

## WILDLIFE SANCTUARIES IN THAILAND

Jira Jintanugool<sup>1</sup>

### บทคัดย่อ

การจัดตั้งและดำเนินงานเขตรักษาพันธุ์สัตว์ป่า มีหลักการกำหนดโดยบทบัญญัติแห่ง พ.ร.บ. สงวนและคุ้มครองสัตว์ป่า พ.ศ. ๒๕๐๓ โดยเฉพาะอย่างยิ่งในมาตรา ๑๙ ที่ว่า

“เมื่อรัฐบาลเห็นสมควรกำหนดบริเวณที่ดินแห่งใดให้เป็นที่อยู่อาศัยของสัตว์ป่าโดยปลอดภัย เพื่อรักษาไว้ซึ่งพันธุ์สัตว์ป่าก็กระทำได้โดยประกาศพระราชกฤษฎีกา และให้มีแผนที่แสดงแนวเขตแห่งบริเวณที่กำหนดนั้นแนบท้ายพระราชกฤษฎีกาดังกล่าว บริเวณที่กำหนดนั้นเรียกว่า เขตรักษาพันธุ์สัตว์ป่า ที่ดินที่จะกำหนดให้เป็นเขตรักษาพันธุ์สัตว์ป่านั้น ต้องเป็นที่ดินที่มีได้อยู่ในกรรมสิทธิ์หรือครอบครองโดยชอบด้วยกฎหมายของบุคคลใด ซึ่งมีใช้ ทบวงการเมือง”

นอกจากนี้ พ.ร.บ. สงวนและคุ้มครองสัตว์ป่า พ.ศ. ๒๕๐๓ ยังได้กำหนดหลักและวิธีการในการดำเนินงานอื่นๆ ในเขตรักษาพันธุ์สัตว์ป่าไว้อีกหลายประการ เป็นต้นว่า

ในเขตรักษาพันธุ์สัตว์ป่า ห้ามมิให้ผู้ใดล่าสัตว์ป่าทุกชนิด หรือเก็บหรือทำอันตรายแก่ไข่หรือรังของสัตว์ป่า ทั้งนี้เว้นแต่เป็นการกระทำเพื่อการศึกษา หรือวิจัยทางวิชาการ และต้องรับหนังสืออนุญาตจากอธิบดีกรมป่าไม้

ห้ามมิให้ผู้ใดเข้าไปครอบครองยึดถือที่ดิน หรือตัดโค่น แผ้วถาง เผา ทำลายต้นไม้หรือพืชมงคลอื่น หรือขุดหาแร่ ดิน หิน หรือเลี้ยงสัตว์ หรือเปลี่ยนแปลงทางน้ำ หรือทำให้น้ำในลำน้ำ ลำห้วย หนอง บึง ท่วมท้น หรือเหือดแห้ง หรือเป็นพิษต่อสัตว์ป่า

กล่าวโดยสรุปเขตรักษาพันธุ์สัตว์ป่าจึงหมายถึง พื้นที่ที่กำหนดโดยพระราชกฤษฎีกา เพื่อให้เป็นแหล่งที่อยู่อาศัยของสัตว์ป่าโดยปลอดภัย ในเขตรักษาพันธุ์สัตว์ป่าห้ามมิให้ล่าสัตว์ ตัดต้นไม้ ทำลายที่อยู่ของสัตว์ป่าและกระทำอันใดที่เป็นอันตรายแก่สัตว์ป่า เพื่อว่าสัตว์ป่าในพื้นที่จะได้มีโอกาสสืบเชื้อสาย ขยายพันธุ์ ตามธรรมชาติได้มากขึ้น และมีโอกาสกระจายจำนวนออกไปในบริเวณใกล้เคียงโดยรวดเร็ว

เขตรักษาพันธุ์สัตว์ป่าสลักพระ เป็นเขตรักษาพันธุ์สัตว์ป่าที่จัดตั้งขึ้นเป็นแห่งแรกในประเทศไทย โดยประกาศในราชกิจจานุเบกษา ในปี พ.ศ. ๒๕๐๘

ปัจจุบันได้ประกาศจัดตั้งเขตรักษาพันธุ์สัตว์ป่าเรียบร้อยแล้ว ๓๐ เขต คิดเป็นเนื้อที่ ๑๓,๘๖๕,๕๕๗ ไร่หรือประมาณ ๔.๓๒ เปอร์เซ็นต์ของพื้นที่ประเทศไทย ดังรายชื่อต่อไปนี้

๑. เขตรักษาพันธุ์สัตว์ป่าสลักพระ (พ.ศ. ๒๕๐๘) จังหวัดกาญจนบุรี เนื้อที่ ๕๓๖,๕๕๔ ไร่
๒. เขตรักษาพันธุ์สัตว์ป่าคลองนาคา (พ.ศ. ๒๕๑๕) จังหวัดระนอง เนื้อที่ ๓๐๐,๐๐๐ ไร่
๓. เขตรักษาพันธุ์สัตว์ป่าภูเขียว (พ.ศ. ๒๕๑๕) จังหวัดชัยภูมิ เนื้อที่ ๙๗๕,๐๐๐ ไร่
๔. เขตรักษาพันธุ์สัตว์ป่าเขาสอยดาว (พ.ศ. ๒๕๑๕) จังหวัดจันทบุรี เนื้อที่ ๖๔๕,๖๓๗ ไร่
๕. เขตรักษาพันธุ์สัตว์ป่าห้วยขาแข้ง (พ.ศ. ๒๕๑๕) จังหวัดอุทัยธานีและตาก เนื้อที่ ๑,๖๐๘,๑๕๐ ไร่

