 03pm	2	Prof. Manik Das	SACT Mahishadal Raj College
17.09.20	11	Conservation genetics	02 to 04pm	2	Dr. Subhamoy Das	HOD DEP. of ZOOLOGY
18.09.20	12	Ex-situ conservation	02 to 04pm	2	Dr. Subhamoy Das	HOD DEP. of ZOOLOGY
19.09.20	13	Virtual Field trip (Terrestrial Ecology)	01 to 03pm	2	Dr. Subhamoy Das, Prof. Moumita jana, Prof. Soheli Jana, Prof. Manik Das	HOD DEP. of ZOOLOGY, SACT Mahishadal Raj College
20.09.20	14	Virtual Field trip (Aquatic Ecology)	01 to 03pm	2	Dr. Subhamoy Das, Dr. Rajkumar Guchhait, Prof. Sagnik Mandal	HOD DEP. of ZOOLOGY, SACT Mahishadal Raj College
21.09.20	15	Evaluation, valediction, Discussion	12 to 2 pm	2	Dr. Subhamoy Das, Prof. Moumita jana, Prof. Soheli Jana, Prof. Manik Das, Dr. Rajkumar Guchhait, Prof. Sagnik Mandal.	HOD DEP. of ZOOLOGY, SACT Mahishadal Raj College
				30 hours		

✚ **Course structure and examination scheme:**

Course name	Theory classes (hr.)	Practical Classes (hr.)	Internal Marks	External Marks			Total Marks
				Theory	Practical	Field report	
Wildlife Ecology and Conservation	20	10	20	50	20	10	100



Participant's Details and attendance:

Enrolment Details of Students

Sl. No.	Student ID	Roll No.	Name
1.	B.Sc/19/0965	2190566	SUVADEEP KHUTIA
2.	B.Sc/19/0008	2190008	SANKHA KUMAR SAMANTA
3.	B.Sc/19/0010	2190010	TARUN GIRI
4.	B.Sc/19/0011	2190011	SUBHAMAY SAMANTA
5.	B.Sc/19/0012	2190012	SUJIT MAJI
6.	B.Sc/19/0013	2190013	ANUPAM DAS
7.	B.Sc/19/0015	2190015	PRITI RAY PRAMANIK
8.	B.Sc/19/0016	2190016	PARVIN NAJ
9.	B.Sc/19/0068	2190068	ANUBHAV GURIA
10.	B.Sc/19/0069	2190069	SRABANTIRAJ CHAKRABORTY
11.	B.Sc/19/0071	2190071	SANKET PRAMANIK
12.	B.Sc/19/0073	2190073	SHIBSANKAR MONDAL
13.	B.Sc/19/0074	2190074	Farhin Khatun
14.	B.Sc/19/0121	2190121	PAYEL ADHIKARI
15.	B.Sc/19/0123	2190123	APURBA KUMAR OJHA
16.	B.Sc/19/0124	2190124	KABERI BHUNIA
17.	B.Sc/19/0125	2190125	SOUMYADEEP MAITY
18.	B.Sc/19/0171	2190171	SANGITA DOLAI
19.	B.Sc/19/0191	2190191	SOURAV MAITI
20.	B.Sc/19/0199	2190199	GOURAB SAHA
21.	B.Sc/19/0201	2190201	RAJESH BALA
22.	B.Sc/19/0331	2190331	DWAIPAYAN ROY
23.	B.Sc/19/0351	2190351	SOURAV MANNA
24.	B.Sc/19/0365	2190365	SOUMEN MONDAL
25.	B.Sc/19/0366	2190366	ARNAB JANA
26.	B.Sc/19/0367	2190367	SANDIP BERA
27.	B.Sc/19/0389	2190389	SANTANA DAS
28.	B.Sc/19/0391	2190391	RAMKRISHNA MANNA
29.	B.Sc/19/0392	2190392	SANGITA GIRI
30.	B.Sc/19/0425	2190425	SRABANI BHUNIA



