

## Night Activities in Nature - Useful Ground Rules

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# Introduction

## Night Activities in Nature

These ground rules are intended to help orientate planners and participants of night time recreational activities. To nocturnal wildlife the night time is a world of smells, sounds and visual communications. To fully enjoy and appreciate experiences in nature we should be aware of our potential impacts on wildlife and minimize the disturbances in order to enjoy the activities but also to be considerate to the natural environment. Our hope is that all night time visitors will enter and leave the countryside with an increased awareness of the rich natural history of Hong Kong, and having left a minimal footprint behind.

The document also provides an introduction to nocturnal animals, awareness of which will help guide behaviour of individuals and groups carrying out night-time activities. Animals, like people, have a keen sense of sight, smell and hearing. In fact most wild mammals have senses which are significantly more acute than humans and so may be disturbed by activities that we would not think too extreme. Leopard cat sight is 6 times more sensitive to light than humans. Carnivores like civets can hear sound at a distance 4 times greater than humans. We can hear sounds up to 20 KHz frequency, civets and deer can hear sounds within a higher frequency range up to 40 KHz. Carnivores have a sense of smell which is 1000 times more acute than humans.

A set of keys jangling on a key ring may not seem significant to a human but the sounds will include high frequency features that we cannot hear but every owl, bat, civet and wild boar nearby can hear clearly!

Also when one whispers there are more high frequency sounds produced than when one speaks normally. So normal quiet speech is less intrusive to most mammals.

## GROUND RULES – 23 useful points

To get the most out of a night time experience in nature, and to show respect for the wildlife whose domain you are entering, there should be a code of practice or set of ground rules that help to guide individuals and groups to follow appropriate behaviours.

The ground rules will contain many common sense points, but also some not so obvious behaviours that will effectively increase one's enjoyment and also help to ensure that participants are aware of the affects their presence may have on nocturnal animal and plant life.

1. **Use red filters on torches** – *mammals cannot see red light*
2. **Use cloth rather than plastic materials** – *plastic materials when in contact with other items, or when crushed produce high frequency signatures that can be very noisy to wildlife*
3. **Walk or run quietly with light foot pressure**
4. **Avoid carrying loose keys or metal objects** – *the 'clinking' sounds travel far*
5. **Travel only on designated trails staying close to the centre of the track** – *this avoids damage to trail-side vegetation and minimizes erosion on the path edge*
6. **Don't apply insect repellent (or other artificial scents) excessively** – *the smell is obtrusive to wildlife and chemicals may leach in to the soil in rainy weather*
7. **Avoid brushing against or stepping on vegetation** – *minimizes damage but also avoids contact with venomous snakes (e.g. Bamboo Pit-Viper) and wasps*
8. **Do not smoke or use a naked flame** – *smoke disturbs wildlife and cigarettes are a fire risk*
9. **Put mobile phones into silent mode**
10. **Avoid flash photography**
11. **Avoid entering streams** – *many stream organisms are active at night and insect repellent chemicals may wash into the stream habitats*
12. **Do not remove plants or animals** – *this may be illegal*
13. **Do not discard plastic bottles or food wrappers on the hillside** – *some plastic objects can trap the legs of wild mammals and birds, and rubbish may attract feral dogs which are known to attack and kill wild animals*
14. **Do not make excessive noise when encountering wildlife** - *be quiet and enjoy the experience. If concerned move away slowly and give the animal space to move away*
15. **Avoid walking on rocks and boulders especially on the stream edge** – *the underside of rocks often provides homes for creatures*
16. **Minimize group size as far as possible**
17. **Avoid returning to the same site and/or trails in close succession** – *this provides better recovery time for the environment*
18. **Seek appropriate expert advice regarding which sensitive sites should be avoided**
19. **Ensure appropriate toileting arrangements are made** - *to avoid large groups fouling nature*
20. **Avoid use of loud hailers**
21. **If flood lights are in use minimize excessive light dispersal by pointing lights to the ground as far as possible** - *limits light straying widely and disturbing wildlife*
22. **Vehicle and generator use should be minimized after dark**
23. **Be familiar with routes, do a reconnaissance trip during the day-time**

