

Kadoorie Farm and Botanic Garden

Annual Report 2023-2024



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Mission

To harmonise our relationship with the environment.

Vision

A world in which people live sustainably with respect for each other and nature.

Values

Sustainable Living

Appreciating the impact of our actions with regard to current and future generations. Having awareness of our connection with the environment. Valuing simple and responsible lifestyles.

Justice

Being fair and accountable. Valuing socially equitable systems that protect the health of the planet, the people and their way of life. Protect future generations.

Love

Having self-awareness and understanding of the inter-relationship of all things. Having compassion and respect for all life. Recognising that outer discord is a reflection of inner discord. Striving for inner silence.

Participation

Engaging mentally, physically, emotionally and spiritually; fostering respect for different viewpoints, openness, dialogue and teamwork.

Professionalism

Being a role model of caring, integrity, commitment, professional standards and best practices for partners, organisations, individuals and communities.

Learning

Being adaptive and flexible to changing circumstances. Having a holistic outlook. Being practical, objective, creative and insightful.

Happiness

Appreciating that our happiness lies in creating and sharing happiness with others.

ABOUT US

As an organisation, Kadoorie Farm and Botanic Garden (KFBG) raises awareness, undertakes rigorous science-based species conservation and ecosystem restoration, and offers new ways of thinking and low-carbon living to respond to the world's environmental problems, all while being linked to the resources and lifestyle of Hong Kong. Our work brings hope and improvement, by focusing on nature conservation, sustainable living and holistic education that reconnect people with nature. By working together with the public, government, academia, NGOs and businesses, we help to protect our common future.

KFBG is situated in the rural New Territories on the northern slopes of Tai Mo Shan, Hong Kong's highest mountain, where two steep spurs enclose its deep-set valley. Within KFBG, there are streams, woodlands, orchards, vegetable gardens, walking trails, separate exhibits focusing on live animals, flora and art, sustainable agriculture demonstration plots, a wild animal rescue centre, a native tree nursery, conservation and education facilities, and magical, misty fern gardens. A special department at KFBG is the Green Hub, which is located in the renovated Old Tai Po Police Station – a Grade 1 listed historic building dating back to 1899 – where we run community programmes to demonstrate how we can live sustainably, while at the same time respecting nature and each other. In addition, in April 2024, we opened the Kadoorie Centre Food Hub, for residential retreats and innovative cooking. More about that next year!

In the post-war years, Hong Kong was flooded with destitute immigrants, with many having traditional knowledge of crop production and livestock farming but without stock; others had land but no experience. In short, they required support to rebuild their lives. In 1951, in response to these pressing human needs, Lawrence and Horace Kadoorie established the Kadoorie Agricultural Aid Association (KAAA), which became a key partner of the Hong Kong government in devising and implementing a plan to help Hong Kong feed itself. The Kadoorie brothers, part of a well-established business family, saw wealth as a sacred trust to benefit others. Through such aid, thousands of people received agricultural training: thousands of pigs, chickens and ducks were bred and given to farmers, or sold to them on credit as micro-loans and numerous wells, irrigation channels, roads, footpaths, bridges, pigsties and farmhouses were built.

As Hong Kong's economy grew and times changed, KFBG's purpose also adapted. On 20 January 1995, the Legislative Council of Hong Kong passed an Ordinance (KFBG Chapter 1156) incorporating KFBG as a non-profit corporation and designated as a conservation and education centre with a new mission. It is a unique, public-private partnership that, while a public organisation, is privately funded by the Kadoorie Foundation (over HK\$100 million per year). These funds are supplemented by visitor admission fees, donations from the public and corporations, and occasional project-related government grants that enable us to extend our work.

KFBG's three core programmes, focused on nature conservation, holistic education and sustainable living, are constantly evolving as they strive to harmonise humanity's relationship with nature. In addition to the many on-site courses, work shops and special events we run, we implement projects throughout Hong Kong, Greater Bay Area and other parts of the Indo-Burma region to better protect and restore biodiversity.





FOREWORD

It is often said that KFBG is a micro replica of the Hong Kong society, embracing both heritage and the future. Our site resembles the heritage of Hong Kong: it lies in a valley, with a stream running through a biodiverse (sub)tropical forest, with buildings dating back from the last century. You can find theme gardens, fruit terraces, walking trails, and public education displays of plants and animals, whilst the largest part of the site is managed as a nature reserve. Our Green Hub in Taiipo is located in an old police station from 1899, repurposed as a centre for sustainable living, with a vision for the future of Hong Kong.

Every year on 22 April, we celebrate Earth Day with activities like weeding invasive species, conducting a flora bioblitz, cleaning up our site (luckily our visitors leave little waste) and working on forest rejuvenation. We had to postpone Earth Day this year, due to heavy rains, something we must contend with throughout the year, as typhoons and black rainstorms continue to terrorize Hong Kong and KFBG. When that happens, we are reminded that damage is not limited only to the material world, but also affects animals, plants, and all other creatures who are sometimes unable to survive when typhoons flatten their sleeping places in trees, or a rainstorm floods their burrows.

As we are feeling the impact and consequences of climate change, we are determined to do our part. We further expanded our holistic education department and resumed our “We are Nature” residential retreats. The Wild Animal Rescue Centre once again received more than 4,000 animals with increasing numbers from the illegal wildlife trade. We also modelled our Reforestation Programme for other nature reserves and country parks, as a Nature-based Solution for Hong Kong. And every Sunday, we invite up to 100 Migrant Domestic Workers to engage in activities, such as yoga and Zentangle, while also exploring nature and enjoying a vegan lunch at the Eat Well Café.

Our devoted team is as diverse as the Hong Kong workforce, consisting of animal keepers, arborists, botanists, communicators, conservation officers, educators, ecologists, farmers, geneticists, horticulturists, gardeners, managers, marketeers, veterinarians, zoologists – and more. They work on hundreds of projects and initiatives to raise awareness, educate the public and catalyse behavioural change to protect nature and the environment.

None of what we do is possible without the dedicated hard work and efforts of our staff who love their work, as well as our friends, members, funders, teachers, visitors, and other stakeholders who continue to support us. To all of you I say a most sincere ‘thank you’!

This Annual Report highlights achievements from 1 April 2023 – 31 March 2024, another year in the history of Kadoorie Farm and Botanic Garden, and it tells the story of our Love for Nature.

Wander Meijer
Executive Director



Kadoorie Farm and Botanic Garden (Moon Gate)



The Green Hub (Aerial View)



The Food Hub at Kadoorie Centre (Entrance)

THREE SITES OF KADOORIE FARM AND BOTANIC GARDEN

KFBG is a 'site-based' organisation, meaning that the location, surroundings, environment, nature, animals, plants, soil, structures, and heritage are all integral parts of our organisation.

Kadoorie Farm and Botanic Garden (KFBG)

The largest and most well-known site is the historic Kadoorie Farm and Botanic Garden, established in 1956. Originally an experimental farm for agricultural aid, it was repurposed into a nature reserve and botanic garden in 1995. Today, it spans 148 hectares and is renowned as Hong Kong's nature treasure trove. KFBG offers a sanctuary for wildlife, has extensive plant collections, and offers educational programmes focusing on conservation and sustainable living.

The Green Hub

In 2011, KFBG was granted permission by the government to repurpose the Old Tai Po Police Station, dating back to 1899, making it the oldest building in the Northern Territories. This site was transformed into the Green Hub, a centre for sustainable living. The Green Hub serves as an oasis of tranquillity and nature amidst the bustling city, providing inspiration for citizens aiming to live more harmoniously with nature. It offers workshops, courses and activities, focused on sustainability, organic farming and eco-friendly practices.

The Food Hub at Kadoorie Centre

In the 1980s, the Kadoorie brothers committed financial support to Hong Kong University to set up the Kadoorie Centre. The Centre spans 11 hectares of hilly land and equipped with accommodation for more than one hundred people and includes various educational facilities.

In early 2024, KFBG collaborated with HKU to transform the Canteen Block at the Kadoorie Centre into the Food Hub - a sustainable premise dedicated to food education and pioneering climate-friendly catering services. The Food Hub serves as an entry point for a sustainable lifestyle, offering cooking classes, workshops, and synergising further collaboration for transformative education.



NATURE CONSERVATION

NATURE CONSERVATION FLORA CONVERSATION PROGRAMMES

Plants account for over 82% of all biomass on Earth and provide the fundamental support systems for virtually all ecosystems. Despite that, as many as one in five plants are estimated to be threatened with extinction globally, and in Hong Kong around half have been reduced to very small populations. KFBG's Flora Conservation Department is dedicated to addressing this decline by undertaking targeted species conservation, forest restoration and tackling illegal plant trade through a combination of science, horticulture and education.



Our forest restoration site, where we reintroduce maximum species diversity, based on knowledge of the natural forests that still occur in South China and the wider region

Botanical Knowledge for Conservation Action

Hong Kong's mountainous landscape not only provides a stunning backdrop to the city, it also sustains thousands of species and increasingly gets talked about in the context of 'Nature-based Solutions' (NbS) – actions that seek to protect, sustainably manage and restore ecosystems for the benefit of both people and nature. But as lush and green as Hong Kong's countryside may look, its life-giving flora remains fragile and impoverished following centuries of mistreatment and is thus in need of intensive care.

Hong Kong's original vegetation had been heavily degraded, if not completely cleared, by the 1600s, and so the forests that we see around us today are essentially all 'secondary' – that is, newly regenerated after human impact. In fact, due to the ongoing outbreak of anthropogenic hill fires and repeated bouts of deforestation through the 20th century, most are relatively young, having developed only within the past 70 years. During this time, forests have regained significant ground, increasing from less than 1% of the landscape in 1945 to more than 30% today. However, canopy cover alone is not a good indicator of species diversity, community structure or ecological function, and closer examination reveals that

Hong Kong's contemporary forests suffer from depleted diversity, genetic erosion, extinction debt, arrested succession and the disruption of many ecosystem processes.

In a landmark study published in 2023, KFBG Ecologist Huiling Zhu and colleagues revealed that what is planted to stimulate the rehabilitation of native woodland can have profound ecological impacts for decades – if not centuries – to come. By analysing historic aerial photos of Tai Po Kau (Hong Kong's largest patch of lowland secondary forest) in the light of surveys detailing present-day species composition, they showed that monocultures of a very narrow selection of native and non-native trees planted there in the 1950s and 1960s have actually prevented the recolonisation of many native species and, as a result, impeded the recovery of overall community structure.

In fact, whereas remaining primary forests in the region (on Hainan Island and in northern Vietnam, for example) that serve as reference sites for expected diversity in Hong Kong contain 150–180 woody species per hectare, secondary forests here generally comprise less than one-third of that. By searching for, propagating and planting out rare species, KFBG is on a mission to improve on that.

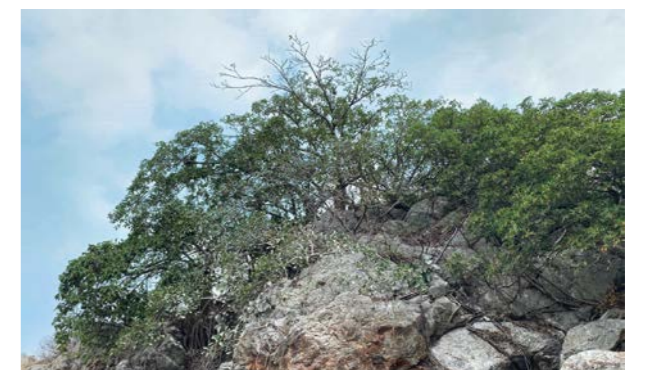
Stately Oaks, Radiant Primroses, Magnificent Sea Beans

Over the course of the past year, our field teams brought back more than 30,000 seeds belonging to over 200 different tree species to sow in our Native Tree Nursery. These included many uncommon species – Reticulate Ixonanthes (*Ixonanthes reticulata*), Chinese Gmelina (*Gmelina chinensis*) and the Smiling, Monkey Forest Tree (*Magnolia maudiae*) to name a few – but two remarkable highlights were the Purple-seeded Tree (*Margaritaria indica*), a large tree with gorgeous, mottled bark that was only recently discovered in Hong Kong, and the Formosan Spider Tree (*Crateva cf. formosensis*), a beautiful species known from just one location that had eluded our field teams for years. We also augmented our collection of oaks through a donation of more than 150 seedlings belonging to 21 native species from The University of Hong Kong, including the very rare tea-leaved Stone Oak (*Lithocarpus iteaphyllus*), the Attenuate Stone Oak (*Lithocarpus attenuates*) and Changeable Oak (*Quercus variabilis*). Some of these had been collected from locations previously unknown to us and so this acquisition has greatly enhanced the genetic diversity of our living collections. Our botanists also stumbled upon the massive Lofty Strangling Fig (*Ficus altissima*) – whose roots wrap the ancient temples at Angkor Wat – on a wind-swept offshore island. Cuttings are now being rooted in our mist house and, in time, will be used to enrich the biodiversity of our site.

In recognition of the fact that every growth form, and indeed each species, plays a unique role in a functioning forest ecosystem, we also incorporated more than 130 native herbs, shrubs and climbers into our collections. From the petite Hong Kong Primrose (*Lysimachia alpestris*), which grows in dappled shade on moist banks, to the climbing Snuff Box Sea Bean (*Entada rheedei*), which forms gigantic stems that clamber through the forest canopy, our challenge, once established in our nurseries, is to find 'sweet spots' in our regenerating woodland into which these species can be planted. Just two individuals of the latter remain in Hong Kong, of which one was seriously damaged by vandals last year. In the spring, our horticultural staff joined forces with the AFCD to collect cuttings of this plant to secure its precious genotype in cultivation. Then, in July, Senior Ecologist Sven Landrein discovered the Frangipani Vine (*Chonemorpha eriostylis*), yet another rare climber with enormous, hairy leaves and beautiful, fragrant flowers, in a remote stream on Tai Mo Shan. These and other discoveries underscore just how diverse Hong Kong's liana flora is and allow us to ensure each species has a place in Hong Kong's future forests.



Margaritaria indica is widespread throughout tropical Asia but was only recently discovered in Hong Kong. Its gorgeous, mottled orange bark and iridescent purple seeds will make it a fabulous addition to KFBG's woodland



The enormous strangling fig *Ficus altissima* was discovered scaling coastal boulders on a small outlying island

Documenting Diversity – Both Good and Bad

Each discovery is documented in the form of a preserved specimen that is deposited in our herbarium. Now with over 18,000 specimens, the KFBG herbarium serves as a 'reference library' detailing the composition, geography, biology and systematics of Hong Kong's plant life. Through the course of last year, more than 200 herbarium specimens were collected, processed and added to this increasingly comprehensive resource. Of these, five represented species not previously known to occur here, including the Java Pennywort (*Hydrocotyle javanica*), which was found by Senior Ecologist Jinlong Zhang during a survey of need to add a sentence explain what is *fung shui* woodland in bracket near Lai Chi Wo, and the Incandescent Cone Mint (*Gomphostemma lucidum*), found by Assistant Curator Daniel Hang at the foot of Tai Mo Shan. *Fung shui* woods are patches of original forest that have been managed for centuries in Hong Kong and parts of South China for socio-cultural reasons.

Unfortunately, not every find is a cause for celebration. One of the greatest threats to native biodiversity is the global spread of invasive alien species (IAS). To the already extensive list of plants from other parts of the world that have naturalised in Hong Kong, Jinlong added a further three in 2023: the Bearded Begonia (*Begonia hirtella*) and Whorled Twintip (*Stemodia verticillata*) both from Latin America, as well as the Carolina Watershield (*Cabomba caroliniana*) from parts of North and South America. All three appear to have recently established self-sustaining populations in natural areas here.