1 Wildlife Conservation Division, Royal Forest Department, Bangkok 10900

๖. เขตรักษาพันธุ์สัตว์ป่าลุ่มน้ำปาย (พ.ศ. ๒๕๑๕) จังหวัดแม่ฮ่องสอน เนื้อที่ ๗๓๘,๑๙๕ ไร่
๗. เขตรักษาพันธุ์สัตว์ป่าทุ่งใหญ่นเรศวร (พ.ศ. ๒๕๑๗) จังหวัดกาญจนบุรีและตาก เนื้อที่ ๒,๐๐๐,๐๐๐ ไร่
๘. เขตรักษาพันธุ์สัตว์ป่าเขาเขียวและเขาชมภู่ (พ.ศ. ๒๕๑๗) จังหวัดชลบุรี เนื้อที่ ๙๐,๔๓๘ ไร่
๙. เขตรักษาพันธุ์สัตว์ป่าคลองแสง (พ.ศ. ๒๕๑๗) จังหวัดสุราษฎร์ธานี เนื้อที่ ๗๒๒,๐๖๗ ไร่
๑๐. เขตรักษาพันธุ์สัตว์ป่าห้วยหลวง (พ.ศ. ๒๕๑๗) จังหวัดเลย เนื้อที่ ๕๒๙,๙๙๕ ไร่
๑๑. เขตรักษาพันธุ์สัตว์ป่าภูวัว (พ.ศ. ๒๕๑๘) จังหวัดหนองคาย เนื้อที่ ๑๑๖,๕๖๒ ไร่
๑๒. เขตรักษาพันธุ์สัตว์ป่าเขาบรรทัด (พ.ศ. ๒๕๑๘) จังหวัดพัทลุง ตรัง สงขลา และสตูล เนื้อที่ ๗๕๑,๘๘๗ ไร่
๑๓. เขตรักษาพันธุ์สัตว์ป่ายอโคม (พ.ศ. ๒๕๒๐) จังหวัดอุบลราชธานี เนื้อที่ ๑๒๑,๕๙๕ ไร่
๑๔. เขตรักษาพันธุ์สัตว์ป่าภูเมี่ยง-ภูทอง (พ.ศ. ๒๕๒๐) จังหวัดอุดรธานีและพิษณุโลก เนื้อที่ ๓๔๐,๖๒๕ ไร่
๑๕. เขตรักษาพันธุ์สัตว์ป่าเขาอ่างไน (พ.ศ. ๒๕๒๐) จังหวัดฉะเชิงเทรา เนื้อที่ ๖๗,๕๖๒ ไร่
๑๖. เขตรักษาพันธุ์สัตว์ป่าโตนงาช้าง (พ.ศ. ๒๕๒๑) จังหวัดสงขลาและสตูล เนื้อที่ ๑๑๓,๗๒๑ ไร่
๑๗. เขตรักษาพันธุ์สัตว์ป่าแม่น้ำภาชี (พ.ศ. ๒๕๒๑) จังหวัดราชบุรี เนื้อที่ ๓๐๕,๘๒๐ ไร่
๑๘. เขตรักษาพันธุ์สัตว์ป่าแม่ตั้น (พ.ศ. ๒๕๒๑) จังหวัดตาก เนื้อที่ ๗๓๓,๑๒๕ ไร่
๑๙. เขตรักษาพันธุ์สัตว์ป่าคอยเชียงดาว (พ.ศ. ๒๕๒๑) จังหวัดเชียงใหม่ เนื้อที่ ๓๒๕,๖๒๕ ไร่
๒๐. เขตรักษาพันธุ์สัตว์ป่าสาละวิน (พ.ศ. ๒๕๒๑) จังหวัดแม่ฮ่องสอน เนื้อที่ ๕๔๖,๘๗๔ ไร่
๒๑. เขตรักษาพันธุ์สัตว์ป่าเขาพนมดงรัก (พ.ศ. ๒๕๒๑) จังหวัดศรีสะเกษ เนื้อที่ ๑๙๗,๕๐๐ ไร่
๒๒. เขตรักษาพันธุ์สัตว์ป่าคอยผาเมือง (พ.ศ. ๒๕๒๓) จังหวัดลำพูนและลำปาง เนื้อที่ ๓๕๔,๔๔๙ ไร่
๒๓. เขตรักษาพันธุ์สัตว์ป่าคอยผาช้าง (พ.ศ. ๒๕๒๓) จังหวัดพะเยาและน่าน เนื้อที่ ๓๕๖,๙๒๖ ไร่
๒๔. เขตรักษาพันธุ์สัตว์ป่าคลองพระยา (พ.ศ. ๒๕๒๓) จังหวัดกระบี่ เนื้อที่ ๕๙,๓๗๕ ไร่
๒๕. เขตรักษาพันธุ์สัตว์ป่าอมก๋อย (พ.ศ. ๒๕๒๖) จังหวัดเชียงใหม่ และตาก เนื้อที่ ๗๖๕,๐๐๐ ไร่
๒๖. เขตรักษาพันธุ์สัตว์ป่าคอยหลวง (พ.ศ. ๒๕๒๗) จังหวัดแพร่ เนื้อที่ ๖๐,๖๒๕ ไร่
๒๗. เขตรักษาพันธุ์สัตว์ป่าเขาสนามเพรียง (พ.ศ. ๒๕๒๘) จังหวัดกำแพงเพชร เนื้อที่ ๓๖,๑๒๕ ไร่
๒๘. เขตรักษาพันธุ์สัตว์ป่าแม่ยมผิงขวา (พ.ศ. ๒๕๒๙) จังหวัดแม่ฮ่องสอน เนื้อที่ ๑๘๒,๕๐๐ ไร่
๒๙. เขตรักษาพันธุ์สัตว์ป่าซับลังกา (พ.ศ. ๒๕๒๔) จังหวัดลพบุรี เนื้อที่ ๙๖,๘๗๕ ไร่
๓๐. เขตรักษาพันธุ์สัตว์ป่าอุทยานเสด็จในกรม กรมหลวงชุมพร (พ.ศ. ๒๕๓๐) จังหวัดชุมพร เนื้อที่ ๒๘๓,๗๕๐ ไร่

