

GREEN ACTIVITY BOOK

For Nature learners...



An initiative of

'NATURE LEARNING CENTRE TRIPURA'

NMHS-HIM NLC FUNDED PROJECT, Sepahijala Wildlife Sanctuary

"Learn, play and live amidst the serene beauty of the NLC Tripura Project"



TRIPURA FOREST DEPARTMENT





ACTIVITY BOOK

- Name of the student / Group :
- Class & Division:
- Name of the College /Institution/ECA Club:
- Contact Details/email id:
- Signature:

FIELD ACTIVITIES



Observe the following during Nature Walk on 'Jungle Trail'

- 1.The sound of birds& insects
- 2.Epiphytic orchids/ferns and other plants
- 3.Falling of leaves and seeds
- 4.Pollination and Honeybees
- 5.Habit and Habitats
- 6.Different ecosystems
- 7.Climbers,creepers and Lianus
- 8.Humus and leaf litter
- 9.Snag and moribund trees-unique and special habitets
- 10.Lichens and Mushrooms
- 11.Different leaves,flowers,fruits
- 12.Animal evidences-Direct and indirect

1. ENVIRONMENT-BIOTIC & ABIOTIC COMPONENTS



Biotic Factors



Abiotic Factors



Uses of Biotic & Abiotic components

2. KNOW YOUR NATURAL SURROUNDINGS



Name Herbs, Shrubs & Trees



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3. PRIDE OF STATE OF TRIPURA.....



State animal



State bird



State flower



State insect



State tree



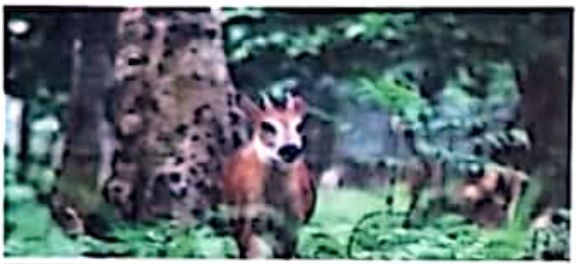
State butterfly



State fruit



4. NAME DOMESTIC AND WILD ANIMALS



5. NAME AND USE OF THE MEDICINAL PLANTS BELOW:



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6. NAME THE POISONOUS / VENOMOUS CREATURES OF NATURE



7. IDENTIFY THE BIRDS



They have Flight and other adaptations
Pneumatic bones
Body weight & Shape
Beak, Claws

BEAK ADAPTATIONS



Generalist



Insect catching



Surface skimming



Mud probing



Grain eating



Coniferous-seed eating



Probing



Filter feeding



Nectar feeding



Fruit eating



Aerial fishing



Pursuit fishing



Chiselling



Dip netting



Scavenging



Raptorial



8. TYPES OF POLLINATION



Bees



Butterflies



Wasps



Moths



Beetles



Flies



Birds



Bats



Wind



You!

Anemophily means



Hydrophily means



Ornithophily means



Entomophily means



Cheiropterophily means



9. TYPES OF SEED DISPERSAL [MECHANISMS]



Anemochory



Entomochory



Hydrochory



Zoochory



Ornithochory



Myremecochory



Helicopter mechanism - Garjan, Mahogany



10. FOOD CHAIN & FOOD WEB



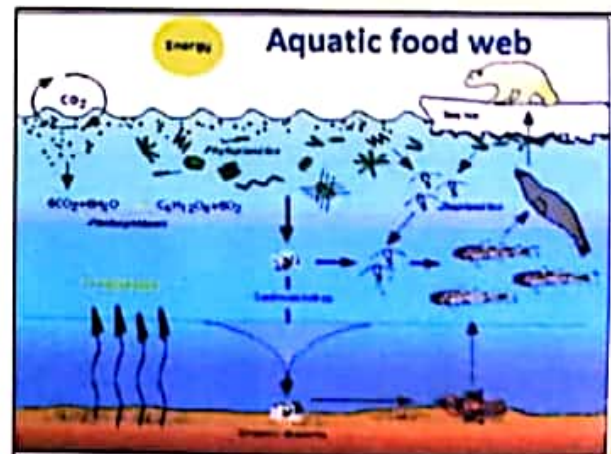
The food chain can be said as the straight and single pathway for the flow of energy in an ecosystem, through different species of organisms. Food web, on the other hand, is defined as the convoluted or complicated pathway of an ecosystem consist of numerous food chains of the different trophic level, through which the energy flow



TERRESTRIAL FOOD WEB

Review: what is a food web?