Mitigating the Blight of Invasive Alien Plants

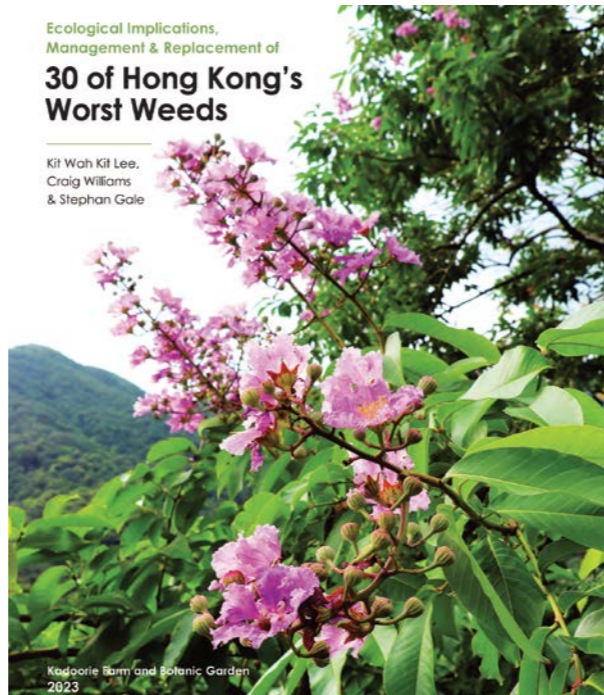
Recognising that there is a problem is the first step to dealing with it. In November, Horticultural Manager Craig Williams and Head of Flora Conservation Stephan Gale published a revealing report on the ecological implications and management of 30 of Hong Kong's worst weeds. This report attests that, although some non-native species may perform one or other ecological service outside their native range, these weeds must be evaluated in full view of their often manifold detrimental impacts. For example, although many IAS get planted here because their plentiful nectar is seen to support local butterflies, what is invariably overlooked is that, by attracting these pollinators, the weeds are simultaneously distracting them from visiting the native plants with which they co-evolved. The weeds may also be releasing noxious chemicals into the soil, increasing fire risk and smothering native plants.



The mighty Snuff Box Sea Bean (*Entada rheedei*), of which only two individuals are known in Hong Kong. One of these was severely damaged by vandals in 2023, and so KFBG staff and AFCD officers went to collect cuttings for ex situ conservation



A freshly potted cutting of the incredibly rare vine *Chonemorpha eriostylis* in our mist house. A single plant was found in a remote stream on Tai Mo Shan



KFBG's report on invasive alien plant species examined their ecological impacts, outlined means of keeping them in check and suggested replacement native species

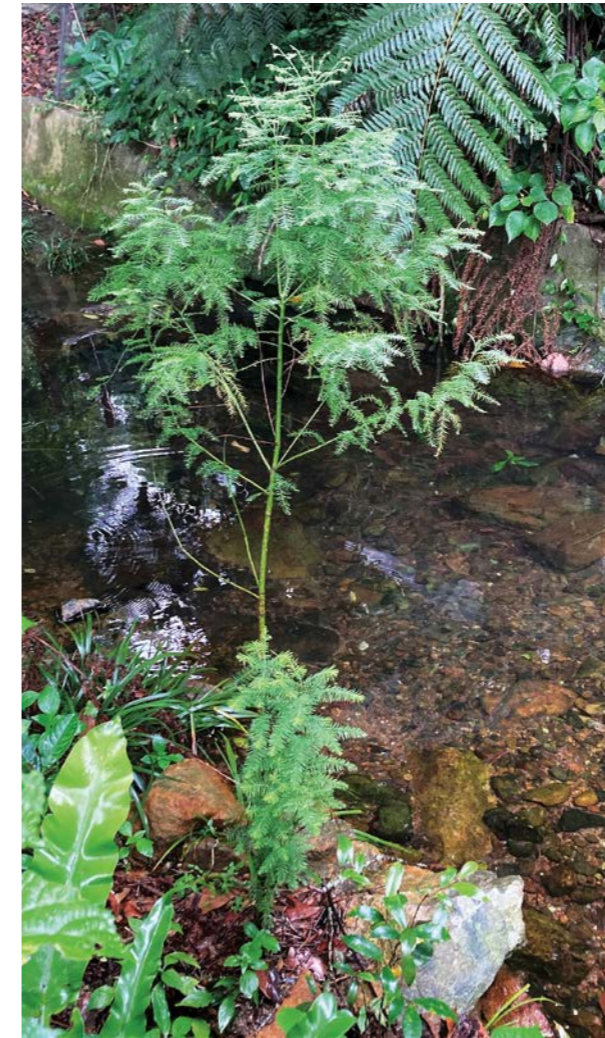
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Regrettably, some weeds are so well established here that their eradication might be regarded as a forlorn hope. But control is important as this can allow native vegetation to gain the upper hand. Active removal is now a routine part of ongoing land management at KFBG: through 2023, Senior Curator Tommy Yu's Upper Landscape Team removed tonnes of invasive plants from planters along the main roads and in theme gardens across the Upper Hillside. The worst culprits were targeted, including Firespike (*Odontonema tubiforme*), Yellow Flax (*Reinwardtia indica*), Mile-a-Minute (*Mikania micrantha*) and Beggar's ticks (*Bidens alba*). Their removal allows native plant displays to breathe again and they are replaced with species that genuinely support local wildlife.

Boosting Native Diversity

Planting native is a guiding principle at KFBG: many local species are now so rare that they need every helping hand



A seedling of the Critically Endangered conifer *Glyptostrobus pensilis*, which we consider native to Hong Kong, was newly established beside the stream in the Walter Kerr Garden

they can get. Through 2023, Assistant Curator Cheung Man Kwong and colleagues added over 200 native species to the landscape of the Lower Hillside. These included rarities such as the spectacular tree fern *Cyathea spinulosa*, the striking (if not bizarre) birthwort *Aristolochia westlandii* and the exquisite azalea *Rhododendron hongkongense*, which produces white flowers and pink new leaves in the spring. The Flying Saucer Tree (*Microdesmis caseariifolia*) and Chinese Swamp Cypress (*Glyptostrobus pensilis*) were planted in KFBG for the first time, and numerous orchids grown from seed in our micropropagation lab were dotted around the Walter Kerr Garden (in the lower part of KFBG), including the gorgeous, pink-flowered *Calanthe masuca* and the black-leaved jewel orchid *Ludisia discolor*. Leading our orchid propagation programme, Curator Kelvin Yeung and Horticultural Supervisor Chow Pak Tai hand-pollinated 40 orchid species, collected more than 70 capsules for micro propagation and deflasked almost 10,000 orchid seedlings over the year.



Before and after photos of a slope in the Upper Hillside highlight the benefits of weeding

Genetic Research Highlights Conservation Priorities

Meanwhile, in our Genetics Lab, more than 8,000 DNA samples representing hundreds of different plant and animal species – including pangolins, orchids and otters – were analysed as part of ongoing projects on threatened species to help ascertain identity, pinpoint geographic origin or measure genetic diversity. Our DNA-based monitoring of shark fin trade reached its tenth anniversary, during which time we have demonstrated that two-thirds of all shark species sold in the Hong Kong market are threatened with extinction. In light of this finding, our partners at Florida International University and the Mote Marine Lab, USA, successfully petitioned for a significant increase in the number of shark species listed in CITES, the international convention that regulates trade in endangered species. Our data also persuaded the AFCD here in Hong Kong to implement more effective enforcement for those who violate trade bans. Building on this important work, we committed to a further three years of collaborative research with our partners, after which we will have completed this important shark conservation project.

We also continue to work on the Hong Kong Incense Tree (*Aquilaria sinensis*), which remains a major target of poachers due to high international demand for the fragrant ‘agarwood’ it produces when wounded. With collaborators at Hong Kong University, Senior Geneticist Huarong Zhang’s team published a study examining how the selective removal of mature individuals from the wild affects the genetic diversity of remaining trees. They found that younger Incense Trees appear to contain similar genetic diversity as compared with older, damaged trees, suggesting that, for now at least, the species remains mercifully resilient to the onslaught. The study recommends the protection of remaining young trees to facilitate the species’ recovery.

Good headway was also made with projects that bring together diverse scientific expertise covering several different aspects of the biology of South Chinese plants. Botanist Jihong Li finalised a genetic analysis of all 134 native Hong Kong orchids that integrates data on phylogenetic history and conservation status, enabling her to prioritise those with greatest evolutionary distinctiveness and which face the highest extinction risk. In addition, Senior Ecologist Sven Landrein made steady progress with his work on the ecology and genetics of native Hong Kong Dutchman’s Pipes (*Aristolochia spp.*). In 2023, his research helped characterise the chemicals released by the flowers to attract pollinators and provide an analytical framework for understanding relationships among these highly endangered plants in Hong Kong.



Chow Pak Tai, Horticultural Supervisor and technician for our Orchid Micropropagation Lab, who has nurtured literally hundreds of thousands of orchid seedlings – many of them belonging to highly endangered species – over her career at KFBG



Amy Tsang helps gather data on the success of a pilot orchid reintroduction scheme



Data from our Conservation Genetics Lab helped confirm the existence of a previously unrecognised fifth species of pangolin in Asia, sadly discovered from illegally trafficked animal parts

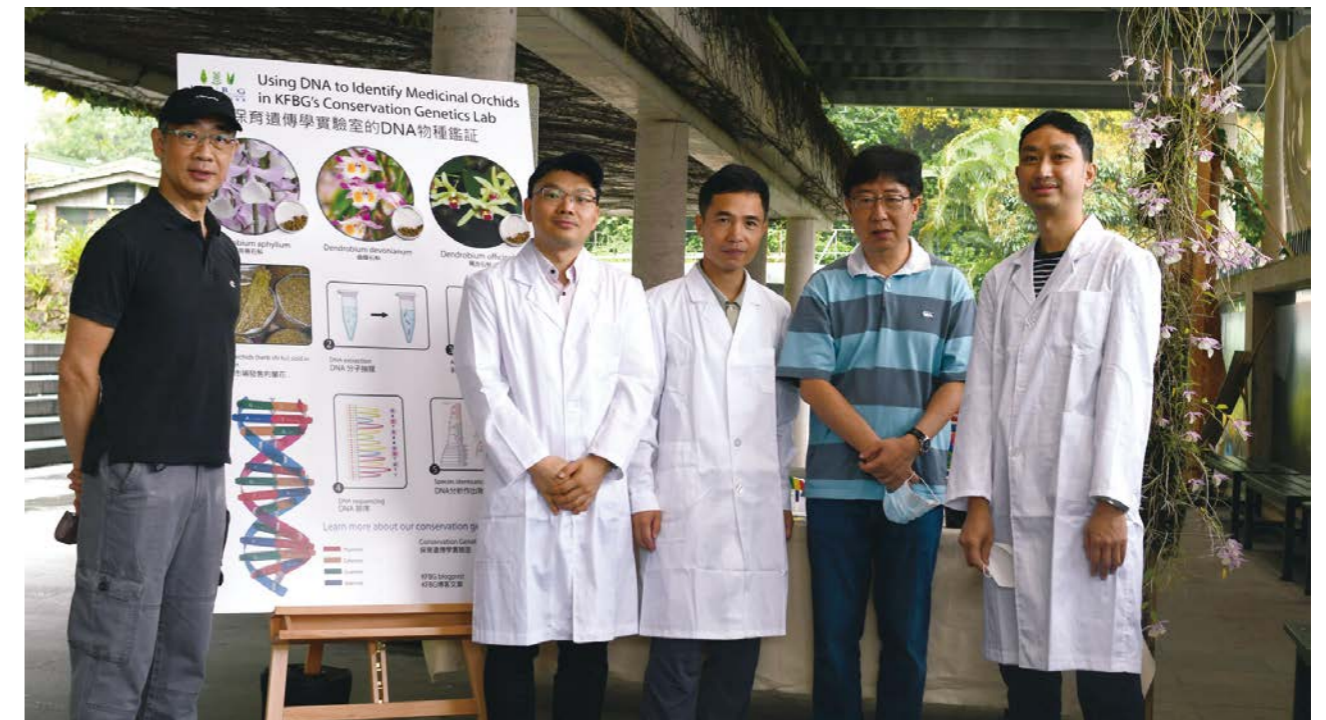
Broadcasting Our Message

In December, Education Officer Fiona Lo spearheaded the launch of Plant Encounters, Flora Conservation Department’s new series of plant-themed guided walks for the public, with two pilot sessions, ‘Fascinating Orchids’ and ‘Seasonal Berries’. A regular monthly programme then commenced in February, with Curator Jenny Li and Jinlong speaking on the topic of ‘Fiery Flora! Red Fruits and Flowers’, to tie-in with the Lunar New Year. In March, Stephan and Sven led sessions on the theme of ‘Cunning climbers: How vines attract pollinators in the forest canopy’. We have consistently received enthusiastic feedback and numbers are growing each month.

Huarong was interviewed by *The New York Times* on the discovery of a new Asian pangolin species, as revealed by our genetic analysis of material seized by Hong Kong customs. This finding stresses the importance of increased collaborative action among research institutes such as KFBG and law enforcement agencies in documenting illegal

trade. To tie in with World DNA Day, Conservation Genetics Lab staff organised interactive games in The Plaza to introduce the work of molecular biologists and raise awareness of the importance of DNA in understanding plant ecology and monitoring illegal wildlife trade. More than 200 visitors joined us.

Showcasing two brilliant arts-science collaborations with the School of Creative Media at City University, we hosted two public events featuring the work of our PhD students. The first, held on a dark, wintry evening at the Green Hub in December 2023, was an open-air screening of ‘(Welcome to) The Planet of Orchids’, a mixed media film created by visual artist Jiyun Park. Then, in March 2024, Cheng Yang curated an exhibition exploring the sensory ecology of the Hong Kong Incense Tree in the Art House. Cheng had ingeniously developed a novel way of expressing Incense Tree genetic fingerprints using sound. Both events were very well attended.



KFBG’s Conservation Genetics Lab team, including volunteers, who hosted educational games and sharing sessions in the Plaza to mark World DNA Day on 25 April

NATURE CONSERVATION FAUNA CONSERVATION PROGRAMMES

The Fauna Conservation Department plays an important biodiversity conservation role in Hong Kong and globally through its wildlife rescue operations, endangered species assurance work and public education activities. In this chapter we highlight the main achievements of the past year.

WILDLIFE RESCUE Notable Rescue Cases During the Period

Birds

Black Winged Stilts – Five black winged stilt chicks and 11 eggs confiscated by the AFCD were received on the 12 May 2023. All chicks and eggs were believed to have been taken from the wild, in Long Valley. Unfortunately, only two of the 11 eggs were viable and hatched, but the chicks did not survive. Of the five live chicks received, only two survived and were successfully rehabilitated. These surviving birds were fitted with identification leg rings and GPS trackers, and released on the 12 September 2023 at Long Valley in the New Territories.



Black winged stilt chicks in the rescue centre ward

Black Kite Wing Tagging Project – Since July 2023, the rescue centre has been wing tagging black kites prior to release. The project aims to use citizen science to assist with post-release monitoring of the many black kites that come through the rescue centre. Feedback on released



Fitting a GPS tracker to a hand raised black winged stilt prior to release

kites can not only provide useful data on survivorship of individuals, but can also help to determine the geographic movement of birds within and outside Hong Kong during migration. Each wing tag is marked with a large unique ID number. A total of ten kites have been tagged and released so far. One was recaptured and subsequently euthanised due to it having a shoulder joint disease. One tagged kite, identified as number 63, and two more tagged kites, have been spotted in different locations by the public. The project continues.

Avian Influenza – On the 22 December 2023, a Eurasian wigeon was received from the Hong Kong Wetland Park. The bird showed signs of a respiratory condition, later identified as avian influenza (AI). This was the first confirmed case since the rescue centre was established, although we did receive a peregrine falcon that showed symptoms of AI more than ten years ago. The Agriculture, Fisheries and Conservation Department (AFCD) and the Centre for Health Protection (CHP) immediately activated quarantine procedures for the centre and the staff who dealt with the bird. The quarantine period set by the AFCD lasted 21 days, during which time we were unable to release any rehabilitated birds or move other birds around in the centre.



Staff wearing full PPE carrying out physiotherapy for a spoonbill during the avian influenza quarantine procedures

Mammals

Leopard Cat – On 1 March 2023, the AFCD carried out an investigation on the hillside at Po Lam to search for illegal traps. During the exercise, the AFCD found a young male leopard cat trapped in a metal cage trap and sent it immediately to KFBG. During the health check, wounds were noted on its face, gums, and paws, likely due from



struggling in the trap. After a period of recovery and exercise, the leopard cat was released inside the KFBG nature reserve on 11 April.

