



## Contents

### 

How to use this guidebook Why do we observe the Barn Swallow The merits of schools involved Why should schools be involved Structuring the lesson

### 

The aim of the survey Study area Study period Surveyors Survey method Important notices on the survey Summarize the result Work sheets [Survey form / Record Active nest / Drawing a swallow nests map / Summary sheet / Let's Talk about swallows and our environment / Swallow Observation Diary]

### 

### Swallow research activities around the world....

### 

### Information ......

Sticker "Give swallows a home" / Avian Flu awareness and swallow observation / Education for sustainable development / What is WBSJ? / References

## Introduction

## How to use this guidebook

This book suggests a swallow observation activity for primary school children and provides simple swallow survey methods to help young children learn how to observe nature in their environment. The surveys can be conducted in any country where swallows breed. Short walks in the local area around the school is probably enough to participate in the survey. The guidebook contains general information about swallows, follow-up activities, and useful resources in order to introduce swallow observation activities into your school curriculum. We hope that this guidebook will help you and your classes to take part in Barn Swallow observation and that this will spawn an interest in conservation work and benefit birds and nature around the globe.

## Why do we observe the Barn Swallow



#### **Our Tiny Neighbours**

Barn Swallow is one of the most familiar birds which has a close association with people for a long time. They travel through both hemispheres from northern breeding areas to southern wintering areas. Barn Swallow can be seen almost all over the world. Everyone even young children can identify our tiny neighbours.

#### Barn Swallows in trouble

In recent years, Barn Swallows tend to decline in some countries. There are several possible explanations. One of the likely reasons seems to be the changes of land use and farming practice. The use of pesticides may reduce the numbers of flying insects and make Barn Swallows' feeding habitat poorer. The other potential reason may be the change of the building materials and style could cause to reduce the number of nest sites.

#### Quick Environmental Health check in your neighbourhood

Barn Swallow is a good indicator of environmental quality. Let's observe the swallow in your region / country! Not only you can help to educate your students about how to observe nature, but also you can help provide vital and consistent swallow information which will help conservation NGO's take appropriate actions.

### The merits of schools involved





## Good educational materials, Easy to observe, Gain new skills for children!

Birds are an ideal educational resources for children and easy to be brought into a schools' curriculum. Children love wildlife and birds and they are the most familiar friend for them. "Barn Swallows" are a resource available to almost all schools, wherever they are located even in a city centre, in suburban, or in rural area.

Swallow nests are usually close enough to be observed with the naked eye. You do not need to use special equipment such as telescope or binoculars. We can expect children to gain new skills such as, conducting a survey, making comparisons, analyzing that information from their observation, and reaching conclusions based on observation, through the activities.

If your classes introduce swallow observation to the curriculum and keep the annual survey consistently during the same period of the year, it will become a valuable resource that can help us understand the patterns and shifts in the life of swallows.



### Why should schools be involved?

—Quote from Bird quest, RSPB

## Structuring the lesson

Environmental issues are an important theme in the curricular requirements of England, Wales, Scotland and Northern Ireland, and birds are an accessible, live resource for teaching these themes. For example, they are available for identification and classification activities in science and can provide examples of adaptation and feeding relationships that are accessible to children. Birds can provide exciting opportunities for real life mathematics. They can inspire reading and writing activities involving factual or fictional texts, design and technology activities setting up feeding and observation sites, and geography activities mapping school grounds and considering environmental changes. Bird can also contribute to personal and social education where children are asked to consider and care for the world around them.



### Learning Objectives

Observe Barn Swallows and their nests, discuss and debate swallow issues; realize the need of swallows and other living things; know what improves their habitat and what harms it.

1 Introduction (Background Information) Provide general swallow information for your region / country.

### 2 Undertake a general swallow survey

•Arrange the groups (2 to 3 children per group is the preferred size) to observe and record the swallows nests in the neighbourhood of your school.

- •Count the number of active nests and abandoned nests, record findings in the survey form, record and map the location of active nests, during swallow breeding season.
- •Interview local residents about their feelings regarding swallows, for example, whether they welcome swallows or not, and their reasons.

#### 3 Summary

- •Compare the result of each group and sum up the survey results, draw a nest distribution map.
- •Consider the differences between nest distribution and location.