ABSTRACT

Under the WILD ANIMALS RESERVATION AND PROTECTION ACT B.E. 2503 currently recognized as WILDLIFE ACT, wildlife sanctuaries have been established in Thailand. With an exception of education and/or scientific research purposes; hunting, capture, and any kind of activity resulting to the disturbances of wild animals and wildlife habits in wildlife sanctuaries are prohibited by law. The first wildlife sanctuary was established in 1965 at Salak Phra, Kanchanaburi province. A number of 30 unique wildlife habitats has been declared as wildlife sanctuaries since 1965 covering the total areas of 22, 192 sqkm. Their names, area coverage, habitat, and noteworthy species were described.

## INTRODUCTION

In 1960 the government of Thailand passed the *Wild Animals Reservation and Protection Act B.E. 2503* which later recognized as the Wildlife Act. The Wildlife Act provided regulations and procedures for establishing wildlife sanctuaries.

Chapter 3, Section 19 of the Act states :

“When it is deemed appropriate to determine any area of land to serve as a safe habitat for wild animal as well as for species conservation, the Government shall have the power to do so by Royal Decree. A map showing the boundary of the determined area shall be annexed to such Royal Decree. The determined area shall be called the **Wildlife Sanctuary**”

A wildlife sanctuary may be defined as the land declared for the conservation of wildlife habitat so that wildlife can freely breed and increase their populations in the natural environment. This will allow a certain proportion of the wildlife population to disperse

into areas adjoining the wildlife sanctuary.

Wildlife sanctuaries are totally protected by law from any act which modifies the habitat including possess or hold the land, or cut, fell, clear, burn or destroy trees or other vegetation, dig for minerals, excavate ground or pasture animals, change the water way or cause the water in the river, stream, march or swamp to overflow, dry up or become poisonous to the wildlife. No hunting or capture of any wild animal, or collecting its egg or nest, except for the educational purpose or scientific research.

Therefore, the wildlife sanctuaries are lands preserved and protected from human activity which may disturb wildlife. Wildlife sanctuaries are similar to national parks in both their protected status and primary purposes. The main distinction is that recreation and tourism are not encouraged in wildlife sanctuaries.

Selection and gazetting of wildlife sanctuaries began following passage

of Wildlife Act. Salak Phra become Thailand's first wildlife sanctuary in 1965. A total of 30 wildlife sanctuaries had been established by 23 March 1988. These range in size from 95

sqkm. to 3,200 sqkm. and cover an area of 22,192 sqkm. Many of the most important wildlife conservation sites in the country have wildlife sanctuary status.

### LIST OF ESTABLISHED WILDLIFE SANCTUARIES

#### 1. Salak Phra Wildlife Sanctuary (1965)

*Area* : 859 sqkm. in Kanchanaburi Province, Western Thailand.

*Habitat* : The areas are mostly mountainous with the highest peak of 1,130 metres. Dry dipterocarps and mixed deciduous dominate the cover with much more bamboo in the lowlands. Thung Na Morn and Salak Phra valley have been recognized for its abundance of big mammals.

*Noteworthy Species* : Banteng (*Bos banteng*), Elephant (*Elephas maximus*), Tiger (*Panthera tigris*), Leopard (*P. pardus*), Serow (*Capricornis sumatraensis*), can be still found. Over 173 species of migrant and resident birds are known. Kalij Pheasant (*Lophura leucomelana*) and some hornbills are among the rare species found.

#### 2. Klong Nakha Wildlife Sanctuary (1972)

*Area* : 480 sqkm. in Ranong Province, Southern Thailand.

*Habitat* : This is the place where the highest rainfall of Thailand, about 4,000 mm., was recorded. The areas are mostly steep mountains. Evergreen forests dominate most of the area with hill evergreen found on the high slopes.

*Noteworthy Species* : Typical species of the South such as Tapir (*Tapirus indicus*), Panther (*Panthera pardus*), Fea's Barking Deer (*Muntiacus feae*), Clouded Leopard (*Neofelis nebulosa*), Great Argus Pheasant (*Argusianus argus*) as well as other common species are reported.

#### 3. Phu Khieo Wildlife Sanctuary (1972)

*Area* : 1,560 sqkm. in Chaiyaphum Province, Northeastern Thailand.

*Habitat* : A huge plateau approximately 800 metres elevation covered by dry evergreen and mixed deciduous forests. Combinations between forests and geologic lanscape have created several scenic wonders. There are also number of savanas decorated along the valleys and plateaus. The areas serve as a very important head water of Chulaporn Dam and Chi River.

*Noteworthy Species* : Besides Sumatran Rhinoceros (*Didermocerus sumatrensis*) which is nearly extinct from Thailand, other rare mammals reported are : Elephant (*Elephas maximus*), Gaur (*Bos gaurus*), Tiger (*Panthera tigris*), Serow (*Capricornis sumatraensis*), Asian Wild Dog (*Cuon alpinus*). As for partial inventory, 102 bird species including Siamese Fireback Pheasant (*Lophura diardi*), Silver Pheasant (*Lophura nycthemera*), White-winged Wood Duck (*Cairina scutulata*) so far recorded.