Leopard cat with facial abrasions rescued by the AFCD in Po Lam

Recaptured Barking Deer – On 30 August 2023, we received an adult male barking deer that was discovered trapped in a water catchment. On arrival, the deer was found to be paralysed, most probably from falling into the water catchment. To our surprise, while checking its body, we discovered the deer had a microchip, indicating that it was a recapture. It was first rescued from Route Twisk in February 2023. As it had not suffered any fractures or capture myopathy (this is a condition which can be life threatening where over exertion causes muscles create an acidic environment which not only damages the muscle but leads to wider physiological stresses), it was released the next day. Unfortunately, on 16 January 2024, we received



this deer again. It had been hit by a lorry on Route Twisk. This time, the deer was severely injured and sadly, had to be euthanised to prevent further suffering.

The recaptured barking deer examined under general anaesthesia



The microchipped barking deer discovered in the water catchment

Reptiles

Injured Burmese Python – In August 2023, a Burmese python, transferred by the police under our Wild Snake Rescue Project, was found to have a 20 cm laceration on its side. After surgery to clean and repair the wound, it made a full recovery and was returned to the wild on 6 October.



24th August - after cleaning and debriding



24th August - after closing with sutures



5th October - after removing sutures

Recovery process of the injured Burmese python

Red-headed Amazon Turtles – In December 2023, we received a confiscation of 488 red-headed Amazon turtles (*Podocnemis erythrocephala*). They were seized by the AFCD at the airport. Most of the individual animals were very dehydrated but in reasonable condition. After rehydration, they were placed in heated outdoor enclosures. The WRR team will continue to investigate possible options for placement of the consignment.



Triage for red head Amazon turtles shortly after arrival at KFBG

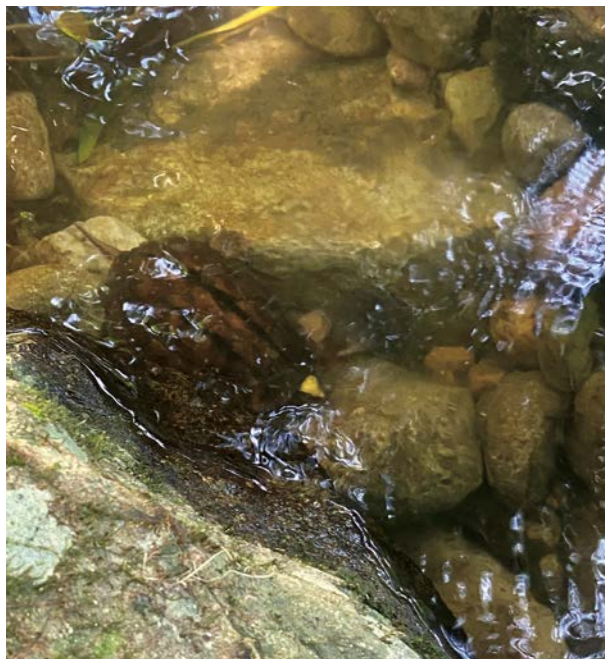
FAUNA CONSERVATION PROJECTS

Wild Snake Rescue Project

This project is now in its 25th year, and is the only such rescue and mitigation project in Hong Kong. Through collaboration with the Hong Kong Police Force and the AFCD, the project aims to mitigate snake-human conflicts by relocating healthy snakes, and conserving some of the rarer local snake species. The pilot scheme that approves a 'rapid release' of snakes following their capture on Lantau Island proved successful, with the three project partners (KFBG, the AFCD and the Hong Kong Police Force) keen to extend the pilot project. This was carried out extending it to all the other districts of Hong Kong in September. There are currently 11 snake catchers that have taken the KFBG/FAU training course and exam and have become certified by KFBG to rapidly release snakes. The certification is recognised by the AFCD and the Police Force and is the most significant change to the project in recent years, bringing benefits to animal welfare, as well as reducing vehicle emissions and man-power requirements.

Golden Coin Turtle Conservation Project

In July 2023, steps towards improving the biosecurity of the breeding facilities for the golden coin turtles occurred. A new dedicated incubation and hatchling rearing room became operational. In the 2022 season, the captive breeding season ended with a joint hatch record of 38 hatchlings from 101 potentially viable eggs.



The first golden coin turtle released by KFBG

On 28 September, KFBG released its first captive golden coin turtle. The turtle was found by a member of public outside their property shortly after Hong Kong's extended black rain fall and joined the breeding population. The discovery site of the turtle was downstream from an adjacent water shed, which has historic records of golden coin turtles. After discussions amongst the project team, it was agreed this animal should be returned to the wild and back into the watershed from where it had been washed down. The turtle was a juvenile male of around four to five years of age, indicating the potential presence of a small wild population in that area, persisting against the odds.

Romer's Tree Frog Conservation Project

The collection, release and post-release monitoring of tadpoles continues at the Phase 2 Romer's tree frog site. Under a special permit from the AFCD, 150 tadpoles were collected between May and June 2023. A total of 139 froglets successfully metamorphosed in their 'soft release' cages and were released in 2023, the highest release count of any translocations so far.

In 2023, adult Romer's tree frogs were recorded at every monitoring visit, except one evening. The calls were regularly recorded on an acoustic monitor which was deployed throughout the active season. At least 50 tadpoles were also counted recorded in one pot on 19 March. These are positive signs that the population continues to grow stronger and has moved towards establishing a self-sustaining population of Romer's tree frogs at the site. The final round of tadpole collection and translocation in 2024 aims to further boost the population level, with the goal to meet the primary objective of this project: to contribute to the conservation of this species, and save it from extinction.

Lam Tsuen Community Bat Project

Monthly visits to the bat house in Lam Tsuen continue, with a peak count of 208 bats (including six carrying young) during the July 2023 visit, the highest number of bats that has been recorded since monitoring started in 2005. The relationship with the property owner, Mrs Chung and her family, remains good, with no issues raised during recent visits. The project has been supported by many volunteers and continues to be a model for local conflict resolution involving wild animals.

Fauna In Situ Conservation

In January, FAU's Project Team met with the architect for the Jockey Club Nature Conservation Centre (JCNCC), our new office building under construction to investigate options and requirements to make the new building wildlife friendly. Issues examined included, the installation of bird strike prevention measures, artificial bat and bird boxes, inclusion of wildlife focused water features, and the modification of significant voids in the building to provide for large scale potential bat roosts.

Giant Spiny Frog Conservation Investigation in Collaboration with the AFCD

In May 2023, a team from the AFCD visited the upper stream habitats to assess the suitability and presence of the giant spiny frog (a rare amphibian in Hong Kong). The joint survey, which included experts from FAU and KCC, located several large tadpoles in one location which represented the target species. The AFCD kept a single tadpole to clarify identification

through DNA study. Acoustic monitors were deployed at three locations and resulted in the successful positive identification of the frog at one of the two monitored stream sites. This resulted in further physical searches for evidence of the species, and numerous eggs were then recorded from the dam at the end of the grassland path (reservoir #1) in the Upper Hillside of KFBG. The positive occurrence record of a highly threatened species has the AFCD concerned about potential poaching. Plans to better manage the key locations for the threatened frog have now been put in place.



Giant spiny frog's eggs discovered in reservoir #1

STATISTICS

Total number of animals received, released, or re-homed through the rescue programme since the establishment of WARC in 1994 to 31 March 2024

	Received	Released	Re-homed
Birds	17,196	6,422 (37%)	77 (0.5%)
Mammals	1,741	558 (32%)	90 (5%)
Reptiles	28,721	1,358 (5%)	10,317 (36%)
Stray Snakes	21,398	19,086 (89%)	505 (2%)
Amphibians	664	29 (4%)	9 (1%)
Grand Total	69,720	27,452 (39%)	10,998 (16%)

Total FAUNA collection figures for the period 1 April 2023 to 31 March 2024 (2022/23 Figures included for comparison).

	Total in Collection 1 April 2023 (1 April 2022)	Received/ Captive Bred	Released/ Relocated	Died/ Euthanised	Total in Collection 31 March 2024 (31 March 2023)
Birds	214 (159)	2,388 (2,188)	852 (690)	1,557 (1,441)	193 (216)
Mammals	53 (67)	156 (157)	39 (32)	121 (139)	49 (53)
Reptiles	845 (747)	586 (251)	27 (31)	202 (124)	1,202 (843)
Stray Snakes	0 (0)	1,563 (1,683)	1,442 (1,539)	121 (144)	0 (0)
Amphibians	0 (0)	10 (0)	8 (0)	2 (0)	0 (0)
Fish	80 (80)	9 (0)	0 (0)	38 (0)	51 (80)
Total	1,192 (1,053)	4,712 (4,279)	2,368 (2,292)	2,041 (1,848)	1,495 (1,192)

The figures indicate a significant increase of animals received: +10% and total animals in collection: +25%

NATURE CONSERVATION KADOORIE CONSERVATION CHINA

Kadoorie Conservation China (KCC) strives to turn around the loss of biodiversity across the region through research, collaborative conservation actions, capacity building and raising awareness. Current projects are located in Hainan, Guangxi, Guangdong and Hong Kong, and the prime focus in this year was the Eurasian otter and the Cao-vit gibbon, both of which are extremely threatened and understudied in South China.



The limestone forest patch at Bangliang Nature Reserve of Guangxi, on the border between China and Vietnam, is the last home to the critically endangered Cao-vit gibbon, one of the most endangered primates on Earth remaining with a population of only 74 gibbons

Otter Conservation in the Greater Bay Area (GBA)

In the GBA, we continued to work closely with various partners to conserve the regionally endangered Eurasian otter (*Lutra lutra*). In Hong Kong, in addition to maintaining a partnership with WWF-Hong Kong to monitor the otters in Mai Po, KFBG continued to carry out regular field surveys of the wetlands of Deep Bay and Shenzhen River, and also in other potential otter habitats, such as Starling Inlet, Lantau, and other outlying islands. A Eurasian otter was captured by the team's camera trap at San Tin in March, highlighting the great conservation value of San Tin wetlands.

In Guangdong, after the discovery of otter's occurrence on Qi'ao Island last year, the team began to work in collaboration with Zhuhai Qi'ao-Dan'gandao Island Provincial Nature Reserve on otter monitoring and public outreach. Across a wider region, our field surveys resulted in some exciting discoveries of new otter populations on Gaolan Island of Zhuhai City, Huidong County and Boluo County of Huizhou City; all confirmed by subsequent DNA analysis and camera trap surveys.

To engage the public regarding otter conservation, the "Project O" volunteer programme was launched in Hong Kong. Training was provided to a team of 22 volunteers, who support the otter surveys and carry out outreach activities in Hong Kong. Moreover, the team published a scientific paper in *Oryx — The International Journal of Conservation*, to illustrate the population change of otters in Hong Kong since 1890.

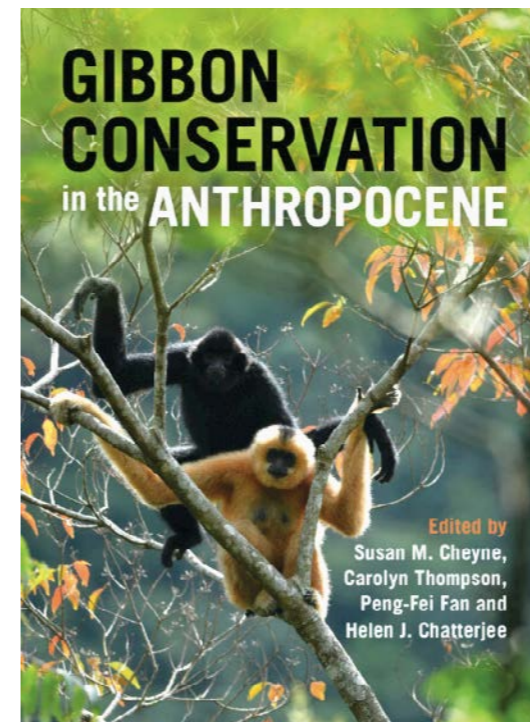


A camera trap photo of a Eurasian otter on Gaolan Island in Zhuhai, representing the first confirmed sighting on the island

Gibbon Conservation

KFBG continued to collaborate with Guangxi Bangliang National Nature Reserve (GBNNR) to safeguard the critically endangered Cao-vit gibbon (*Nomascus nasutus*), one of the most threatened primates on Earth. In order to develop effective community-engaged conservation actions to safeguard the Cao-vit gibbon, we conducted a habitat assessment at current and potential gibbon habitats, and at degraded and restoration sites, with support from the Flora Conservation Department and a botanist from Guangxi Normal University. On the other hand, community surveys were conducted in six Zhuang ethnic communities together with GBNNR and an expert from Sichuan Agricultural University. Based on these surveys, we organised and facilitated a stakeholder workshop involving local communities, GBNNR, local township government and forestry stations to develop conservation actions in managing and restoring the gibbon habitat.

Our rich experience in gibbon conservation continued to contribute to the global community. Our experts were invited to contribute a chapter on Hainan gibbon conservation for *Gibbon Conservation in the Anthropocene*, published by Cambridge University Press. Michelle Wong also shared the team's Cao-vit gibbon conservation work at the Save Our Species (SOS) Gibbon Regional Workshop in Bangkok, Thailand, in May. The workshop was organised by the IUCN and the SOS Gibbons initiative to catalyse conservation actions for some of the most threatened gibbon species.



KFBG's iconic Hainan gibbon conservation project was featured on the front cover of a newly published book on global gibbon conservation

Farmland Bird Survey in Hong Kong

The study report of KFBG's comprehensive study on farmland biodiversity, entitled "The Hidden Oases of Hong Kong – high ecological value farmlands in the proposed Northern Metropolis", was released at a press conference held at Green Hub in September. The report highlighted the high conservation values of some of the remaining farmlands of Hong Kong and recommended farmland conservation to be incorporated into the city's future development plans. The news was covered by major local media and radio interviews. Monitoring of the three key farmland sites continues.



In May, Dr Michelle Wong (3rd from right) joined the Save Our Species (SOS) Gibbon Regional Workshop in Bangkok



The final report of Northern Metropolis farmland bird survey was released in September. The pdf version is available online

Download here:



Hainan Eld's Deer Conservation

KFBG continued to support the conservation of the endangered Hainan Eld's deer. In June, the team supervised and provided technical support to the Hainan Eld's deer population survey conducted in the Hainan Bangxi Provincial Nature Reserve, where unmanned aerial vehicles (UAVs) were deployed for the first time. For capacity building, a training workshop was organised in November for over 40 staff from four government agencies involved in Hainan Eld's deer conservation, and as part of the collaboration with the two Eld's Deer nature reserves, we temporarily hired three community wardens to combat poaching.

Hainan Panjia Nature Reserve

Hainan Panjia Nature Reserve is home to at least 21 raptor species, yet there has been no scientific studies or conservation measures targeted for the raptors there, with the ecological significance of this lowland nature reserve going unrecognised. To build the capacity of the nature reserve, trainings were provided to the wardens to conduct surveys on raptors' breeding nests and night roosts, and to study the population size of the Crested serpent eagle - the first time this study was conducted in mainland China. In addition, Professor Liu Yang, an ornithologist from Sun Yat-sen University, was invited to take part in a study on the migration of oriental honey-buzzards (*Pernis ptilorhynchus*) using satellite tracking devices.



Li Fei (left) of KFBG and Prof. Liu Yang (middle) of Sun Yat-sen University installing satellite tracking device on an Oriental Honey-buzzard youngster in Hainan Panjia Nature Reserve



Various departments of KFBG participated in the exchange with the delegates of NFGA in December

Exchange Visit with the National Forestry and Grassland Administration (NFGA)

As the government authority supervising KFBG's operations in mainland China, representatives of the International Cooperation Center of the NFGA, including the Deputy Director General, Mr Xie Chunhua, visited KFBG in December. This was the first time NFGA officials had visited KFBG's headquarters since the Beijing Representative Office was formally registered in mainland China in 2019.

Contributing Expertise

IUCN Red List is a critical indicator of biodiversity and is a powerful tool to inform and catalyse conservation actions for threatened species. Yang Jianhuan and Philip Lo of KCC were invited to be the core group members of the Red Listing and Biodiversity Hotspot Mapping Working Group, a project initiated by WWF-Hong Kong to assess the conservation status of selected terrestrial and freshwater taxon groups and develop a map of biodiversity hotspot for Hong Kong based on the distribution of threatened species.