## More Animal Facts

Animal Species China and Hong Kong	China	HK
Mammals	534	78
Bats	98	26
Whales & Dolphins	31	16
Birds	~1,200	~500
Amphibians	~210	24
Reptiles	~320	93
Freshwater Fish	1,337	140
Dragonflies	231 (Guangdong)	114
Butterflies	~1,350	~250
Moths	~20,000	>2,350

Hong Kong is only a dot on the South China coast but the territory's 1,100 square kilometres is a treasure of biodiversity. The table above indicates the number of species from selected animal groups that can be found locally. This includes some unique animals like Romer's Tree Frog and Bogadeck's Burrowing Lizard that are only found in Hong Kong.



Hong Kong's rich biodiversity

### Wildlife to **SEE**

- With luck and good weather, it is possible to **see** any of the following mammals during a night walk in the countryside: **wild boar**, **Chinese porcupine**, **barking deer (red muntjak)**, **masked palm civet**, **small Indian civet** and possibly even **leopard cat**, **Chinese pangolin** and **small-toothed ferret badger**. All species mentioned will utilise ridge tracks and paths as animal highways during excursions in their territories.
- **Bats** are present but not always seen. Several species may fly around paths and along streams especially where there is overhanging vegetation and woodland edge. **Japanese pipistrelle**, **Himalayan leaf-nosed bat**, **pomona leaf-nosed bat** and **Chinese horseshoe bat** can commonly be seen in the countryside at night.
- **Moths** will be present feeding on nectaring flowers and **fireflies** may be spotted near rocky streams.
- **Frogs** and **toads** are abundant during the early part of the **wet season** and sporadically throughout the warmer months to October and November.
- Nocturnal snakes (about 20 species) are often seen during the summer months.

### Wildlife to **HEAR**

- Animals **heard** regularly on the hillside and in woodland patches include **barking deer**, **collared scops owls**, **cuckoos** (several species call at night) and many species of **crickets**.



## Wildlife SCENTS

- There are smells that are unique to the night that may not be apparent unless you focus your senses. Several plant species will flower at night and produce scents that attract moths and bats to their nectar, which aids the transfer of pollen to other plants.
- If a porcupine walks across a track or path it leaves in the air a strong pungent musk odour, which once noticed cannot be mistaken. Some bugs produce strong acrid smells as defence if you brush past and inadvertently touch them. Such scents cling to clothing and remain until washed.

## TRACKS & SIGNS of Wildlife

- Many people will walk past tell tale **tracks** and **signs** of mammal activity without even noticing. These include well-worn animal trails in the undergrowth often exiting onto man-made tracks and paths. Several species may travel the same trails including deer, porcupines, and wild boar. Animals use these trails to move around the hillside searching for food and marking their territory. Also animals will leave footprints in wet mud.
- **Signs** of animal presence include porcupine quills that indicate a porcupine has recently passed by, tree damage by wild boar tusks, or earth dug up by wild boar rooting for bulbs and insects;
- **Droppings** or scats of mammals can be readily identified as they may contain visible fruit seeds (fruit eating animals such as masked palm civets) or hair and bird feathers in the droppings of leopard cats and small Indian civets. Pangolin droppings are composed entirely of the head capsules and remains of ants and termites.



Macuna plant flowers at night, and is mammal pollinated



Porcupines leave a strong scent on their trails



Porcupine quills



Mammal trail or highway



Leopard Cat foot prints

### **There are Animal Activities that Human Life depends upon**

- **Pollination** of flowers for fruit and vegetable production, especially by insects, bats and birds;
- **Seed dispersal** (especially of fruiting trees), by insects, bats and birds;
- **Predator-prey relationships** that benefit mankind (e.g. snakes-rats; bats-mosquitoes).

Protecting nature ensures a healthy environment where these important interactions can take place

Be aware of and respect the nocturnal environment during recreation activities - the more familiar you are with the environment around you the less undesirable impacts you are likely to have on nature and ultimately the safer and more enjoyable your experience will be