

CHAPTER 6

RESULTS: VOCAL COMMUNICATIONS

VOCAL COMMUNICATIONS

The Asian Paradise Flycatcher had a range of vocalizations in frequency from 1 to 4 kHz (i.e. the minimum and maximum frequencies, respectively) these range from whistling calls to harsher calls which were heard in long distance. A total of 4 different element categories (A, B, C and D see Figure 6.1) which each element categories differed in their overall shape and frequency of maximum amplitude. The brief description of the vocalizations of the Asian Paradise Flycatcher recorded in two study sites consisting of alarm call, feeding call, contact call and flying call is given below. Additionally, begging call from nestlings was recorded during the period of their stay in the nest before fledging also was described in this chapter.

Alarm call: Most vocals heard and recoded were alarm sounds uttered by males and females. They often produced this sound when strangers came too close to them and also perching at high tree branch with the feather at crown standing erect. This sound was very loud rasping and high-pitched vocalization which consist of 2 elements (A1 and A2). A1 and A2 had harmonic frequency 4, 3 kHz, respectively (see Figure 6.2). This sounding liked “Ad At” which is somewhat similar, but stronger than call of the Black-napped Monarch (*Hypothymis azurea*).

Feeding call: A short and high-pitched vocalization sounding like “ Ad At ” which similar to alarm call, but the frequency of high-pitch lower than from alarm call

which consist of 2 elements (A3 and A4). Addition, feeding call contained with B category was difference by shape and frequency. Sometimes, feeding call may be containing mix within or between element categories with contact call element together (see Figure 6.3). This call was emitted by both male and female when they were feeding the nestlings in the nest with insects.

Contact call: A soft, low frequency vocalization sounding like whistling each of element which may be repeated several times. The contact call contained 2 - 20 elements (see Figure 6.4). This sound was emitted by male and female when they were sitting in their nest or perching at tree branch.

Flying out call: This sound was occasionally heard for about a week during the period of parental care before nestlings were fledging. A very soft and slightly lighter voice. Flying call contained with D category was difference by shape and frequency (see Figure 6.5). Both of male and female emitted this sound while they were flying from nest. They were leaved the nest during brooding the nestlings; when their mate came too close to nest. This call liked signal to fly out from nest in order to switch parental care between male and female.

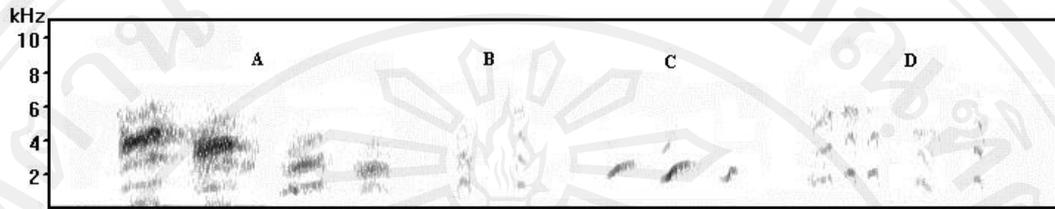


Figure 6.1 Sonagram illustrating variation between and within element categories by the Asian Paradise in both sites.

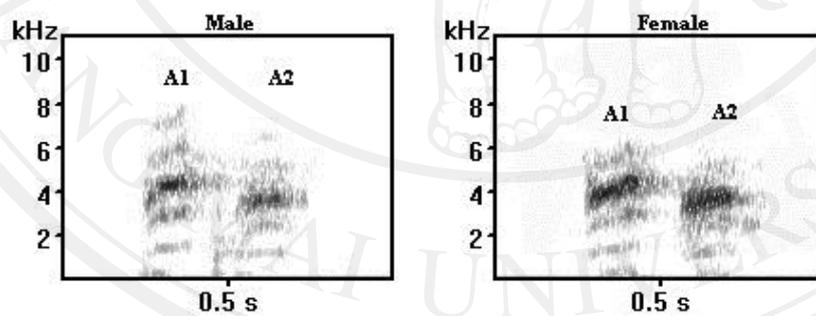


Figure 6.2 Sonagram illustrating of alarm call emitted by male and female.