KFBG's conservation work was presented at various professional forums and workshops. For example, our raptor monitoring and capacity building in Hainan which was shared at the *China Raptor Monitoring Network Workshop* held at Beihai, Guangxi, hosted by the Guangxi Biodiversity Research and Conservation Association. At the 8th Guangdong-Hong Kong-Macau Nature Conservation Symposium held in Zhuhai, the team gave two presentations on otter conservation in Hong Kong and the GBA, and Yang Jianhuan contributed to the panel discussion on transboundary conservation. The result of the farmland biodiversity survey was presented at the *Northern Metropolis: Hong Kong / Shenzhen Ecological and Environmental Symposium* hosted by the Hong Kong Institute of Landscape Architects.



Yang Jianhuan (right) participated in panel discussion at the 8th Guangdong-Hong Kong-Macau Nature Conservation Symposium in December

Public Outreach

The 2024 the Countryside Eco-festival was successfully held at the Green Hub in March to promote countryside biodiversity and conservation in Hong Kong. This year, the freshwater ecosystems-themed event attracted the participation and support of various NGOs, institutes and the Countryside Conservation Office under the Environment and Ecology Bureau. The nature market, workshops and public talks attracted more than 1,500 visitors.

Other outreach activities such as game booths were set up in the Hainan Panjia Nature Reserve and Guangdong Zhuhai Qi'ao-Dangandao Nature Reserve to raise the awareness of local communities on threatened species. The team also produced and distributed conservation leaflets, stickers and calendars to facilitate public engagement.

Weibo and Wechat are KCC's major social media channels to promote nature conservation and KFBG news in mainland China. A total of 129 posts were published from April 2023 to March 2024, resulting in an estimated total readership of over 3.2 million.



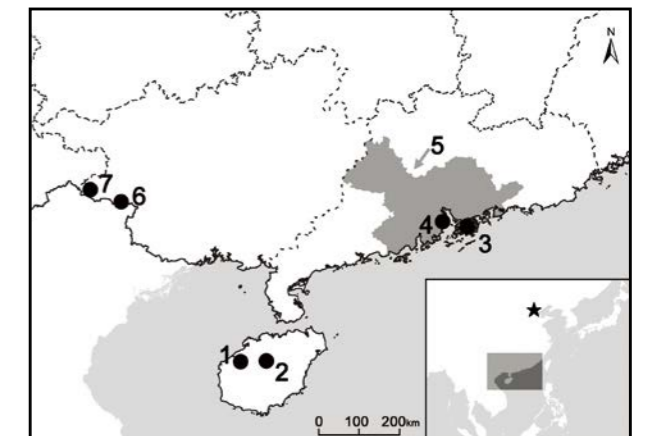
The 2024 Countryside Eco-festival, with a theme of freshwater ecosystems and conservation, attracted more than 1,500 visitors to the Green Hub

New Discovery

At the project site of Qi'ao Island in Zhuhai, the team discovered the regionally threatened Reeves' butterfly lizard (*Leiolepis reevesii*) which has not been detected in the Pearl River Delta for decades. The existing populations on Hainan Island and Leizhou Peninsula in Guangdong had been in drastic decline, and the species was recently classified as a Class II State Key Protected Wild Animal, and categorised as Critically Endangered in the China Red List Assessment. This newly discovered population is the only known remaining population from the vicinity of its type locality.



The regionally endangered Reeves' butterfly lizard (*Leiolepis reevesii*) was discovered on Qi'ao Island in Zhuhai



KCC Project Sites

1. Hainan Eld's Deer Conservation
2. Raptor Monitoring & Capacity Building of Panjia NR
3. Farmland Bird Survey in Northern New Territories, Hong Kong
4. Guangdong Qi'ao-Dan'gandao NR Biodiversity Conservation
5. Otter Conservation in Hong Kong and the Greater Bay Area
6. Guangxi Cao-vit Gibbon Conservation
7. Southwest Guangxi Biodiversity Survey

* Beijing Representative Office

NATURE CONSERVATION

KFBG WATCHDOG: PROTECTING LOCAL ECOLOGY

The Ecological Advisory Programme (EAP) actively monitors ecologically sensitive areas as well as areas of the natural countryside affected by development proposals. It plays a direct role in helping to protect these wilderness areas by carrying out field surveys/ site inspections, documenting and sharing ecological information, participating in meetings/ forums, submitting letters of concern and lodging objections. It also acts upon reports of possible harmful environmental damage caused by activities such as illegal dumping, disturbance to sensitive areas and improper land use. In addition, the EAP monitors planning applications, land use zoning proposals, Environmental Impact Assessments and development proposals, in order to ensure that Hong Kong's sensitive wildlife habitats and species are well-protected from development pressures.

From April 2023 to March 2024, the Ecological Advisory Programme (EAP) sent around 350 submissions, commenting on planning applications that would affect either farmlands or natural environments. The EAP also provided written comments on five project profiles, three direct applications for environmental permits (EPs), five environmental impact assessments (EIAs) and two draft outline zoning plans (OZPs). We attended a Town Planning Board hearing for the proposed amendments to the South Lantau Coast OZP, and also participated in the public consultation exercises regarding several large-scale projects carried out by the government, including the San Tin Technopole, Wetland Conservation Parks and Lau Fau Shan Development Proposal.

Numerous site visits were conducted to investigate ecological destruction cases, to gather information for submissions and for general, or routine, checking of sites of conservation importance. Suspected unauthorised ecological destruction cases at many sites were reported to the relevant authorities. We also attended meetings with various government departments and environmental non-governmental organisations (ENGOS) with regard to high-profile conservation issues and policies. Some highlights of our work are described below.

The San Tin Technopole proposal is one of the most controversial development projects in the past decade. If it proceeds, it will cause a substantial loss of fish pond areas in the northwest New Territories which are considered to be globally important in supporting migratory waterbirds. These fish ponds are also important habitats for the Eurasian otter, which is the most endangered native mammal species in Hong Kong.

In spite of all the efforts of KFBG and many other ENGOS, through liaison with the government, in May 2024 the EIA for this project was endorsed by The Advisory Council on the Environment and approved by the Director of Environmental Protection. The EAP has provided much ecological information and advice regarding the importance of the San Tin fish pond area; this included, for example, the fact that although the ecological survey conducted for the EIA failed to record any Eurasian otters in their assessment area, KFBG had recorded an Eurasian otter in the San Tin fish pond area in March 2024, with this important finding reported immediately through social media.

Now, although the EIA has been approved, there are still many conditions that the project proponent would need to follow,

including those related to the protection of the otter and enhancement of their movement corridors. Agricultural elements would also need to be considered in the form of urban farming. The EAP will continue to liaise with the government regarding the San Tin Technopole project to ensure that by doing so, environmental impact caused by the proposal can be further reduced.

From September to October 2022, dead birds were observed outside a transparent glass façade at Mei Foo MTR Station. It was suspected that they had flown into the façade and were killed by the collision. After some discussion with the MTR, a bird collision prevention film was installed on the façade. A year later, in 2023, after having inspected the same façade regularly in the same bird migratory period, we found no more dead birds, indicating that the film was functioning well in preventing birds from colliding with the glass. It is our hope that similar films can be installed in other places with comparable issues related to glass façades in order to create a harmonised environment for both human and nature to coexist. The EAP, in meetings with government departments on different projects repeatedly requested that such films be installed at sites of concern.

'Regulated Area' (RA) plans, which are new statutory tools to enhance the enforcement provision under the Town Planning Ordinance (TPO), were formally designated at South Lantau Coast and Mui Tsz Lam (Ma On Shan) in 2023. This has been a long awaited result, given the calls from various sectors, including members of the Legislative Council, having, for decades, urged the government to amend the TPO. We are also pleased at the current outcome, and will continue to urge the government to cover more areas in which the Planning Department does not have any enforcement power with RA plans, in order to better protect areas from environmental destruction, such as land filling and excavation.

During the reporting period, the Ombudsman proactively launched an investigation regarding the enforcement by the Lands Department and the Planning Department against unauthorised land development, and the general public was invited to provide views. The EAP responded with a comprehensive submission, based on our extensive experiences, clearly listing out actual happenings on the ground and areas where improvements could be made. The Ombudsman acknowledged and appreciated our contribution, stating that our views would be considered and incorporated into their investigation.

A natural hill stream and its well-vegetated riparian zone at Mui Tsz Lam, Ma On Shan



Fish pond area in San Tin



Eurasian otter recorded in San Tin in 2024



After the provision of RA, the South Lantau Coast area, including the wetland in Pui O, can be further protected from land filling activities

HOLISTIC ESTATE MANAGEMENT

Transmitting the Energy of Revival

Managing KFBG's diverse landscape for the benefit of biodiversity and people is a holistic, inter-disciplinary task. Parts of the site that are core to its botanic garden function are more intensively managed – planted and gardened – than those that serve as nature reserve. For example, areas with higher footfall are generally those where we showcase the beauty of plants in more curated displays, whereas the vegetation in remoter parts tends to be left for nature to shape by itself. Even so, removing invasive weeds, pruning trees to enhance their health and growth potential, and ensuring safety are common management interventions across the site as a whole. Overall, of course, we wish to see nature thrive and, as far as possible, we see this as an exercise in removing the barriers for native species of plants, animals and fungi to interact at will and run the course of their life cycles in the most uninhibited way possible. Acknowledging that nature has not had all that long to recover after profound historic disturbance (the last major hill fire to affect our upper slopes occurred as recently as 2004, for example), this entails working with the soil and the natural communities it supports to restore ecological resilience.

Though it takes hard work and costs both time and money, the act of restoring nature can achieve far more than the sum of the requisite inputs. This is because, if done properly, restoration harnesses natural processes that flow through landscapes at a range of spatial and temporal scales. Liberating this energy is the joy of the work we are engaged in.

In 2023, we initiated a completely new habitat restoration project that is already paying dividends. Along the Butterfly Path, which follows a stretch of the main stream at the heart of our site, Special Project Officer Paul Melsom and colleagues began clearing overgrown vines and invasive weeds to reveal a dramatic landscape featuring massive granite outcrops and stunning vistas across the slopes either side of the valley. This created space for numerous rare species to be introduced, including the Hong Kong Pencil Wood (*Dysoxylum hongkongense*), Crapnell's Camellia (*Camellia crapnelliana*) and the Beautiful Oiltree (*Millettia pulchra*). *Kopsia arborea*, a species first discovered in Hong Kong by Sir Horace Kadoorie, was also planted. As for all plants that are produced in our nurseries, every seedling is databased and labelled, allowing us to track their performance in the years to come.

Seeing Both the Wood and the Trees

Whilst striving to provide care for every seedling we plant, we also keep an eye on the bigger picture. Recognising the value of wood is an important part of this: wood not only helps trees to grow when they are alive, it also supports many creatures and nourishes the soil as these trees die and decay, plus it helps balance the climate by storing carbon.

Routine tree works took place all over KFBG in 2023, in total, more than 900 dead, hazardous, diseased or poorly structured trees were removed, and more than 1,000 ecologically valuable trees were pruned by our Arboricultural and Silvicultural Tree Teams. The areas cleared as a result of these operations were then prepared for re-planting to foster the rejuvenation of new native woodland.

These tree works generate a tremendous volume of wood. The logs are carted off site to clear the understorey and then stored in the lay-bys of the Upper Hillside. Bit by bit, these logs were shredded to produce 12 tonnes of wood chip, which was spread back over the slopes for soil enhancement. Pieces that were too large for the chippers were split and dried for biochar production.

Firing Up For Forest Restoration!

After a two-year hiatus due to technical problems, KFBG's biocharmaker finally resumed normal operation in December. This came after numerous modifications, extensive fine-tuning and several test runs to make sure it was fit for service – and able to pass stringent new environmental standards that were introduced by the government in the interim. In the end, all the blood, sweat and tears poured into the machine by Arborist Cyrus Cheung and support staff from manufacturers Earth Systems paid off, and we began ramping up our biochar production again through the first three months of 2024. The heaps of 'black gold' that come out are chipped and mixed with wood mulch and compost to activate the millions of microscopic pores it contains, and this magic formula is broadcast over forest soils to work wonders for the microorganisms and plant roots beneath the surface.



Special Project Officer Paul Melsom (R) and intern Steve Mani (L) getting their hands dirty planting native tree seedlings on a slope recently cleared of aggressive vines and weeds beside the Butterfly Path



Plants Record Officer Daniel Hang is in the process of accessioning (databasing and labeling) all plants in our living collections. This documents their source, helps us track their performance and gives us an analytical overview of the collection as a whole



Wood waste generated through routine tree works is normally removed from site, stacked for drying, converted into wood chip or biochar and then returned to the soil. However, in recognition of the importance of dead wood as a habitat in itself, we also made a feature of one of the stacks, which will be left to gradually decompose



Wood chip made from wood waste and returned to the soil, in this case to create an attractive, natural footpath



The Biochar Team had a busy year trouble-shooting the biocharmaker's technical faults and then fine-tuning its operation to meet new government emissions standards

Crafting Diverse, Resilient Plant Communities

2023 saw the completion of our first full year working on the forest restoration initiative on our uppermost slopes for which we received CLP financial support the year before. Building on the initial weed clearance that had commenced at the beginning of the year, staff got stuck into essential ground preparation works, including thinning of unwanted trees and shrubs, and formative pruning of retained stems. The trees that came out mostly belonged to the exotic species Formosa Acacia (*Acacia confusa*), as well as to the native but overly abundant Chekiang Machilus (*Machilus chekiangensis*) and Turn-in-the-Wind (*Mallotus paniculatus*).

In parallel, a total of 3,550 seedlings representing 109 different species were readied for planting out in the ecological space thereby created under the diligent coordination of Jason Yiu in the Native Tree Nursery. All were firstly tagged and measured as a baseline for future monitoring. Planting then got underway in the second half of July. The precise schedule of what to plant and where to plant it had been drawn up through the combined experience of horticultural and ecological staff in the department. This is truly an example of knowledge in action: far from being just an academic exercise, deep understanding of how hundreds of different species perform under different environmental conditions is needed to bring about a high degree of restoration success in terms of seedling survival and strong growth. It is always a breathtaking moment to take in a hillside of healthy young saplings once they are in the ground. Notable species planted included the Hairy Chestnut (*Castanopsis concinna*), Tutcher's Fig-hazel (*Distyliopsis tutcheri*) and the Small-fruited Honey-locust (*Gleditsia australis*).

To help advance research into the dynamics of forest recovery, Restoration Ecologist Fernanda Cardoso and colleagues set up a field experiment that will monitor the growth of a subset of these trees over the coming three years. She seeks to discern why a small number of native tree species (such as *M. chekiangensis*) do so well on Hong Kong's fire-damaged hillsides when the vast majority struggle to make a comeback of their own accord.

A few of the high-tech equipments we call upon in orchestrating these complex workflows include, drones for aerial photography, as well as laser rangefinders and LiDAR scanners for accurately mapping the locations of trees and other features in the landscape, which in combination allow us carry out detailed spatial analyses in GIS. Our environmental statistics expert Mang Lung Cheuk coordinated this work, greatly simplifying the process of setting up research plots in this and other locations to monitor the progress of canopy rejuvenation.

Ensuring Long-Term Tree Health, Whatever the Weather

Meanwhile, the newly reinvented Corporate Habitat Restoration Scheme moved to a new home, Plot 107 just below Signpost Corner at the heart of KFBG. Prior to 2023, this site was a long-abandoned, unkempt fruit orchard that was in great need of attention. To ready it for ecological planting, exotic plants were removed and the few remaining native trees were pruned to improve their health and form. Following this, two 1,000-litre water tanks fitted with rainwater collection funnels were installed for water storage on-site to help with irrigation through the dry season. New footpaths were created across the site, and these were mulched with wood chip produced from recycled waste wood to improve safety and aesthetics. Then, in July, the planting itself got under way. Three volunteer groups from Jardine's visited Plot 107 over the summer, followed by other groups in the autumn, together planting hundreds of trees and shrubs belonging to dozens of native species. Through this collaborative approach, the ecological health of our slopes only grows.

