Self Introduction

Name : Cici Nurfatimah
Country : Indonesia
Duration stay in Kyoto : 6 months
(April – September 2015)

Current affiliation in IPB : Master Student in Department of Landscape Architecture, Faculty of Agriculture, Graduate School of Bogor Agricultural University (IPB)

Affiliation in Kyoto University : Landscape Ecology and Planning Laboratory of Graduate School of Global Environment Studies

Supervisor in Kyoto University : Prof. Shozo Shibata
Supervisor in IPB : 1. Dr. Syartinilia, SP, Msi
                 2. Dr. Ir. Yeni Aryati Mulyani, MSc
Current Study Background in Indonesia

- An alarming population decline of Javan Hawk-Eagle
- Habitat fragmentation and destruction caused by human activity
- Only few studies about Javan Hawk-Eagle
- No update information about habitat condition since 2003

Study Area:
- Central part of Java Island
- The least of habitat quality rank (Syartinilia et al., 2009)
- Severe habitat destruction and still continue

Study Topic and Objective

In Bogor Agricultural University

- **Research Topic**: Ecological Corridor Networks for Javan Hawk-Eagle (*Nisaetus bartelsi*) Habitat in Central Part of Java Island
- **Main objective**: Making recommendation for the policy of Javan Hawk-Eagle’s habitat through ecological corridor networks management system

In Kyoto University

- **Study Topic**: The comparison of ecological habitat between Javan Hawk-Eagle (*Nisaetus bartelsi*) and Goshawk (*Accipiter gentilis*)
- **Main objective**: To study about the ecological habitat of Goshawk (*Accipiter gentilis*) and how to manage and conserve the species as protected bird species
Common name: Javan Hawk-Eagle (EN)  
Elang Jawa (INA)  
Scientific name: *Nisaetus bartelsi*  
IUCN Red List Category: Endangered species  
Current population ± 300 pairs for 126.700 km²

**Geographic range:** Java Island endemic

**Habitat requirement:**
- Primary forest at 1200 - 1800m asl
- Home range ±400 ha / 4 km²
- Feed on small reptiles, fruit bats, small mammals.
- Nesting on high and old trees: Rasamala (*Altingia excelsa*), Pasang (*Lithocarpus* sp), Puspa (*Schima wallichii*)

Status in Japan:
- 2002 – Threatened species
- 2006 – Near threatened species

Common name: Northern Goshawk (EN)  
Oo taka (JPN)  
Scientific name: *Accipiter gentilis fujiyama*  
IUCN Red List Category: Least concern

**Geographic range:** North America, Europe, Asia, Japan

**Habitat requirement:**
- Agricultural landscapes where open land was the predominant land-cover type
- Nesting at conifer and deciduous mix forest
- Prefer forest edge.
- Feed on small birds and mammals.
- Home range 1171 ha (northern Japan)

Common name: Mountain Hawk-Eagle (EN)  
Kumataka (JPN)  
Scientific name: *Nisatetus nipalensis orientalis*  
IUCN Red List Category: Least concern but gradually decreasing

**Geographic range:** southwestern India, Sri Lanka, the Indo-China Peninsula, China, the Russian Far East and Japan

**Habitat requirement:**
- Mountainous region covered with forest
- Deciduous forest and artificial plantation forest
- Distribution density: 1 pair/ 20-40 km²
- Feeds mostly on small mammals, especially hares, and terrestrial birds, including junglefowl, domestic poultry, ducks, and pheasants, large snakes, and lizards

Common name: Blakiston’s Fish Owl (EN)  
Shima fukuro (JPN)  
Scientific name: *Bubo blakistoni blakistoni*  
IUCN Red List Category: Endangered Species  
35 breeding pairs left, restricted to eastern and central part of Hokkaido

**Geographic range:** China, Japan, Russian Federation

**Habitat requirement:**
- Home range within valley and close to water
- Inhabits dense forest and broad-leaves forest
- Fish as main diet. But also prey on small mammals, amphibi, insect and crustacean
- Home range varied from 3.7 km² to 56 km² depends on the season
Ecology and Conservation of Raptors

What it needs to understand habitat of birds are by observing each of this requirement:
- What kind of prey it needs
- The suitable nesting site
- Its movement: how, why, where and when
- Stop over condition (connector between patches)

