

# Enjoy Plastic-free Countryside

Topic : Our Living Community — Going to the Park

Learning time : 35 minutes



# GREENGOAL

<b>General Studies Lesson Plan</b>	<b>P.04-10</b>
<b>Extended Activity Kit ①</b>	<b>P.12-19</b>
<b>Extended Activity Kit ②</b>	<b>P.20-26</b>
<b>Extended Activity Kit ③</b>	<b>P.27-29</b>
<b>Supplementary Information</b>	<b>P.31-33</b>

**Primary 2**

# **Lesson Plan**

**Prior knowledge**

1. Common recyclables and community recycling facilities
2. Understanding of the concept of domestic waste
3. Environment, equipment, and facilities in country parks

**Learning objectives****Skills**

1. To use images to demonstrate the concepts of “Plastic-Free” Countryside and animal protection

**Knowledge**

1. To understand the impacts of plastic waste on the natural environment
2. To understand the concepts of “Plastic-Free Countryside” and “Take Your Litter Home”
3. To build a sense of responsibility for keeping the countryside clean, and the attitudes and values towards animal protection

Learning objectives	Time	Teaching flow	Teaching materials
	3 MINS	<b>Lead-in / Motivation</b> <ul style="list-style-type: none"> <li>• Teacher can demonstrate the photos of country parks in the slides</li> <li>• Teacher can ask students if they have ever visited a natural environment and invite one student to share his / her experiences and what he / she has observed</li> </ul>	PowerPoint slides
<b>1</b> To understand the impacts of plastic waste on the natural environment	5 MINS	<b>Topic demonstration</b> <b>Investigative Activity 1</b> <b>Understanding the impacts of plastic waste on the natural environment</b> <ul style="list-style-type: none"> <li>• Teacher can ask students about animal types they have seen in natural environments. Then, the teacher displays some scenario photos (a cow mistakenly ate a plastic bag nearby when it ate the grass in the countryside) in the slide</li> <li>• Teacher can use the story of animals mistakenly consuming plastic waste as a prelude to briefly introduce various types of waste in the natural environment, and explains the impacts of plastic waste on the environment and animals</li> </ul>	PowerPoint slides



**2**

To understand the concepts of “Plastic-Free Countryside Activities” and “Take Your Litter Home”

**10**  
MINS

### Investigative Activity 2

#### Understanding the concepts of “Plastic-Free Countryside Activities” and “Take Your Litter Home”

- Teacher can guide students to think about the sources of plastic waste, making them understand that the major sources of litter in countryside are the plastic products and daily necessities disposed of by visitors
- Teacher can guide the students to discuss in groups on how to keep the countryside clean as well as highlighting the importance of waste reduction at source
- Teacher can summarise the discussion results to emphasise the concepts of “Plastic-Free Countryside Activities” and “Take Your Litter Home”

#### Examples of keeping the countryside clean:

- Reducing the use of disposable items:
  - *Avoid using tissues and buying over-packaging food*
- Using reusable items:
  - *Use reusable food containers and water bottles, replace tissues with towels, etc.*
- Recycling:
  - *Separate recyclables and put them into corresponding recycling bins*
- Preparing appropriate amount of food:
  - *Prepare food with appropriate portion to support the trip and some dry food or fruits as a reserve which can be taken away to avoid food wastage*

PowerPoint  
slides

**3**

To build a sense of responsibility for keeping the countryside clean, and the attitudes and values towards animals protection

**15**  
MINS

### Investigative Activity 3

#### Building a sense of responsibility for keeping the countryside clean, and the attitudes and values towards animals protection

- Teacher can display four scenario photos in the slides to draw students’ attention and discussion on why the wild animals are being trapped
- Teacher can assign students into groups and randomly distributes scenario photos, and guide the students to create a poster about wild animal protection
- Teacher can encourage students to identify the difficulties faced by wild animals when designing the posters and write down the possible conservation plans. The teacher can provide support to each group when necessary
- Teacher can display each group’s poster and let students share their suggested conservation plans

PowerPoint  
slides and  
drawing  
papers

2  
MINS

## Conclusion

- Teacher can assist students in summarising the concepts that practising “Reduce Waste at Source”, “Take Your Litter Home” can help protecting the natural environment and wild animals
- Teacher can direct students to complete the “Enjoy Plastic-Free Countryside Activities” Student Worksheet at home