Removal of two very large *Acacia confusa* trees by crane



Fernanda Cardoso (R) and colleagues rolled up their sleeves to set up a field experiment that will examine how different tree species fare in the early stages of establishment in relation to a range of biotic and abiotic factors



Mang Lung Cheuk using a laser rangefinder to precisely map the position of trees and other features within an experimental plot



Extensive tree works were conducted at our Forest Restoration Site in the spring to prepare for the summer planting season



Over 3,500 tree seedlings were planted as part of our CLP-sponsored forest restoration project

ENHANCING OUR INFRASTRUCTURE

Enhancing the environment with a Life/Fish Ladder

In order to allow stream life to pass up and down the stream, and mitigate the negative impact of the existing manmade structures, a new life ladder was installed near the Plaza. This also provides an educational message to visitors. Natural stone was used, instead of concrete, which minimises the negative impact on the environment. The purpose of the life ladder is to improve aquatic animal movement to higher and lower altitudes along the stream.



Improvement to Kadoorie Brothers' Memorial Pavilion

Improvement works were carried out and mainly included repainting and plastering work to the Pavilion, as well as the Moon Gate. During the period of improvement work, a beehive was found inside the void area between rafters and ceiling joists. After consulting with a bee specialist, it was decided to seek a co-living solution, and the beehive was left undisturbed. Encounters were considered low if the nest is undisturbed; keeping in line with KFBG's mission of harmonising our relationship with the environment.



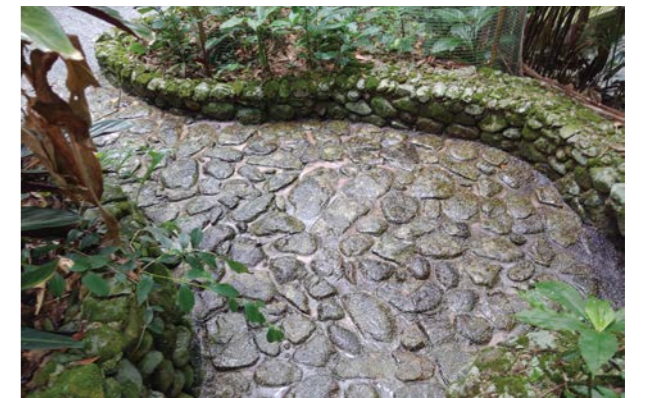
Replacement work in Orchid Haven

For many years, bamboo cladding formed by hundreds of bamboo poles with supporting metal frames, were erected surrounding the Orchid Haven as both protection and decoration. Over time, they were dilapidated and replacement work was undertaken for a refreshing feel to visitors. Additionally, decor masonry over the existing surface channel was added, providing a natural appearance and atmosphere to incorporate in our Orchid Haven.



Anti-Skid Treatments

Most of KFBG's trails and attractions are located on the slopes of Tai Mo Shan and these trails and areas often have to be closed after rainy or misty days, due to the potential hazard to visitors as a result of the slippery surfaces. To ensure that safety is maintained, and in keeping with the aesthetic natural appearance of the stone steps and trails, harmonising with the whole forest, an anti-skid treatment (translucent coating works with quartz) was applied in the Walter Kerr Garden, the Fern Walk and the Orchid Haven to increase friction, and thus preventing the risk of injury to visitors as a result of slippery walkways.





REGENERATIVE AGRICULTURE

REGENERATIVE AGRICULTURE

Promoting agricultural education is one of the sustainable development areas for KFBG. The Regenerative Agriculture Department (RAD) promotes agricultural work through demonstrations, public education, supporting local farmers and encouraging the development of community farms.

Agriculture Demonstrations

Along with the unique natural environment at KFBG, we continue to plant tea and coffee trees on the hillside and cultivate orchards on the terrace. Vegetables and herbs are mainly grown in lower farm area including One-dou Farm and the Eco-garden. This past year, the crops included 63 varieties of vegetables, a diversity of 35 kinds of fruits, and about 60 different types of herbs, green tea, scented tea, coffee and honey. Production was stable, in spite of the extreme rainstorms and typhoons in Hong Kong in September 2023. Many of our agricultural products were sold at the KFBG and Green Hub shops, while we also provided ingredients to the Eat Well Café at KFBG and the Eat Well Canteen at the Green Hub.

RAD also maintains poultry and livestock, including four breeds of chickens: Yellow Wai Chow, White Wai Chow, New Hampshire, and Pak Ngau Shek. The quantity and health conditions of the chickens were good, as was the egg production. Although the egg production was at a high in April to May 2023, sales were slow due to the decrease in the number of visitors, result of bad weather. As a result, we adopted other sales channels, including at the Central Farmers' Market at Pier 7 next to the Star Ferry.

Sadly, Bao, our last pig completed his mission as a farm ambassador and passed away in August 2023, ending KFBG's long history of raising pigs. The existing piggery will be renovated and used for other educational purposes.

One of our last projects is compost mixed with animal manure, and the plant waste and wetland wastewater treatment system, which form the basis for organic resource recovery. The annual output of more than 30 tons of high-quality compost continues to support our agricultural production and demonstration projects.

Support Local Farm Produce

The demand from the general public for vegetables from the farmers' market has dropped over the past years, making the business conditions of local farmers difficult. Therefore, we will improve and upgrade the Central Farmers' Market, held every Sunday at the Star Ferry Pier No. 7 in Central and continue to support local farmers selling their organic produce. The Central Farmers' Market celebrated 17 years of providing organic produce to the public. With the participation of ten local organic farmers and nine local handicrafts producers and social enterprises, we held a total of 50 farmers' markets, selling approximately 22 tons of farm products, and about 50 types of agricultural by-products and environmentally friendly products. Another direct sales platform was the Community Supported Agriculture (CSA) scheme in the form of online purchases, which is now in its fourth year.

Agricultural Policy

Since July 2023, we cooperate with the Urban Innovation Centre of the Hong Kong Asia Pacific Institute of the Chinese University of Hong Kong, the Liber Research Community and WWF Hong Kong on the development of Hong Kong Agricultural Park. A study, entitled, "Northern Metropolitan Area Development Regional Agricultural Land Survey" is expected to be completed and released in mid-2024.

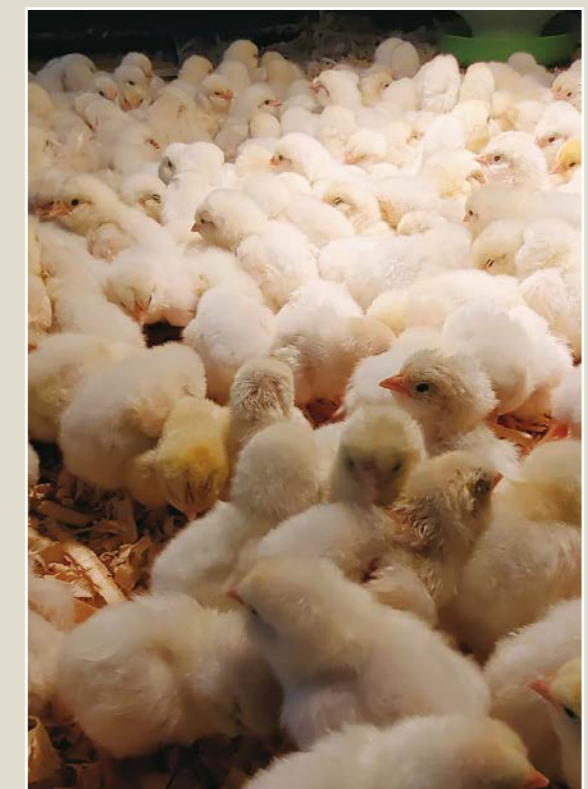
The apiary guided tours are suitable for everyone, especially children



A total of 16 apiary tours were held over four days in the spring



Organic, free range eggs from KFBG are one of our most popular agricultural products



Chicks thriving

FARMING COURSES AND COMMUNITY FARMING

Farming Courses and Workshops

Regular, agriculture-related courses, including “Introductory Courses on Sustainable Agriculture for City Farmers”, and “Planting Vegetables in Synchrony with the Seasons of the Year”, were held in March and May 2023 respectively. Our “Beekeeping Training Course”, which is very popular, was also held in September and October 2023. In addition, we held other courses and launched a brand-new “Hong Kong Agriculture” course in September 2023, which explores the history of Hong Kong agriculture and focuses on agricultural development.

In addition to the more professional agricultural courses, we organised guided tours this year that are based on interests of KFBG visitors. During January and February 2024, 16 apiary guided tours were held within four days to promote sustainable agriculture by sharing basic knowledge of the habitats and life cycles of local bees. There were a total number of 180 participants and due to the positive response, we will organise more diversified educational activities in the coming year.

Courses with Universities

The Regenerative Agriculture Department co-organised courses and lectures with tertiary institutions, focusing on sustainable agriculture in Hong Kong and its connection with the natural environment. From February to March 2024, we collaborated on the “Certificate course in Sustainable Communities - Sustainable Agriculture” with the University of Hong Kong, SPACE- Academy for Sustainable Communities. A total of 12 students from different backgrounds completed the 36-hour course. In addition, we also provided lectures in February at Chinese University and in March at Lingnan University on the relationship between Hong Kong agriculture and the natural environment. Altogether, 62 university students joined.

Community Farming

In recent years, in conjunction with the development of transitional housing, we have established and supported community gardens for various communities. Starting in 2022, together with the Society for Community Organization we ran a garden project at Sham Shui Po. From April to May 2023, those residents who had been trained under our supported project, “Training the Planting Ambassador in the Community Garden”, continued to run their gardens on their own. In addition, from October 2023 to March 2024, we also provided technical support to a series of community farms, as well as training courses for another transitional housing scheme, “A Square” managed by the Aberdeen Kai-fong Welfare Association Limited. As more transitional housing will be completed, the RAD will continue to promote more urban farm projects to help members establish their own community farms.



Tea trees were planted on the hillside, with the harvesting of young tea in the spring

The introductory courses allowed participants to experience different farming models



Regular introductory courses on sustainable agriculture for city farmers remains popular with the public



High-quality compost continued supporting our various agricultural production and demonstration projects



“A Square” at Stanley is one of our major Community Garden projects

IN NATURE

Andrew McAulay

In Nature, open your senses,
Take a deep breath and...
Allow the mind to become still.

By day, the sun plays
Hide and seek with the clouds;
Hot and cold, rain and shine.
Just as Awareness contracts and
Expands with dancing thoughts.

At night, beneath the stars,
The call of an owl, a deer;
The chorus of frogs, cicadas;
The fragrance of night blooms,
The feel of a cool breeze...
Stir the soul into silence.

In the sacred space of the Heart,
All beings find fulfilment.
With reverence, trust and patience,
Discover your true nature.





HOLISTIC EDUCATION

HOLISTIC EDUCATION

We believe that education should embody the wholeness and harmony found in nature. By integrating science with intuition, economy with ecology, and philosophy with practice, we offer educational programmes that cover ecology, art, farming, economics, and culture, and foster a heartfelt connection with nature.

Our Reach and Impact

In 2023-24, as our city recovered from the pandemic, we experienced sustained growth in visitor numbers. Combining outreach and online programmes, our holistic education initiatives reached 178,511 individuals. This growth demonstrated our commitment to fostering a deep connection with nature and promoting interdisciplinary learning.

Target Audience	2018	2019	2020	2021	2022-23	2023-24
School Groups	35,355	28,296	3,151	671	19,436	46,065
Commercial Groups	6,905	5,453	136	0	2,461	2,407
NGO Groups	12,007	11,563	1,418	3,436	11,051	19,200
General Public	89,914	65,654	42,753	124,916	132,542	110,839
Total	144,181	110,966	47,458	129,023	165,490	178,511

Note: The figures from 2018 to 2022 represent the number of onsite visitors only, while the figures in 2023-24 also account for our reach through outreach programmes (7,058) and online programmes (2,040).

Our holistic education programmes reach diverse audiences and age groups, from young children to professionals, designed and delivered by KFBG staff and in collaboration with local and overseas teachers.



Meditation and Dialogue with Satish Kumar during his visits

Nurturing Tomorrow's Leaders through Early Years and School Programmes

School programmes recommenced swiftly as the community recovered from the pandemic, enabling our reach to nurture young minds. Below are some highlights.

Full Resumption of Existing Programmes with New Programmes Unfolded

The "Talk to Plants" programme blossomed post-pandemic, reuniting participants with nature through captivating stories, sensory experiences, art, and engaging activities. It touched the lives of 460 participants across eight organisations, instilling an appreciation for plants as echoed in their feedback.

Recognising the vital role of soil in sustaining life, we introduced the "Soil and Us" programme to inspire secondary school students on soil conservation. In 2023-24, this initiative attracted 94 participants across four groups, planting the seeds of environmental stewardship in young minds.



Farming experience offered by RAD were arranged for the interns as part of the comprehensive training

Cradle for Nature's Explorers & Artists: Camps & Internships

In the summer of 2023, 18 university students joined the annual Internship Programme. After rigorous training and assessment, these interns helped design and facilitate themed camps for various age groups, as detailed below.



Participants of In Touch with Nature 5-day Summer Camp

In Touch with Nature Camp Series – Facilitated by trained interns, this series ran in July, August, December 2023, and February 2024 for children aged 6-8, and engaged 231 participants. Activities included hiking, a recycled wood carnival, animal and plant treasure hunts, picnics in nature, and stories about our animal ambassador, the masked palm civet "Chun Chun."

Create Art with Blessings of the Forest: 3-day Art and Music Camp – 52 youth participated in two cohorts in July and August 2023. Participants explored their connections with nature through various art forms and expressed their blessings to animals and forests, which fostered a deeper appreciation for the natural world.

Play in the Woods Camp Series – There were ten sessions of the "Play in the Woods 1-day Summer Camp" from June to August 2023 and 2 sessions of the "Play in the Woods 2-day Winter Camp" in January and February 2024 were organised. These camps provided wonderful opportunities for parents and young children to immerse themselves in nature and enjoy quality family time. A total of 242 participants joined these two programmes.

Bespoke Programmes Tailored for Students and Teachers

An outreach programme for St. Paul's College in August 2023 immersed students in native wildlife stories and sustainable agriculture. Through engaging activities, 150 Form 1 students developed a deeper connection with nature, preparing their minds and hearts for their science and humanities curricula.

In September 2023, we organised a teacher development day for Sau Mau Ping Catholic Primary School, engaging 52 teachers and staff in themed programmes on ecology, conservation, nature arts, and wellbeing. This initiative fostered a deeper connection with nature among staff, inspiring them to promote environmental awareness within their school and communities.

Nature Education Empowered by Philanthropy

Supported by Knorr Bremse Global Care and the Social Innovation and Entrepreneurship Development Fund (SIE Fund), the “Reconnect with Forest - Six Week Nature Immersion Programme” provided immersive experiences in nature for underprivileged students, including those with special needs and their families over six Sundays from April to May 2023, 37 students and parents enjoyed hiking, animal encounters, and low-carbon workshops, fostering a profound bond with nature.

Funded by the Environment and Ecology Bureau, our “Secret World of Wild Animals” (SWOWA) and Outreach Talks enriched local school students through the “Sustainable Development School Animal Outreach Programme”. With 7,058 participants from 38 schools, this initiative invited students to become animal detectives, observe native wildlife, and connect closely with rescued animals. Through captivating animal footage and engaging talks, participants gained a deeper understanding and appreciation for wildlife from diverse perspectives.

Weaving Art and Nature Education

We actively supported the “Seed to Textile Project” initiated by the Centre for Heritage, Arts, and Textile (CHAT), delving into the intricate bonds between textile culture, local communities, and the urban and rural environment. As CHAT embarked on curating artwork using native Chinese indigo, 60 students and teachers from three schools visited KFBG to harvest Chinese indigo and join guided tours to learn about local flora and crops. The harvested Chinese indigo was used for creating art pieces, which were proudly displayed in The Mills’ art gallery, showcasing the harmonious weave of artistry and nature’s bounty.