Sample Question of Examination

1. Match the following:
14. Rank the following species in *decreasing* order of their geographic range within India
I. Nilgiri langur, II. Leopard, III. Asiatic lion, IV. Bonnet macaque
- a. I-III-II-IV
b. IV-I-II-III
c. II-IV-I-III
d. IV-II-III-I
15. Singara in the Nilgiri Mountains is the site of a conservation battle regarding
- a. Open cast mining
b. Hydro-electric
c. Highways closure at night
d. Neutrino observatory
16. Smooth-coated, small-clawed and Eurasian are all common names of species of:
- a. Eagle
b. Weasel
c. Otter
d. Fruit bat
17. Match the following animals with their habitats:
- | | |
|-------------------------|-------------------------------|
| A. Great Indian Bustard | I. Moist grasslands |
| B. Bengal Florican | II. Dry grassland |
| C. Serow | III. Rivers |
| D. Gharial | IV. Temperate montane forests |
- a. A-II, B-I, C-IV, D-III
b. A-I, B-II, C-IV, D-III
c. A-IV, B-II, C-I, D-III
d. A-II, B-IV, C-III, D-I
18. Recently the Government of India set up an agency to strengthen the efforts for the conservation of tigers. This agency is called:
- a. Tiger Task Force
b. Tiger Protection Force
c. National Tiger Conservation Authority
d. National Wild Life Board
19. According to IUCN Red List criteria, a species would be classified as Endangered, if it meets one or more of the following criteria: (1) a 50-80% decline in population, inferred or estimated, during the past 10 years; (2) it occurs in an area of less than 20,000 sq. km; or (3) a total adult population of less than 2500 animals. Which one among the following would you **NOT** call an Endangered species, based the above criteria, if you apply these only to the Indian population?
- a. Tree pie
b. Great Indian bustard
c. Jerdon's courser
d. White-backed vulture
- a. A-I, B-III, C-II
b. A-II, B-I, C-III
c. A-III, B-I, C-II
d. A-III, B-II, C-I
20. Arrange the following states in order of increasing forest cover: Arunachal Pradesh, Maharashtra, Goa, Punjab.
- a. Punjab, Goa, Maharashtra, Arunachal Pradesh
b. Goa, Punjab, Arunachal Pradesh, Maharashtra
c. Maharashtra, Punjab, Arunachal Pradesh, Goa
d. Punjab, Maharashtra, Goa, Arunachal Pradesh
21. Which of the following trees are exotic to India?
- a. Jacaranda
b. Jackfruit tree
c. Peepal tree
d. Flame of the forest tree
22. Glacial surface temperature is project to increase by 1 to 3.5°C by 2100 AD and sea level is expected to rise 15 to 95 cm. The latter is due to:
- a. Glacial ice melt
b. Expansion of sea water
c. a & b
d. Increased rainfall
23. *Arribaba* is:
- a. A tribal festival in Orissa associated with ritual hunting of wild animals.
b. The mass nesting of Olive ridley turtle, which occurs in the coast of Orissa.
c. The mass migration of whales from the southern to the northern hemisphere.
d. The mass fruiting of dipterocarp trees in Borneo
24. Which is a biodiversity hotspot in India?
- a. Eastern Himalaya
b. Sunberbans
c. Central Indian highlands
d. Rann of Kutch
25. National parks and wildlife sanctuaries cover about of the geographical area of India.
- a. 50%
b. 15%
c. 5%
d. 1%



Write an essay

1. You are very concerned about the Greater Indian Hornbill, which is facing imminent extinction in our country. You undertake a trip to the Namdapha National Park in eastern Arunachal Pradesh, one of the best areas where this beautiful bird can be protected. The main threat to the bird here is a certain tribe that regularly hunts these birds for meat and feathers. The people of this tribe have considered hornbill meat a delicacy over the centuries that they have lived here while the feathers form their headdress, an extremely important component of this tribe's cultural identity. What would be your possible arguments for and against the conservation of the hornbill in this area and how, if at all, would you attempt to protect this population of the bird?

2. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 grants legal recognition to the rights of traditional forest dwelling communities, and makes a beginning towards giving communities and the public a voice in forest and wildlife conservation. What in your opinion are the implications of this Act for the conservation of wildlife in India.



✚ **SAMPLE CERTIFICATE OF COURSE COMPLETION**



**CERTIFICATE
OF COURSE COMPLETION**

THIS IS TO CERTIFY THAT

SUVADEEP KHUTIA

has successfully completed the **Add-on Course** on *Wildlife Ecology and Conservation*
held during *2020-2021* academic year at Mahishadal Raj College.

Subhanoy D.
Course Co-ordinator

S. Mookherjee
IQAC Co-ordinator

[Signature]
Principal



**CERTIFICATE
OF COURSE COMPLETION**

THIS IS TO CERTIFY THAT

KABERI BHUNIA

has successfully completed the **Add-on Course** on *Wildlife Ecology and Conservation*
held during *2020-2021* academic year at Mahishadal Raj College.

Subhanoy D.
Course Co-ordinator

S. Mookherjee
IQAC Co-ordinator

[Signature]
Principal