

CHAPTER-6

PLANT-ANIMAL INTERACTION

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Animals and plants are involved in a great number of trophic relationships that are responsible for the origin, maintenance and function of biodiversity. This great number of interactions between animals and plants gives rise to large and complex networks of ecological interactions. In the past few decades, several studies of plant-animal interaction networks has provided novel insights into how communities are assembled and ultimately how they evolve. The interactive communities and populations generate organized network and these ecological networks vary over space and time. Stochastic and deterministic mechanisms explain the organized structure of plant-animal networks and their variation over natural gradients. Moreover we noticed the multilayer nature of ecological networks, we paid attention to the importance of plant-animal networks in understanding the mechanisms and processes driving the geographic mosaic of co evolution.

The provision of ecosystem services by plants and animals is inextricably linked. This is because animals interact with plants directly by eating them or by moving their pollen and seeds across the landscape. This has short-term consequences on ecosystem processes and also long-term evolutionary consequences (such as the evolution of plant chemical defenses and floral and fruit structures). Major ecosystem services are supported by the direct interactions between plants and animals, such as herbivory, pollination, and seed dispersal. Animals and plants can also influence each other indirectly by changing each other's habitat and resource availability (such as the provision of nesting sites by plants to animals or the increased availability of soil nutrients to plants due to physical disturbance caused by animals). University is a rich site of biodiversity and covers vast land of the forest where the interactions between plants and animals occur vividly, some animals and birds encounter frequently have been included and enlisted in this report.

Table-24: List of birds in university campus and adjoining area.

Sl	Family	Zoological Name	Common name
1.	Alcedinidae	<i>Alcedo atthis</i>	Kingfisher
2.	Corvidae	<i>Corvus macrorhynchos</i>	Jungle Crow
		<i>Corvus splendens</i>	House Crow
3.	Coraciidae	<i>Coracias benghalensis</i>	North Indian Roller
4.	Columbidae	<i>Spilopelia senegalensis</i>	Indian Dove
		<i>Columba livia</i>	Pigeon
5.	Cuculidae	<i>Oxylophus jacobinus</i>	Pied Cuckoo
		<i>Eudynamys scolopaceus</i>	Koel
6.	Dicruridae	<i>Dicrurus macrocercus</i>	Black Drongo
7.	Falconidae	<i>Falco indus peregrines</i>	Common Hawk
8.	Gruidae	<i>Grus grus</i>	Bagula/ crane
9.	Irenidae	<i>Aegithina tiphia</i>	Common Iora



10.	Leiothrichidae	<i>Turdoides striata</i>	Jungle Bubbler
11.	Laniidae	<i>Lanius schach campophaga</i>	Blackheaded cuckoo
12.	Motacillidae	<i>Saxicoloides fulicata</i>	Indian Robin
		<i>Motacilla</i>	Wagtail
13.	Meropidae	<i>Merops philippinus</i>	Blue tail bee eater
14.	Passeridae	<i>Passer domesticus</i>	Old world Sparrow
15.	Phasianidae	<i>Coturnix coturnix</i>	Common quail /batair
		<i>Pavo cristatus</i>	Peacock
16.	Plocidae	<i>Ploceus philippinus</i>	Baya Weaver
17.	Picidae	<i>Picus sp</i>	Woodpeckers
18.	Psittacidae	<i>Psittacula krameri</i>	Parrot
19.	Pycnonotidae	<i>Pycnonotus cafer</i>	Bulbul
20.	Stricidae	<i>Bubo bubo</i>	Owl
21.	Sturnidae	<i>Acridotheres tristis</i>	Common Myna
22.	Strigidae	<i>Bubo bengalensis</i>	Indian eagle Owl
23.	Upupidae	<i>Upupa epops</i>	Common hoopoe