Kadoorie Earth Programme

The Kadoorie Earth Programme (KEP) is an initiative co-created by KFBG and its network of collaborators. By integrating KFBG’s nature conservation, sustainable living, and holistic education programmes, KEP provides life-transforming learning experiences that reconnect people with nature and cultivate resilience. In 2023-24, through offline and online initiatives curated by renowned ecological speakers from international and regional backgrounds, KEP impacted 2,887 individuals worldwide.



Kadoorie Earth Programme Talk Series featuring International Ecological Speakers in 2023

Bringing Global Wisdom to Hong Kong: Hosting International Teachers

This year, we were privileged to host three KEP teachers at KFBG: Satish Kumar, Colin Campbell, and Jhon Kwano. Their visits to Hong Kong brought invaluable wisdom and guidance, allowing us to experience the profound concept of “We Are Nature.”

Elegant Simplicity: Satish Kumar’s Visit – Ecophilosopher Satish Kumar returned to KFBG in October 2023, sharing his wisdom with 474 individuals through a series of transformative events including an immersive three-day residential retreat, that included an enlightening dialogue with Venerable Chang Lin; a public talk on holistic education; a soil workshop, nature walk and meditation. Guided by the theme of “Elegant Simplicity”, Satish inspired us to embrace a harmonious coexistence with nature by cultivating simplicity in consciousness, mindset and behaviour.

The Power of Ritual: Learning from Indigenous Wisdom: Colin Campbell and Jhon Kwano’s Visits – Colin Campbell, a practitioner of traditional African medicine from Southern Africa, and Jhon Kwano, a messenger from a traditional tribe in New Guinea, shared their rich experiences and wisdom from indigenous traditions. Through a deeply experiential six-day residential retreat, captivating school talks and a dialogue between the two teachers, their teachings and insights inspired and guided 312 individuals to restore their connection with the natural world.

Enriching Series of KEP Talks

In 2023, KEP organised a series of online talks under the theme “We Are Nature” featuring renowned ecological speakers. In 2024, the talk series will continue to focus on Indigenous Wisdom. These talks inspired 2,040 individuals to explore new pathways to rediscovering our place in nature.



The Kalimba Keychain and Mandala Workshop combines woodworking, painting, and music



Public event featuring Colin Campbell and Jhon Kwano

Date	Name of Programme
22 April 2023	“Soil Is the Source of Life” by Satish Kumar
31 May 2023	“We Are Seed, We Are Soil, We Are Shakti” by Dr Vandana Shiva
15 July 2023	“Between the Body and the Breathing Earth” by David Abram
7 September 2023	“Co-Existing and Co-Creating with the More-Than-Human World” by Om Sunisa Janwiset Deiters
14 December 2023	“From ‘Deadlihoods’ to ‘Alivelihoods’” by Manish Jain
27 February 2024	“Indigenous Wisdom: Restoring Connection with the Natural World” by Colin Campbell

“Deepening Our Connection to Nature” Online Course by Dr Stephan Harding

Dr Stephan Harding hosted a two-week online course, “Deepening Our Connection to Nature,” from 6 to 20 June 2023. This course introduced participants to the Gaia theory and deep ecology, integrating scientific, philosophical, and practical foundations for developing a profound engagement with the natural world. A total of 25 participants joined the course.

Discovering Artistry in Our Nature Art Programme

The arts programmes at KFBG creatively utilized nature-inspired materials and elements, engaging participants in eco-friendly practices and deepening their connection with the natural world through interactive workshops and our Artist-in-Residence Programmes.

During 2023-24, the Natural Woodcraft Workshop attracted over 80 participants, who learned to craft unique wood products using reclaimed wood debris. By repurposing these materials, the workshop inspired eco-friendly lifestyles while showcasing the creative potential of participants.

The Kalimba Keychain and Mandala Workshop combined woodworking, painting, and music. While it started as an online event, in 2023-24, 220 participants came to KFBG to gain insights into the farm’s tree management and waste recycling practices, which aim for “zero landfill” and carbon neutrality.

The Zentangle in Nature Workshop served as a gateway for over 140 participants to appreciate nature and engage in art as a form of meditation, allowing them to feel empowered and deeply connected to the natural world.

In October 2023, the “Bat Clip DIY” art workshop was launched, focusing on bats’ ecological importance. From October to November 2023 and February to March 2024, we hosted the weekend pastel nagomi art activity at Plaza and Art House, educating participants about conservation through themed paintings.

Artist-in-Residence Programme

KFBG offered three Artist-in-Residence programmes in the same year. These included, “Music Journey: Transcending through Nature” by Kawa Wong; “Oneness: Painting Offering to Nature” by ArBlackChris; and “Soil and Art, The Roots of Life” by David St Maur Sheil.

Over 170 attendees savoured a half-day interactive concert, immersing themselves in the harmonious fusion of nature and music led by the acclaimed local multi-instrumentalist, Kawa Wong. The two art exhibitions in the Art House attracted a total of 11,515 visitors. During David’s residency, he inspired 231 participants in 13 sessions of the Soil and Art: Soil Painting Experience Workshop, guiding them to create captivating soil paintings.



The third Artist-in-Residence exhibition, “Soil and Art, The Roots of Life”, features innovative artist David St Maur Sheil

Transcendence and Holistic Growth: Transformative Programmes

Our transformative programmes at KFBG engaged over 3,000 participants. These initiatives fostered deep connections with nature, promoting holistic growth and personal transformation through experiential learning and mindfulness practices.



The guide and participants enjoyed a tea ceremony during the Forest Immersion Walk

Forest Immersion Walk Series

Our “Forest Immersion Walk” series, including the “Forest Immersion Walk at Dusk,” allows participants to reconnect with nature by engaging their senses. With over 60 sessions and 868 participants, we facilitated a gradual forest walk to rebuild the nature-human relationship. We also partnered with universities, offering experiential forest learning for the Education University of Hong Kong students and a “Day of Mindfulness” for The University of Hong Kong’s Master of Buddhist Counselling Programme.

“Energy of Nature” Series by Dr Claire Elouard

Dr Claire Elouard returned to KFBG to deliver a series of “Connecting with the Energy of Nature” workshops, guiding participants towards cultivating a deep awareness of their

intuitive relationship with nature. Residential retreats and single-day workshops were offered from the end of November to December 2023, with 59 participants benefiting from this enriching series.

Holistic Wisdom and Healing Journeys

Return to Nature • Learn the Way of Life from the Natural World Residential Retreat – We collaborated with yoga and mindfulness teacher, Janet Lau, to hold a four-day residential retreat, inspiring 32 participants to reconnect with and learn from nature. Janet also conducted two “Return to Yourself” yoga sessions, healing 53 participants through yoga, meditation, and self-reflection in nature’s embrace.

Pause and Breathe in Nature - Zen Art Experience – Attracting 1,763 visitors, the exhibition featured Zen moments captured and designed by local teacher Changlin Fashi. Additionally, mindfulness workshops co-organised with Pause and Breathe engaged 206 participants in grounding practices, breathing, and immersing in nature.

Little Fish Journey – This journey combines the Little Fish story, written by the Chairperson of KFBG, Andrew McAulay, with the musical arrangement of singing bowl artist, Tsang Man Tung. This transformative workshop included immersive forest walks from the lower to the upper farm area, coupled with nature sounds and the resonating sound of singing bowls, participants were encouraged to rethink the question of “Who am I”.



Janet Lau sharing her insights with participants at Sunshine Hall during “Return to yourselves” Yoga Meditation Workshop

Collaborative Endeavours for Sustainable Impact

From April 2023 to March 2024, we customised plans for various organisations aligned with our vision and mission, addressing their specific needs and promoting staff development.

- Enable Foundation: Co-created "Objects-Talk" Showcase
- The D. H. Chen Foundation: "Soul Good" Day Staff Retreat
- AIRI Urban-Rural Sustainability Fellowship 2022-23
- Hong Kong Mortgage Corporation Limited: Nature-Based Seminar and Team Building at KFBG

Youth Natural Ecotourism Guide Programme – Beautiful Hong Kong

In partnership with The Hong Kong Chronicles Institute, we trained 25 young people aged 18 to 25 in September 2023 to become natural ecotourism guides. This initiative included thirteen guided tours for 348 citizens in January and March 2024, enhancing local ecotourism and nature appreciation.

Nature Education Volunteer Training Programme 2024

This programme offers comprehensive training for individuals passionate about nature education at KFBG. Out of 104 applicants, 30 trainees were selected to attend a six-day intensive training from February to April 2024. Qualified volunteers will assist in delivering various holistic education activities.



The HKMC staff concluded their team-building event at the Kwun Yum Shan summit



The Little Fish story was performed with the musical arrangement by Tsang Man Tung and Allpamama



Participating families enjoyed nature movement games at the "Play in the Woods Summer Camp"

HOLISTIC EDUCATION VISITOR EXPERIENCE

Animal Encounters and Discovery Tables

With the support of the 2023 cohort of Outreach Volunteers, we were able to run the Discovery Tables and Animal Encounters regularly every month.

Both programmes have proven popular with visitors and have often been requested to support different events. These have included the ECA Expo at the Hong Kong Convention Centre (May 2023); the Membership Drive at Bookazine (August 2023, September 2023); the ReThink HK Sustainable Business Conference & Expo (September 2023); the After Dark Safari Party at the Hong Kong Science Museum (November 2023); and the Countryside Eco-festival at the Green Hub (March 2024).

Live Exhibits

In April, Ocean Park transferred their male Chinese alligator to KFBG as part of their conservation breeding program. Although they alligators did not end up breeding, both animals were seen spending most of the time together and made a unique display for that month.

We installed a simple, self-contained WIFI system that allowed visitors to log on via their mobile devices to view our monitor lizards, tortoises and turtles when they were keeping warm indoors over winter. The CCTV system went live over the hikeathon weekend in December 2023.

During the year we unfortunately lost two of our oldest residents, Fifi, the barking deer, and Rambo, the long-tailed macaque who passed away in June and July respectively.

Fifi was over 19 years old and arrived as a fawn in 2005. Rambo has been at KFBG since 1996 and was over 30 years old.

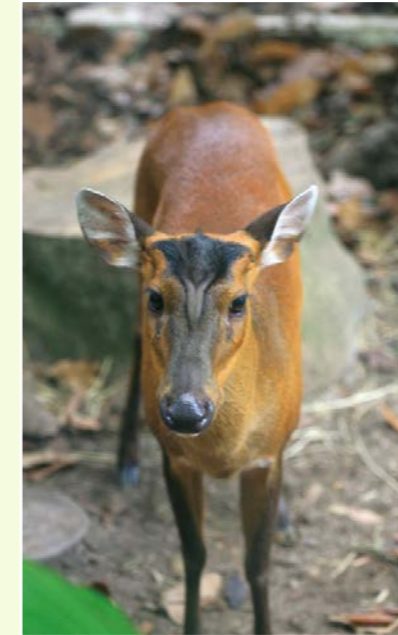
Chun Chun, a masked palm civet, joined the mammal exhibits during the year. He was discovered as a pup of around three days old. Fond of attention, he has become an important feature during the Night Walk programme.

Aberdeen, an Asian water monitor, made the headlines when he escaped from a temporary holding facility in August. He was discovered not far from where he escaped 17 days later, basking in the sun and was returned to his main enclosure.

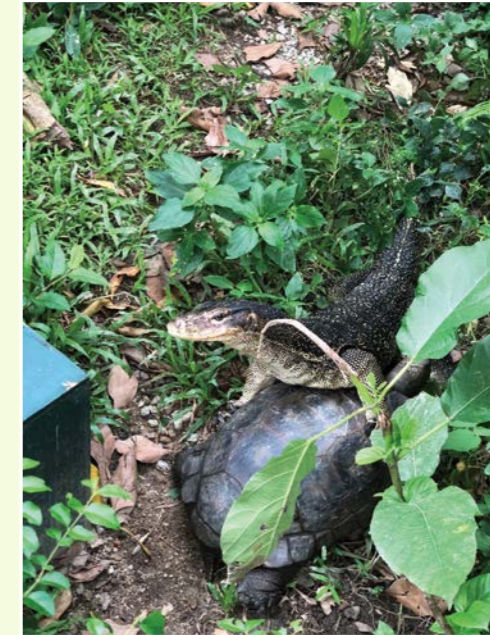


Chinese alligators together, the Ocean Park male on the left and the KFBG female on the right

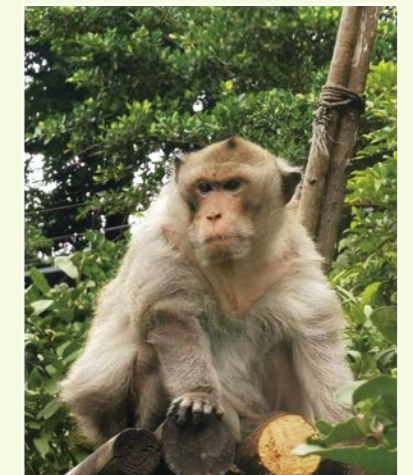
Fifi, the barking deer, was popular with visitors for nearly 20 years



Water monitor, Aberdeen, resting on one of his mates from his enclosure shortly after his return to the Reptile Lookout



Masked palm civet, Chun Chun, in his enclosure



Rambo, the long-tailed macaque, was a good leader to his small troupe



View inside reptile den via the CCTV link



SUSTAINABLE LIVING AND KFBG GREEN HUB

SUSTAINABLE LIVING AND KFBG GREEN HUB

Our sustainable living programme continues to engage community partners to co-create entry points for individuals to act and explore collaboration for a collective transition to a life-sustaining society.

KFBG Green Hub – A Hub for Co-creating Positive Change

As a collaboration between KFBG and the Development Bureau of the Hong Kong government, under the Revitalising Historic Buildings Partnership Scheme, the Green Hub continues to inspire visitors by making adaptive use of the Old Tai Po Police Station, a declared historic monument, to provide tangible examples of how climate solutions can be integrated into daily life. During the year, there were

- 44,884 visitors attracted by the opportunity to learn about low-carbon living and the annual number of visitors continued to grow, increasing by a further 16% compared to the previous year;
- 4,311 people enjoyed our professional interpretative services, which was supported by a team of volunteer guides, who were part of the of the Old Tai Po Police Station Heritage Interpreter Scheme. In parallel, we maintained online interpretative resources, accessible through mobile devices, to assist 35,412 visitors who preferred to enjoy the heritage site at their own pace; From the autumn, young visitors were able to borrow educational kits to facilitate their active and independent learning at the heritage gardens through sensory activities;
- 42 open-day events were organised on Sundays and public holidays during the dry season, to offer a wide range of activities designed to enrich visitors' experiences;
- 1,242 people participated in our workshops, courses and residential camps, all of which featured diverse themes, but which focussed on the same sustainable living goal.
- 23 sustainable producers and pioneers joined the revamped Sunday Co-op Markets to convey their sustainable messages through their products and stories to Green Hub visitors.

The Green Hub continues to serve as a platform to support different organisations promote sustainable living and heritage conservation. Programme highlights include, two Meet-the-Author events with Hide Enomoto, who wrote Transition Town in Japan and Satish Kumar, the author of

Elegant Simplicity, in collaboration with the Partnership for Community Development in August and the Art and Cultural Outreach in October respectively.

We are grateful that the Green Hub was selected as one of the Earth Stations to support the Common Core Unit of The University of Hong Kong, to engage their students in studies of the environment, who then produced a documentary using dance, film and portable kinetic sculptures.

