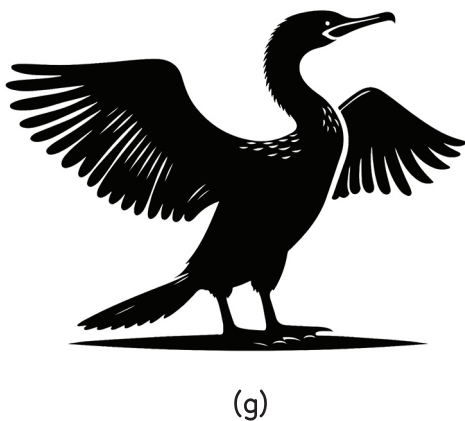
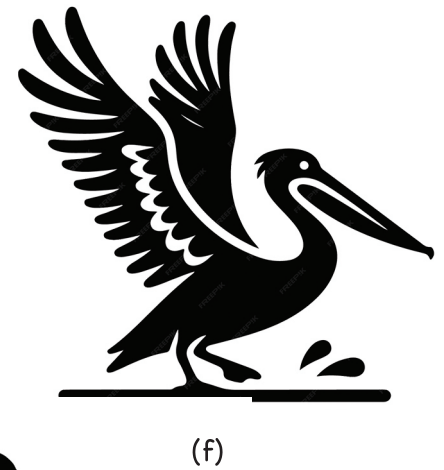
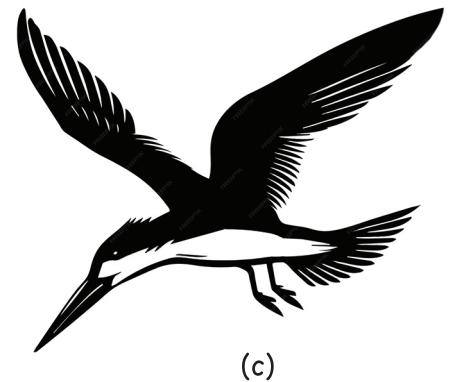
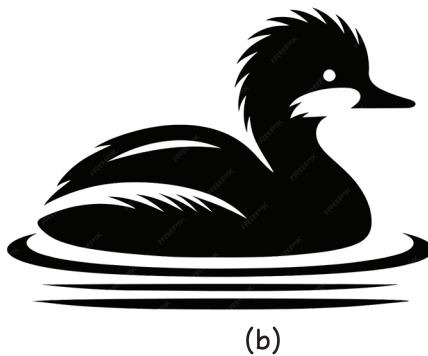


ACTIVITY SHEET I : OBSERVE FISHING BIRDS

Aim:

- Explore the 'diversity of life' by learning about different kinds of fishing birds and their feeding habits.
- Think about how the kind of human activities that affect one kind of heron in a different part of the world (out there) can affect other kinds of herons and fishing birds in your own neighbourhood.



What to do:

In 'The Meditating Heron', a farmer describes the fishing routine of his companion, a white-bellied heron. Listen to your teacher read this part of the story out to you.

Observe:

Page 1 of this activity has images of six of the different kinds of fishing birds seen in India. Look at these images carefully. What do the beaks of these birds look like? What do their feet look like?

Think about:

A. Have you seen any of these kinds of birds in your neighbourhood? What do you call them? Can you think of 1-2 things about these birds that will help your friends identify them?

Which of them are seen in your neighbourhood?	What do you call them?	Think of 1-2 things about the way they look that stand out for you?	Have you seen them fishing? (Y/N)

B. Different kinds of fishing birds use different fishing strategies. The way they look can often give us important clues about the way they fish. Columns 1 and 2 of the table below list and describe some strategies that fishing birds use. Can you guess which of these fishing strategies the birds on Page 1 are most likely to use? Fill out your guesses in Column 3.

