

## THE DIVERSITY OF DIURNAL BIRD'S SPECIES IN SUNGAI CHONGKAK RECREATIONAL FOREST SELANGOR

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### ABSTRACT

Malaysia has many species of flora and fauna. This is because Malaysia is among 17 mega biodiversity country in the world. Malaysia has many recreational forest areas. The values of the recreational forest area are normally dependent on the species of flora and fauna that lives at the area. Sungai Chongkak Recreational Forest (SCRF) Selangor is among popular recreational forest in Selangor state but no research on diurnal bird's species has been conducted at the area. Diurnal bird's species are among the important species that help to maintain the forest growing and healthy forest. Other than that, the identification of diurnal bird's species that lives at SCRF can help SCRF to promote bird watching activities to the visitor. The study about the diversity of diurnal bird's species in Sungai Chongkak Recreational Forest Selangor has been conducted. The results of the study indicate that SCRF Selangor lives with many species of diurnal birds. There are 41 species of diurnal birds from 20 families has been observed and the number of observed birds is 524 observed birds.

Key words: Diurnal Bird's Species, Diurnal Bird's Families, Sungai Congkak Recreational Forest

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### Introduction

Malaysia is among 17 mega biodiversity country in the world. There are many species of bird in the world which is about 10,000 species. Malaysia is contains about 70% of the world species. The family and species of birds in Malaysia are about 85 family and 742 species where 550 species in Sarawak, 568 species in Sabah and 644 species in Peninsular Malaysia. Diurnal birds are birds that normally active from 7am to 7pm which is during the sun rises. SCRF Selangor is among popular recreational forest in Selangor state. It receives about 2000 visitor per month and this number may increase double during school break and public holiday. SCRF Selangor has 2800 hectare of forest area which is a large size of forest area that lives with variety species of flora and fauna. The values of forest in recreational forest area are normally dependent on the value of the species of flora and fauna. The species of diurnal birds are among important wildlife species that help to maintain the forest growing and healthy forest. So the diurnal bird's species at forest area need to be managed so that the healthy forest can be maintain. Although SCRF Selangor has a large size of forest area, there is no research on diurnal bird's species has been conducted at the area. In order to manage diurnal bird's species at SCRF Selangor, the species of diurnal birds that lives in that area need to be identified. Other that, this area is also potential to be one of the sites for bird watching activities. The study about the diversity of diurnal bird's species in Sungai Chongkak Recreational Forest Selangor has been conducted.

### Methodology

#### Study Area

The study area is at Sungai Chongkak Recreational Forest (SCRF) Selangor. SCRF is located at about 3° 12' 42.32"N 101° 50' 36.46"E. It is about 33.5km from Kuala Lumpur (Kuala Lumpur is located at about 3° 08' 20.45"N 101° 41' 12.68"E). The size of the area is 2800 hectare. Sungai Chongkak Recreational Forest is a popular recreational forest in the Hulu Langat district of Selangor state. It is also known as Chongkak Park and Resort (CPR) and is managed by Tourism Selangor.

#### Sampling Method

During the study, transect line and point sampling has been used to observe the diurnal bird's species. This is because point sampling and transect line is suitable method to conduct the research on animals and birds in tropical rainforest or in difficult terrain such as Sungai Chonkak Recreational Forest, Selangor. Other than that, point sampling method in distance survey has been commonly used to study the population of avian community and animals.

### Equipment

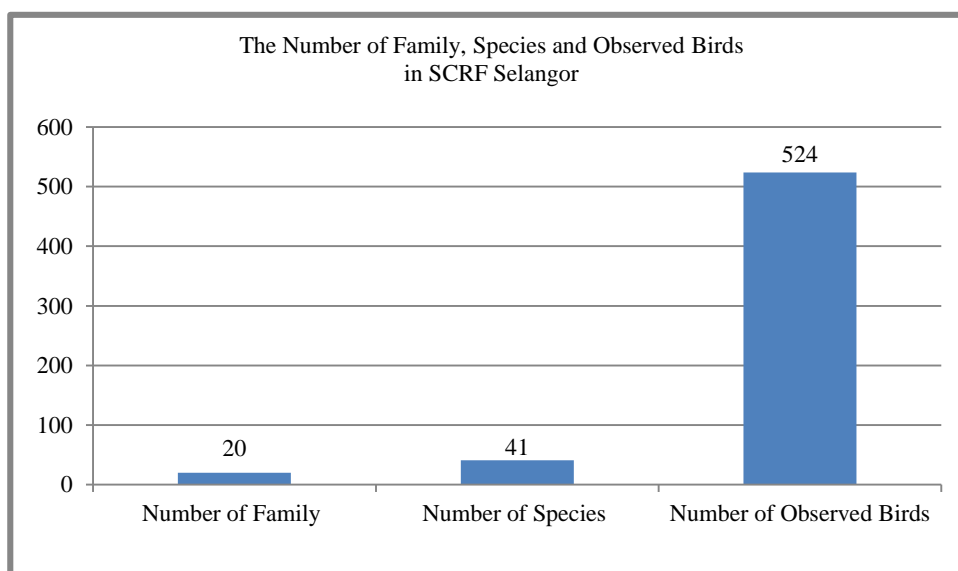
Binocular has been used during the study. The model of binocular is Bushnell 10-90x100. This binocular can view an object until 1000m in distance and it is suitable to view the long distance object.

### Bird Observation

The observation of the species of diurnal birds has been conducted in early morning which is from 7am to 7pm. The observation has been conducted only during good climatic condition and not conducted during rain. The species of birds that has been observed has been identified using the book of bird. The title of book that has been used in identification of the species of diurnal birds is "A Field Guide to the Birds of South – East Asia".

