# Guide to Running a BioBlitz for Hong Kong Schools









# Acknowledgements

*Guide to Running a BioBlitz for Hong Kong Schools* is based on *Guide to Running a BioBlitz 2.0*, a UK publication first written in 2010. This guide is produced with kind permission from the following authors and we appreciate their support to bring BioBlitz to Hong Kong.

Jack Sewell, Marine Biological Association, UK Lucy Robinson & John Tweddle, Natural History Museum, UK Matt Postles, Bristol Natural History Consortium, UK Sarah West, Stockholm Environment Institute (York), UK Open Air Laboratories Project, UK

Written and adapted by Shaun Martin and Jenna Ho Marris, Tai Tam Tuk Foundation, HK and created to support Hong Kong BioBlitz 2017 funded by Subventions for Biodiversity Education, Agriculture, Fisheries and Conservation Department (AFCD), Government of Hong Kong SAR.

Produced by: Rachel Wilson, Jacaranda Publishing Services Designed by: Junko Takahashi Illustrated by: Elsie Tam

The following have generously given their time, effort and resources to this guide:

Ho Koon Nature Education cum Astronomical Centre Department of Chemistry, City University of Hong Kong Hong Kong Bird Watching Society Outdoor Wildlife Learning, Hong Kong Swire Institute of Marine Science, The University of Hong Kong School of Biological Sciences, The University of Hong Kong The many teachers, educators and nature experts who have kindly provided input and advice

We also acknowledge all BioBlitz organisers, participants, volunteers and experts who have taken part in events across Hong Kong to increase public awareness of our amazing biodiversity.

We are grateful to the following photographers for their contribution this guide: Louis Man, Man Chi Lok, Louise Ng, Ann To and staff of Tai Tam Tuk Foundation.

Photograph of students on campus, p. 13 © TAB2@CityU, City University of Hong Kong All other photographs © Tai Tam Tuk Foundation

© Tai Tam Tuk Foundation 2017

All rights reserved; no part of this publication can be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of Tai Tam Tuk Foundation.

Cover photograph: Mangrove Shield Bugs photographed by Ann To



# About this guide

This guide is designed for school teachers and educators in Hong Kong to engage their students in nature appreciation and outdoor learning through a BioBlitz. It offers a framework that can be easily adapted to suit curriculum objectives of any school and can accommodate all levels of students from kindergarten through to university.

This guide walks you through the practicalities of organising a BioBlitz. It demonstrates how a BioBlitz can be mapped to core subject areas, and it provides useful links to online resources for identifying and recording your findings. Most of all, it aims to equip you with the confidence and enthusiasm to venture outdoors with your students and record the diverse wildlife of urban and rural Hong Kong.

# Contents 🛛 🛹 🥕



Policy on biodiversity education	Page 6
What is a BioBlitz?	Page 7
Curriculum links and learning experiences	Page 8
When and where	Page 13
Planning checklist	Page 14
Experts, volunteers and student participants	Page 16
Risk assessment and safety	Page 17
Basecamp	Page 18
Data collection, data use and information sharing	Page 21
Evaluation and feedback	Page 22
Resources	Page 23

4

No one will protect what they don't care for, and no one will care for what they have never experienced. "

Sir David Attenborough

Students at Basecamp studying a specimen

"Engaging our children in appreciating the beauty and importance of nature is essential for sustaining our conservation efforts."

> – Biodiversity Strategy and Action Plan, Government of Hong Kong SAR

# Policy on <sup>-Bi</sup> biodiversity education

The United Nations Convention on Biological Diversity (CBD), signed by almost 200 countries and territories, is the global framework to conserve biological diversity and ensure it is sustainably used and fairly shared among all. Acting on reports that we are losing species at an alarming rate, CBD signatories agreed ambitious targets to stop global biodiversity loss by 2020.