#### 4 Extension / future learning

- •Talk about the essential needs of the swallows.
- •Discuss whether the swallows can get their essential needs from the surrounding environment or not.
- •Discuss what we can do for swallows and the environment.

#### Materials needed

Work sheets (Sheet 1 to 6), Pencils, Map (The vicinity of your school area)



## **Background Information about swallows**





### Barn Swallow (Hirundo rustica)

Barn Swallow is a sparrow-sized migratory bird, with a slender body and pointed wings and well extended forked tail. The color pattern is glossy blue on the body with a rusty orange forehead and throat.

Barn Swallows are often seen flying over water and hunting insects.

They feed in open habitats, meadows, ponds, paddy fields, rivers, and coastal waters.

Their nests are easy to spot under the eaves or inside of sheds, barns, bridges, and other manmade structures. They often use a beam or other artificial construction to support the nest.

### Distribution

Barn Swallows can be seen almost all over the world. It makes annual journey from its northern breeding grounds to its southern wintering grounds. Asian swallows breed in Russia, China, Korea, Japan and Taiwan. They migrate to South East Asia for wintering, in Southern parts of Taiwan, the Philippines, Indonesia, and Malaysia. European swallows spend the winter in Southern Africa.



**Distribution Map** Adapted from "Tanbo no – ikimonotachi Tsubame" and "The Barn Swallow"





Migration Route Adapted from "Tanbo no – ikimonotachi Tsubame"

### **Journey of the Swallow**

Migration is a miracle of bird life that remains complex with many unknown factors. Migration is a seasonal movement between a breeding area and another area where the climate and conditions offer a better life. Insect eaters such as swallows breed in the temperate north and move southward to winter in the tropics or subtropics. They migrate during the day, and roost at night in reed beds or other tall plants.

Migratory birds travel along certain flight paths, often following the winds. Exact mechanisms are still a mystery but many species also make use of the sun and stars.

There are many threats during their migration like predators along the migration routes, and the birds also face the most serious threat: loss of habitats. Important feeding and resting sites during the long journey have been long established key stopping points for the birds, but when they are destroyed, it has a devastating effect on migratory birds.



#### Swallows' life

Barn Swallows eat many different kinds of flying insects such as mosquitoes, horseflies,

bees, moths, butterflies, dragonflies. Watch the swallow nest and observe what kind of insects the swallows feed their chicks.

### How long does it takes before the chicks leave the nest?

After being incubated for 2 weeks, the eggs will hatch. Then, it takes another 3 weeks until the young have fledged and can leave the nest.

## What is the favorite food of Barn Swallows?

Raptors such as hawks and falcons attack small birds.

## What is the enemy of Barn Swallows?

Dragonfly

Crows, cats, snakes often attack swallow nests and eat eggs and chicks. There are many predators in the natural world. That's why Barn Swallows raise many chicks to increase the chances for one surviving to maturity.

### The Wetland is an essential habitat

Wetlands and rivers full of insects are an essential foraging site for Barn Swallows. Barn Swallows also take mud and straws from there for building their nests.



A Barn Swallow flying over water to catch the insects



A Barn Swallow taking mud from wetland

### Swallow family

5 species of the swallow family breed in Japan: the Barn Swallow, the House Martin, the Red-rumped Swallow, the Sand Martin, and the Pacific Swallow. There are about 80 species of Swallow family in the world.

### Red-rumped Swallow (Hirundo daurica)

Red-rumped Swallow breeds across southern Europe and Asia. Slightly larger than the Barn Swallow, they have pale or reddish rumps, face and neck collar, and a white breast with brownish spots. They build a mud nest in a domed shape with a tunnel entrance. They normally nest under cliff overhangs but often build under man-made structures such as bridges. \*The Striated Swallow (*Cecropis striolata*) is very similar to Red-rumped Swallow, breeding in Taiwan and Southeast Asia. They build the mud nests on bridges or on buildings similar to the Red-rumped Swallow.



### House Martin (Delichon dasypus)

Smaller than Barn Swallow, they have glossy blueblack upper parts and a pure white under part. They have a white rump band and slightly short forked tail. They often build mud nests below the eaves and other man-made structures, usually in large colonies.