#### 4. Khao Soi Dao Wildlife Sanctuary (1972)

*Area* : 745 sqkm in Chantaburi Province, Eastern Thailand.

*Habitat* : Most of the areas within the sanctuary are steep mountains. The highest peak is Khao Soi Dao Tai, which stands about 1,670 metres. Evergreen forests cover most of the mountains and form many beautiful streams as well as waterfalls. Khao Soi Dao Waterfall has long been wellknown to the nature lovers.

*Noteworthy Species* : This area is considered the most dense and extensive population of the Pileated Gibbon (*Hylobates pileatus*). Other mammals such as Elephant, Gaur, Tiger, Leopard, Asian Wild Dog (*Cuon alpinus*), Clouded Leopard (*Neofelis nebulosa*) are reported. At least 216 species of resident and migrant birds so far known. Large birds include Silver Pheasant (*Lophura nycthemera lewisi*), Siamese Fireback Pheasant (*L. diardi*), Cambodian Tree Partridge (*Arborophila cambodiana*).

#### 5. Huai Kha Khaeng Wildlife Sanctuary (1972)

*Area* : 2,254 sqkm in Uthai Thani Province and Tak Province, Northwestern Thailand.

*Habitat* : The areas dominated by a mosaic of dry dipterocarps and mixed deciduous forests in lowlands, with evergreen forests on the hill slopes. Huai Kha Khaeng is the name of a stream which bisects the sanctuary. Almost all small streams in the area pour to Huai Kha Khaeng, which later joins Kwai Yai in Kanchanaburi. Lowland areas in the vicinity of Huai Kha Khaeng support Thailand's largest population of Green Peafowl (*Pavo muticus*) and the only remaining herd of Wild Water Buffalo (*Bubalus bubalis*).

*Noteworthy Species* : Many endangered or threatened species remain in the sanctuary. Elephant, Wild Water Buffalo, Serow (*Capricornis sumatraensis*), Tapir (*Tapirus indicus*), Banteng, Gaur, Tiger, Leopard, Eld's Deer (*Cervus eldi*), Hog Deer (*Axis porcinus*), Phayre's Langur (*Presbytis phayrei*), Silvered Langur (*P. cristata*) and White-handed Gibbon (*Hylobates lar*) are reported. All Thai five species of macaques found in the area. At least 318 species of resident and migrant birds recorded. Among of

them are green Peafowl, White-winged Wood Duck (*Cairina scutulata*), Cinnamon Vulture (*Aegypius monachus*), King Vulture (*Torgos calvus*), White-backed Vulture (*Gyps bengalensis*), Kalij Pheasant (*Lophura leucomelana*), Burmese Grey Peacock Pheasant (*Polyplectron bicalcaratum*) and six species of hornbills.

#### 6. Lum Nam Pai Wildlife Sanctuary (1972)

*Area* : 1,181 sqkm with elevation of 600-1,955 metres in Mae Hong Son Province, Northern Thailand.

*Habitat* : Dominated by dry dipterocarps in the lowlands, with small areas of mixed deciduous and evergreen forests along the valleys. Hill evergreen and pine forests occupy on the high slopes. The most important lowland, riverine habitat lies along the southern boundary of the sanctuary. The reserve is transected by a highway 1095 and has encompassed both hill tribes and lowland Thai villages.

*Noteworthy Species* : Sambar Deer (*Cervus unicolor*), Barking Deer (*Muntiacus*

*munjak*), Asiatic Black Bear (*Selenarctos thibetanus*) are of the mammals easily found. Green Peafowl and several other deciduous woodlands bird are reported in the lowland. Great Hornbill (*Buceros bicornis*) found in evergreen forests while Giant Nuthatch (*Sitta magna*) is present in upland pinewoods.

#### 7. Thung Yai Naresuan Wildlife Sanctuary (1974)

*Area* : 3,200 sqkm. with elevation of 250-1,811 metres in Kanchanaburi Province and Tak Province, Northwestern Thailand.

*Habitat* : Considered the largest wildlife sanctuary of Thailand, the area can be described as hilly or undulating highland. It encompasses extensive, relatively level areas of 500-600 metres elevation with a preponderance of evergreen and deciduous forests. Bisected by Khwae Yai, the sanctuary contains the largest and least disturbed riverine woodlands in Thailand. There are several upland areas including "Thung Yai", a big grassland with about 15 sqkm. in size,

which is very famous for its abundance of wildlife.

*Noteworthy Species* : A biggest herd of about 50 gaurs (*Bos gaurus*) was recorded at Thung Yai in 1985. Other endangered species reported including Elephant, Sumatran Rhinoceros, Serow, Wild Water Buffalo, Tapir, Banteng, Fea's Barking Deer, Clouded Leopard, Leopard, Tiger and etc.

At least 415 resident and migrant bird species are recorded, Red Jungle Fowl (*Gallus gallus*), Kalij Pheasant (*Lophura leucomelana*), Burmese Grey Peacock Pheasant (*Polyplectron bicalcaratum*) found in large population. Green Peafowl (*Pavo muticus*), White-Winged wood Duck (*Cairina scutulata*), Masked Finfoot (*Heliopois personata*) are still present. Six species of hornbills recorded.