The CBD was extended to Hong Kong in 2011 and in December 2016, the Hong Kong Government released the first **Biodiversity Strategy and Action Plan (BSAP)** through the Environment Bureau. This policy outlines a five-year plan to "step up biodiversity conservation and support sustainable development, contribute to global efforts on biodiversity conservation and contribute to China's National BSAP". The BSAP focusses on four main areas:

- Area I: Enhancing Conservation Measures
- Area 2: Mainstreaming Biodiversity
- Area 3: Improving Our Knowledge
- Area 4: Promoting Community Involvement

The Education Sector is represented by Area 4 with these aims:

Action 21: Promote Biodiversity in Education

- 21a Incorporate the concept of biodiversity in the school curriculum
- 21b Engage NGOs to provide capacity building for teachers on biodiversity
- 21c Enhance the resources for early childhood education on nature conservation

AFCD further champions the need for Capacity Building for Teachers on Biodiversity Education. It defines this as:

- Produce teaching resources to support teachers in conducting outdoor field sessions on nature appreciation
- Organise training courses on biodiversity related subjects
- Enhance existing teaching resources for teachers

While biodiversity is already incorporated in science subjects in local and international school curricula, BSAP emphasises the need to explore ways to "continuously incorporate the concept of biodiversity" and nature conservation into kindergarten, primary and secondary curricula. It encourages educators to be more dynamic and ambitious in the ways they teach biodiversity. A BioBlitz is a fantastic platform for doing just this!



# What is a BioBlitz?

Bio means life and Blitz means to do something quickly and intensively. Together they make "BioBlitz", a collaborative race against the clock to discover as many species of plants, animals and fungi as possible, within a set location, over a defined time period.

A BioBlitz can be carried out anywhere there is wildlife, including urban and rural areas, inland or coastal locations, and upland and lowland settings. It is a very flexible concept: it is up to you how many people to invite, how big an area to explore and what activities to include.

From an educational perspective, a BioBlitz allows you to combine curriculum requirements with experiential learning, within school grounds or close by, and strengthens the concept of civic responsibilities. For students, it is an opportunity to learn in an outdoor setting, to apply classroom knowledge and to develop practical skills.

> "The library of life is on fire. We must extinguish this fire before even more treasures, yet to be discovered, are lost beyond recovery."



#### Citizen Science

A BioBlitz is an example of citizen science. This is the collection and analysis of data about the natural world by the public. It has been going on for hundreds of years, with records of grape harvests, bird counts, and cherry blossom seasons as early examples.

Nowadays, by outsourcing to the public, scientists can collect large quantities of data that they could never do otherwise. With better technology, such as smartphone apps with integrated GPS and crowdsourcing functions, this data is becoming more and more credible, and can be made usable for scientific research and informing government policy. It's time for Hong Kong schools to join in!

– Dr Gro Harlem Brundtland

# Curriculum links and learning experiences

Biodiversity education is incorporated into the Hong Kong School Curriculum and the International Baccalaureate.

In the Hong Kong School Curriculum, biodiversity, nature conservation and sustainable use of resources are addressed in different subjects including biology, geography, moral and civic education, liberal studies. There are also many applications in art, English and Chinese language and mathematics. As a start, the table opposite maps out links from science and general studies.

This curriculum also recommends outdoor education or visiting country parks to help teachers further solidify each subject area in the table. A BioBlitz activity is directly related to these areas as it allows your students to see biodiversity and nature first-hand and to practice sampling techniques.



BioBlitzes and biodiversity education can be incorporated into STEM, STEAM or STREAM education or Other Learning Experiences (OLE). A 2016 Education Bureau report on STEM education recommends strengthening partnerships with key community groups. For BioBlitzes, this would include outreach to the various organisations and institutions that can provide expertise.