Strategy	What you will see the bird doing	Image numbers
DIVING	Dive towards the water. Catch fish with its beaks or claws.	
SKIMMING	Fly very quickly over the water. Keep its beak open in flight and catch fish from the surface.	
SCOOPING	Wade through shallow water or mud. Scoop fish up with its beak.	
AMBUSHING	Stand still in water or close to it. Creep up to and snatch up unsuspecting prey with a quick movement of its beak.	

- C. Look at the images of the different kinds of fishing birds again. Think of what you heard about the fishing strategy of the farmer's companion. Which of the bird images on Page 1 is most like the 'meditating' heron? Why do you think so?

Discuss:

Watch the short 4-minute video that your teacher plays for you.

- Was your guess in Question C correct? If not, what did you miss?
- If you see any kind of heron in your real world, will you be able to identify it by the way it looks and fishes for food?
- If you see a neighbourhood bird catching fish, will you be able to tell if it is a diver, skimmer, scooper, or an ambusher?
- The farmer's 'meditating' heron is seen in India too. Here too, they are disappearing. Human activity plays an important role in its disappearance. The video shares some examples of such activities. Do you see any of these kinds of human activity in your neighbourhood? What effects do you think such activities have on the herons in your neighbourhood? Do you think they can affect other kinds of fishing birds too?



Life in Your Backyard

ACTIVITIES I & II

- 1) Activities I & II can help meet the following learning outcomes:
 - For science at the middle stage (Grades VI–VIII): The learner can identify and classify living organisms based on their observable features, can conduct simple investigations to seek answers to queries, and makes efforts to protect the environment (by spreading awareness on the need to protect plants and animals).
 - For EVS at the preparatory stage (Grades III–V): The learner can identify simple features (like movement, eating habits, and sounds) of birds in their immediate surroundings, group birds according to similarities and differences using different senses, predict patterns, and show sensitivity towards plants and animals.
- 2) One of the goals (CG–3) in the National Curriculum Framework for School Education (NCF–SE) 2023 for science in the middle stage is for students to have the opportunity to explore the living world in scientific terms. Activities I & II are designed to help meet this goal and two of its related competencies:
 - Describe the diversity of living things (including birds) observed in the natural surroundings.
 - Analyse patterns of relationships between living organisms and their environments in terms of dependence on and response to each other.
- 3) In Activity I:
 - Start the activity by narrating the story of ‘The Meditating Heron’. You may want to read the parts that describe the features of the bird and its fishing routine again if students request it.
 - The kinds of birds in **Sheet I** are: (a) Kingfishers, (b) Grebes, (c) Skimmers, (d) Herons, (e) Sea Eagles, (f) Pelicans, (g) Cormorants, and (h) Spoonbills.
 - In **part B** of the **Think about** section: Kingfishers, Grebes, Sea eagles, and Cormorants are divers. Skimmers are named for skimming. Pelicans and Spoonbills are scoopers. Herons are ambushers.
 - Encourage students to attempt the questions in the **Discuss** section after you show them a short 4-minute YouTube video (by Roundglass Sustain) on your mobile phone. Titled ‘How Namdapha’s Most Statuesque Bird is Quietly Disappearing’, this video is available in English here: <https://www.youtube.com/watch?v=s-H5zn4xCDw>. If students prefer, you could play it in Hindi instead: <https://www.youtube.com/watch?v=eTPr31KbHeE&t=0s>.
- 4) In Activity II:
 - Encourage students to listen carefully to the stories and information their elders share. Ask them to record these details in their notebooks.
 - Also, encourage them to listen carefully to presentations by the other groups in class.
- 5) Facilitate the discussion in both activities by encouraging students to think about and share the effects we (humans) have on birds in our neighbourhoods. End the session by posing these questions: Do human activities always have harmful impacts on birds? Can they think of some activities that don’t? Do they know of efforts in their locality that help protect birds or their habitats? Let students take at least a couple of days to think about these questions. If you see a lot of interest in these questions, you could invite them to share their responses in a class discussion.