#### 8. Khao Khieo-Khao Chomphu Wildlife Sanctuary (1974)

*Area* : 145 sqkm with elevation of 100-789 metres, in Chonburi Province, Eastern Thailand.

*Habitat* : Two main mountains, Khao Khieo and Khao Chomphu, extend parallel to the Gulf of Thailand from north to south. Khao Khiew, estimating elevation of 789 metres on the top, is a little higher than Khao Chomphu. Steep hills covered with evergreen forests dominate high elevation while lower slopes support deciduous forests. It is considered the last remaining forest in Chonburi.

*Noteworthy Species* : Serow, Sambar Deer, Barking Deer, Asiatic Black Bear are among the big mammals reported. Over 78 bird species including Great Hornbill (*Buceros bicornis*), Wreathed Hornbill (*Rhyticerso undulatus*), Changeable Hawk Eagle (*Spizaetus cirrhatus*) are recorded.

#### 9. Khlong Saeng Wildlife Sanctuary (1974)

*Area* : 1,155 sqkm with elevation of 100-1,395 metres in Surat Thani Province, Southern Thailand.

*Habitat* : Steep mountains dominate most of the reserve. Only small patches of lowland stretch along the valleys

with some areas of limestone crags. The covers are mostly evergreen forests. The southern part flooded by Ratcha Prapa Hydro-electric Dam.

*Noteworthy Species* : Many vulnerable or endangered species such as Tapir, Elephant, Gaur, Leopard or Panther (*Panthera pardus*), Tiger (*P. tigris*), Fea's Barking Deer (*Muntiacus feae*), Clouded Leopard (*Neofelis nebulosa*), Binturong (*Arctictis binturong*), Great Argus Pheasant (*Argusianus argus*), Crested Fireback Pheasant (*Lophura ignita*), Masked Finfoot (*Heliopias personata*), Cinnamon-rumped Trogon (*Harpactes arrhophaeus*) are reported. Storm Stork (*Ciconia stormi*) was first found nesting here in 1987.

#### 10. Phu Luang Wildlife Sanctuary (1974)

*Area* : 848 sqkm with elevation of 350-1,575 metres in Loei Province, Northeastern Thailand.

*Habitat* : The sanctuary is represented by a steep-sided plateau, a typical sandstone mountain in the Northeast.

The average elevation of the plateau is about 1,000 metres. Deciduous and evergreen forests occupy the lower elevation while hill evergreen and pine forests cover the higher slopes and plateaus. Combinations between geological features and forests have resulted numerous scenic locations.

*Noteworthy Species* : Elephant, Tiger, Gaur, Serow, Sambar Deer, Barking Deer can be found. 137 species of resident and migrant birds so far known. Higher elevations support Rufous-throated Tree Partridge (*Arborophila rufogulais*), Silver Pheasant, Burmese Grey Peacock Pheasant, and many smaller montane birds. Several species of epiphytic tree orchids, ground orchids and other climbers are represented. This is the only place where *Paphiopedilum sukhakulii* found.

#### 11. Phu Wua Wildlife Sanctuary (1975)

*Area* : 187 sqkm with elevation of 160-449 metres in Nong Khai Province, Northeastern Thailand.

*Habitat* : The Areas can be characterized by undulating highlands with steep cliffs on the eastside. Dry dipterocarps and mixed deciduous occupy the lower slopes while the higher slopes and plateaus covered by evergreen forests.

*Noteworthy Species* : Tiger, Leopard, Asiatic Black Bear, Sambar Deer, Barking Deer, Siamese Fireback Pheasant are among the species reported.

#### 12. Khao Bantad Wildlife Sanctuary (1975)

*Area* : 1,267 sqkm with elevation of 50-1,322 metres in Phatthalung Province, Trang Province, Satun Province and Songkhla Province., Southern Thailand.

*Habitat* : Mountain ranges of Khao Bantad extend along the peninsula from north to south. Evergreen forests dominate the cover with small areas of hill evergreen on the high elevation. The largest areas of lowland in the south of the sanctuary are extensively deforested. However, forests on the higher slopes are still in good condition.

*Noteworthy Species*: Leopard or Panther (*Panthera pardus*), Tiger (*P. tigris*), Serow, Tapir, Binturong, Fea's Barking Deer, Greater Mouse Deer (*Tragulus napu*), are among the rare mammals reported. Key lowland species of birds such as Wallace's Hawk Eagle (*Spezautus nanus*), Diard's Trogon (*Harpactes diardii*), Cinnamon-rumped Trogon (*H. orrhophaeus*), Red-rumped Trogon (*H. duvaucelii*), Crested Fireback Pheasant, Great Argus Pheasant and Roulroul (*Rollulus roroulroul*) found. The montane areas support an endemic race of Golden-throated Barbet (*Megalaima fromklinii*).

### 13. Yot Dom Wildlife Sanctuary (1977)

*Area*: 203 sqkm with elevation of 160-787 metres in Ubon Ratchathani Province, Northeastern Thailand.

*Habitat*: Sandstone mountains lie on the edge of Khorat Plateau along the border where cliffs occur on the kam-puchean side. Evergreen forests dominate most of the areas with deciduous

forests appear on the lowlands. The reserve bound by a major river valley, Lam Dom Yai, along its eastern margin.

*Noteworthy Species*: Kouprey (*Bos sauveli*) may occasionally visit the area. Eld's Deer (*Cervus eldi siamensis*), Banteng (*Bos banteng*), Clouded Leopard (*Neofelis nebulosa*), Pileated Gibbon (*Hylobates pileatus*) are among the endangered species reported. The area also supports many other rare birds such as White-winged Wood Duck (*Cairina scutulala*), Green Peafowl (*Pavo muticus*), Siamese Fireback Pheasant (*Lophyrura diardi*).