# **Direct links to the Hong Kong School Curriculum**

Subject (Last Date Amended)	Age Group	Strand /Unit	Core Elements /Sub-Units /Learning Objectives that can be Adapted with BioBlitz Activities		
Early Childhood Education (2006)	Pre-Primary	2.5.4: Science & Technology	Develop curiosity about the environment		
			Gain interest in exploring the physical world		
			Master basic exploration techniques such as observation, questioning and developing assumptions		
			Care for animals and plants, and develop a deep concern for environmental protection		
			Understand the relationship between humans and nature		
General Studies (2011)	PI-P3	2: People &	The existence of a variety of living things, their observable characteristics and life processes		
	P4-P6	Environment	Simple classification of different varieties of living things		
	PI-P3	3: Science & Technology in Everyday Life	Methods of observation (e.g., using sense organs and equipment)		
			Methods of recording observation results (e.g., photos and sketches)		
			The wonder of nature		
	P4-P6		Planning and conducting simple investigations		
Science	SI-S3	3: Looking at Living Things	3:1 Living things		
Science (2017)			3:2 Grouping of living things		
			3:3 Biodiversity		
Biology (2015)		2: Genetics & Evolution (Compulsory)	2c Biodiversity and evolution		
		3: Organisms & Environment	3f Ecosystems		
		6: Applied Ecology (Elective)	6c Conservation		
Integrated Science (2015)	S4-S6	6: Balance in Nature (Compulsory)	6:4 Disturbances and restoration		
Combined Science (2015)		Bio2: Genetics & Evolution	2c Biodiversity and evolution		
		Bio3: Organisms & Environment	3f Ecosystems		

Direct	links	to	the	IB	Curriculum

Subject (Last Date Amended)	Age Group	Strand /Unit	Core Elements /Sub-Units that can be Adapted with BioBlitz Activities
Environmental		I: Foundations of environmental systems & societies	1:4 Sustainability
		2: Ecosystems & Ecology	2:4 Biomes, zonation and succession
Societies	Diploma Programme		3:I An introduction to biodiversity
(2017) Biology (2016)		3: Biodiversity & Conservation	3:2 Origins of biodiversity
			3:3 Threats to biodiversity
			3:4 Conservation of biodiversity
		4: Ecology (Core)	4:I Species, communities and ecosystems
		5: Evolution & Biodiversity (Core)	5:3 Classification of biodiversity
		Option C: Ecology & Conservation	C.1 Species and communities
			C.2 Communities and ecosystems
			C.4 Conservation of biodiversity

A BioBlitz is an example of practical work in the field that can develop your students' observational, analytical, communication and recording skills, and it can link evidence and results to scientific knowledge and apply to global perspectives. These skills are crucial to the learning outcomes of the IB.

IB Primary Years Programme (PYP) and Middle Years Programme (MYP) science courses can depend on the scheme of work created by individual science departments and be based on local resources. A BioBlitz can be included in, or act as a culmination of, many units of inquiry that are based on life science, environmental science and experimental science.





## STUDENT DEVELOPMENT

Aside from meeting curriculum objectives, a BioBlitz can help students develop positive attitudes towards nature and shape their value judgements towards it.

With the help of smart technology, your students can be inspired to be more involved in similar citizen science projects and replicate many methods that a Bioblitz uses, such as data collection, data recording and data upload.

Other outcomes may include:

- Enjoyment, inspiration and creativity: Students have fun and are inspired to enjoy the natural world and contribute to its conservation
- Knowledge and understanding: Students become familiar with local wildlife and habitats and gain first-hand experience of how biological recording works
- **Skills development**: Students develop wildlife identification and biological recording skills alongside communication and teaching skills
- Attitudes and values: Students are more aware of wildlife and conservation in their local community
- Behaviour and progression: Students are encouraged to continue to record their wildlife sightings after the event

## **CASE STUDY**

#### ESF Secondary School BioBlitz 2017

We wanted to end the school year with a high-impact event that got students working outdoors. We got in touch with the NGO Ark Eden who suggested we hold a BioBlitz to learn a bit more about the vibrant ecosystems of Mui Wo on Lantau Island.

In the days before the event, we put together an info-pack for our 50 participants with maps, survey techniques and instructions on how to use an online app called iNaturalist to help us with identification.

On the day, our survey covered an area from the hillside down to the shoreline. We found all kinds of interesting flora and fauna, which

we immediately uploaded to the app. We logged 122 observations with 22 species confirmed by 16 people from the online community – an encouraging result!



So much has yet to be discovered. There are probably hundreds or thousands of species that are unrecorded in Hong Kong.