### Result and Discussion

Figure 1: The Number of Family, Species and Observed Birds in SCRF Selangor



From figure 1, there are about 41 species of diurnal birds has been recorded and 524 birds has been observed in SCRF Selangor, belonging to 20 families.

Figure 2: Number of Species at Each Family

Family	Number of Species
PYCNONOTIDAE	5
MUSCICAPIDAE: SAXICOLINAE	4
PICIDAE	4
CISTICOLIDAE	4
TIMALIIDAE	3
MUSCICAPIDAE: MUSCICAPINAE	3
NECTARINIIDAE	3
CHLOROPSEIDAE	2
DICAEIDAE	2
RALLIDAE	1
LANIIDAE	1
ESTRILDIDAE: LONCHURINAE	1
ALCEDINIDAE: ALCEDININAE	1
MOTACILLIDAE	1
ORIOOLIDAE	1
ALCEDINIDAE: HALCYONINAE	1
CAMPEPHAGIDAE	1

COLUMBIDAE: COLUMBINAE	1
CUCULIDAE: PHAENICOPHAEINAE	1
DICRURIDAE	1

From figure 2, there are 20 families with their own number of species. Family that has the highest number of species is PYCNONOTIDAE which is 5 species follow by MUSCICAPIDAE: SAXICOLINAE, PICIDAE and CISTICOLIDAE which is 4 species and the other families are below than 4 species.

Figure 3: Number of Observed Birds at Each Species

Scientific Name	Local Name	Number of Observed Bird
<i>Orthotomus sutorius</i>	Common Tailorbird	28
<i>Culicicapa ceylonensis</i>	Grey Headed Canary Flycatcher	28
<i>Pycnonotus finlaysoni</i>	Stripe Throated Bulbul	27
<i>Orthotomus atrogularis</i>	Dark Necked Tailorbird	22
<i>Copsychus saularis</i>	Oriental Magpie Robin	22
<i>Pynonotus erythroptalmos</i>	Spectacled Bulbul	21
<i>Chloropsis cyanopogon</i>	Lesser Grean Leafbird	20
<i>Meiglyptes tukki</i>	Buff-Necked Woodpecker	19
<i>Pericrocopus cinnamomeus</i>	Fiery Minivet	18
<i>Orthotomus ruficeps</i>	Ashy Tailorbird	16
<i>Chalcophaps indica</i>	Emerald Dove	15
<i>Macronous gularis</i>	Pin-Striped Tit-Babbler	15
<i>Orthotomus sericeus</i>	Rufous-Tailed Tailorbird	15
<i>Muscicapa dauurica</i>	Asian Brown Flycatcher	14
<i>Dicaeium trigonostigma</i>	Orange-Bellied Flowerpecker	14
<i>Enicurus ruficapillus</i>	Chestnut-Naped Forktail	13
<i>Arachnothera modesta</i>	Grey-Breasted Spiderhunter	13
<i>Stachyris poliocephala</i>	Grey-Headed Babbler	13
<i>Malacocincla sepiaria</i>	Horsfield'S Babbler	13
<i>Amaurornis phoenicurus</i>	White-Breasted Waterhen	13
<i>Prionochilus maculates</i>	Yellow-Breasted Flowerpecker	13
<i>Motacilla cinerea</i>	Grey Wagtail	12
<i>Chloropsis cochinchinensis chlorocephala</i>	Blue-Winged Leafbird	11
<i>Blythipicus rubiginosus</i>	Maroon Woodpecker	11
<i>Alophoixus phaeocephalus</i>	Yellow Bellied Bulbul	11
<i>Micropternus brachyurus</i>	Rufous Woodpecker	10
<i>Dicrurus paradiseus</i>	Greater Racquet-Tailed Drongo	9
<i>Hemicurcus concretus</i>	Grey And Buff Woodpecker	9
<i>Pycnonotus cyaniventris</i>	Grey-Bellied Bulbul	9
<i>Arachnothera longirostra</i>	Little Spiderhunter	9
<i>Lonchura striata</i>	White Rumped Munia	8
<i>Tricholestes criniger</i>	Hairy-Backed Bulbul	7
<i>Luscinia cyane</i>	Siberian Blue Robin	7
<i>Lanius triginus</i>	Tiger Shrike	7
<i>Zanclostomus curvirostris</i>	Chestnut Breasted Malkoha	6
<i>Hypogramma hypogrammicum</i>	Purple-Naped Sunbird	6
<i>Enicurus leschenaultia</i>	White-Crowned Forktail	6
<i>Tersiphone paradisi</i>	Asian Paradise Flycatcher	5
<i>Oriolus xanthonotus</i>	Dark Throated Oriole	5
<i>Ceyx erithaca</i>	Black Backed Kingfisher	3
<i>Actenoides concretus</i>	Rufous-Collared Kingfisher	1

From figure 3, there are 41 species of diurnal birds with their own number of observed bird. Species that has the highest number of observed birds is Common Tailorbird (*Orthotomus sutorius*) and Grey Headed Canary Flycatcher (*Culicicapa ceylonensis*) with 28 observed birds, follow by Stripe Throated Bulbul (*Pycnonotus finlaysoni*) (27 species), Dark Necked Tailorbird (*Orthotomus atrogularis*) and Oriental Magpie Robin (*Copsychus saularis*) which is 22 species. The number of observed bird for the other species is below than 22.

### Conclusion

According to the result of the study, SCRF Selangor lives with many species of diurnal birds. This species need to be managed so that the forest growing and healthy forest can be maintained. Other than that, SCRF Selangor also could be one of the sites for bird watching activities for visitor. The data of diurnal bird's species during this study can help SCRF Selangor to promote bird

watching activities to the visitor. The observation of diurnal birds at SCRF should be extended and conducted from time to time. This is because the species of diurnal birds may differ depending on the environment and season.

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