## Conduct a swallow survey

OThe aim of the survey	To collect baseline information of Barn Swallow nests and their nest distribution in your region.				
<b>⊘</b> Study area	The vicinity of the primary school				
Study period	During the breeding season of the Barn Swallows (Between April and July)				
<b>⊕</b> Surveyors	Primary school children *from 4 to 6 graders (9 to 12 years old) are suitable for the survey.				
Survey method Survey sheet watch	<ol> <li>Walk through streets in neighbourhood of your school, check every building, observe and record the number of Barn Swallow nests (both active and abandoned) on the survey form (Sheet 1).</li> <li>When you find an active nest, observe the nesting site and record the specifics and note the observation details on the following form (Sheet 2), write down the location of nest on the map (Sheet 3).</li> <li>Interview the local residents about their views regarding Barn Swallows. For example, if they like having the swallows around or if they feel it's a nuisance, and the reasons.</li> <li>*If possible, ask the residents to put the sticker "Give swallows a home (page 22)" beside the door to let people know there is a swallow nest.</li> </ol>				
Olmportant notices on the survey	<ol> <li>Surveyors are divided into small groups (2-3 pupils) and go out to conduct their surveys during roughly the same time during the day.</li> <li>Keep a good distance from the nest. If you get too close or bother the swallows during breeding, they might leave the nest behind even if there are eggs.</li> <li>Criterion "Active nests" are; When you find adult swallows or chicks in the nest, or you see the adult swallows making the nest, the nests are active.</li> <li>Active nest</li> <li>Active nest</li> <li>Active nest</li> <li>Active nest</li> <li>Keep a good distance from the nest (ex Red-rumped Swallows, House</li> </ol>				
	<ul><li>Martins) in your region, count each species nests separately.</li><li><b>5</b> "Local residents" are people who live in the survey area.</li></ul>				



Summarize the result	<ul> <li>Back in the classroom after the field survey,</li> <li>1 Compare each group's result and nest maps to make clear the area where active and abandoned nests have been seen. Share the distribution of the nests, environmental Information, any other observations about swallows. Consider the surrounding environment and its relationship to the birds.</li> </ul>
	*While you compare each group's results, let's children draw a large map of the survey area to see the distribution and consider the relevance to surrounding environment. Present the result of each group's research, using the completed map, or poster to share swallow information to the class.
	<b>2</b> Gather the survey form from each group and sum up the number of swallow nests, following the summary sheet. (Sheet 4)
	<b>3</b> Compare the number of nests regarding the location and consider which type of building is good for swallow nesting.
	4 Share with other groups how local residents feel about the swallows.
	<ul> <li>5 Talk about swallows and the environment following the sheet. (Sheet 5)</li> <li>• Talk about daily life for people and the things that are essential for us.</li> <li>• Talk about the foods which swallows feed to their chicks, and the materials of swallow nests and where swallows take them from.</li> <li>• Talk about the essential needs of swallows, food, water, nest site, and consider how they protect themselves from dangers.</li> <li>• Consider whether swallows can get their essential needs as mentioned above from the surrounding environment or not.</li> <li>• Discuss what we can do for swallows and the environment.</li> </ul>
	<ul> <li>6 Keep observations</li> <li>Swallows raise two or three broods from spring to summer.</li> <li>Encourage children to keep watching and note the observation record.</li> <li>Have one group watch one nest to keep up the children's attention.</li> <li>Observe the chicks and note their growing on the sheet. (Sheet 6)</li> <li>Count and record the number of fledged chicks if possible.</li> </ul>
The second second	*The number of chicks leaving the nest is useful to have reproduction data. When swallow experience deteriorated environmental conditions, they tend to reduce the number of eggs.
	7 Continue the survey Continue the observations every year during the same period, so that you can translate the results in a graphic form to see secular change of the number of swallow nests.



Sheet 1 Survey Form Use 1 sheet for 1 group					
Name of School		Grade	Nam	es of suveyors	
Date of survey	Date	Time Weather condition		Weather condition	
Survey site [Town / District / Country]					

### Ocount the Barn Swallows' nest you found, write down the number.

When you find swallows or chicks in the nest, or if you see the swallows making the nest, the nests are active.



Abandoned	
nest	
and a constant	

\*If you found other swallow familys'nest, count separately.

