woody plant genus (after *Ficus*), with 14 native species: *Ilex asprella* and *I. pubescens* are shrubs and are very common in shrublands and forests; *I. championii, I. cinerea, I. ficoidea, I. graciliflora, I. memecylifolia, I. rotunda* and *I. viridis* are trees and are common in shrublands and forests; *I. lohfauensis* is a shrub restricted to montane shrublands and forests; *I. chapaensis, I. dasyphylla, I. lancilimba* and *I. kwangtungensis* are rare forest trees.

The flowers of *Ilex* are small and male plants produce more flowers than female plants. *Ilex dasyphylla, I. lancilimba* and *I. kwangtungensis* produce pink flowers; *Ilex pubescens, I. lohfauensis* and *I. viridis* produce white to pink flowers; *Ilex cinerea* produces greenish-yellow flowers; the others species all produce white flowers. *Ilex ficoidea* flowers first in February, followed by most other *Ilex* species from March to May. *Ilex lohfauensis* flowers last in June. Only *I. ficoidea* and *I. memecylifolia* produce fragrant flowers. Honey bees, *Apis cerana,* are the commonest flower visitors on *Ilex* species in Hong Kong.

Ilex asprella and *I. viridis* produce black fruits, *Ilex chapaensis* produces green fruits, while all the others produce red fruits. *Ilex asprella* is the only summer-fruiting species, all other *Ilex* species fruit in winter. Some fruiting *Ilex* species are very conspicuous, like *I. cinere*a, *I. rotunda* and *I. pubescens*. The *Ilex* fruit is a bacco-drupe with pyrenes inside. A bacco-drupe is a berry-like drupe containing one or more seeds, each enclosed within a stony endocarp; a pyrene is the stone of a drupe, with the seed surrounded by hard endocarp (Hu, 1950). The fruits are eaten by seed-dispersing birds, except those of *I. chapaensis*. The very large green fruits of this species are eaten by civets and, probably, fruit bats.

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MISCELLANY

Kadoorie Farm & Botanic Garden - Wildlife updates & sightings

by Gary Ades

Wildlife recording, surveys and rehabilitation at Kadoorie Farm & Botanic Garden (KFBG) have produced a number of interesting and unusual records since August. In this report, KFBG staff provide some of the highlights of their findings.

General wildlife sightings are posted on the KFBG Wildlife Sightings Board on a fortnightly basis, with records provided by KFBG staff and visitors. Most records tend to be generated by the KFBG Security team on night shifts, the monthly Night Safari activity and regular surveys by the Fauna Conservation Dept. staff. All records will soon be databased to investigate any possible patterns of habitat use by fauna on our hillside.

(1) The following sightings records were posted between August and November, 2003:

August

5 August, 5.10pm; Scarlet-backed Flowerpecker (*Dicaeum cruentatum*), near tropical plants house - adult female with 3 juveniles begging for food.

23 August, (Night Safari) 7.30 pm; Japanese Pipistrelle Bats observed hunting insects, and picked up at 46KHz on bat detectors, over the Butterfly Garden; 8:30 pm - still a few fireflies along the stream at the Fern Walk.

27 August, p.m.; Many-banded Krait hatchling found outside the Admin. Office.

29 August; a male Macaque seen outside the Conservation Office.

September

1 September, 4 pm; at least 5 Birdwing butterflies (*Troides helenus* and *T. aeacus*) flying around the Butterfly Garden.

3 September; Small Indian Civet at Signpost Corner.

6 September; Bamboo Snake at Native Tree Nursery.

8 September; Cobra near Helicopter Pad.

10 September; Atlas Moth (mating pair) at Parrot Sanctuary.

12 September; Muntjac (Barking deer) heard, below Kwun Yum Shan and near Post Office Pillars.

12 September; Porcupine seen on road above Post Office Pillars.

12 September; Wild boar seen on road above Post Office Pillars.

13 September; Barking deer above Post Office Pillars.

15 September; Porcupine at Apiary.

24 September; Burmese Python near T.S.Woo pavilion.

29 September; Woodcock below Twin Pavilion.

October

5 October; Black-naped Oriole, (two individuals) at Kwun Yum Shan summit.

24 October; Big-headed Terrapin, Magnolia Reservoir.

25 October; 2 Ferret-badgers playing near Orchid Haven; 2 Porcupine at Raptor Sanctuary, unidentified species of Nightjar hawking for insects at dusk, summit of Kwun Yum Shan; Japanese Pipistrelle Bats above Upper Canteen; Himalayan Leaf-nosed Bats (*Hipposideros armiger*) hunting airborne invertebrates below TS Woo Pavilion; fireflies evident after dusk at the top of Kwun Yum Shan and at Great Falls.