Table-25: List of animal found in university campus and adjoining area

Sl	Family	Zoological Name	Common name
1.	Agamidae	<i>Calotes versicolor</i>	Garden Calotes
2.	Bovidae	<i>Bos Taurus Bojanus</i>	Cow
		<i>Bubalus bubalus</i>	Buffalo
		<i>Capra hircus</i>	Goat
3.	Bufo	<i>Bufo melanostictus</i>	Common Indian Toad
4.	Canidae	<i>Canis familiaris</i>	Domestic dog
		<i>Vulpes benghalensis</i>	Indian fox
5.	Cercopithecidae	<i>Macaca mulatta</i>	Rhesus Macaque
		<i>Semnopithicus entellus</i>	Hanuman Langoor
6.	Elapidae	<i>Naja naja</i>	Indian Cobra
7.	Felidae	<i>Felis catus</i>	Domestic cat
		<i>Felis sylvestris</i>	Wild cat
8.	Gekkonidae	<i>Hemidactylus flaviviridis</i>	House Lizard
9	Herpestidae	<i>Herpestes edwardsii</i>	Indian Grey Mongoose
10..	Leporidae	<i>Lepus nigricollis</i>	Indian Hare
11.	Muridae	<i>Rattus rattus Linn.</i>	House Rat
		<i>Mus urbans</i>	Chuha
12.	Polychrotidae	<i>Anolis pentaprion</i>	Lichen Anole
13.	Ranidae	<i>Rana cyanophlyctus</i>	Indian skipper frog
		<i>Rana temporaria</i>	Common Brown Frog
14.	Sciuridae	<i>Funambulus pennati</i>	Gilhari
15.	Suidae	<i>Sus cristatus</i>	Wild boar



Insects			
1.	Aranae	<i>Agriope pulchella</i> Thorell	Gardenorb weaver
2.	Acrididae	<i>Oxya fuscovittata</i>	Short horned grasshopper
3.	Apidae	<i>Apis indica</i>	Honeybee
		<i>Xylocopa latipes</i>	Carpenter Bee
		<i>Drury sp.</i>	
4.	Bombyliidae	<i>Lepidophora labidocera</i>	Bee fly
5.	Calliphiridae	<i>Lucilia sericata</i>	Green Bottle Fly
6.	Cercopidae	<i>Aphrophora saratogensis</i>	Spit Bug
7.	Chrysididae	<i>Chrysura refulgens</i> Spinola	Cuckoo Wasp
8.	Cicadellidae	<i>Eurymeloides bicincta</i>	Leaf Hopper
9.	Corixidae	<i>Corixa punctata</i>	Lesser water boatman
10.	Coccinellidae	<i>Hormonia axyridis</i>	Asian lady beetle
11.	Culicidae	<i>Culex tarsalis</i>	Mosuitoe
12.	Dytiscidae	<i>Cybister limbatus</i>	Water beetle
13.	Formicidae	<i>Anoplolepis gracilipes</i>	Yellow Crazy Ant
		<i>Paratrachina longicornis</i>	Black Crazy Ant
		<i>Salenopsis geminate</i>	Common Red Fire Ant
		<i>Tetramorium smithi</i>	Miniscule House Ant
14.	Gnaphosidae	<i>Acanthogonatus pissi</i>	Ground spider
15.	Gryllidae	<i>Gryllus himaculatus</i>	Field cricket
16.	Hesperidae	<i>Hesperia golba</i>	The Indian skipper
17.	Hyblaeidae	<i>Hyblaea puera</i>	Teak defoliator
		<i>Hyblaea puera</i>	Teak defoliator
18.	Muscidae	<i>Musca domestica</i>	Housefly
19.	Nepidae	<i>Rantara elongate</i>	Water Scorpion
20.	Nymphalidae	<i>Dannais chrysippus</i>	The plain Tiger
		<i>Junonia hierta</i>	The yellow pansy
		<i>Euploea core</i>	The common Indian crow
21.	Papilionidae	<i>Papilio aristolocheae</i>	Common Rose
22.	Peridae	<i>Delias eucharis</i>	The shipped albatross
23.	Pyrgomorphidae	<i>Atractomorpha sp.</i>	Vegetable grasshopper
24.	Scarabaeidae	<i>Phanaeus vindex</i>	Scarab Beetle
		<i>Scarabaeus sacer</i>	Dung Beetle
25.	Tabanidae	<i>Tabanus sulcifrons</i>	Horse Fly
26.	Tettigonidae	<i>Gryllodes sagillatus</i>	House cricket
27.	Tettigonidae	<i>Macopoda elongata</i>	GroundHopper