## **When you asked the residents about swallows, how many of them welcome swallows?**

Write down the number of people whom you heard from during the survey.

Welcome	
swallows	

Not
welcome
swallows

Why people "welcome the swallows"?

Why people "do not welcome the swallows"?

### **O**This question is for surveyors. Do you welcome swallows in your home?

Ask your group members and write down the number.

Yes

No
----

Why do you welcome the swallows?

Why do you Not welcome the swallows?

### Sheet <sup>2</sup> Record Active Nest

When you find an **active** nest, write down the location on a map and record the following sheet

Date	Weather	Names
Survey Site		
Barn Swallow	Others [	]

Oraw the pictures of nest (or take photo)	Nest site (as specific as possible)
	What materials are the nest made from?
Materials of the building walls to which the new Concrete Wood Tile Others (	est is attached
Surrounding Environment     Residents Shopping arcade Farmland	Others ( )
<ul> <li>What were the parents doing?</li> <li>Building the nest</li> <li>Sitting in the nest (incubation)</li> <li>Did not return during the observation</li> <li>Others (</li> </ul>	Feeding chicks

Observe the chicks? □ Yes: The number of chicks ( ) □ No
Observe the chicks and check the box.
□ Downy coats □ Downy coats turn into feathers
□ Fledged (Flight feathers and tail grow) □ Leaving the nest

)

□ Others (

Write down anything else you noticed.

## Sheet <sup>(3)</sup> Drawing a swallow nests map!

Draw the swallow nests you found, write down information of surrounding environment.

### Sheet Summary sheet

Use 1 sheet for 1 class (or school)

Name of School / country / address		E-mail	
		Tel & Fax	
		Name	
The number of surveyors			Weather condition

### **1** Total number of Barn Swallows' nests

Active nest	Abandoned nest	Things to Note

Total number of other swallow familys' nests

Species	Active nest	Abandoned nest

### **O**Sum up the total number regarding to the following questions.

When you asked the residents about swallows, how many of them welcome swallows?

Welcome swallows		Not welcome swallows		
---------------------	--	----------------------------	--	--

Do you welcome swallows in your home?

Yes

No

**O**Where have active nests been seen?

**O**What kind of building material can you see swallows nesting on?

## **O**Did you find any relation between the environment and nest distribution?

Please send your survey result (summary sheet, nest distribution map, observation details, photos) to **Wild Bird Society of Japan** to share with us. Address: 3-9-23 Maruwa-Bldg Nishi-Gotanda Shinagawa-ku Tokyo Japan 141-0031 FAX: +81-3-5436-2635 E-mail: hogo@wbsj.org

### Sheet G Let's Talk about swallows and our environn

What do we need for our daily life? — What are the essential things for us?

What are the essential needs of a swallow?

Can a swallows obtain the essential needs mentioned above in the surrounding environment?

What can we do for swallows and the environment?

## Sheet Swallow Observation Diary

Date :	Weather :	Name :	
Survey site			
	Barn Swallow	Others (	)
Nest site			

O Draw the picture of nest (or take photo)
<ul> <li>What were the parents doing?</li> <li>Building the nest</li> <li>Sitting in the nest (incubation)</li> <li>Feeding chicks</li> <li>Did not return during the observation</li> <li>Others (</li> </ul>
<b>③Did you find the chicks?</b> □ Yes: The number of chicks ( ) □ No
Observe the chicks and check the box.
<ul> <li>Fledged (Flight feathers and tail grow)</li> <li>Leaving the nest</li> <li>Others (</li> </ul>
<b>O</b> Did you find any changes comparing the prior observation?

### Sheet <sup>2</sup> Record Active Nest

When you find an **active** nest, write down the location on a map and record the following sheet

Date XXXX	Weather CLoudy	Names Hiroko	Okamoto
Survey Site XXX city, X	XX prefecture, Japa	in	
V Barn Swallow	Others [	]	

### **O** Draw the pictures of nest (or take photo)



Nest site (as specific as possible)

Inside the apartment building, beside the steps from ground floor to 1st floor.