## Extended Activity

## Teaching Materials

### Extended Activity 1 (Indoor activity):

Draw your ideal country park

Extended  
activity kits

### Extended Activity 2 (Outdoor activity):

Visit to a hiking trail

Extended  
activity kits

### Extended Activity 3 (Parent-child activity):

Turning old clothes into eco-bags

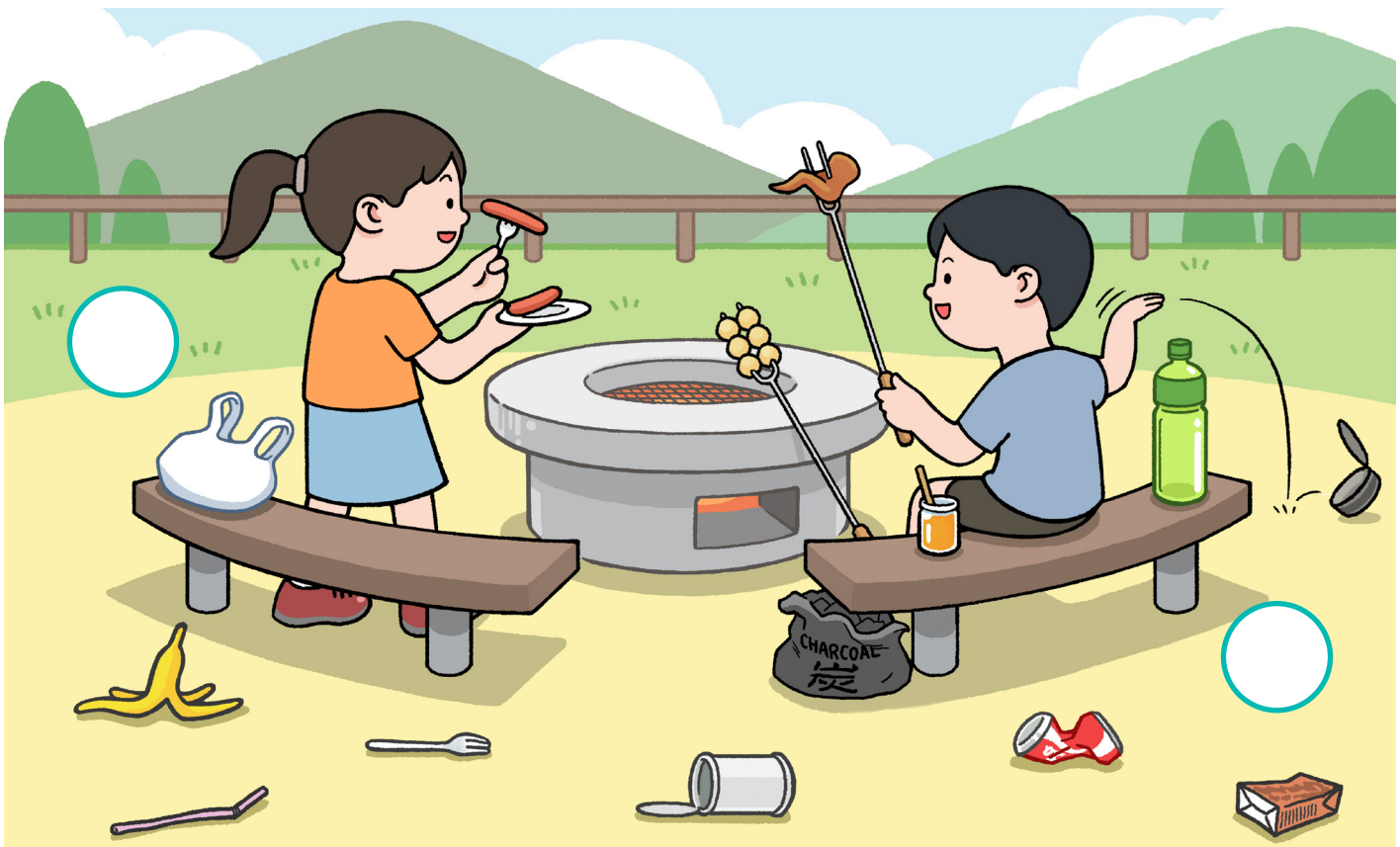
Extended  
activity kits

Primary 2

# Worksheet

1

Observe the behaviour of visitors and the waste they generate in the picture, in order to determine whether the waste will damage the natural environment. Please give a “√” for behaviours that will damage the environment; otherwise, please give a “X” in the circles and circle the correct answer as appropriate.



