

CHAPTER 4

RESULTS: GENERAL BEHAVIOUR, SIZE OF MALES AND FEMALES, AND TERRITORY ESTABLISHMENT

4.1 GENERAL BEHAVIOUR

General behaviour of the Asian Paradise Flycatchers was observed before the breeding season (August-February) in both study areas. The Asian Paradise Flycatcher was difficult to find in the non-breeding season. Quantitative data was more difficult during the non-breeding season. The types and patterns of general behaviour were described. The most common aspects include foraging, excretion, locomotion, preening, and vigilance. Types and patterns of general behaviour were similar between the three types of males and females in both study areas. Additionally, the body sizes of adult males and females which were captured by using mist nets are shown in Table 4.1.

4.1.1 Foraging

The Asian Paradise Flycatcher inhabits mixed + evergreen deciduous and secondary growth forest. They were found mostly in pair in which the pair may breed together or just live together to forage for insects. They often perched or fly in high tree branches or in the canopy to glean insects. They are insectivorous and often catch insects in the air and from perches, or sometimes drop to the ground and forage with their broad bill.

4.1.2 Excretion

Excretion by the Asian Paradise Flycatcher occurred regularly, but was observed only a few times. The feces has a semi-solid texture which is a mixture of white urinary salts and dark fecal material.

4.1.3 Locomotion

The Asian Paradise Flycatcher are specialized for two different modes of locomotion: perching with the legs and flying with the wings. Perching occurred regularly and was observed frequently during foraging, resting, or vigilance. They often perch on high tree branches or in the middle storey. They sit very upright with the tail hanging downward while perched on branches. The central pair of tail feathers of males wiggle back and forth and move apart like scissors. The Asian Paradise Flycatcher regularly fly in high tree branches or in the middle storey.

4.1.4 Preening

Preening was observed when the Asian Paradise Flycatcher was cleaning itself. The Asian Paradise Flycatcher typically uses its beak to preen its feathers smoothly. The locations of preening were the belly, breast, flank, tail, and wings. It sometimes was scratched its head with a foot.

4.1.5 Vigilance

Vigilance was observed frequently when the bird spends some time on a branch to observe the surroundings. This behaviour is displayed by moving the head from left to right and back. Sometimes the head was pointed backwards without moving the body. This bird has an alarm call when a predator or human is present or close to its perching site where it cocks its crest and straightens up a rasping alarm call. The alarm call is shown in Chapter 6.



Figure 4.1 Adult female Asian Paradise Flycatcher being vigilant at the Chiang Dao Wildlife Research Station.

4.2 SIZES OF MALES AND FEMALES

Asian Paradise Flycatchers were captured and measured for body size before the breeding season at Chiang Dao Wildlife Research Station from 2005-2006 and 2009. The measurements of males and females include: bill, unflattened wing, tarsus, tail lengths, and body weight (Table 4.1). There were no differences among RL males and RS males (Mann-Whitney U-test), but tail length of RL males were rather longer than RS males, but the difference was not significant.

Table 4.1 Body measurements of the males and females in Chiang Dao Wildlife Research Station. Data is pooled from three years study (2005-2006 and 2008).

Gender		Bill (mm)	Wing (mm)	Tarsus (mm)	Tail (mm)	Body weight (g)
All males (N = 7)	Range	23.0-24.5	90.0-93.0	15.0-16.6	91.7-270.1	18.2-21.9
	Mean	23.6	91.3	16.0	181.1	20.4
	S.D.	0.4	1.1	0.6	83.3	1.1
RL males (N = 5)	Range	23.0-24.5	90.0-93.0	15.5-16.7	105.0-270.1	18.2-21.9
	Mean	23.7	91.5	16.1	216.4	20.4
	S.D.	0.5	1.2	0.5	70.4	1.4
RS males (N = 2)	Range	23.5-23.7	90.5-91.0	15.0-16.0	91.7-94.0	19.9-20.6
	Mean	23.6	90.8	15.5	92.9	20.3
	S.D.	0.1	0.4	0.7	1.6	0.5
Females (N = 9)	Range	21.4-23.6	81.0-90.0	14.9-16.2	85.0-99.0	16.6-20.8
	Mean	22.3	86.1	15.6	91.1	18.9
	S.D.	0.7	2.9	0.5	4.8	1.3

4.3 TERRITORY ESTABLISHMENT

Seven males Asian Paradise Flycatchers were captured and colour-ringed for individual identification in order to determine their territory before the breeding season at Chiang Dao Wildlife Research Station. Khao Pra-Bang Kram Wildlife Sanctuary did not permit capture by using mist nets. The territorial boundaries of males were also identified by direct observation of males which were colour-ringed from daily surveys before pairing in both study sites. Once the birds were found, the places and location of perching were marked and plotted on a map and were used to locate territory boundaries for each one daily. I found that, this bird usually inhabit and forage throughout the forest. They often moved to forage continually and rarely were not found in same place or nearby location. Moreover, the birds did not emit any sound or song to defend the area where they were perching. The territory may not be occupied during this time, but is occurred for nest territory during the breeding season. These territories are further discussed in Chapter 5.