What materials are the nest made from? mud, dead grass

② Materials of the building walls to which the nest is attached ☑ Concrete □ Wood □ Tile □ Others ( )
<ul> <li>Osurrounding Environment</li> <li>✓ Residents □ Shopping arcade □ Farmland □ Others ( )</li> </ul>
<ul> <li>♦ What were the parents doing?</li> <li>□ Building the nest □ Sitting in the nest (incubation) I Feeding chicks</li> <li>□ Did not return during the observation □ Others ( )</li> </ul>
<ul> <li>Observe the chicks? ✓ Yes: The number of chicks ( 4 ) □ No</li> <li>Observe the chicks and check the box.</li> <li>□ Downy coats □ Downy coats turn into feathers</li> <li>□ Fledged (Flight feathers and tail grow) □ Leaving the nest</li> <li>□ Others ( )</li> </ul>
Write down anything else you noticed.

Parents were feeding chicks frequently.

### Sheet <sup>(3)</sup> Drawing a swallow nests map!

Draw the swallow nests you found, write down information of surrounding environment.



## Follow-up for extension / future learning

## What we can do for swallows and environment

### Encouraging Swallows



When you discuss what we can do for swallows and the environment in your class, ask the children to take action for the environment even regarding very small changes in their daily life.

For example, take care of wildlife in the school garden, and ask their parents to leave windows open for swallows nesting, tell their friends to welcome swallows.

Encourage children to keep observing the swallows. They might find some improvement to the site resources (to create a biotope, manage the water to protect the eco-system, setting the platform for support swallow nests). Let's try and monitor the effects.

Swallows prefer the buildings which provide eaves, dark ledges and nooks for nesting.

Swallows can enter a building through a very small opening. To encourage them to nest in a garage or outhouse,

- Make a small opening under the garage or barn eaves; leave a window or a door open for the swallows to get access.
- Make a platform to support the nest.
- Fix the nest platform where you would like them to nest, high in the building, out of the reach of cats, in a spot where droppings are not a problem\*.
- \*To prevent the floor from getting dirty from droppings, hang an open umbrella under the nest.



When the nest has broken...

Occasionally a swallow nest may fall down and break. Make a replacement nest by using shallow cup (ex. noodles cup, cut in half) in place of the old nest with the remains of the broken nest inside and relocate the nestlings.

After the end of their breeding season, the large numbers of swallows flock in reed beds along a river for roosting.

In late summer, about 30 minutes before the sun sets, we can see thousands of swallows crossing over the sky and fly into the reeds.

Search for the swallow roosting areas in your region and observe the spectacle with children.

Not long afterwards, they start long journeys southward.



If you need consultation, contact to the local conservation NGO. There are 120 Birdlife partners around the world. Find them on this website. Birdlife Partners: http://www.birdlife.org/worldwide/partnership/birdlife-partners

### Swallow Roost Observation

# Swallow research activities around the world



According to several survey records, Barn Swallows tend to decline in Japan. In response to these results, the Wild Bird Society of Japan (WBSJ) started the Internet Swallow breeding survey in 2012. Everyone can join this survey just to observe the swallow nests and send the findings to the website. Regarding the survey, swallows were often affected by crow attack and nest destruction by human and failed to raise their chicks. We found that the number of fledged chicks in urban areas is lower than in the country side. We also found that swallows raise more chicks in the site neighbouring green areas, even in the city centre. The green areas and wetland habitats such as parks, farmlands in the city must be essential for swallows foraging. WBSJ keeps on monitoring Barn Swallows and express the conservation message for protection of these habitats to our audience by conducting nature observation activities in the field, and developing teaching materials to expand our education work.





Since 1972 the Ishikawa Prefecture started Barn Swallow survey with schools which has continued over 40 years.

The survey consists of observing Barn swallows in the neighbourhood of the schools, counting and recording the number of swallows and nests in the breeding periods of the species in the area. The survey also requires pupils to interview local residents, so it serves as awareness building for residents and also pupils to get to know more about swallows and environments in their area. Every year, the primary school 6th graders (11 to 12 years old) of Ishikawa prefecture, (approx. 200 schools, 13000 children) participated in the survey. Looking back on 40 years of survey data in Ishikawa, we can see that there has been a one-third decrease in the number of adult swallow. There has also been decreased about 50 percent in the number in-use nests since 1989. From the survey result, we can speculate that there is direct correlation between the decrease of rice paddies and the decrease of adult swallows. The area of rice paddies has caused the decrease of insect-spawning grounds, which result in the decrease the food availability for swallows.