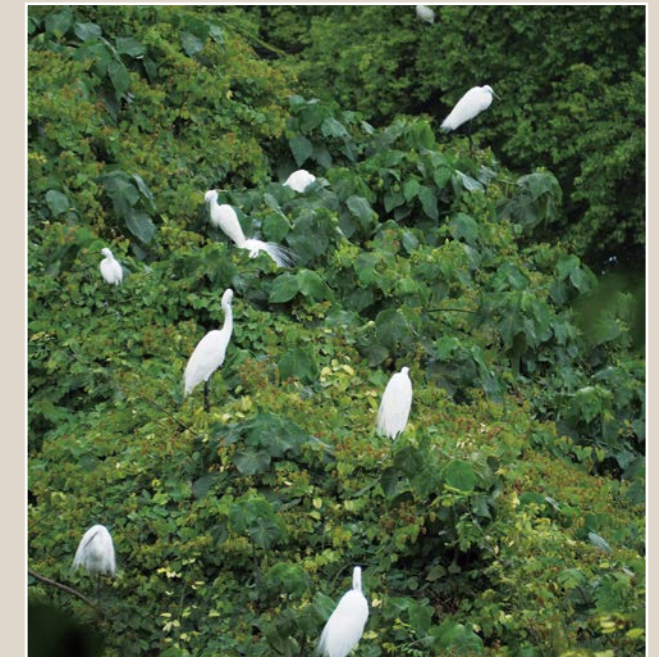
We were also delighted to work with One City One Book, of the Education University of Hong Kong, and co-host the screening of "(Welcome to) the Planet of Orchids" produced by Park Ji Yun. This was held in the Heritage Garden at the Green Hub in December. The cinematic anthology explores the lives of orchids, resulting from interdisciplinary research linking multispecies ethnography, botany, and the creative arts. The film generated stimulating discussions among the participants, which included artists, scholars, university students and community members, about our relationship with other living things.

To celebrate the start of egret breeding season at the Tai Po Market Egretty, we collaborated with Moving Playground to organise a Nature Movement Educator Workshop in March and worked with a team of young naturalists to deliver eleven workshops on "Our Secret Neighbours: Heritage Eco Tour" during the spring of 2024.

The Green Hub also supported the Kadoorie Earth Programme, to engage notable speakers to deliver public talks, and the Kadoorie Conservation China to organise a four-day Countryside Eco-festival at the Green Hub for the community.

We are thankful to organisations which made Green Hub facilities for meetings or organising retreat camps. Special guests of the year included, delegations from Wu Zhi Qiao (Bridge to China) Charitable Foundation, Partnership for Community Development, the Netherlands Consulate Hong Kong and the British Consulate Hong Kong.

Renovation works at the Green Hub were carefully scheduled to sync with the breeding season of egrets



Satish Kumar in dialogue with the Green Hub community on 23 October, on "Act to Solve Climate Crisis: Achieve Peace with Nature by Elegant Simplicity"



Community yoga at heritage garden, a regular activity of Green Hub Open Day, connecting visitors with self, each other and the environment

With funding and technical support from the Development Bureau, the Green Hub engaged architectural consultants and contractors in a year-long exercise to design and execute essential renovation works to preserve the architecture and visitor facilities at Old Tai Po Police Station.

Eating Well: A Starting Point to Harmonise Relationships

We believe eating well, with informed dietary choices, pave the way to improved well-being, of individuals, community and environment. The growing popularity of this understanding is reflected in our record high demand for our Eat Well educational services over the past year. During the year,

- we welcomed 3,897 people to our Eat Well cookery classes and workshops, as they learnt how to eat healthily and lightly on earth. This was 124% higher in comparison with the previous year;
- in reaching out to primary schools, we had 1,389 students join in, learning the importance of nutrition at an early age;
- we ran a test 'train-the-trainer scheme' to develop a team of eight professional Eat Well Tutors to cope with growing demand for these educational services;
- the Eat Well Canteen at the Green Hub and the Eat Well Café at KFBG continued to serve visitors with wholesome meals, with a minimal carbon footprint, that also generated support to local food producers;
- five residential camps and retreats were organised, with cooking workshops, for community bond building.



Sharing by Russell Kong of Urban Mushroom about sustainable production with the Green Hub community



Fun-filled activities were organised almost weekly at the Green Hub to facilitate young visitors to connect with other living things



Green Hub's Co-op Market strengthened ties between consumers and producers, and among producers



With support from the Zonta Club NT, twelve Eat Well Cookery Workshops were organised as part of a cookery competition to promote sustainable living



Students investigating the LOVERS principles (Local, Organic, Vegetarian, Energy-efficient, Reduce-reuse-recover and Seasonal) in everyday life

The Green Hub hosted KFBG's four-day Countryside Eco-festival in March 2024



Food education is central to our sustainable living programme



Young visitors connecting with nature through art jamming



Participant's Feedback: "It was a joyful and meaningful two-hour programme for my kid. I am impressed by the enthusiasm of the facilitator and the rich content. Highly recommended."

Food Hub – Part of the Emerging Kadoorie Earth Programme



Sustainability being integrated to the Food Hub renovation design

The Food Hub is a new initiative under of the Kadoorie Earth Programme which integrates the various strands of KFBG's nature conservation, sustainable living and holistic education programmes. We completed a feasibility study and developed a plan to revitalise a Canteen Block at HKU Kadoorie Centre as a Food Hub, to provide sustainable catering services and food education programmes, to connect people with self, each other and nature. The renovation design aims to serve the practical functions of the Food Hub, as well as complying to sustainable principles. We are grateful to have HKU's endorsement in 2023 to move this collaborative effort forward. Renovation works began in January, and service is expected to commence in the summer of 2024.



Renovation work at the Food Hub

Mainstreaming Sustainable Living

The Carbon Neutral Challenge was supported by the Bank of China(HK) Limited. This 18-month campaign successfully concluded with a sharing session by community project holders in July. Altogether, 78 schools, organisations and companies joined the campaign. There were fifty-five workshops organised for 8,756 participants to mobilise actions towards carbon neutrality from different perspectives. Sustainable principles were fully integrated in project management to 'walk the talk', highlighting KFBG's best practices. The environmental performance of the project was audited by the Hong Kong Quality Assurance Agency, which led us to the winning of an Outstanding Green Event Merit Award and Top 10 Outstanding Green Event Award in January. The Green Hub also received an Outstanding Green Event Facilitator Award.

- Moving Towards Carbon Neutrality, is a Langqing Charity led project, endorsed by China's Ministry of Ecology and Environment and Hong Kong's Environment and Ecology Bureau, that we continue to support. It promotes youth participation in carbon neutrality. We contributed to a series of training programmes, and assisted in organising a three-day Youth Forum in Zhuhai on 10-12 November for students of the Greater Bay Area to exchange their visions, as they learnt about national strategies for carbon neutrality. Idy Wong was invited to serve as Vice-Chairperson of the project organising committee for an extended year.



Community project leaders shared their stories of Carbon Neutral Challenge with public audiences



Over 8,000 students participated the Carbon Neutral Challenge

Statistics of Direct Participation in Sustainable Living Programmes

	2023-24	2022-23	Variance
Total number of visitors to KFBG Green Hub	44,884	38,628	+16%
Self-guided visitors to KFBG Green Hub	35,434	30,968	+14%
Heritage tour participants of KFBG Green Hub	4,311	4,820	-11%
Eat Well workshops & cookery courses	3,897	1,198	+225%
Sustainable living courses, workshops and camps	5,864	12,584	-53%
Overall number of participants	49,506	49,570	0%

A strong growth in actual visitors/ participants in Sustainable Living Programmes, from 38,628 to 44,884, whereas we noticed a similar decline in online visitors, reflecting the shift from online to offline after the pandemic.

COMMUNITY ENGAGEMENT

In 2022, the Partnerships Department underwent a strategic expansion, transitioning to become the Communication and Partnerships Department (CPAR). This shift recognised the dual role that CPAR would play - enhancing brand awareness through effective communication, as well as exploring valuable partnerships and collaborations with corporation and foundations.

Enhanced Communication Strategies

KFBG disseminates monthly press releases to the media, and newsletter to members, updating them on the happenings at KFBG with multimedia, images and print information. During the reporting period we generated over 1,300 media stories with an estimated media value of over HK\$45 million.*

** Media value generated, measured by advertising dollars, refers to the estimated monetary value of media exposure obtained through advertising efforts. It represents the worth or equivalent cost of the media coverage or visibility gained through advertising campaigns. Media value is often calculated by comparing the actual cost of purchasing equivalent advertising space or time with the estimated value of the earned media exposure. This approach helps in evaluating the economic impact and return on investment (ROI) of communications activities, as it provides a tangible measure of the financial value generated through media exposure.*

Viral Social Media Campaign

In August 2023, we launched a social media campaign after Aberdeen, the long-time Reptile Lookout ambassador, went missing. Within just two hours of the initial Facebook and Instagram posts, the story went viral, with seven media outlets reaching out to cover the disappearance.

The social media posts, and subsequent media coverage, generated extraordinary results. The Facebook content achieved an unprecedented reach (275,000, average is 28,000). The Instagram posts also saw massive spikes in reach (17,500), likes (3,128), and comments (47).

When Aberdeen was safely recaptured on 27 August, the good news was shared across social media the next day, prompting 15 media inquiries and a series of impactful interviews. This remarkable chain of events transformed Aberdeen into a beloved public figure, captivating hearts and minds, and igniting an unprecedented awareness for KFBG's mission.

Nature Hikeathon and Treasure Hunt @KFBG 2023

On 2 and 3 December 2023, KFBG held the third edition of its annual Nature Hikeathon and Treasure Hunt fundraising event. To encourage participation, the organisation provided

free shuttle bus services from four locations: Admiralty, Kowloon Tong, Tai Po Market, and Kam Sheung Road. This year, the focus was on increasing engagement and interaction, with the Hikeathon event offering both the classic 8km route and a more leisurely 4km route that allowed participants to explore KFBG's Raptor Sanctuary, Butterfly Path, and other scenic areas. The Treasure Hunt on 3 December featured 25 educational checkpoints across the Lower Farm and Orchid Haven. Participants received a souvenir postcard of Aberdeen, while also enjoying free cold drinks or ice cream at the "Nature Bazaar", which featured eight local partner organisations.

KFBG surveyed 414 participants after the event; the feedback was largely positive, with many indicating that they would recommend the event to others, or attend again. Participants highlighted their enjoyment of the tea, ice cream, scenery, learning experiences and event organisation. Suggestions for improvement included better shuttle bus coordination, enhanced communication, and more detailed course information, especially for the Treasure Hunt.

Fundraising Endeavours

We launched three initiatives: The first initiative, "Connection to Nature for Migrant Domestic Workers in Hong Kong," received a generous grant from the Kadoorie Charitable Foundation. Initiated in December 2023, this programme engages up to 100 migrant domestic workers weekly in nature-focused events throughout the year. Activities like yoga, Zentangle, treasure hunts, and pastel nagomi art fostered a deeper connection to nature among participants, providing quality rest and recreational opportunities to enhance wellbeing.



Nature-based activities, such as yoga exercises, are offered to migrant domestic workers

This project focused on the mental health and well-being of migrant domestic workers who face unique challenges in Hong Kong. By offering them the opportunity to connect with nature at KFBG, they were able to find a nurturing environment. Along with the educational and physical activities conducted in a supportive group setting, participants found solace, rejuvenation, and a sense of belonging amidst serene natural surroundings.

The second initiative secured a grant from the ZeShan Foundation, enabling us to acquire an ultrasound machine for our Wild Animal Rescue Centre. This vital veterinary equipment significantly enhanced our ability to diagnose and treat illnesses and injuries in wild animals rescued in Hong Kong. Additionally, the ultrasound machine plays a crucial role in monitoring the reproductive health of female animals and identifying internal problems, including those in newly hatched endangered turtles. By providing detailed, real-time images of internal organs, the machine enabled our experienced veterinarians to make faster and more accurate decisions, preventing animal suffering and facilitating successful rehabilitation and conservation efforts. The acquisition of the ultrasound machine further showcased our department's commitment to wildlife care and conservation.

Building on the success of the Nature Hikeathon and Treasure Hunt @KFBG 2023, KFBG secured a sponsorship from Hang Seng Bank for the 2024 edition of this annual fundraising event. This financial support will enable KFBG to further enhance the participant experience and expand the reach of the event.



The kick-off ceremony of our annual fundraising event Nature Hikeathon and Treasure Hunt @KFBG in December 2023



Migrant domestic workers found solace in KFBG



Participants enjoying refreshment at the Nature Bazaar



Tara the tegu is the first patient to receive an ultrasound scan with our new machine donated by ZeShan Foundation

AN EVOLVING ORGANISATION

After a year of dedicated efforts in rebuilding a nature-focused and people-oriented management team, our focus has shifted towards organisational capacity building and staff retention through various measures.

The People and Culture (the P&C) team has reviewed, and enhanced, the entire recruitment process to ensure that the right talents are acquired. This includes conducting pre-hiring interviews with referees for key positions such as Head of Department (HoD) and session leaders. By adopting a 360-degree assessment approach, we aim to evaluate potential hires comprehensively, considering both their competencies for the role, as well as their cultural fit within the organisation. Notable successes include the hiring of session leaders for the Flora Conservation and the Holistic Education (EDU) Departments, as well as the new HoD for Finance and Facilities Management (FM) Department.

To provide a warm welcome from day one, the P&C team conducted one-on-one introduction sessions for all new joiners to orient them to their contracts, the site and daily work. A further two-day orientation programme is held within the probation period, so that new employees learn about the activities of all departments. Official welcome gifts were also provided to create a positive experience.

Despite the challenges posed by the rainy season, we successfully conducted the 2023 Earth Day Event on 8 May. Over 230 staff members participated in habitat restoration activities, scientific surveys, and environmental clean-up efforts at the KFBG site.

Furthermore, the Annual Chinese New Year Dinner 2024 took place on 23 February, in a cozy and familiar atmosphere tailored to the comfort and preferences of our staff. We incorporated prizes promoting local businesses with eco-friendly or sustainable attributes, while addressing the diverse needs and desires of staff members.

Through these activities, we foster unity among all staff members, regardless of their departments, professions, or backgrounds, truly embodying the spirit of "One KFBG."

To ensure everyone in the organisation is informed and engaged, we have implemented various staff engagement activities similar to the year before. A staff engagement survey was conducted to gauge satisfaction levels and understanding of organisational initiatives, followed by briefing sessions to share the results with everyone.

Farm Keepers briefings were also held to refresh and introduce the unique responsibilities of designated staff members for the nature site.

Additionally, Lunch and Learn Sessions continue to be held twice a month, deepening internal understanding across departments.

Management team members, session leaders, potential successors, core staff members, and general staff were invited to participate in various learning, self-exploration, and personal development activities. These activities included Kadoorie Earth Programme (KEP) extension cooking sessions, breathwork ceremonies, conversation sessions with Satish Kumar, Colin Campbell, and Jhon Kwano, and DISC personality framework workshops. These initiatives provided opportunities for staff members to work, learn, and explore together.

The P&C team act as facilitators for internal staff development, advisors to leaders in times of need, advocates for implementing initiatives, and mediators in times of disputes.

We have reviewed and fine-tuned the Performance Appraisal mechanism and Annual Salary Review exercise to make them more systematic and transparent for the management team.

Additionally, in line with our goal to modernise KFBG through digitalisation and automation, we are in the process of implementing a system to streamline daily staff logistics and P&C-related processes.

In addition to our organisational efforts, we designed activities to promote the physical well-being of staff. A series of stretching sessions were conducted at the beginning of 2024 to emphasise the importance of physical care, especially for those engaged in outdoor fieldwork. Staff members were educated on preventive and rehabilitative movement practices to address fatigue and occupational health and safety concerns as top priorities.

In the post-pandemic era, there has been stability in people's movement. During the fiscal year 2023-2024, we recruited 53 staff members, while 37 left and two retired. The P&C Department played a vital role in stabilising the workforce, resulting in a net growth of 14 staff members. As of 31 March 2024, we have a total of 254.5 employees.

Good times at the Annual Dinner



A toast during the 2023 Annual Dinner



Joining the "Lunch & Learn" session



Experiential learning in the "KEP Soil and Seed" workshop



"Let's Stretch!", outdoor staff participating in an occupational health workshop



FINANCE

FINANCE

The financial performance and position of KFBG has been prepared in a true and fair view in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). In all other respects, the financial information has been properly prepared in compliance with the KFBG governance and internal control to prevent and detect fraud and error and also safeguard the assets of KFBG.