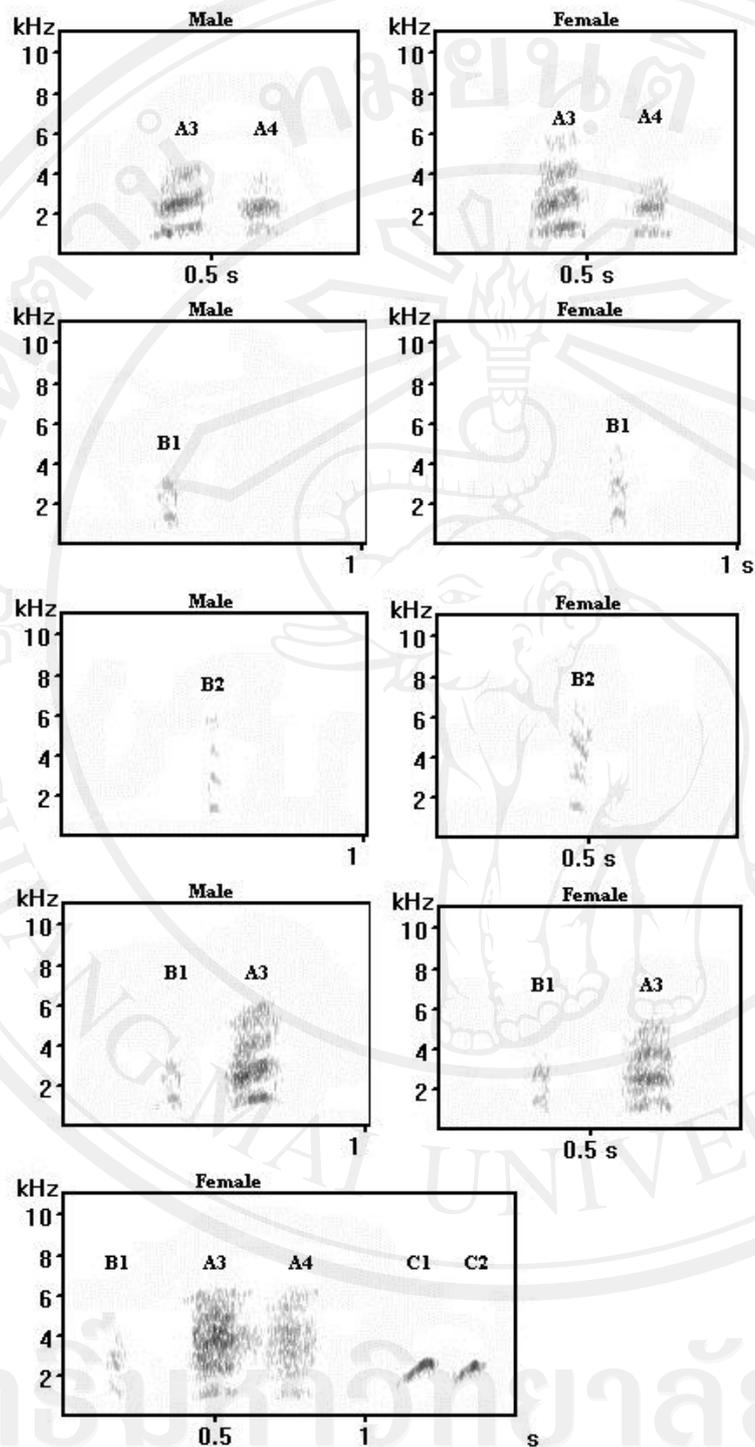


Figure 6.3 Sonagram illustrating variation of feeding call between and within element categories emitted by male and female.