### 14. Phu Miang-Phu Thong Wildlife Sanctuary (1977)

*Area*: 545 sqkm with elevation of 300-1,564 metres in Uttaradit Province and Phitsanulok Province, Northern Thailand.

*Habitat*: The area can be described as mountainous. Phu-Miang, the highest peak, stands at 1,564 metres. Evergreen forests dominate the cover except on the foot hills which are occupied by

dry dipterocarps and mixed deciduous woodlands.

*Noteworthy Species* : Elephant, Serow, Gaur, Tiger, Asiatic Black Bear, Silver Pheasant, Hornbill and Big-headed Turtle (*Platysternon megacephalum*) are reported.

#### 15. Khao Ang Runai Wildlife Sanctuary (1977)

*Area* : 108 sqkm with elevation of 100-763 metres in Chachoengsao Province, Central Thailand.

*Habitat* : Much of the area consists of evergreen forests on the lowland and in vicinity of larger streams at 100-200 metres elevation. There are also some steep hill slopes. It is considered the only reserve in this region to comprise extensive areas of forest in level lowlands.

*Noteworthy Species* : Elephant, gaur, Serow, Tiger, Leopard, Sambar Deer, Barking Deer are among the big game reported. So far 156 species of birds known. The area supports a high density of Siamese Fireback Pheasant and

Hill Myna (*Gracula religiosa*). Other rare birds found are Pompadour Green Pigeon (*Treron pompadora*), Red-billed Ground Cuckoo (*Carpococcyx eenauidi*), Wreathed Hornbill, Great Hornbill. It is the only remaining site in the country for White-necked Stork (*Ciconia episcopus*).

#### 16. Ton Ngachang Wildlife Sanctuary (1978)

*Area* : 182 sqkm with elevation of 200-932 metres in Songkhla Province, Southern Thailand.

*Habitat* : The area can be classified as mountainous with the highest peak of 932 metres above mean sea level. The cover is mostly moist evergreen forest. Combinations of forests and geologic landscapes created several beautiful waterfalls such as Ton Ngachang, Ton Plew, Boripat, and etc.

*Noteworthy Species* : Tapir, Serow, Mouse, Deer, and Langurs are abundant. Some other big mammals such as Tiger, Panther, Elephant, and Sambar Deer are also reported. So far 146 species of

resident and migrant birds recorded. The density of Great Argus Pheasant (*Argusianus argus*) may be higher than in the most other reserves. Diard's Trogon (*Harpactes diardii*), Bushy-crested Hornbill (*Anorrhinas galeritus*), White-crested Hornbill as well as Great Hornbill are present. The area may possible support some of the species with restricted range in the far south such as Rhinoceros Hornbill (*Buceros rhinoceros*).

#### 17. Maenam Phachi Wildlife Sanctuary (1978)

*Area* : 489 sqkm with elevation of 180 - 1,068 in Ratchaburi Province, Western Thailand.

*Habitat* : Some parts of the boundary on the westside lie on the border of Burma. The area can be classified as mountainous with average elevation about 500 metres. Forest covers are deciduous at the edge and evergreen in the main reserve.

*Noteworthy Species* : Elephant, Gaur, Serow, Tapir, Tiger, Leopard are among

the big game reported. Bird species such as Burmese Grey Peacock Pheasant, Kalij Pheasant, Hodgson's Frogmouth (*Batrachostomus hodgsoni*), Hornbills also found.

#### 18. Mae Tuen Wildlife Sanctuary (1978)

*Area* : 1,173 sqkm with elevation of 300-1,256 metres in Tak Province, Northern Thailand.

*Habitat* : The area can be classified as hilly. Some parts of the eastside bound by Bhumipol Reservoir. Dry dipterocarps and mixed deciduous forests occur on the lower slopes while the higher elevations occupied by hill evergreen forest. Some hill evergreen woodlands are partly deforested by hill tribes.

*Noteworthy Species* : The area supports one of Thailand very rare animals, Goral (*Naemorhedus goral*). Other mammals reported are Elephant, Serow, Tiger, Leopard, Gaur, Banteng, Sambar Deer, Barking Deer. Lowland areas along the streams and water edges support a wealth of deciduous forest

bird species. Also hill evergreen community includes species which are risk such as Rufous-throated Tree Partridge (*Arborophila rufogularis*) and Hornbills.

#### 19. Doi Chiang Dao Wildlife Sanctuary (1978)

*Area* : 521 sqkm with elevation of 300-2,230 metres in Chiang Mai Province, Northern Thailand.

*Habitat* : The areas is represented by a steep limestone massif which, on its eastern slopes, contains some of the most intact dry evergreen forest in the northern region. Hill evergreen forest of higher elevations is partly depleted due to shifting cultivation by hill tribes.

*Noteworthy Species* : The area contains high population of Serow (*Capricornis sumatraensis*). 239 species of resident and migrant birds are known. An endemic species Deignan's Tree Babbler (*Stachyris rodolphi*) is apparently restricted to this mountain, while Hume's Pheasant (*Syrnaticus humiae*) may still exist.

#### 20. Salawin Wildlife Sanctuary (1978)

*Area* : 875 sqkm with elevation of 250-1,130 metres in Mea Hong Son Province, Northern Thailand.

*Habitat* : The area mostly comprises rolling hills of low to moderate elevation covered with mixed deciduous and dry dipterocarps forests. The reserve is situated in a loop of the Salween River, which forms the boundary and also the Thai-Burmese border. Lowland riverine areas are partly occupied by hill tribes.