Javan Hawk-Eagle Conservation Program in Indonesia

14 priority species to be increased in population as much as 3% by 2010-2014 (Indonesian Ministry of Forestry, 2010).
- Strategy and Action Plan For Conservation of Javan Hawk-Eagle (Spizaetus bartelsi) 2013-2022

Still lack of scientific guidance and methodology to be applied in the field

Ecology and Conservation of Raptors

Conservation and Management Program for Raptors in Japan:
- **Kumataoka**: preserve large trees in their favorable nesting grounds as well as to make environmentally sustainable use of timber resources
- **Shima fukuro**: design and implement a recovery plan for the river system and forest in Hokkaido; reduce human activity in riparian zones
- **Ootaka**: Published guide book to conserve Ootaka. This book consist of scientific paper and also environmental impact analysis and assessment tools for development in urban/sub urban area based on raptors.
Collaborative Research and Discussion With Experts

Experts:  
Mr. Hamada (Ornithologist)  
Mr. Kawakami (M1, Landscape Ecology & Planning Lab)

Date: 5th August 2015  
Location: Notogawa  
Activity: Bird surveying

Survey methodology:  
- Listing all the birds occurred on the site  
- Observed and noted the behavior  
- Mapped its movement within area

Purpose of study:  
To understand the function and relationship of landscape matrix for bird habitat

Collaborative Research and Discussion With Experts

Experts:  
- Prof. Hisashi Sugawa (The Ornithology Society of Japan, Japanese Bird Banding Association)  
- Prof. Yoshihiro Natsuhara (Nagoya University Graduate School of Environment)

Date: 28th July 2015  
Location: Ryukoku University  
Activity: Discussion about Ootaka

Date: 15th August 2015  
Location: Ujigawa River  
Activity: Observing Swallow bird nesting habitat at riverbank

Survey Methodology:  
Bird Banding >> Also called bird ringing is the attachment of small, individually numbered metal or plastic tag to the leg or wing of a wild bird to enable individual identification. To catch the birds is by installing 5 x 20 m nets over birds flying track.
Collaborative Research and Discussion With Experts

**Date:** 25th July 2015 & 20th September 2015  
**Location:** Suzuka Mountain

**Research team:**
- Prof. Toru Yamazaki (President of Asian Raptor Research Networks)  
- Mr. Takehiko Inoue (raptor researcher)  
- Mr. Shin Nakano (raptor researcher)  
- Ms. Maho Sumita (avian veterinarian specialist)  
- Mr. Koichi Naito (bird watching community)

**Species target of study:**
- Mountain Hawk-Eagle (*Nisaetus nipalensis orientalis*)  
- Golden Eagle (*Aquila chrysaetos japonica*)

**Survey Methodology:**
Team divided into two teams. Each team took spot at different mountain’s peak within Kumataka’s territory. Each team reported the sighting of Kumataka.

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**Benefit of Study**

- Improved my comprehension in raptor research through discussion with experts and field activities
- Obtained many good literature references which are not accessible in my home campus
- Learn new methodology and technique in bird survey and observation
- Established connection with researchers and experts as basis for the development of my study in landscape ecology and ornithology
Other Activities

Wakayama Fieldtrip (27th-28th June 2015): traditional fisherman village, Shirahama aquarium, harvested plum and learned how to proceed the plums into different products.

Awaji Island Lab Fieldtrip (31st August – 1st September 2015)
Sumoto Castle, Narugashima, Bamboo fertilizer factory, Izanagi Shrine, Hokudan Earthquake Memorial Park, Awaji Hanasajiki

Lesson Learned From The Program

- Understanding standard and methods of academic in Japan
- Acquisition of knowledge about Japan by experienced fascinating social and cultural daily life of Japan
- Increased knowledge about Japanese landscape and architecture design by directly observed many wonderful sites and places in Kyoto City
- Made a lots of new friends and connections from students of different countries
- Gain confidence and familiarity to speak foreign languages
- Improved cross-cultural communication and discussion ability in foreign language
References


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- Staff of GSGES Office
- Members of Landscape Ecology and Planning Laboratory

Terima Kasih ありがとうございました
คุณขอบคุณ cam on Thank you