1

Visitors (**should / should not**) leave any waste in the country park, such as tissues, plastic bottles, straws, etc.

2

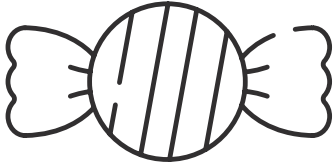
The waste disposed in country park (**will / will not**) damage the ecological environment.

3

All visitors (**need / do not need**) to properly dispose of their own waste and (**should / should not**) establish a habit of “Take Your Litter Home”.

2

**Drawing:** List out and draw the plastic waste your family generated last weekend and record the amount of plastic waste generated.

<b>Type of Plastic Waste (Examples):</b> Candy wrapper	<b>Quantity</b> 1 ( piece )
<b>Picture (Example):</b> 	

<b>Type of Plastic Waste (Examples):</b>	<b>Quantity</b> (     )
<b>Picture:</b>	

<b>Type of Plastic Waste (Examples):</b>	<b>Quantity</b> (     )
<b>Picture:</b>	

<b>Type of Plastic Waste (Examples):</b>	<b>Quantity</b> (     )
<b>Picture:</b>	

<b>Type of Plastic Waste (Examples):</b>	<b>Quantity</b> (     )
<b>Picture:</b>	

<b>Type of Plastic Waste (Examples):</b>	<b>Quantity</b> (     )
<b>Picture:</b>	

According to the above record, the type of plastic waste my family frequently generated is \_\_\_\_\_, we **(can / cannot)** reduce the wastage of resources through recycling.

3

**Sequencing:** Arrange the answers in accordance to the sequence of events in the story, and write down a letter representing the correct answer in the circle.

**Story Background:** Ben went for a hike in a country park and generated plastic waste during hiking. How should he handle with the waste when he left?



**Correct order:**



**1. What did Ben bring for hiking? (Please circle the correct answer)**

Ben brought (a plastic bottle / a paper cup / an aluminium can) for hiking.

**2. Following the above question, what is Ben required to do before recycling the recyclables?**

As the item is recyclable, Ben should \_\_\_\_\_ the recyclable item before recycling at "GREEN@COMMUNITY".

**Primary 2**

# **Extended Activity Kit**

## Draw your ideal country park

### Objectives

1. To guide students in recognising wild animals and raise their awareness on wild animal's living environment
2. To cultivate students' creativity and artistic expression abilities

### Activity Arrangements

#### Purpose

- To strengthen students' awareness on waste reduction at source and to enhance their knowledge of common wild animals in Hong Kong country parks

#### Preparation

- Teacher can notify the students about the purpose and requirements of the activity through the lesson
- Teacher needs to prepare pictures of several common wild animals found in the country parks, including but not limited to cattle, wild boars, insects (butterflies, bees, ants), monkeys, etc.
- Teacher needs to prepare some photos to illustrate the negative impact of improper waste disposal on wild animals

#### Requirements

- Teacher needs to teach students to distinguish the habitats of wild animals and identify examples of wild animals living in country parks
- Teacher needs to teach students to distinguish common types of waste found in country parks, such as plastic waste, food packaging, tissues etc.

#### Activity flow

- Before the activity begins, teacher can introduce several common wild animals found in country parks to the students, including but not limited to cows, wild boars, insects (butterflies, bees, ants), monkeys, etc., and explains their characteristics, habitats, and how the improper waste disposal affect the environment and wild animals
- Teacher can distribute the drawing materials to the students and guide them to draw their ideal country park and favourite wild animals
- Teacher can encourage students to showcase their drawings and share their creative ideas

#### Conclusion

- Teacher can ask students about the negative impact of improper waste disposal on wild animals, and remind students to develop habits of waste reduction at source and "Take Your Litter Home"



## Draw your ideal country park

**Time**

1 lesson

**Materials**

- Paper
- Coloured pencils, crayons, markers
- List of Common Wild Animals in country parks

**Remarks**

Teacher needs to provide some wild animal photos or provide simple descriptions of the animals' appearance and characteristics to help students with their creations

## List of Common Wild Animals in Country Parks

### 1. Cattle (Water buffalo, Brown cattle)

**Brown cattle**



Photo Source: Agriculture, Fisheries and Conservation Department

**Water buffalo**



Photo Source: Agriculture, Fisheries and Conservation Department



#### Features

Yellow cattle and water buffalo are common types of cattle in Hong Kong. They were mainly used for farming before the 20th century, but as agriculture declined in Hong Kong, they were abandoned in the wilderness. Wild cattle continue to survive and breed in the countryside, playing an important role in biodiversity.

