



Agriculture, Fisheries and Conservation Department

Hong Kong Country Parks Education Kit for Secondary Schools

Diversity of Plants and Animals

Topics covered:

- Biodiversity
- Appreciation of biodiversity

Background information:

Tai Po Kau Nature Reserve is a very important nature reserve in Hong Kong. The reserve has an amazingly wide variety of living things - from small insects, to frogs and birds, and even mammals. Let's take a virtual tour of Tai Po Kau Nature Reserve.

Students will see that the world is occupied by a wide variety of living things. They can be found in different habitats, and each has a specific role in the ecosystem. They can also learn about the inter-dependence of living things and how they form food chains.

Flash game learning materials are used to illustrate an example of a food chain to help students to engage themselves in the lesson.

Teaching objectives

1. To illustrate the concept of biodiversity, both in plants and animals using local examples in Tai Po Kau Nature Reserve.
2. To develop students' awareness of the importance of biodiversity in our world.

Suggested study mode

Classroom activity

[Game 1 - Bring Me Home](#)

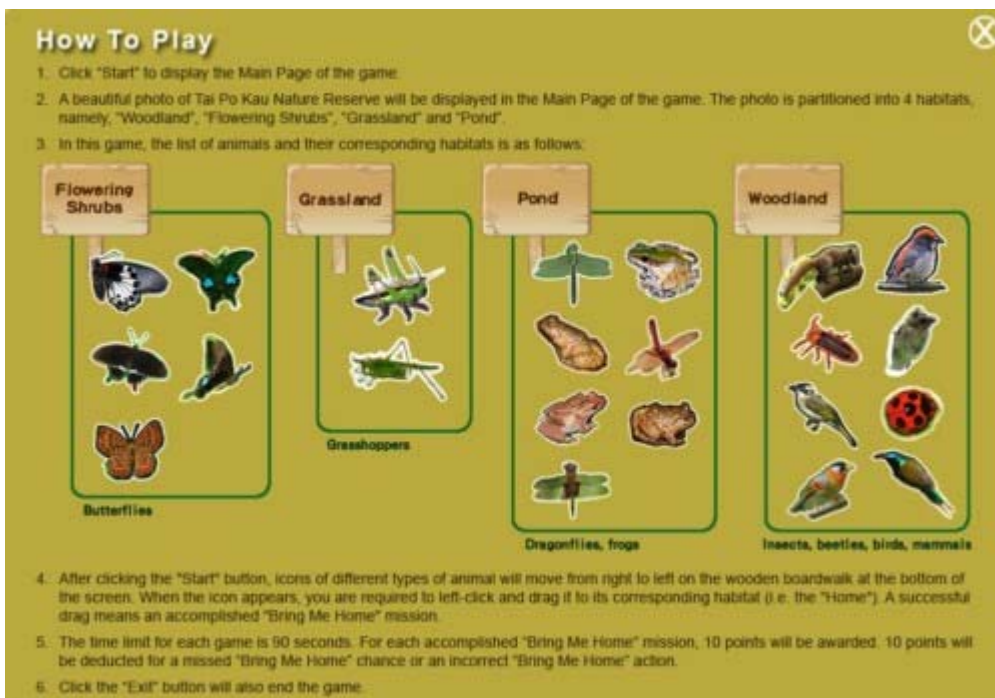
[Game 2 - Eat Me if You Can](#)

Description of Game 1 - Bring Me Home

1. You will see a photo of Tai Po Kau Nature Reserve with different habitats (woodland, flowering shrubs, grassland and pond) when the game is launched. On the Main Page, a "Start" button, and a "How to Play" button will be shown.



2. In the "How to Play" page, you will see a table listing the plants, animals and their corresponding habitats as follows:



3. After clicking the "Start" button, icons of different types of animal will move from right to left on the wooden boardwalk at the bottom of the screen. When the icon appears, you are required to left-click and drag it to its corresponding habitat (i.e. the "Home"). A successful drag means an accomplished "Bring Me Home" mission.