Fig. 1. Juvenile Chinese Porcupine; family groups of porcupines have been seen regularly at KFBG in 2003.

November

21 November (evening / night); Wild boar, Leopard Cat and Small Indian Civet - upper Farm tangerine terraces; HK cascade frog - stream pool near Orchid Haven; Big-headed Terrapin x 3, Lesser Spiny frog, Anderson Stream Snake x 3 - stream above Magnolia Reservoir; HK Newt - stream near Fern Walk.

22 November (Night Safari); Porcupine (2 adult, 2 sub-adult) (Fig. 1) on road beneath summit of Kwun Yum Shan; Porcupine (one adult) above Boulder Lodge; Fire-fly larvae (=glow-worms!) at Magnolia Reservoir, by stream at Orchid Haven, Fern Walk and below Butterfly Garden.

(2) Kadoorie Farm & Botanic Garden – Fauna Department Project News

Roger Kendrick: **The monthly moth survey** has increased the number of moth species recorded at KFBG to at least 1,146 as of 23 November (Fig. 2). The latest new record (22 Nov 2003, Butterfly Garden, at a mercury vapour light trap) is of a species of *Yponomeuta* (Yponomeutidae) - a small ermine moth, which is also new to Hong Kong.

Fig. 2. Indian Moon Moth (*Actias selene*); one of the more than 500 moth species recorded at KFBG between August and November 2003.

Paul Crow: **Artificial bat roosts for insectivorous bats at KFBG**

KFBG currently has a total of 21 artificial bat roosts of 4 different designs installed on site. The boxes are all between 1-2 yrs old and as yet have not attracted a significant level of occupancy, however that is not to say they are not utilized. Our most successful design to date was our "first draft" which was our simplest design based upon principles laid out by Bat Conservation International and reference design laid out in "The Bat House Builder's Handbook" 1993 Merlin Tuttle and Donna Hensley.

The first design was recorded as housing up to 5 head of Japanese pipistrelle (*Pipistrellus abramus*) in a box at any one time and up to 11 bats at one time between all four roosts of that design. Unfortunately this box design was not resilient enough to last in the Hong Kong climate, being constructed only of Plywood and later upgrades have as yet failed to attract the same response from our local bats.

Other designs in use include a "Bat Condo" designed to offer housing to larger numbers of bats and prefabricated "Woodcrete" boxes designed to be built into permanent brick or concrete structures.

In many temperate countries, artificial roost structures for bats are well researched and are recognized as a valid conservation measure for some species. By putting different designs through trial, we hope to find those most appropriate for use in Hong Kong which may have value in mitigating loss of existing bat roost sites (Fig. 3). Plans exist in the future to test larger scale roost designs.

Fig. 3. A selection of artificial bat roost designs currently on trial at KGBF.

(3) Wild Animal Rescue Centre (WARC) - update

The months leading into the winter season are always a particularly busy time for the WARC team. During the winter migration, many birds arrive at our centre in a thin, weak state and in need of respite, especially young birds making the trip for the first time. Others travelling through our city at night are disorientated by our huge, illuminated tower blocks, often suffering concussion, even fractured bones.

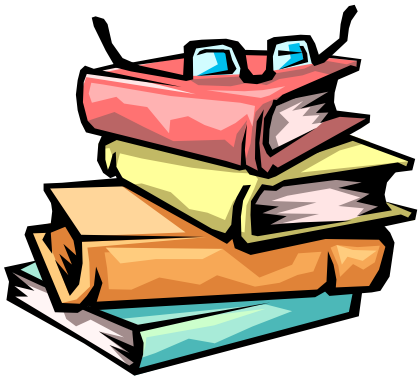
However, life at a rescue centre is never dull. Exciting animals received during this period include a new species for our centre a Band-bellied Crake, the third record of this species for HK and the first live specimen (Fig. 4).

Fig. 4. Band-bellied Crake.

Below is a list of just a few of the animals received over the last few months that have been **successfully rehabilitated and subsequently released**.