\*40years swallow survey result in Ishikawa :

http://www.pref.ishikawa.jp/ seikatu/kouryu/undou2PFD/ tubame/english\_survey.pdf



## in Hong Kong

Resear

Swift and Swallow Research Group of Hong Kong Bird Watching Society was established in 2003 with the aim of investigating the ecology of Barn Swallows and House Swifts in Hong Kong and promoting their conservation.

In terms of research, the group investigates the number of Barn Swallow's and House Swift's nests and chicks as well as the situation of the nests regularly and published several research reports.

Workshops have been conducted for new volunteers every year in order to involve them in the nest surveys of Barn Swallow and House Swift.

They are also responsible for a wide range of work for the conservation of swallows besides conducting survey and research. For example, they provide the most updated information and correct concept of avian flu using the mass media to the general public so that swallow nests will not be removed due to misunderstanding. They also deal with the inquiries related to the care of the swallow chicks falling down from nests.

Regarding to the survey, swallow nests are often destroyed by reconstruction and building renovations in Hong Kong. To protect the swallow nests, they communicate with the building contractors to keep the space open for swallows to get access to their nests during the construction period. They also make presentations to the government to protect swallow nests attached to government buildings.

\*Swallow survey report in Hong Kong: http://www.hkbws.org.hk/web/eng/swift\_swallow\_report\_eng.html

Spring Alive is an educational project of BirdLife International to encourage children's interest in nature and the conservation of migratory birds, to get them to take action for birds and other wildlife as well as to participate in events organized by BirdLife Partners.

By posting their observations of Barn Swallow, White Stork, Common Cuckoo, Common Swift, and European Bee-eater on the www.springalive.net website, children from Europe, Central Asia and Africa create a real-time map of the incredible journeys these birds take every year.

Spring Alive brings together children, their teachers and families to record their first sightings of the above mentioned, easily recognized migratory birds. Each year, spring begins with a few scattered early sightings in warm countries, which are displayed as patches of pale orange on the Spring Alive map, as more sightings flood in, the colour spreads and deepens, until all the countries where these birds breed are a rich, glowing orange.

Creating the map is one of the core activities. But Spring Alive involves lots more indoor and outdoor events, to engage children, schools and the wider community in the conservation of migratory birds, and to encourage them to \_\_\_\_\_\_ support their national BirdLife Partners.

19

Spring Alive began in 2006 as a European project, which soon spread to Central Asia. In 2010, Spring Alive was extended to Africa, where from September onwards children look out for the return of the same five species from their breeding grounds in Europe and Asia.

Spring Alive is organized by OTOP, the BirdLife Partner in Poland, on behalf of the BirdLife Partnership.



Swallow

### in **Europe**



## Green Holiday in Taiwan

Guandu Keelung

Taipei

Gaomei Taichung

### **1st** 13th-16th Sept. 2014

## International conservation volunteer tour for swallows and wetlands

Green Holiday is quite a new concept for tourism developed by Wild Bird Society of Japan, which entails practical conservation work, lectures set up with NGOs and the local people. The project started from 2009 at 3 sanctuaries of WBSJ, expanded- international in 2014 as Green Holiday in Taiwan.

The main focus is Barn Swallows and wetland habitats, a common migratory bird in both Taiwan and Japan.

The 1st Green Holiday in Taiwan was held from 13th to 16th Sept 2014 at Guandu Nature Park (Taipei) and Chuhong Lake (Keelung). Japanese and Taiwanese volunteers have joined and cleaned up the ponds to protect foraging site for swallows.

The 2nd and 3rd Green Holiday in Taiwan, we moved our destination from Taipei to Taichung. We worked for the protection of wetland ecosystem in Gaomei wetland, Important Bird and Biodiversity Area in Taiwan. The participants have performed a high efficiency by clearing invasive plants "Smooth Grass (*Spartina alterniflora*)" spreading rapidly into Gaomei Wetland with local volunteers and university students.

We also visited 2 local schools, Gaomei Elementary School and Kuo Kuang Elementary School, which started swallow observation with students in spring 2015.

We observed swallow breeding on the street and discussed about swallow and our precious nature with lovely students.