Financial Figures (Excluding Depreciation)

Expenditure (HK\$) (see Breakdown 3)	*Year Ended 31.3.2024 (unaudited)	**Year Ended 31.3.2023 (audited)
Capital	28,143,514	18,371,717
Operating	156,739,479	120,634,093
Total	184,882,993	139,005,810
Income (HK\$)	*Year Ended 31.3.2024 (unaudited)	**Year Ended 31.3.2023 (audited)
The New Kadoorie Foundation	148,942,200	109,000,000
Green Hub	7,867,566	7,213,093
Farm sales income (shop sales, floristic produce, fruits & vegetables, tea and eggs produce)	1,620,030	1,307,949
Government and other funding (see below breakdown 1 & 2)	14,180,081	8,265,716
Entrance fees and shuttle bus	3,305,783	4,092,767
Workshops, programmes, course income and guided tour fees, etc	3,754,796	1,935,371
Service provision of snake rescue & Golden Coin Turtles programmes, etc	1,489,460	1,295,520
Donations	795,177	1,425,916
Fund-raising events	869,000	959,941
Others	890,568	635,971***
Total	183,714,661	136,132,244

Income has increased by HK\$47.6M as compared to year 2023, mainly due to more funding from The New Kadoorie Foundation and from Hong Kong Jockey Club Charities Trust for the new Nature Conservation Building, the Jockey Club Nature Conservation Centre (JCNCC).

*From management accounts (expenditure includes commitments accrued and not yet settled).

**From audited accounts (expenditure includes expenses accrued and not yet settled).

*** Including vehicle trade-in of HK\$98K and insurance claims HK\$537K.

Breakdown 1 - Government Funding

Government Funding	Year ended 31.3.24	Utilised/will utilise by KFBG to provide:	Year ended 31.3.23	Utilised/will utilise by KFBG to provide:
HKSAR gov't (anti-epidemic fund)	-		1,000,000	Green Hub
HKSAR gov't (anti-epidemic fund)	-		20,000	Chang Lin exhibition
HKSAR gov't (AFCD) subvention	1,000,000		1,000,000	Wildlife Animal Rescue Centre
HKSAR gov't (employment subsidy scheme)	-		3,925,864	Staff costs
Development Bureau (The Green Hub)	721,919		0	Old Tai Po Police Station revitalisation
HKSAR gov't (SIE fund)	92,476	Forest School programme	92,474	Forest School programme
Total	1,814,395		6,038,338	

Breakdown 2 - Other Funding

Other Funding	Year ended 31.3.24	Utilised/will utilise by KFBG to provide:	Year ended 31.3.23	Utilised/will utilise by KFBG to provide:
Hong Kong Jockey Club Charities Trust	9,104,422	Jockey Club Nature Conservation Centre	493,037	Jockey Club Nature Conservation Centre
Knorr-Bremse Global Care Asia Pacific Ltd	-	-	250,000	Gaoligong Gibbon Summer Camp project
IUCN	202,689	Cao-vit Gibbon Conservation project	78,355	Cao-vit Gibbon Conservation project
CLP Holdings Limited	1,260,000	Ecological restoration of tropical forest	1,280,000	Ecological restoration of tropical forest
Mangrove Foundation	151,477	Greater Bay Area otter survey project	53,554	Greater Bay Area otter survey project
ZeShan Foundation	300,000	Ultrasound machine in Wild Animal Rescue Centre	-	-
Kadoorie Charitable Foundation Services Limited	1,347,098	Connection to Nature for Migrant Domestic Workers in Hong Kong project	-	-
Others	-	-	72,432	-
Total	12,365,686		2,227,378	

Breakdown 3 – Expenditures (Capital and Operating)

	Year Ended 31.3.2024 (unaudited)	Year Ended 31.3.2023 (audited)
Capital		
Kadoorie Conservation China	21,970	93,544
General Administration	205,930	1,134,804
Education	190,530	818,890
Facilities	12,617,240	7,775,624
Fauna Conservation	1,151,260	4,121,775
Flora Conservation	5,790,200	2,131,646
Sustainable Living & Agriculture	6,688,460	1,489,495
Partnerships	19,500	31,680
Green Hub	99,124	252,613
Lower Farm upgrade	1,359,300	521,646
Total	28,143,514	18,371,717
Operating		
Kadoorie Conservation China	3,580,500	4,296,518
KFBG Mainland China	1,835,284	1,376,925
General Administration	8,682,900	19,575,493
Education	13,707,590	10,447,198
Facilities	27,813,220	12,213,079
Fauna Conservation	17,647,390	14,230,095
Flora Conservation	31,127,100	26,316,716
Sustainable Living & Agriculture	22,169,140	17,779,613
Partnerships	5,240,600	3,461,988
Green Hub	7,160,315	7,489,311
Total	138,964,039	117,186,936
Jockey Club Nature Conservation Centre	17,775,440	3,447,157
Grand Total	184,882,993	139,005,810

Note: Green Hub's expenditures were covered by its income and the government's funding upon claims made and government approval.

APPENDIX 1

KFBG Activities Aimed at Building Capacity in Community Organisations and Partnerships for Sustainable Living

Title	Number of Participants	Organiser/ Collaborator	Audience	Date	Format
Training the Planting Ambassador in the Community Garden	50	RAD / The Society for Community Organization (SoCO)	Public	8, 22/4, 6,13/5 2023	Onsite
Sustainable Urban Farming Workshop	20	RAD / HKU CEDARS-GE Team	University students	14/4/2023	Onsite
Introductory Courses on Sustainable Agriculture for City Farmers	27	RAD	Public	22/4/2023	Onsite
Sustainable Farming at KFBG tour	13	RAD / Tin Shui Wai Community Development Network	Public	24/4/2023	Onsite
"Planting Vegetables in synchrony with the seasons" Course	24	RAD	Public	6, 13/5/2023	Onsite
"Organic and Sustainable Farming – Theories and Techniques" Workshop	20	RAD / HKU CEDARS-GE Team	University students	16/6/2023	Onsite
"Hong Kong Agriculture" Course	19	RAD	Public	16 & 17/9/2023	Onsite
Bee keeping course	15	RAD	Public	30/9 & 1/10/2023	Onsite
EduTEER: Monthly Theme Workshop	80	RAD / The Education University of Hong Kong	Public	21/9/2023	Onsite
"A Square" Community Farm Project	12	RAD / Aberdeen Kai-fong Welfare Association Ltd	Public	13/10, 5, 17 & 24/11, 8 & 29/12/2023, 23/2 & 8/3/2024	Onsite
Seminar "Food & Farm – Harvest in Hong Kong"	20	RAD / Hong Kong Federation of Women's Centres	Public	18/10/2023 & 12/3/2024	Onsite

Title	Number of Participants	Organiser/ Collaborator	Audience	Date	Format
Apiary Tour	180	RAD	Public	21/1, 4, 24 & 25/2/2024	Onsite
Apiary Tour	5	RAD / Worcester Polytechnic Institute	Students	2/2/2024	Onsite
Certificate course in Sustainable Communities – Sustainable Agriculture	12	RAD / HKU SPACE-Academy for Sustainable Communities	University students	15 & 22/2, 2, 3, 16, 17 & 24/3/2024	Onsite
Seminar "Hong Kong Farmland"	50	RAD / The Chinese University of Hong Kong	University students	19/2/2024	Onsite
"Agriculture in Hong Kong and its Relationship with the Natural Environment" Workshop	12	RAD / Lingnan University	University students	20/3/2024	Onsite
Introductory Courses on Sustainable Agriculture for City Farmers	27	RAD	Public	23/3/2024	Onsite

A Summary of KFBG's Major Agricultural Produce from 1 April 2023 to 31 March 2024

Produce	Kg	Pieces	Tons
Vegetables	18,088		
Fruit	4,888		
Bokashi	125		
Honey	120		
Fish	33		
Chrysanthemum	9		
Tea	23		
Coffee	13		
Roselle	6		
Eggs		129,097	
Compost			32

APPENDIX 2

Technical and Scientific Publication (author(s) in **bold**)

Title	Authors	Journal/ Publication
"Strategies for recovery of the Hainan Gibbon (<i>Nomascus hainanus</i>) — twenty years of multidisciplinary conservation effort"	Chan, B.P.L. & Lo, Y.F.P.	<i>Gibbon Conservation in the Anthropocene</i> . Cambridge University Press, Cambridge: 40–56.
"Genomic analysis reveals a cryptic pangolin species"	Gu, T.-T., Wu, H., Yang, F. , Gaubert, P., Heighton, S.P., Fu, Y., Liu, K., Luo, S.-J., Zhang, H.-R. , Hu, J.-Y., Yu, L. (2023)	<i>Proceedings of the National Academy of Sciences</i> 120: e2304096120.
"Analysis of a 131-year longitudinal dataset of the Eurasian otter <i>Lutra lutra</i> in Hong Kong: implications for conservation"	Hui, M.K.Y. & Chan, B.P.L.	<i>Oryx</i> . 2023: 1–9.
"Engaging Urban Residents in Primate Conservation: Impact of a Conservation Education Intervention in Hong Kong"	Hui, M.K.Y. & Tam, K.P.	<i>Primate Conservation</i> , 37: 155-164.
" <i>Cheirostylis yunnanensis</i> var. <i>gloriae</i> , an interesting new caterpillar orchid from Hong Kong, China"	Kumar, P., Gale, S.W. (2023)	<i>Feddes Repertorium</i> 134: 181–190.
"Life history traits associated with high fecundity help offset the worst genetic impacts of targeted poaching in <i>Aquilaria sinensis</i> "	Kwok, W., Zhang, H., Yang, F., Gale, S.W. , Fischer, G.A., Saunders, R.M.K. (2024)	<i>Global Ecology and Conservation</i> 50: e02814.
"Can disparate shared social values benefit the conservation of biodiversity in Hong Kong's sacred groves?"	Lee, K.W.K., Cheuk, M.L. , Fischer, G.A., Gale, S.W. (2023).	<i>Human Ecology</i> 51: 1021–1032.
" <i>Ecological Implications, Management & Replacement of 30 of Hong Kong's Worst Weeds</i> "	Lee, K.W.K., Williams, C., Gale, S. (2023)	Hong Kong: Kadoorie Farm and Botanic Garden.
"Genetic diversity of Eld's deer <i>Rucervus eldii siamensis</i> populations captive-bred at Phnom Tamao Wildlife Rescue Centre, Takeo, Cambodia"	Leroux, N., Zheng, C., Liu, Y., Chen, Q., Wong, M.H.G. , Gish, E. & Marx, N	<i>Cambodian Journal of Natural History</i> , 2023 (1): 8–20.
"Ongoing declines for the world's amphibians in the face of emerging threats"	Luedtke, J.A., Chanson, J., Neam, K., Hobin, L., Maciel, A.O., Catenazzi, A., Borzée, A., Hamidy, A., Aowphol, A., Jean, A., Sosa-Bartuano, Á., Fong, G.A., de Silva, A., Fouquet, A., Angulo, A., Kidov, A.A., Muñoz Saravia, A., Diesmos, A.C., Tominaga, A., Shrestha, B., Yang, J.H. , ... Stuart, S.N.	<i>Nature</i> , 622: 308–314.

Title	Authors	Journal/ Publication
"Drivers of habitat availability for terrestrial mammals: Unravelling the role of livestock, land conversion and intrinsic traits in the past 50 years?"	Pacifici, M., Cristiano, A., Lumbierres, M., Lucherini, M., Mallon, D., Meijaard, E., Solari, S., Tognelli, M.F., Belant, J.L., Butynski, T.M., Cronin, D., d'Huart, J. P., Da Re, D., de Jong, Y. A., Dheer, A., Li, F. , Gallina, S., Goodrich, J.M., Harihar, A., Lopez Gonzalez, C.A., ... Wiesel, I.	<i>Global Change Biology</i> , 29(24), 6900–6911.
"Comparative karyotype analysis of six native <i>Passiflora</i> species (Passifloraceae) from SW China"	Qian, L., Landrein, S. , Hao, C., Wu, F. (2023).	<i>CYTOLOGIA</i> 88: 295-300.
"A phylogenomic analysis of <i>Lonicera</i> and its bearing on the evolution of organ fusion"	Srivastav, M., Clement, W.L., Landrein, S. , Zhang, J., Howarth, D.G., Donoghue, M.J. (2023)	<i>American Journal of Botany</i> 110: e16143.
"Identifying the wetlands of international importance in Beibu Gulf along the East Asian–Australasian Flyway, based on multiple citizen science datasets."	Tang, N., Ma, Y., Li, S., Yan, Y., Citizen Science Project Team of Guangxi Biodiversity Research Conservation Association, Cheng, C., Lu, G., Li, F. , Lv, L., Qin, P., Nguyen, H.B., Nguyen, Q.H., Le, T.T., Wee, S.Q.W., He, T., Yong, D.L. & Choi, C.Y.	<i>Frontiers in Marine Science</i> , 10:1222806.
"Enhancing germination of <i>Habenaria janellehayneana</i> (Orchidaceae): Insights from asymbiotic and symbiotic methods"	Thummavongsa, T., Musimun, C., Watthana, S., Gale, S.W. , Choeyklin, R., Wiriyathanawudiwong, N., Muangsan, N. (2024)	<i>Journal of Ornamental Plants</i> 14: 11–23.
"Inoculum potential of mycobiont regulates the establishment of mycorrhizal symbiosis with <i>Erythrorchis altissima</i> , a fully myco-heterotrophic orchid"	Umata, H., Gale, S.W. (2023)	<i>Research Bulletin of the Kagoshima University Forests</i> 48: 1–7.
"Variable, life stage-dependent mycorrhizal specificity and its developmental consequences in the fully myco-heterotrophic orchid <i>Cyrtosia septentrionalis</i> "	Umata, H., Gale, S.W. , Suetsugu, K., Ota, Y. (2024)	<i>Mycoscience</i> 65: 68–78.
"Notes on <i>Halpe paupera</i> Devyatkin, 2002 (Lepidoptera: Hesperidae)"	Xue, G., Zeng, T., Lo, Y.F.P. , Wang, Q., Li, M., & Yang, J.	<i>Zootaxa</i> , 5399(3): 287–295.
"Notes on a road-killed Red Bamboo Snake, <i>Oreocryptophis porphyraceus</i> (Cantor 1839), in Hong Kong"	Yeung, H.Y., Chan, B.P.L. & Yang, J.H.	<i>Reptiles & Amphibians</i> , 30(1): e18748.
"Predation of the Endangered Hainan Torrent Frog (<i>Amolops hainanensis</i>) by Boulenger's Keelback (<i>Hebius boulengeri</i>) on Hainan Island, China"	Yeung, H.Y. & Yang, J.H.	<i>Herpetology Notes</i> , 16: 687–688.

Title	Authors	Journal/ Publication
"Confirmation on the occurrence of <i>Micryletta menglienica</i> (Yang & Su, 1980) (Anura: Microhylidae) in Mengla County, Xishuangbanna Dai Autonomous Prefecture, Yunnan Province, China"	Yeung, H.Y. , Zhao, J. & Yang, J.H.	<i>Sauria</i> , 45(2): 69–75.
"Exploring island syndromes: Variable matrix permeability in <i>Phalaenopsis pulcherrima</i> (Orchidaceae), a specialist lithophyte of tropical Asian inselbergs."	Zhang, Z., Li, J.-H. , Suddee, S., Bouamanivong, S., Averyanov, L., Gale, S.W. (2023)	<i>Frontiers in Plant Science</i> 14: 1097113
"The Hidden Oases of Hong Kong: High Ecological Value Farmlands in the Proposed Northern Metropolis"	Zheng, X. , Chan, B.P.L. , Au, T.K. , Yang, J.H. & Lo, Y.F.P.	<i>Kadoorie Farm and Botanic Garden Publication Series No. 19.</i>
"Species richness disparity in tropical terrestrial herbaceous floras: Evolutionary insight from Collabieae (Orchidaceae)"	Zhou, P., Li, J.H. , Liu, Y., Zhu, Z.W., Luo, Y., Xiang, X.G. (2023)	<i>Molecular Phylogenetics and Evolution</i> 186: 107860
"Additions to the flora of Hong Kong"	Zhu, H. , Liu, J., Wong, C.-K., Williams, C. , Hang, K. , Zhang, J. , Gale, S.W. (2023)	<i>Subtropical Plant Science</i> 52: 70–77.
"Monoculture plantations impede forest recovery: Evidence from the regeneration of lowland subtropical forest in Hong Kong"	Zhu, H. , Zhang, J. , Cheuk, M.L. , Hau, B.C., Fischer, G.A., Gale, S.W. (2023)	<i>Frontiers in Forests and Global Change</i> 6: 1098666.