Dr Benoit Guenard, University of Hong Kong

# When and where

Large scale BioBlitzes typically run for 24 hours to survey the different wildlife that appears over the course of day and night, but you don't need to stick to this. Your event could take place over the course of a school day, or even the duration of a class period. All you need is some time outside of the classroom where you can observe wildlife.

When to hold your BioBlitz will be influenced by the school calendar and the curriculum. In Hong Kong, wildlife can be found at all times of the year and you will always find ants, birds and trees in urban environments. If your focus is on particular species, consider the season, location, and time of day to increase your chance of finding them.

#### Key seasons for wildlife

Insects – May-July Birds – Oct-Mar Intertidal/Mangroves – June-Sept Marine life – Nov-Feb Mammals – Jan-Dec (though most are nocturnal) Urban wildlife – All year round

# **STAYING ON CAMPUS**

If you have not held a BioBlitz before, staying within school grounds is an excellent first step, and has the added advantage of being easier to organise. But communication is still essential! For example, it is a good idea to discuss BioBlitz plans with school facilities managers in case they regularly spray school grounds with pesticides.

From a data perspective, scientists and NGOs believe that information about common urban species such as sparrows, black kites and ants is still lacking in Hong Kong. There is increasing research interest in "urban biodiversity" and you might find that environmental NGOs and local or international institutions may be interested in the data that you find in your school.

## **CASE STUDY**

### **City University of Hong Kong BioBlitz**

Teams of students carried out a 24-hour BioBlitz in the small wooded park on university campus, in the middle of urban Kowloon Tong. It took the form of a competition with a focus on birds, amphibians and insects. Participants were provided with guidebooks and were also encouraged to take pictures and upload them to a campus database. We arranged for experts to identify the species from these photos. The team that had the most photos of individual species each won a pair of binoculars!



# **GOING OFF CAMPUS**

For an off-campus BioBlitz, consider public parks, sites of special scientific interest (SSSI), country parks or even green roofs (more information on locations in the Resources link). Note you may have to ask permission from relevant Government departments to take samples or even enter a site. Your location should be able to cope with your expected participant size without any negative impact on the biodiversity. If you are in any doubt about this point, ask an expert.

Intertidal surveys should start during a falling tide for safety reasons. Go to the Hong Kong Observatory website to find the tide tables closest to your survey site.

# **Planning checklist**

Once you have decided to run a BioBlitz, the planning can begin. The checklists on these pages are only a guide: many of these points can be skipped if your event is smaller or takes place on school grounds. Finally, don't forget to enlist your students in the planning stages!

There is plenty of information and help at hand in the Resources link at the end of this guide.

## BEFORE THE EVENT

#### STEP 1

- Define the objectives and scale of your event
- Put a team together to organise the event
- Choose a site, on or off school grounds
- Set the duration of the event
- Get a basic plan approved by your school authorities
- Think about local groups and experts who could help and get in touch with them

#### Permits

If your BioBlitz takes place on Government land, consider the need for permits. Under the Wild Animals Protection Ordinance (Cap 170), it is illegal to "hunt" any protected wild animal without a permit, where "animal" means any animal other than fish or marine invertebrate, and "hunt" means any act aimed at capture of an animal. Technically, this would include putting flashlights against bedsheets to trap moths or even insect pitfall traps! This is another important aspect that can be discussed with experts. It can take around 4-8 weeks for AFCD to process and approve any permit which is supported by an expert.

#### **STEP 2**

- Visit the site to be sure it meets your learning needs
- Check the site facilities: parking, catering, toilets, and make arrangements if any are unavailable
- Decide where to position your Basecamp
- Apply for permits if needed
- Plan the event activities and timetable
- Ensure event planning is as sustainable as possible
- Confirm any equipment you need. Arrange to borrow or hire any extra equipment
- Write a risk assessment
- Plan and develop pre- during- and post-BioBlitz activities with your team
- Make or adapt worksheets and recording sheets and a records database
- Prepare an information pack for staff, students and parents
- Plan how you will evaluate the success of the event