Removing water lettuce at Chuhong Lake

> Swallow roost watch at Wugu wetland



**Pum Soontornkit** A volunteer from Japan

International Green Holiday brought together people of different ages, sexes, occupations and nations. It gave all of us chances to get our hands dirty and sweat from hard work, and by feeling, and touching our mother natures. It made us feel and realize why we need to save and preserve our environment and ecology together. The trip also helped us to appreciate the importance of natures and our ecology system naturally.

With many activities from field works, exchanges ideas and knowledges with local participants, we got so many chances to see many wild birds, dragonflies, butterflies and most impressively barn swallow roost. By working and seeing, we knew our work to save our natures and ecology were in fact, not for anyone else, but for ourselves, our future generations and our future environments. I have gained so much from this trip, not just realized the importance of natures, but gained the priceless

experience and friendship among the participants both Japanese and Taiwanese.

Work to save our environment can't be done just by one country, one person, and one time.

And we don't need to be physically strong to get involved in such program. The love of nature is by heart and passion in each individual.

### Local voice



#### **Kevin Wu** Wild Bird Association of Taiwan

Though it's only few days, we can feel their heart-felt joy for eco conservation. I was also glad to see them counting Barn Swallow and talking with students happily which increased the friendship between two countries.

Swallow nests observation with school children

#### **David Wu** teacher, Kuo Kuang Elementary School

We watched Barn Swallow, the closest creature to people. We recorded their nesting, mating, hatching, breeding and training the chicks flying for independence. And some of them bred again for the second time. The process has fulfilled the teachers' as well as students' hearts of Kuo Kuang Elementary School. We also felt touched by the happy volunteers of Wild Bird Society of Japan came afar for conserving the habitat of Barn Swallows which inspired us the concept of conservation has no boundary and there is only one planet.

Thank these Japanese friends' kind sharing and instruction. We believe it's fate that connects us.



For the future

2nd

2015

Now the concept of Green Holiday shared with Taiwanese volunteers and locally-based Green Holiday in Taiwan has started by Wild Bird Association of Taiwan and Ecotourism Taiwan at Gaomei Wetland, for the protection of wetland by removing Smooth Grass (Spartina alterniflora) and creating spaces for local plants. Many young people including university students are joining this activity and learning nature conservation. Regarding to swallow observation by school children, the worksheets in this

guidebook were translated into Chinese and used by Elementary Schools in Taiwan. It will be shared with conservation NGOs in mainland China for the use of swallow observation with school children in China.

## Information



Sticker "Give swallows a home" When you are conducting a swallow survey with children, let children ask the residents to put the stickers on or beside the door to let people know there is a swallow nest.

Swallo



Original picture was drawn by a student of Shen mei Elementary School.

When you find a swallow nest on the street...



Sticker

"Give Swallows a Home"

Let's ask the residents to put the swallow sticker on their house.

Avian Flu awareness and swallow observation There are numerous strains of the avian flu virus, but the risk of contracting the disease from wild bird is very low.

Almost all of the human cases of infection have been due to extremely close contact with infected domestic poultry.

It is also not really possible that returning swallows have been infected by avian flu.

If Barn swallows are infected by avian flu in their wintering site or migration route, they will not be able to survive the long journey of thousands of miles. The risk of a nesting swallow in your house being infected is very small, and the risk of receiving the virus is also extremely small.

The fear of avian flu drives some people to keep their distance from wild birds, some people even destroy nests and drive birds away, but such action will not provide protection from disease.

As a precaution you should avoid touching sick or dead birds, but it is extremely unlikely that avian flu could be transmitted to people by just observing swallows.



—Quote from Birds quest, RSPB

**Over** the next few years you will hear less about environmental education and much more about education for sustainable development. What is the difference?

Environmental education is essentially education about the environment with an implicit hope that children will develop the skills and attitudes that will enable to make informed decisions about environmental issues. Education for sustainable development contains all of the environment education, but adds much more. It starts from the aim of humanity altering its behavior to achieve sustainable living. This means living in a way that does not deplete non-renewable resources that will be needed by future generations. It acknowledges that people are both the problem and the solution to most environmental problems, and recognizes that political, economic and cultural behavior have a big part to play in sustainable living.