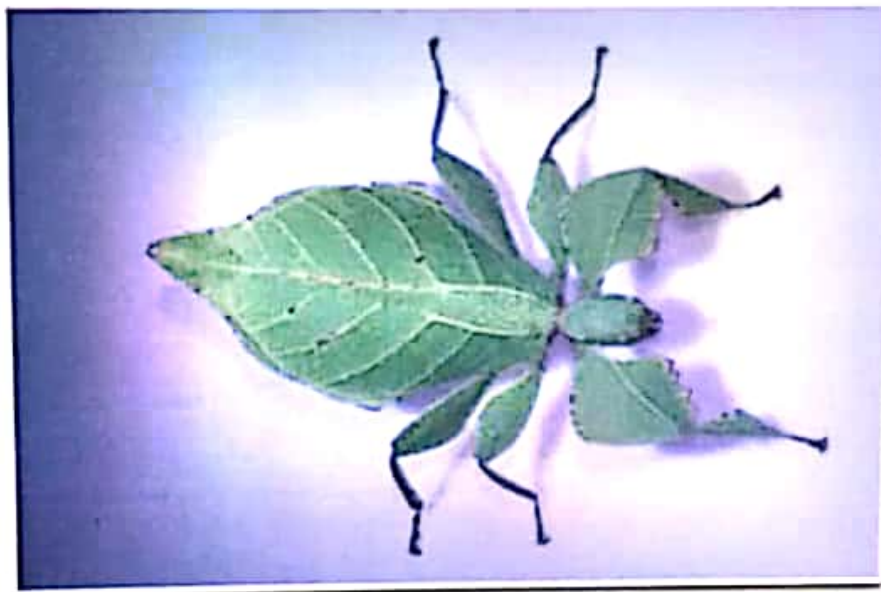
- Food chains and food webs show how organisms get energy from their food
- Food webs show interconnected or overlapping food chains



11. IDENTIFY THE FOLLOWING INSECTS



Insects or Insecta (from Latin insectum) are hexapod invertebrates and the largest group within the arthropod phylum. Insects have a chitinous exoskeleton, a three-part body (head, thorax and abdomen), three pairs of jointed legs, compound eyes and one pair of antennae. Insects are the most diverse group of animals; they include more than a million described species and represent more than half of all known living organisms.



12. IDENTIFY THE FOLLOWING REPTILES



Reptiles are tetrapod animals in the class Reptilia, comprising today's turtles, crocodilians, snakes, lizards, tuatara, and their extinct relatives. The study of these traditional reptile orders, historically combined with that of modern amphibians, is called herpetology.



13. IDENTIFY THE FOLLOWING INDIGENOUS & EXOTIC FRUITS



Indigenous species are native species of a country and bred in the same country by similar species.
Exotic species are species that are brought from other countries bred within same varieties or crossed with indigenous or other exotic species.



Indigenous

1. Ladkan
2. Gab
3. Amla/Amloki
4. Amra
5. Carambola

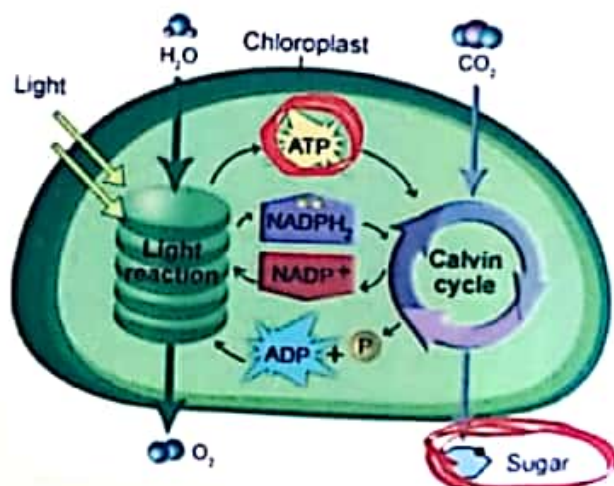
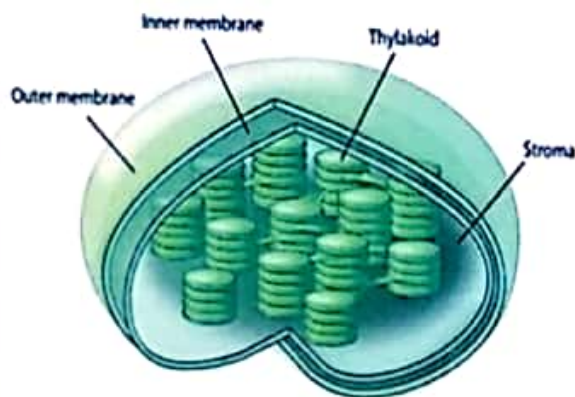
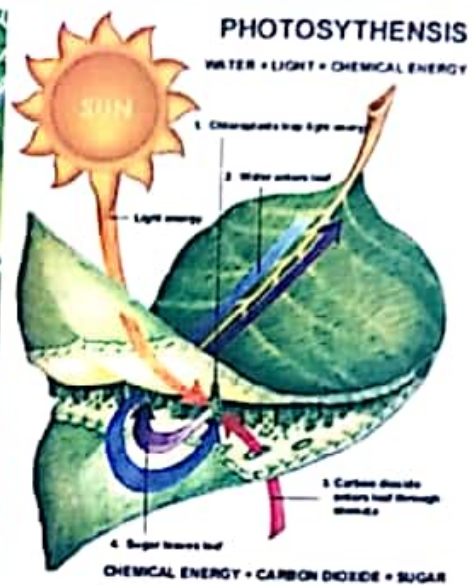