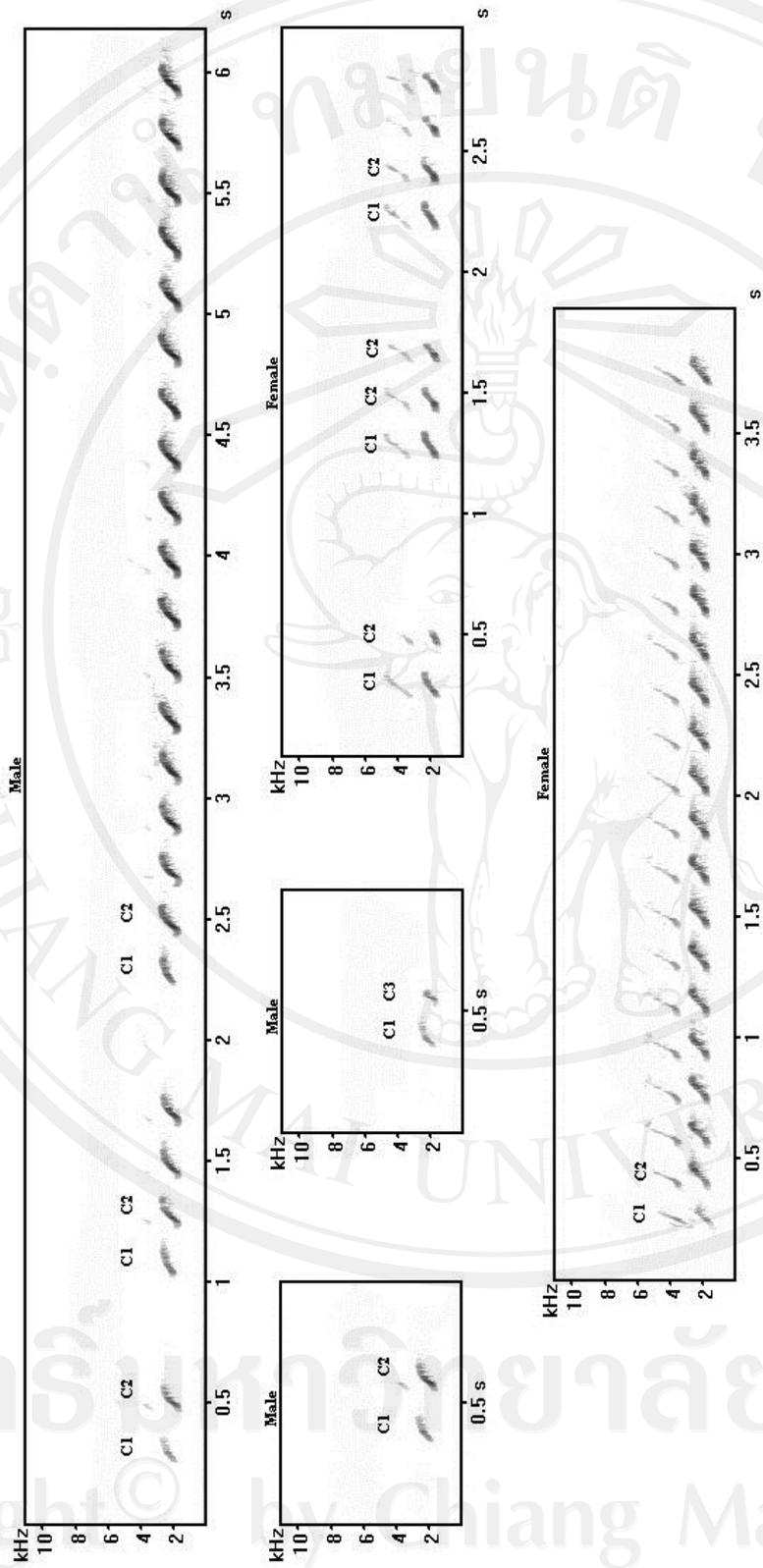


Figure 6.4 Sonagram illustrating of contact call emitted by male and female.