*Noteworthy Species* : Gaur, Elephant, Banteng, Tiger, Leopard, Asiatic Black Bear are reported. The area supports dense population of Hill Myna and Kalij Pheasant. Other rare birds such as Green Peafowl (*Pavo muticus*), Great Hornbill, Indian-Pied Hornbill, Wreath Hornbill, Brown Hornbill are also reported.

#### 21. Khao Phanom Dong Rak Wildlife Sanctuary (1978)

*Area* : 316 sqkm with elevation of 200-694 metres in Sisaket Province, Northeastern Thailand.

*Habitat* : Located along the Thai-kampuchean border, the area is a typical sandstone mountain where cliffs, average 500-600 metres, appear on the kampuchean side. Most of the slopes covered by dry evergreen forest with small grasslands on the plateau. Secondary forests at lower elevations are mostly deciduous in character, following removal of original evergreen.

*Noteworthy Species* : Kouprey (*Bos sauveli*) was reported for its occasional visit the areas. Other endangered species found are Elephant, Gaur, Banteng, Tiger, Leopard, Clouded Leopard, Siamese Fireback Pheasant, Great Hornbill, Wreathed Hornbill.

## 22. Doi Pha Muang Wildlife Sanctuary (1980)

*Area* : 583 sqkm with elevation of 250-1,313 metres in Lampang Province and Lamphun Province, Northern Thailand.

*Habitat* : The area is hilly with the highest peak, Doi Pha Muang, stands at 1,313 metres. Most of the reserve

covered by mixed deciduous forest. Hill evergreen occupies on the high slopes but are extensively deforested by hill tribes.

*Noteworthy Species* : Serow, Tiger, Leopard, Asiatic Black Bear, Sambar Deer, Barking Deer, Silver Pheasant, Brown-breasted Tree Partridge (*Arborophila brunneopectus*) are reported.

## 23. Doi Pha Chang Wildlife Sanctuary (1980)

*Area* : 577 sqkm with elevation of 350-1,614 metres in Phayao Province and Nan Province, Northern Thailand.

*Habitat* : Hilly with most of the areas lie at 500-1,000 metres. Hill evergreen forest dominates the high slopes with deciduous forest occupy the lowlands. Several streams formed from this area flow to Yom River.

*Noteworthy Species* : Elephant, Serow, Tiger, Leopard, Asiatic Black Bear, Barking Deer, Silver Pheasant, Red-billed Ground Cuckoo, and many other birds found.

**24. Klong Phraya Wildlife Sanctuary  
(1980)**

*Area* : 85 sqkm with elevation of 100-553 metres in Krabi Province, Southern Thailand.

*Habitat* : The area is mostly steep mountains covered by moist evergreen forest. Most of level lowlands along the boundary have been extensively converted to oil palm and other crops but some key lowlands still remain.

*Noteworthy Species* : Gaur, Tapir, Serow, Clouded Leopard are among the endangered mammal species found. So far, at least 168 bird species known, including many key lowland species such as Bat Hawk (*Machamphus alcinus*), Little Green Pigeon (*Treeron olax*), Red-naped Trogon (*Harpactes kasumba*), Diard's Trogon (*H. diardii*), This is the area where Gurney's Pitta (*Pitta gurneyi*) has been located.

**25. Omgoy Wildlife Sanctuary (1983)**

*Arca* : 1,224 sqkm with elevation of 300-1,929 metres in Chiang Mai Pro-

vince and Tak Province, Northern Thailand.

*Habitat* : The area can be characterized as hilly with a number of steep mountains of elevation over 1,300 metres comprise the western part. The sanctuary bound by a major river, Mea Nam Ping, along its eastern margin. Dry dipterocarps and mixed deciduous forests dominate the lower slopes with small area of dry evergreen along the valleys. Hill evergreen forest with some grasslands, caused by shifting cultivation, occupy the higher slopes.

*Noteworthy Species* : The area contains high number of Goral (*Naemorhedus goral*) which its status considered very rare. Many other endangered mammals such as Elephant, Gaur, Banteng, Tiger, Leopard, Serow are also reported. Forest combination and reverine habitats support a very diverse and great number of bird species. Rufous-throated Tree Partridge, Silver Pheasant, Rufous-necked Hornbill (*Aceros nipalensis*), Purple Cochoa (*Cochoa purpurea*) are, for example, repercent.

**26. Doi Luang Wildlife Sanctuary  
(1984)**

*Area* : 97 sqkm with elevation of 200-1,189 metres in Phrae Province, Northern Thailand.

*Habitat*: Most of area lies at elevations 400-500 metres. Mixed deciduous and dry dipterocarps dominate the forest cover. Evergreen forests occur along the valleys and high slopes.

*Noteworthy Species* : Tiger, Sambar Deer, Barking Deer, Serow, Asiatic Black Bear, Pangolin (*Manis javanica*), White-handed Gibbon (*Hylobates lar*). Hill Myna, Large Parakeet (*Psittacula eupatria*), Red-breasted Parakeet (*P. alexandri*) are among the species reported.

**27. Khao Sanam Priang Wildlife Sanctuary (1985)**

*Area* : 101 sqkm with elevation of 150-800 metres in Kamphaengphet Province, Northern Thailand.

*Habitat* : An isolated mountain which support both deciduous and evergreen forests. Patches of pine forest occur on the high slopes.

*Noteworthy Species* : Due to its small and restricted size, only few big animals found. The sanctuary still supports Serow, Barking Deer, some macaque species as well as resident and migrant birds.