**Brown cattle:** Mainly characterised by a yellow body, there are about 940 Yellow Buffalo located in different districts and common in countryside. Adult cattle weigh approximately 1 000 to 1 200 kilograms, with peak feeding times at sunrise and sunset.

**Water buffalo:** Mainly characterised by a dark grey body, large horns, and a sturdy build. There are about 180 Water Buffalo in Hong Kong, commonly found in wetlands. Due to their short legs and large hooves, they are primarily used for workforce.

#### Living environment

**Brown cattle:** Distributed across different regions, commonly seen in country parks.

**Water buffalo:** Commonly found in wetlands in Hong Kong, including several villages on Lantau Island (Pui O).

# List of Common Wild Animals in Country Parks

## 1. Cattle (Water buffalo, Brown cattle)

### Threats posed by litter to the wild animals

**Source:** Human littering and feeding lead to wild cattle consuming discarded litter, including plastic bags, plastic waste, barbecue food, and most of the human food.

**Impact:** Diarrhea and accumulation of toxins in the body, intestinal blockage.

### How to deal with them during hiking

- Maintain the behaviour of “Take Your Litter Home”, do not litter or allow litter to accumulate in country parks.
- Keep a safe distance from wild cattle, do not harm them, and respect them.

Information Source: Agriculture, Fisheries and Conservation Department

# List of Common Wild Animals in Country Parks

## 2. Wild Boar



### Features

- Wild boars are common mammals in Hong Kong and are widely distributed. An adult wild boar weighs about 200 kilograms, its colour is mainly brown-grey and black, with dark stripes that serve as camouflage. Adult male wild boars have tusks protruding from the corners of their mouths.
- They are omnivores, they mainly eat plants or prey on insects and other small animals.

### Living environment

- Wild boars have high adaptability and appear in different habitats, including forests, grasslands, and rural areas.

### Threats posed by litter to the wild animal

- Due to their high adaptability, wild boars will feed on food scraps from human litter. Wild boars are attracted to food left behind from feeding and come to forage near feeding sites, gathering in urban areas and causing disturbance to residents.
- Feeding on leftover food can cause environmental hygiene issues.

### How to deal with them during hiking

- When encountering wild boars, remain calm and do not approach or disturb them.
- Properly dispose outdoor litter or use litter bins that can prevent animals from tipping them over, to reduce attracting wild boars for food.

Information Source: Agriculture, Fisheries and Conservation Department



# List of Common Wild Animals in Country Parks

## 3. Insects (Butterflies, Bees, Ants)

### Butterflies

Photo Source: Agriculture, Fisheries and Conservation Department



### Bees

Photo Source: Maggie Mang



### Ants

Photo Source: Maggie Mang



### Features

Currently, there are about 9 060 species of insects in Hong Kong, making them ubiquitous animals that can be found everywhere from flowers, grass, soil, to the sky. There are 8 main categories of insects.

**Butterflies:** Currently, Hong Kong records 245 butterfly species, accounting for about 11% of the total recorded in China. Among them, there is a unique subspecies that can be found only in Hong Kong – Beggar's Ace (*Halpe paupera walthewi*). Apart from their cultural and ornamental value, butterflies possess unique ecological values and maintain important relationships with plants.

**Bees:** There are about 10 common bee species in Hong Kong, with body colours including yellow, black, brown, and orange, and their bodies are covered with dense fine hairs. They are particularly sensitive to sounds and may exhibit aggressive behaviour in response. They also build nests near flower sources, natural cavities, tree holes, or crevices in autumn. Except when their hives are threatened, bees generally do not display aggressiveness.

**Ants:** Over 300 species of ants, which are social insects, have been recorded in Hong Kong. The largest ants can be nearly 15 mm long, while the smallest is less than 1 mm. Most are omnivores and scavengers, aiding in plant reproduction and pollination during their foraging activities.

# List of Common Wild Animals in Country Parks

## 3. Insects (Butterflies, Bees, Ants)

### Living environment

**Butterflies:** Their lives revolve around their nectar and host plants, widely distributed in streams, farmlands, parks, etc.