### **STEP 3**

- Book transportation to and from the site
- Obtain parental permission for children to participate
- Run a briefing session for all participants
- Contact your experts to confirm their roles and any equipment or field guides that they can provide
- Re-visit the site and check for any new risks Scope out wildlife present so that it can be incorporated into any pre-BioBlitz activities
- Keep an eye on the Hong Kong Observatory for weather updates
- Start pre-BioBlitz learning activities at school including sampling techniques

## ON THE DAY OF THE EVENT

- Set up your Basecamp and activity areas
- Brief staff and volunteers
- Actively monitor events; if something isn't working don't be afraid to change it
- Make sure all students are accounted for at all times
- Evaluate the success of the event
- Encourage your students to pick up any litter whilst they are working. Highlight threats posed by pollution as a side issue to the event

## **AFTER THE EVENT**

- Thank everyone who helped including the relevant Government body or property manager
- Collate findings and write an event report
- Communicate the results with participants and the wider school community, e.g., species totals and other achievements
- Continue with post-BioBlitz learning activities at school
- Write up your evaluation of the event and consider any lessons learned





# Experts, volunteers and student participants

Volunteers can be found from school departments, parents and other students. However, it would not be a BioBlitz without expert input, whether dedicated amateurs from Hong Kong natural history groups, or professionals from NGOs and universities. If your intention is for meaningful citizen science, you need to consider how your data can be made as credible as possible so that it can form part of the biodiversity record. One way is to contact experts to assist.

Experts don't have to join in person; many use online platforms such as iNaturalist, iSpot, eBird, HKWildlife.net and could be persuaded to confirm species after, or even during the event. It is always good to make contact well in advance to discuss aspects of the BioBlitz such as specialist equipment or field guides that might be needed. If your event resonates with their interests, some experts will take part for free. In return for their input, you could:

- Offer to cover their expenses
- Give them access to the data that is collected
- Support their initiatives and learn more before the event! E.g., Hong Kong Birdwatching Society runs regular training for all levels at a reasonable cost (some are free)

In the run-up to the event, send out an information pack to everyone involved. It should include:

- Background to the event and the aims and expectations
- Details of the event when, where, nearby facilities
- Survey information map, collecting policy, recording form
- Any clothing and footwear requirements
- Safety procedures
- Contact details
- Risk assessment
- Acknowledgement of supporting organisations and experts

# Risk assessment and safety

# RISK

## As with any educational outdoor trip, the safety of all involved is paramount. A BioBlitz is no different.

Each school will have their own system for doing risk assessments for the many trips and events planned throughout the school year. However, risk assessment documents generally involve these key areas for consideration:

- Identifying potential hazards
- Assessing how they could harm staff and participants
- Outlining how they would be dealt with
- Evaluating the likelihood of them happening

In order to write a risk assessment, a visit to the site is necessary to visualise and gauge potential dangers. Following this, precautionary measures can be implemented that entirely remove these hazards or reduce their likelihood. It may be possible to work with experts on this, especially if their organisation is responsible for the location.

A risk assessment template is provided in the Resources link of this guide.





# SAFETY

Other precautionary measures to consider could include:

- Briefing all participants on the AFCD Countryside Code
- Circulating a master list of phone numbers of staff, participants and their emergency contacts in case of accidents
- Placing first aid kits in a central location at Basecamp
- Having a designated first aid area at Basecamp
- Recruiting teachers or volunteers who are proficient in first aid
- Contacting St. John's Ambulance to provide extra medical assistance on the day. This service is free of charge

# Basecamp

Key to a successful BioBlitz is a busy, well-organised and accessible Basecamp that serves as the focus and heart of the event. This is a place where your students, experts and staff can congregate before setting off for surveys, report their survey results and conduct further analysis of specimens or simply rest and relax.

Basecamp should be:

- Safe, secure and easy to navigate around
- Centrally located in your activity area if possible
- Easy to find and accessible to parking and/or public transport links
- Close to toilets and catering

For school-based BioBlitzes, Basecamp could be the science laboratory or the school gym or assembly hall. Setting up some exhibits, microscopes for specimens and an identification zone with ID books and guides sets a great scene for showing the rest of the school what you are finding.