Exotic

1. Dragon fruit
2. Kiwi
3. Durian
4. Rambutan
5. Lichi
6. Mangosteen



14. STUDY ABOUT



Significance

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15. STUDY ABOUT WETLANDS



Ramsar site
Lentic and Lotic water bodies



Wetlands are also transitional areas between dry terrestrial and permanent aquatic ecosystems (Eco-tones and therefore are more productive than just terrestrial ecosystems). In recent years, more particularly during the last three decades of the twentieth century wetlands are recognized as highly productive ecosystems and their importance in socio-economical and ecological frontiers has also been increasingly felt. Not surprisingly they are considered to be the repository of our WATERLOGGED WEALTH.

Importance

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16. STUDY ABOUT CAMOUFLAGE



Importance

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17. PRIMATE DIVERSITY OF TRIPURA

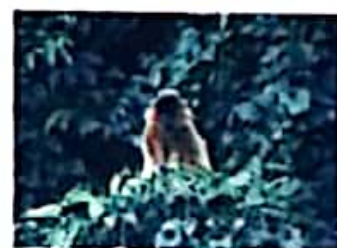


Primates of Tripura

1. Hoolock Gibbon
2. Phayres langur
3. Pig tailed macaque
4. Common Rhesus Macaque
5. Bengal Slow loris
6. Capped Langur
7. Stump tailed macaque



Phayre's Leaf Langur (*Trachypithecus phayrei*)
 Family: Cercopithecidae, Local Name: Chama Samat
 Status: In Part I of Schedule I of W.P.A. & Appendix I of CITES.
 Size: Total length: 45-50 cm and weighs about 6-8 kg.
 Distribution: The forest range of Bangladesh, Thailand, eastern & southern side of Tripura.



Capped Langur (*Presbytis pileatus*)
 Family: Cercopithecidae, Local Name: Raji Bana.
 Status: In Part I of Schedule I of W.P.A. & Appendix I of CITES.
 Size: Males: Head & body: 24-26 dm, tail: 70 cm;
 tail: 30-40 cm, 175-180 cm average weight: 20 kg.
 Females: smaller & lighter head & body: 1.3-2.0 dm, 160-180 cm tail:
 1.5-2.0 dm, 175-180 cm average weight: 22 kg, 170 kg.
 Distribution: Found in the adjoining districts of Bangladesh and south & west side of Tripura.

18. IMPORTANCE OF HONEY BEES



In India five important species of honey bees :-

The rock bee, *Apis dorsata* (Apidae).

The Indian hive bee, *Apis cerana indica* (Apidae).

The little bee, *Apis florea* (Apidae).

The European or Italian bee, *Apis mellifera* (Apidae).

Dammer bee or stingless bee, *Melipona irridipennis* (Meliporidae).



5. Stingless bee

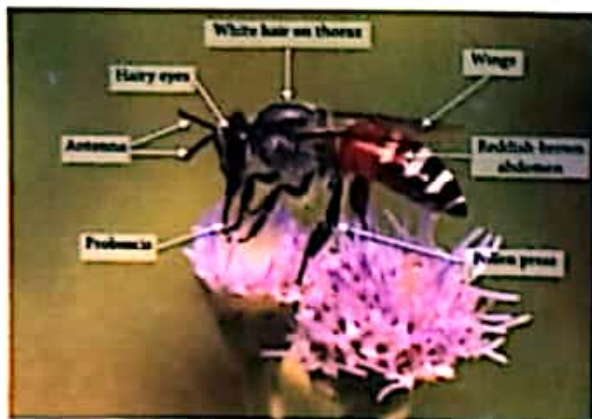
HONEY BEE INDIVIDUALS



Write here the importance of Honey bees....

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4. *Apis florea*

19. DISCUSSION POINTS:-



REDD+

Carbon sequestration

Green Technology

Global Warming & Green House Effect

Acid rain

Role of Forest in Water conservation

**Biodiversity and Wildlife of Tripura,
India & Global Scenerio**



**20. WRITE DOWN YOUR OBSERVATIONS IN THE
NATURE WALK BIODIVERSITY/WILDLIFE/FLORA& FAUNA/
NATURAL FACTS/ANY OTHER INFORMATION**

21. FEED BACK ABOUT NLC EXPERIENCE



BACK COVER



TRIPURA FOREST DEPARTMENT