**Bees:** Grassy areas, fern thickets, or mixed forests are the usual living habitats for bees.

**Ants:** They live in all terrestrial environments, mainly live in soil where they build nests and tunnels.

### Threats posed by litter to the insects

**Butterflies:** When litter is disposed of in natural environment, it pollutes their habitats, leading to the loss of ideal living conditions and a decrease in numbers.

**Bees:** Disposed beverage bottles with sugary litter in open spaces can attract bees to build nests nearby or fly over, causing disturbances and potentially leading to the destruction of their newly built nests, which affect their population.

**Ants:** When plastic waste is disposed of in natural environment, they may mistakenly consume these plastic fibers as food or using them as construction materials, leading to incorrect retention of plastic waste in the soil and further impacting the natural ecosystem.

### How to deal with them during hiking

**Butterflies:** Do not capture or interfere with butterflies' lives. Instead, observe them quietly and avoid feeding wild butterflies or placing food carelessly.

**Bees:** When encountering them, protect your head and neck with a coat and lie down curled up on the ground until the swarm leaves before slowly moving away. Avoid using scented products to prevent attracting bees. Cover food and drinks (e.g., ripe fruits, soda, and sugary foods) and dispose of litter in sealed containers.

**Ants:** Do not litter, visitors should properly handle or take away their own litter. Do not collect butterflies at will.

Information Source: Agriculture, Fisheries and Conservation Department

# List of Common Wild Animals in Country Parks

## 4. Monkeys



### Features

- The total number of wild monkeys in Hong Kong is estimated to be about 2 000, divided into approximately 30 groups. The main species are macaques, long-tailed macaques, and their hybrids. Their main food sources are plants and tree bark, occasionally supplemented with insects.

### Living environment

- Mainly distributed in Kam Shan, Lion Rock, and Shing Mun Country Parks.
- They can adapt to different environments such as forests and grasslands, even urban areas.

### Threats posed by litter to the wild animal

- In the past, visitors fed wild monkeys, leading them to snatch food from plastic bags or search for food in the litter.

### How to deal with them during hiking

- Do not feed any wild monkeys to prevent them from being attracted by fed food and frequently foraging in residential areas.
- Properly manage outdoor litter or use monkey-proof litter bins to reduce sources of food that attract monkeys.

Information Source: Agriculture, Fisheries and Conservation Department

## Visit to a hiking trail

### Objectives

1. To allow students to experience the beauty of nature and understand the negative impact of improper waste disposal on the natural environment
2. To cultivate environmental awareness among students and establish habits of waste reduction at source
3. To practice the behaviour of “Take Your Litter Home” and “Plastic-free” during hiking

### Activity Arrangements

#### Preparation

- The teacher notifies students and parents about the purpose and requirements of the activity through school announcements and provides a brief background to the students before the activity starts, including the length of the trail, location, precautions, activity process, weather conditions, etc.

#### Purpose

- To enhance students’ understanding on the negative impact of improper waste disposal to the natural environment and to increase students’ awareness of Plastic-Free Countryside during hiking

#### Requirements

- Students should observe the waste during hiking and identify their types, such as plastic waste, food packaging bags, tissues, etc.
- Students should identify the animals and plants commonly found in the country parks and learn about the importance of keeping the natural environment clean

#### Activity flow

- The teacher searches for a suitable trail for students and notifies them and their parents of the activity arrangements through announcements, providing background information, distance, and location of the path, etc.

#### Suggested Trail

- Selected Path: Tsiu Hang Nature Trail - Located in Sai Kung Tsiu Hang Special Area and a loop route in Hong Kong, starting from the Lions Nature Education Centre near Pak Sha Wan, with a flat route
- Path Design: Approximately 0.7 km long, it takes about half an hour to complete the journey
- Before the activity begins, the teacher should conduct a brief discussion with students, citing the purpose and focus of this activity, extending to what students need to observe along the hiking trail, and mentioning why everyone should participate in environmental protection and the impact of litter on the environment



## Visit to a hiking trail

### Activity Arrangements

- The teacher leads the students to a suitable hiking trail or other natural environments to get closer to nature. During the visit, the teacher should guide students to observe their surrounding environment and discuss with students about the ecological landscapes and animals (Refer to the “List of Common Ecological Landscapes and Species in Tsiu Hang Nature Trail”)
- The teacher should remind and instruct students to bring their own plastic bags for collecting small pieces of waste along the trail and emphasise the importance of “Take Your Litter Home”, teaching them to keep the environment clean
- At the end of the activity, the teacher gathers all students for a discussion about the environmental problems they encountered and the impact of waste on the ecological environment, as well as the responsibility to protect the environment by everyone