For off-campus events over several hours, consider NGO field centres and scout camps. If there are no existing facilities at your site, one option is to set up a marquee. For longer events, you will have to consider the need for portable toilets, lights, a generator, some furniture, etc. Discuss with experts or any management associated with the location to see what can be sourced.

# **INFORMATION POINT**

This area has all the aspects of the BioBlitz laid out including maps, timetable, safety information, rules, and sign-out for equipment. This can also be a location for first aid and other practicalities that participants may need such as insect repellent.



# **IDENTIFICATION ZONE**

BioBlitzes are all about finding and identifying what species you have found. If you cannot identify or photograph your specimens in the field, bring them back to Basecamp for a closer look. This area should be equipped with appropriate field guides, microscopes, hand lenses, cameras, laptops and Internet access.

You should also have plenty of pots and trays for your specimens. The best trays are white rectangular plastic trays used by ecologists but any tray around 3-4 cm deep is fine. Label the specimen once it has been identified.

There are also online platforms and apps that can help you. iNaturalist is a crowdsourcing app that allows you to upload a picture of a specimen, "Geotag" its location and link it to a particular project. A community of amateur naturalists and experts might be able to help with close-to real time identification. In this way, you can work effectively with experts, even if they cannot join the BioBlitz in person.

# RESULTS AREA

The results area is a central point in which to collate all of your results and display them. You could perhaps use a whiteboard to



display the results as and when they come in or have a computer handy to update a school blog with photos and results.



Results can take the form of a database of species records, and can be grouped in many different ways depending on your focus:

#### **Basic information**

The person who spotted the item, the person who identified the item, the time it was found, its location, descriptions of the item

#### **Detailed information**

Photographs, videos, sound recordings, the full classification for each species recorded: Kingdom, Phylum, Class, Order, Family, Genus, Species, Subspecies

#### **Cumulative information**

Total number of species found; total number of records

#### **Bigger picture**

These results make up the baseline data for species diversity found in this area at this time. In follow-up activities, the data can be analysed but also applied in many other ways, in subject areas as diverse as statistical analysis or art. You may also wish to share the data online, with experts or other schools.

## **REST AND REFRESHMENT AREA**

If your BioBlitz is more than three hours long, you will need an area for participants to take a seat and relax, grab a bite to eat and have a drink, especially if the weather is hot and humid. This is a great place to reinforce school sustainability initiatives.

# Avoiding single-use plastic water bottles

Ask participants to bring their own water bottles. Provide large water dispensers for topping up if there are no water fountains at the site.

## CASE STUDY

#### Ho Koon Nature Education cum Astronomical Centre BioBlitz

We have developed BioBlitz courses for both lower and higher forms of secondary school students. Our surveys last for two hours with a focus on counting different species of animals and plants such as birds, butterflies, dragonflies, ferns, and trees. We provide some simple and easy field guides to assist the students with the fieldwork and sometimes use iNaturalist to accumulate data and information. Our students are visibly pleased to use their smartphones!



"Not all classrooms have four walls."

Anon

# Data collection, data use and information sharing

### A BioBlitz is all about recording the who, the what, the when and the where for each specimen found.

You may already be familiar with basic sampling methods such as quadrats and transects. These techniques are commonly used to record abundance. However, in a BioBlitz the emphasis is primarily to establish the presence or absence of certain species within a certain time limit. To do this, it may be appropriate to use more active sampling techniques. Discuss with experts or NGOs about appropriate sampling techniques in your planning. There are also some good demonstration videos online.

#### Insects

Different methods of sampling insects include:

- Using an aspirator, also called a pooter
- Winkler sifting
- Beating with a beating sheet
- Pitfall traps (a licence is likely needed)
- Light traps (a licence is likely needed)

At its core, you are aiming to record who found the species, who identified the species, the name of the species, any additional description such as size, colour, features and the time and location where it was found. Photographs are always valuable but also try adding a ruler into the picture to add scale.

## **POST-EVENT**

Post-event analysis is very important. This is something that could be the basis for later classroom studies. For example, your students can sort the data collection into different taxonomic groups and compare with previous studies in that location.