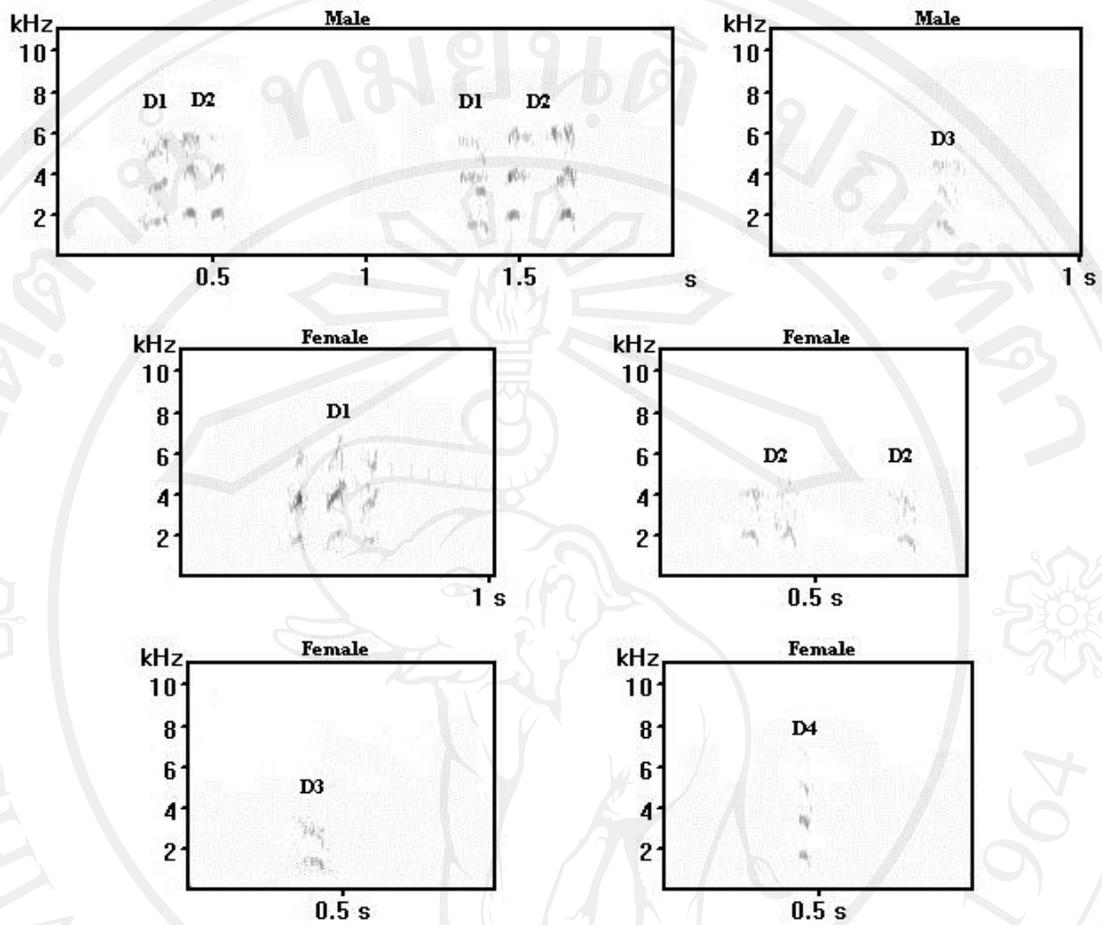


Figure 6.5 Sonogram illustrating of flying call emitted by male and female.

Begging call: The nestlings made the begging call when their parents returned and perched at the nest but, in some cases, the begging call also occurred when their nest was shaken whether parents were present or not. This only happened in the first few days after hatching. Nestlings making the begging call stretched their necks out to try to reach the parent's bill and opened their gapes until the yellow palate was visible. The begging calls were short and high-pitched vocalizations sounding like “jeeap”, but rather soft before day 3-4. The sonograms showed each element of the

begging call to be of high frequency and to rise and fall in the form of a chevron (see Figure 6.6), but they became of lower frequency in the few days before fledging.

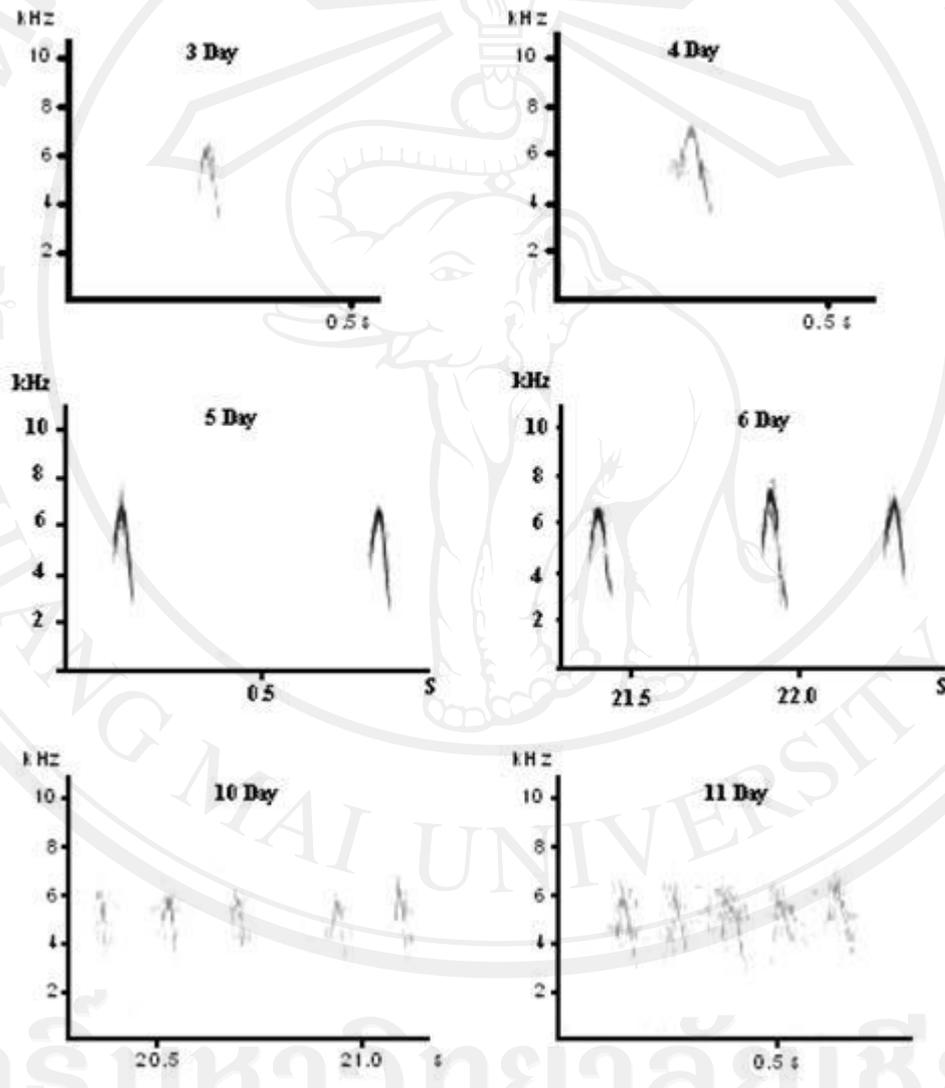


Figure 6.6 Sonograms of begging calls emitted by nestlings at different ages.