#### Conclusion

- The teacher asks students if they took away their own waste and reminds them of the importance of practicing “Reduce Waste at Source” in country parks

### Time

3 hours

### Materials

- Plastic bags (bring your own)
- List of Common Ecological Landscapes and Species in Tsiu Hang Nature Trail

### Remarks

1. Teacher should ensure students to wear appropriate outdoor outfits and shoes, and bring their own drinking water and snacks
2. Teachers and guardians must ensure that students follow safety rules and students must not leave designated areas without permission
3. After the activity, the teacher should ensure students to dispose of the waste in their bags into designated rubbish bins and put the clean recyclables in recycling bins
4. Students should respect the natural environment and should not damage nor take away anything
5. During the activity, students should remain quiet to avoid disturbing surrounding wild animals
6. Students should inform the teacher in advance if they have allergies to certain plants or organisms

## List of Common Ecological Landscapes and Species on Tsiu Hang Nature Trail

### Animals

Photo Source: Agriculture, Fisheries and Conservation Department



#### 1. Oriental garden lizard



**Reptile**



**Features:** Scales are very rough, with a row of crest-like protrusions on the back, light brown in colour with deep brown spots, and its body colour can change according to humidity and light intensity of surrounding environment



Mostly inhabit tropical and subtropical regions, commonly found in forests, hillside grass, graveyards, riverbanks, roadside, grass around residential areas or on tree trunks



In 2023, it was included in the “the List of Terrestrial Wildlife with Important Ecological, Scientific and Social Values”

Information Source: Little Woods Nature Education



Photo Source: Maggie Mang

#### 2. Giant Wood Spider / Banded Bird Spider



**Arthropod**



**Features:** Capable of catching insects, birds and bats, with a body size of about 5 cm and a leg span of 15 cm. Female spider is much larger than male spider, mainly in orange and black colour



Usually inhabits primary forests, secondary forests and gardens, also living in forests and mangroves



The largest wild spider in Hong Kong

Information Source: Little Woods Nature Education

# List of Common Ecological Landscapes and Species on Tsiu Hang Nature Trail

## Animals



Photo Source: Agriculture, Fisheries and Conservation Department

### 3. Common Tiger



**Arthropod**



**Features:** It belongs to the *Nymphalidae* family, adults are visible throughout the year, flying slowly and often feeding on flowers. The body, head, and thorax are dark brown with white spots and lines. The abdomen is orange, with small white lines and dots on the ventral and lateral sides



Mainly inhabits forest edges and open environments like grasslands, visible all year round

Information Source: Little Woods Nature Education



Photo Source: Agriculture, Fisheries and Conservation Department

### 4. Russet Percher



**Arthropod**



**Features:** The synthorax and abdomen are red, wings largely red or yellow-brown, body length about 35 to 40 mm, with different characteristics between males and females, notably the male's wing tips are circular transparent areas surrounded by red, while the female's wing tips are pale yellow-brown



Mainly inhabits marshes and ponds, such as wetland parks, under chicken trees, and Mui Wo. More common from March to November

Information Source: Little Woods Nature Education



# List of Common Ecological Landscapes and Species on Tsiu Hang Nature Trail

## Animals



Photo Source: Agriculture, Fisheries and Conservation Department

### 5. Little Egret



**Ardeidae**



**Features:** Common in Hong Kong, with all-white plumage, smaller size, characterised by a black bill, black feet, and yellow toes, relatively large in size, neck forming a "Z" shape, usually appears in scattered groups, mainly feeds on fish, crustaceans, and insects. Feeds primarily on various fishes and shrimps



Mainly found at the edges of wetlands and ponds

Information Source: Little Woods Nature Education



Photo Source: Maggie Mang

### 6. Six-spotted Zigzag Ladybird



**Arthropoda**



**Features:** Carnivorous, strong predatory ability and large appetite, with a wide diet mainly consisting of aphids, whiteflies, and scale insects, fast-moving, adult size is 4 to 7 mm, with a black pronotum, white at the front edge and side edges, horn-shaped shape with central black, elytra red with three transverse rows of black spots of varying lengths on each side



Mainly inhabits farmlands, forests, and weeds, prefers crawling on crops or occasionally flying among them