4. In this game, the list of animals and their corresponding habitats is as follows:



5. At the end of the game, the list of animals and their corresponding habitats will be displayed again as a revision.

Suggested procedures for Game 1 - Bring Me Home

1. Open Flash Game 1 "Bring Me Home"
2. Click the "How to Play" button and explain briefly how the game works.
3. Invite students to play the game. Record their scores and reward the student with the best performance with a small prize.

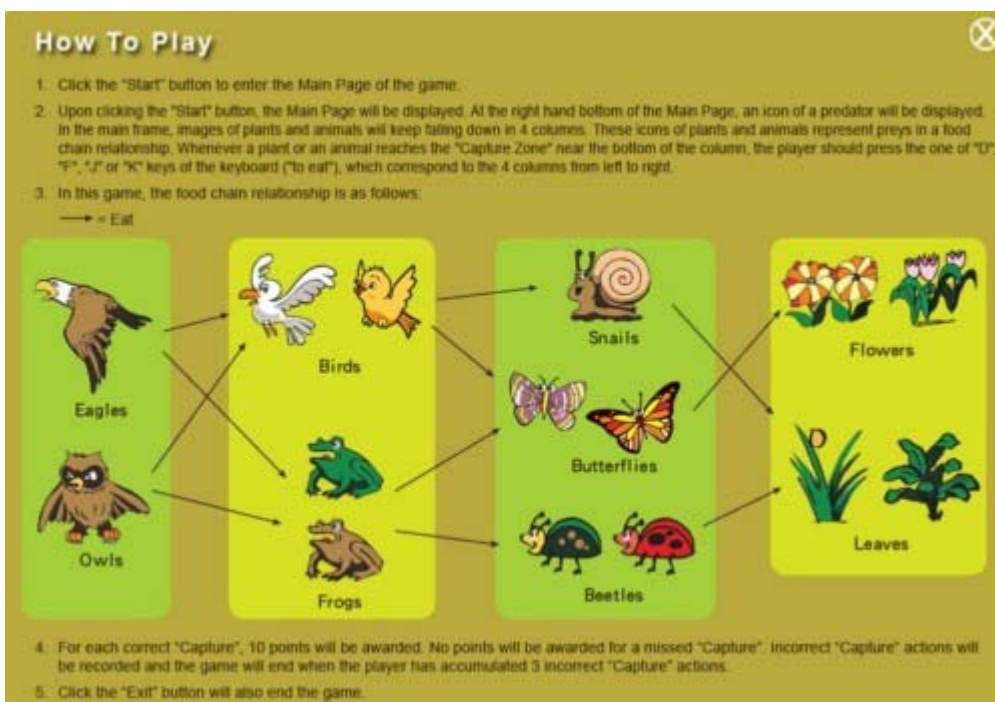
4. Have them complete [Worksheet IS-6](#), on which they are required to write down the names of habitats, as well as some of the living things within them.
5. Go through the suggested answers and draw a conclusion from the lesson.

Description of Game 2 - Eat Me if You Can

1. You will see the front page of the game with a "Start" button, an "Exit" button and a "How to Play" button when the game starts.



2. In the "How to Play" page of the game, you will see a food chain relationship chart as follows:



3. Upon clicking the "Start" button, the Main Page will be displayed. At the right hand

bottom of the Main Page, an icon of a predator will be displayed. In the main frame, images of plants and animals will keep falling down in 4 columns. These icons of plants and animals represent preys in a food chain relationship. Whenever a plant or an animal reaches the "Capture Zone" near the bottom of the column, the player should press the one of "D", "F", "J" or "K" keys of the keyboard ("to eat"), which correspond to the 4 columns from left to right.



- At the end of the game, the food chain relationship will be displayed again as a revision.



Suggested procedures for Game 2 - Eat Me if You Can

1. Open Flash Game "Eat Me If You Can".
2. Click the "How to Play" button and explain briefly what the game is about and how it works.
3. Invite students to play the game. Record their scores and reward the student with the best performance with a small prize.
4. Go on to [Worksheet IS-7](#). Students fill in two food-chain relationship examples from a pool of living things found in [Tai Po Kau Nature Reserve](#).
5. Go through the suggested answers and draw a conclusion from the lesson.