### What is WBSJ

Wild Bird Society of Japan (WBSJ) is the charity organization that takes action for wild birds and the environment. It has joined a global partnership called Birdlife International.

We are the largest conservation NGO in Japan, supported by over 45000 members and donors.

WBSJ was established in 1934 for the purpose of conserving birds and their habitats to share the joy of nature with people.

Our aim is to continue to provide a rich natural environment to future generations by conserving the habitats for birds and our precious biodiversity. We secure a healthy environment for birds by managing nature reserves and sanctuaries, conduct a national survey on wild birds, promote bird watching as a healthy and fulfilling hobby, and educate people to understand nature conservation. http://www.wbsj.org

#### References

- Bird Quest (The Royal Society for the Protection of Birds, RSPB)
- Primary PE (RSPB)
- Information swallows-summer favourites (RSPB)
- Survey of House Swift and Barn swallow nests in Hong Kong 2006 Report (Hong Kong Bird Watching Society)
- 40years swallow survey result in Ishikawa (Ishikawa Prefecture Healthy Citizens Campaign Promotion Headquarters, 2011) The survey method in this guidebook is inspired by swallow survey in Ishikawa
- Tanbo no-Ikimonotachi Tsubame (Life in the paddy field —Barn Swallow—, Kazuo Koyama, Nobutoshi Sato, Hitoshi Watanabe, published by Nobunkyo, Tokyo 2012)
- The Barn Swallow (Angela Turner, T&AD Poyser, London 2006)

#### **Barn Swallows Observation guide**

Supported by the Toyota Environmental Activities Grant Programme, Toyota Motor Corporation.

Published by Wild Bird Society of Japan, 3-9-23 Maruwa-Bldg Nishi-Gotanda Shinagawa-ku Tokyo Japan 141-0031

Copyright: This resource may be copied for educational use only.

It may not be copied for any other purposes without prior written permission by WBSJ.

Written by: Hiroko Okamoto (Wild Bird Society of Japan)

Co-Written by: Victor Yu (Ecotourism Taiwan)

Illustrations by: Minori Kataoka (Wild Bird Society of Japan)

Photo by: Cezary Korkosz (p19), Yuzo Nakagawa (p18), Kamila Nienaltowska (p19), Nobutoshi Sato (p17 right), Itsuo Tabata (p6),

Sze Wong (p19), David Wu (p4,6)

Designed by: Manami Yasuda

Supervised by: Tsutomu SUZUKI

Special thanks to: Per Blomberg, Barrie Cooper, Vivian Fu (Hong Kong Birdwatching Society), Karolina Kalinowska (International Spring Alive Manager), Volker Mauerhofer, Takako Sato, Anders Selmer, Masami Shimozawa (Ishikawa Prefecture Healthy Citizens Campaign Promotion Headquarters), Lo Wai Yan (Hong Kong Birdwatching Society), Zhi-Wei Wang (Gaomei Elementary School), Meijung Yeh (Kuo Kuang Elementary School), Shen-Mei Elementary School, Wild Bird Society of Keelung

## Calling all teachers/education leaders

Please take a fe below.	ew minutes to help us to help you by filling the evaluation form
Did you find thi	is guide book useful? Yes No
Did you do Bar	n Swallow observation at your school? Yes No
With which age	e group did you do?(     )
How many child	dren participated the survey?(
How could the improved?	activities, worksheets, or information in this guidebook be
-	your comments or any feedback regarding to swallow tivity in your school.
observation de Society of Japa	e survey result (the number of nests, nest distribution map, tails, comments from the children, photos or videos) to Wild Bird an. We are happy to share the swallow information with you.
*Country:	
*Name:	
*Job title:	
*School / Organi	zation name:
*Address:	
*Telephone:	
*E-mail:	
We review these detail also ask you to take pa please tick here	to hold details about you to send you further information about birds and nature conservation. ils to help us understand more about you and to contact you about our campaign work. We may art in confidential market research. If you prefer us not to use your details in any of these ways, ell nor tell your details to anyone else.

Please return your form to: Wild Bird Society of Japan, 3-9-23 Maruwa-Bldg Nishi-Gotanda Shinagawa-ku Tokyo Japan 141-0031 FAX: +81-3-5436-2635 E-mail: hogo@wbsj.org