Information Source: Little Woods Nature Education



# List of Common Ecological Landscapes and Species on Tsiu Hang Nature Trail

## Major Plants



Photo Source: Agriculture, Fisheries and Conservation Department

### 1. Pteridophyta - Lamb of Tartary



**Dicksoniaceae**

**Vulnerable (VU), a national second-class protected wild plant**



**Features:** The source plant of the traditional medicinal herb "*Rhizoma Cibotii*" a large herbaceous species, 2-3 m tall, commonly used in folk medicine. It has a thick and short rhizome densely covered with golden-brown long hairs, a robust petiole up to 1.2 m long, and undergoes three rounds of pinnate division. The leaflets are alternate, dark green and glossy on the top, and grey-white underneath



Commonly found in mountainous areas, growing in gullies and damp places under forests



Protected under Hong Kong's Endangered Species Protection Ordinance, Cap. 586, and included in the "National Key Protected Wild Plant List" as a second-class protected category

Information Source: Hong Kong Herbarium



Photo Source: Agriculture, Fisheries and Conservation Department

### 2. Wax Tree



**Anacardiaceae**

**(common lacquer tree in Hong Kong)**



**Features:** A native plant of Hong Kong, either a shrub or small tree, 2-12 m tall. Branchlets stout, greyish white or greyish brown. Blade papery, elliptic-oblong or ovate-lanceolate. Turning red in autumn



Flowering period: March to May  
Fruiting period: September to November

Information Source: Hong Kong Herbarium

# List of Common Ecological Landscapes and Species on Tsiu Hang Nature Trail

## Major Plants



### 3. Ivy Tree



**Araliaceae**  
(A native species of Hong Kong)



**Features:** Leaves are palmate compound leaves, resembling the foot of a poultry (thus also known as duckfoot bark), flowering and fruiting periods are in autumn and winter. In seasons when nectar and fruits are scarce, Schefflera acts as an excellent source of nectar for wildlife, aiding their survival through winter, reaching up to 10 m, with grey-brown, smooth bark on the main trunk, a broad crown, thick branches, and spherical drupes that turn black when ripe



Flowering period: August to September  
Fruiting period: December to



A species commonly found in tropical and subtropical evergreen broad-leaved forests, a very common native plant

Information Source: Greening, Landscape & Tree Management Section (Development Bureau)



## Turning old clothes into environmental bags

### Objectives

1. To cultivate students' awareness of environmental protection, teach them how to upcycle old clothes, and help them understand the concept of resource recycling
2. To emphasise the importance of resource circulation
3. To enhance students' creative thinking and skills

### Activity Arrangements

#### Preparation

- The teacher notifies students and parents of the purpose and requirements of the activity through school announcements and suggests students to bring old clothes as the materials for the activity

#### Purpose

- To enhance students' understanding on upcycling through the activity, learn the importance of resource circulation, and encourage family members to practice waste reduction at the source and upcycling together

#### Requirements

- Parents should let their children bring 1 to 2 pieces of old clothes from home, ensuring the old clothes are clean and suitable for cutting. (If students forget to bring their own, the school can provide backup old clothes)
- Students must use the material from old clothes and avoid using brand new materials to prevent unnecessary waste
- The teacher should demonstrate the correct production processes, showing students how to measure, cut, and sew the bag, how to add decorations to the bag, and the steps that need to pay attention

#### Activity flow

- The teacher organises the "Turning old clothes into environmental bags" activity
- The teacher invites students to prepare a piece of old clothes (T-shirt) and suggests students to choose interesting patterns or colours
- At the end of the activity, the teacher should give students a chance to showcase their finished products and invite them to share their creative work and their feelings about turn waste into upcycling products

## Turning old clothes into environmental bags

### Upcycling steps (for reference)

1. Cut off both sleeves; the original shoulder part will become the handle of the environmental bag. After measuring the appropriate width (about 5 cm), start cutting
2. Cut a U-shape along the collar inward as the opening of the environmental bag
3. Cut fringes at the bottom of the old clothes with a width interval of about 1.5 cm, both the front and back parts need to be cut
4. Turn the old clothes inside out, start tying the fringes of both pieces of cloth with a flat knot, then tie another flat knot on each flat knot until the old clothes are tied into a semicircle shape, forming the bottom of the environmental bag
5. Finally, turn the old clothes back to the right side out, hiding all the flat knots inside the environmental bag

Reference image:



Source: zero zero Lifestyle Magazine

Activity  
Arrangements



## Turning old clothes into environmental bags

### Activity Arrangements

#### Conclusion

- The teacher asks students how to select and find waste and recyclables for upcycling and review the tools and methods used in the production process
- The teacher emphasizes to students on the ways and methods of reducing plastic waste
- The teacher reminds students to use homemade environmental bags in daily life instead of plastic bags, practise waste reduction, and spread the concept of upcycling to people around them, encouraging them to continue paying attention to environmental issues and taking action

### Time

1 -2 hours

### Materials

- Scissors, Old clothes and Ruler

### Remarks

1. The teacher must ensure students to handle scissors carefully to avoid accidents
2. The teacher should encourage students to add personalised designs in the production process, such as attaching their own designs or favourite pictures and patterns, using paint or markers to draw on old clothes, and tearing or cutting parts of the fabric to create a unique distressed effect

**Primary 2**

# **Supplementary Information**

## **1. Impacts of waste on the natural environment (Ocean)**

- All man-made items can become marine refuse.
- Marine refuse come from various land and offshore activities, with 60% to 80% of marine refuse comes from land, the major sources are improper waste disposal, trash disposed of in rivers and streams, and industrial leaks in the processes of production, processing, and transportation.
- Marine refuse affects the health of the marine ecosystems, such as entangling wild animals and reducing biodiversity.
- Most marine refuse are plastics, which can release toxic chemicals, threatening marine environments, the health of marine ecosystems, human health, food safety, etc., and exacerbating climate change.

## **2. Impacts of waste on the natural environment (Countryside)**

- About 3 000 tons of waste are collected annually in country parks.
- Most waste comes from recreational sites (such as hiking trails, barbecue sites and picnic areas).
- Waste scattered across countryside creates visual impacts, adversely affecting visitors' and hikers' experiences, causing disgust or discomfort.
- Waste leads to environmental hygiene problem, its odour attracts pests like mosquitoes, rats, etc.
- Wild animals may get accustomed to scavenging remnants of human litter, affecting their long-term foraging habits. Moreover, the scent from food packaging can attract wild animals, and their consumption of plastic bags and other waste directly threatens their survival.
- Lightweight waste (such as plastic bags, plastic bottles, etc.) can be blown by the wind to inaccessible places (such as hillsides, river valleys, ponds, coasts, etc.), that will pollute the environment.

### 3. Waste reduction at source and clean recycling

- Reduce waste at source: Avoid using disposable items, replace them with reusable / recyclable / recycled products, and minimise unnecessary packaging, opting for products with simpler packaging.
  - Purchase from shop naked stores
  - Bring your own environmental bottle when buying takeaway drinks
  - Bring reusable shopping bags when shopping
  - Select electronic receipts, monthly e-statements, etc.
  - Consider renting equipment and supplies (such as books) instead of buying brand new products
- Clean recycling: Separate the waste in advance before recycling to avoid recyclables mixing with other waste, which can improve the quality of recyclables and reduce the treatment procedures in the recycling process
  - For recycling paper, please check carefully and ensure it is free from tape, staples, and clips
  - For recycling of plastic bottles, please empty, rinse and clean the beverage plastic bottles before recycling
  - For recycling of metals, please empty, rinse and clean the metals
  - For recycling of beverage cartons, please remove the straw and plastic wrap, cut a corner, wash and then flatten the cartons

#### 4. Maintain a sense of responsibility for keeping the environment clean and adopt the habit of “Plastic-free” when hiking

- Practice the principle of “Leave No Trace” in the countryside
- Do not litter
- Do not damage any plants or disturb the soil
- Do not pollute water sources
- Do not destroy natural landscape
- Do not ride bicycles off designated mountain biking trails
- Do not harm wild animals and their habitats
- Do not feed wild animals-free
- Do not dig or cultivate soil in countryside
- Respect other visitors, and keep low noise levels
- Respect villagers, and do not damage private properties, crops, or livestock
- Take care of public properties
- Camp, barbecue, or make fires only at designated sites
- Use reusable meal boxes and tableware during outings to avoid using cling wrap to store food
- Responsibly manage your litter during hiking. Bring plastic bags or designated rubbish bags to collect waste, and ensure proper waste separation and disposal at appropriate locations
- Use refillable water bottles, and avoid buying bottled drinks
- Purchase higher quality hiking gear (such as backpacks) to extend product lifespan
- Consider repairing hiking gear if it has minor issues or abrasion, instead of replacing it immediately