**28. Mae Yuam Wildlife Sanctuary  
(1986)**

*Area* : 292 sqkm with elevation of 250-1,169 metres in Mae Hong Son Province, Northern Thailand.

*Habitat* : Rolling hills comprise most of the area with major part covered by mixing dry dipterocarps and mixed deciduous forests. Some evergreen forests remain in stream valleys.

*Noteworthy Species* : Goral, Serow, Gaur, Banteng, Tiger, Leopard, Kalij Pheasant, Silver Pheasant are among the endangered species are reported.

**29. Sub Lungka Wildlife Sanctuary  
(1986)**

*Area* : 155 sqkm with elevation of 150-620 metres in Lopburi Province, Central Thailand.

*Habitat* : A long valley lies along the Khorat Plateau and low hills. Lam Sonthi is a main stream in the valley. Dry evergreen forest in the northern part is still in good condition. Secondary forest, mostly deciduous in character, occupies the areas where original evergreen removed.

*Noteworthy Species* : Due to small size woodland and heavy poaching in the past, only few rare species reported. the area still supports dense population of Hill Myna, Siamese Fireback Pheasant, Asiatic Black Bear, Barking Deer and other common species found.

### 30. Prince Chumphon Park Wildlife Sanctuary 1(987)

*Area* : 454 sqkm with elevation of 90-790 metres in Chumphon Province, Southern Thailand.

*Habitat* : The rather narrow shape sanctuary extends along the Burmese border. Moist evergreen forest covers most of the area. Some lowland in the southern part had been extensively deforested by illegal settlers while the northern hill slopes as well as vegetation in the Burmese side are still in good condition. This area is situated north of the Isthmas of Kra which considered an area of unique biological singificance.

*Noteworthy Species* : As partly survey, 52 mammal species including Tapir, Gaur, Elephant, Fea's Barking Deer, Tiger, Panther or Leopard, Asiatic Black Bear, Malayan Sun Bear are recorded. Over 190 bird species are also found. The sanctuary supports very high population of Hill Myna. At least 8 species of Hornbills reported.

## REFERENCES

- Anon (1987) **Assessment of National Parks, Wildlife Sanctuaries and Other Preserver Development in Thailand.** Faculty of Forestry, Kasetsart University, Bangkok. 344 pp.
- Jintanugool, J., Eudey, A.A., and Brockelman, W.Y. (1982) "Species

- Conservation Priorities in Thailand", **Species Conservation Priorities in the Tropical Forests of Southeast Asia**, Occasional Papers of IUCN/SSC 1 : 41-51
- King, B., Dickinson, E.C. and Woodcock, M.W. (1975) **A Field Guide to the Birds of South-East Asia**. Collins, London. 480 pp.
- Lekagul, B. and Cronin, E.W. Jr. (1974) **Bird Guide of Thailand**. 2nd edition. Association for the Conservation of Wildlife, Bangkok. 324 pp.
- Lekagul, B. and Mc Neely, J.A. (1977) **Mammals of Thailand**. Association for the Conservation of Wildlife, Bangkok. 758 pp.
- Round, P.D. (1988) **Resident Forest Birds in Thailand : Their Status and Conservation**. ICBP Monograph No. 2, S-Print, Cambridge. 211 pp.
- Royal Forest Department (1986) **Wildlife Conservation Handbook**, Bangkok. 156 pp. (in Thai)
- Royal Forest Department (1983) **List of Reserved and Protected Wild Animals in Thailand**, Bangkok. 71 pp. (in Thai)



Figure 1. Distribution of Wildlife Sanctuaries in Thailand.

# THAI JOURNAL OF FORESTRY

Volume 7 Number 3, 1988

ISSN 0857-1724

---

Bird Species in Mangrove Forest at Ao Luk, Krabi Province .....	Piyarat Wongarin	213
Predator-Prey Relations in the Dry Dipterocarp Forest, Sakaerat Environmental Research Station Nakhon Ratchasima Province .....	Choompol Ngampongsai and Virayuth Lauhachinda	221
The First Wildlife Rescue Operation in Thailand .....	Seub Nakhasathien	250
Habitat Utilization of Open-billed Stork's Nesting at Wat Phai Lon and Wat Umpuwararam Non-Hunting Area Pathum Thani Province .....	Kriengsak Chaturasukkul	266
Ecology of Malayan Tapir in Huay Kha Khaeng Wildlife Sanctuary .....	Narong Jirawatkawi	277
Effects of External Components on Nesting Behavior of Hornbills .....	Pilai Poonswad, Atsuo Tsuji, Rungarun Liewviriyakit, and Narong Jirawatkawi	289
Biological Characteristics and Breeding Behaviours of Green Peafowl ( <i>Pavo Muticus</i> (Linnaeus)) in Huai Kha Khaeng Wildlife Sanctuary .....	Pongsak Ponsena	303
Breeding Biology of Birds at Sakaerat Environmental Research Station .....	Pramote Saiwichian, Siriporn Thongaree, Budsabong Kanchanasaka, and Srifa La-ong	314
Estimation of Siamese Hare Population by Technigue of Pellet-Group Counts .....	Choompol Ngampongsai and Virayuth Lauhachinda	339
Benefit Evaluation of Thale Noi Non-Hunting Area as a Recreation Site .....	Srisuda Loypha and Wilailuck Thaiutsa	354
Red-Whiskered Bulbul ( <i>Pycnonotus jocosus</i> ) in Chiang Mai .....	Narit Sitasuwan	371
Wildlife Sanctuaries in Thailand .....	Jira Jintanugool	382

---