Sharing your data can also add value to it. Perhaps work with experts or organisations to circulate the species list, add it to established (Government) biodiversity databases or perhaps create your own database either within your school or among a group of schools. However, please be careful with your data, especially if you find species that may be endangered or garner press attention. Your records could attract unwanted attention that could seriously impact populations or the habitats in which they live. Unfortunately, in Hong Kong this has happened with species including starfish, fireflies, and rare birds and butterflies.



![](_page_20_Picture_16.jpeg)

# **Evaluation and feedback**

### **Evaluation of your BioBlitz is really** important for developing future events.

Obtaining feedback from all involved goes a long way to finding out opinions and attitudes as well as what went well and what could be improved. You could start this process at Basecamp at the time of the event or you could hold a staff meeting or student focus group later on. For any questionnaires, both quantitative and qualitative questions would

![](_page_21_Picture_3.jpeg)

be useful. (Refer to the Resources link for samples.) In any case, the sooner you do this after the event the better so that impressions are fresh in participants' minds.

For your students, you can hold an evaluation discussion class where you ask them what they enjoyed and what they thought they got out of the experience. You could

"The BioBlitz was of great significance to my students – suddenly science became three-dimensional and relevant; it became a part of their own lives."

> – Lo Hoi Hong, Secondary Science Teacher

perhaps ask them to write

a short personal reflection of the event. Asking students from other subjects /classes to interview or observe the participants during the event can be an interesting way to engage others.

## **CASE STUDY**

## Hong Kong BioBlitz 2015 **Tai Tam Tuk Foundation**

The aim of our BioBlitz was proof of concept for a medium-to-large event of around 300 participants over a 24-hour period. It was important for us to recruit different schools: English- and Chinese-medium schools, Band I, 2 and 3 schools and international schools. We also found diverse experts since our site covers terrestrial, coastal, mangrove intertidal and marine interest!

On Day I, experts took school groups around two sites each, one terrestrial and one intertidal and we had a pop-up science exhibition at Basecamp. Overnight and throughout Day 2 experts worked on their own surveys. We also did a coastal rubbish survey.

The most difficult part was not having a comprehensive Hong Kong database of species. ID forms with misspellings, old names, common names, Chinese names, and/or Latin names meant that it was difficult to transcribe, and then make sense of the data. For many species, only an expert could tell from the name what it actually was (bird, fish, spider, etc)

We logged 578 species which increased to 680 after a month of following up with experts. Our findings included the first official record of coral in the area, rare records of moths only found in Hong Kong, and the first record of juvenile mangrove horseshoe crabs on Hong Kong Island. These special findings were not entirely by luck, as we had spent months talking with the village community and exploring the site and knew we had good chances. Having the right season, timing and experts on hand helped show us what we thought was already there, and so much more!

![](_page_22_Picture_0.jpeg)

![](_page_22_Picture_1.jpeg)

In order to assist you in your BioBlitz planning or pre- and post-event activities, we have collated resources with kind permission from various local organisations, institutions and NGOs. They include information on wildlife guides, sampling techniques, site locations, and expert organisations. They also include a range of worksheet and record sheet templates.

These resources can be found on a Wikispaces page and are regularly being updated.

To access this page, please go to:

http://taitamtukfoundation.wikispaces.com/

Photographs on the back cover show from top-left to bottom-right: Great Mormon on a Hibiscus; Great Tit; Flower Mantis; Widow Periwinkle; Little Egret; Thick-legged Fiddler Crab; Stick Insect; White Popinac; False Kelpfish

# **CONTACT US**

Tai Tam Tuk Foundation

www.taitamtuk.org

www.facebook.com/hkbioblitz

![](_page_22_Picture_11.jpeg)

Twitter @taitamtukorg

![](_page_23_Picture_0.jpeg)

![](_page_23_Picture_1.jpeg)

![](_page_23_Picture_2.jpeg)

![](_page_23_Picture_3.jpeg)

![](_page_23_Picture_4.jpeg)

![](_page_23_Picture_5.jpeg)

![](_page_23_Picture_6.jpeg)

![](_page_23_Picture_7.jpeg)

![](_page_23_Picture_8.jpeg)