SPECIES	LOCATION FOUND	RELEASE DATE	RELEASE LOCATION
RAPTORS			
Collard Scops Owl (*Otus lempiji)*	Unknown	20.09.03	KFBG
Collard Scops Owl (*Otus lempiji)*	Aberdeen	20.09.03	KFBG
Collard Scops Owl (*Otus lempiji)*	Peel Rise	25.10.03	KFBG
Collard Scops Owl (*Otus lempiji)*	Mui Wo	25.10.03	KFBG
Collard Scops Owl (*Otus lempiji)*	Quarry Bay	13.10.03	KFBG
Black Eared Kite (*Milvus migrans)*	Unknown	05.10.03	KFBG
Brown Hawk Owl (*Ninox scutulata)*	Ho Man Tin	15.10.03	KFBG
Oriental Scops Owl (*Otus sunia)*	Kwun Tong	21.10.03	KFBG
Common Buzzard (*Buteo buteo)*	Kowloon Tong	06.11.03	Mai Po
NON RAPTORS			
Koel (*Eudynamis scolopacea)*	Kam Tin	01.09.03	Kam Tin
Yellow Bittern *Ixobrychus sinensis)*	Sham Shui Po	17.10.03	Mai Po
Schrencks Bittern (*Ixobrychus eurhythmus)*	Kwun Tong	18.10.03	Mai Po
Chestnut Bittern (*Ixobrychus cinnamomeus)*	Wan Chai	22.10.03	Mai Po
White Breasted Waterhen (*Amourornis phoenicurus)*	North Point	30.09.03	Lam Tsuen
White Breasted Waterhen (*Amourornis phoenicurus)*	Morrison Hill	22.10.03	Lam Tsuen

Chinese Pond Heron (*Ardeola baccus)*	Central	27.10.03	Lam Tsuen
Water Cock (*Gallicrex cinerea)*	Cotton Tree Drive	06.11.03	Mai Po
Common Teal (*Anas crecca)*	Lok Ma Chau	19.11.03	Mai Po
Band Bellied Crake *(Porzana paykulli)*	Mongkok	19.11.03	Mai Po
Moorhen *(Gallinula chloropus)*	Peak	21.11.03	Kam Tin
Woodcock (*Scolopax rusticola)*	Tsim Sha Tsui	22.11.03	KFBG
MAMMALS			
Greater Short Nosed Fruit Bat *(Cynopterus sphinx)*	Tai Po	11.11.03	Tai Po



BOOK REVIEW

List of Chinese Insects, Vol. II.

by Hua, Li-zhong , 612 pages, hardcover. Guangzhou: Zhongshan (Sun Yatsen) University Press, 2002

Volume two of the ambitious one-man catalogue "List of Chinese Insects" is dedicated to Judson Linsley Gressitt (1914 –1982) in commemoration of the 20th anniversary of his sudden death. This volume covers Coleoptera, Strepsiptera, Megaloptera, Neuroptera, Raphidiodea, Mecoptera and Trichoptera.

As I know from my own experience, cataloguing the insect fauna of China is not a simple task, especially if there is just a single author trying to compile about 70,000 species, described before 1990.

Evidently, Hua received some assistance from a number of specialists world-wide, as we can see from the comprehensive "acknowledgements" section. Consequently, some of the families treated in this volume have received professional attention, others not.

Staphylinids, for instance, have been compiled more or less correctly, although there are numerous typos and some double entries (e.g. *Stenus similioides* Puthz). Unfortunately, the water beetle list leaves much to be desired. Besides numerous typographical errors, resulting in badly mutilated taxa and author names, there are some rather curious lapses: *Haliplus bachmanni* Vidal Sarmiento & Crosso, 1969 from the Argentinian province of Formosa is the first species in the list of Chinese Haliplidae. *Agabus ussuriensis* Nilsson, 1997 (erroneously cited as "Nilsson, 1996") should not be included as it was described definitely after 1990. *Ilybius rufus* Zeng, 1989 is not available according to the International Code of Zoological Nomenclature. The replacement name *Nipponhydrus guizhouensis* Hua, 2002 nom.n., was introduced for another unavailable name, *Nipponhydrus bimaculatus* Zeng, 1989. *Metagyrinus sinensis* is listed for a second time, under the invalid combination "*Paragyrinus sinensis*". The lucanid genus *Cladophyllus* is listed under the family Dryopidae. All species of Ptilodactylidae are placed under "Helodidae" (= incorrect name for Scirtidae). Luckily, the incomplete and sometimes erroneous compilation of the various water beetle families is not really a tragedy because they are throughly covered by three volumes of the "Water Beetles of China" (Jäch & Li 1992 – 2003) and by the first three volumes of the "World Catalogue of Insects" (Hansen & Nielsen 1998 – 2001). Some of the terrestrial families (e.g. Carabidae) have recently been compiled thoroughly in the "Catalogue of Palaearctic Coleoptera, Volume 1" (Löbl & Smtana 2003).

As for the remaining families, Hua's catalogue will at least offer some interesting information for the beginner, who should, however, treat the the book with the necessary caution.

M.A. Jäch

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