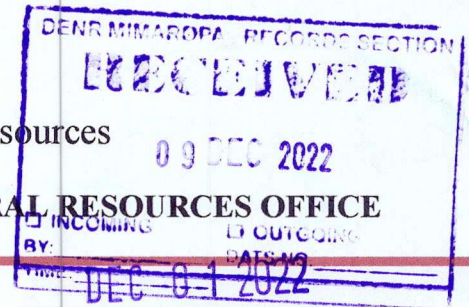




Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE



MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA Region
1515 DENR By the Bay Building, Roxas Boulevard,
Barangay 668, Ermita, Manila

THRU : The ARD for Technical Services

FROM : The OIC, PENR Officer

SUBJECT : **SUBMISSION OF THE THIRD QUARTER PROGRESS
REPORT FOR THE ERADICATION PLAN FOR THE
EXOTIC SPECIES IN MIBNP (PHASE 1) UNDER AHP
INITIATIVES**

Forwarded is the memorandum dated November 14, 2022 of Mounts Iglit-Baco Natural Park regarding submission of the Third Quarter Progress Report for the Eradication Plan for the Exotic Species in Mounts Iglit-Baco Natural Park (Phase 1) under AHP initiatives.

A total of five (5) invasive species were identified within the established ten (10) main plots in Tamaraw Gene Pool Farm. Based on the results, Gmelina has the most number of individual species with a total of 851 or 78.29%, Mahogany 180 (16.56%) Kakawate 52 (4.78%), Paper Mulberry 3 (.28%) and Ipil-ipil with 1 (.99%).

Included in the report are the status and progress of activities conducted by MIBNP-PAMO as part of the implementation of the stated subject in various phases follows:

- Phase I: Completion of dossier of the identified IAS in the protected area mainly the Big leaf Mahogany and Gmelina
- Phase II: Data Collection and encoding
- Phase III: Mensuration and biometrics
- Phase 4 IV: Spatial Analysis
- Phase V: Eradication Planning

For information and record.


ERNESTO E. TAÑADA

TSD-CDS 12/01/2022
1. Planning Section
2. File

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Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Provincial Environment and Natural Resources Office
**MOUNTS IGLIT-BACO NATURAL PARK
PROTECTED AREA MANAGEMENT OFFICE**

November 14, 2022

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA Region
1525 L & S Bldg., Roxas Blvd., Ermita, Manila

THRU : The OIC-PENR Officer
Mamburao, Occidental Mindoro

FROM : The Protected Area Superintendent
Mts. Iglit-Baco Natural Park

SUBJECT : **SUBMISSION OF THE THIRD QUARTER PROGRESS
REPORT FOR THE ERADICATION PLAN FOR THE
EXOTIC SPECIES IN MIBNP(PHASE 1) UNDER AHP
INITIATIVES**

Respectfully submitted is the 2022 Third Quarter Report of Mts. Iglit-Baco Natural Park – Protected Area Management Office (MIBNP-PAMO) on the Eradication Plan for the Exotic Species in MIBNP (Phase 1) under ASEAN Heritage Park (AHP) initiatives.

Relative hereby, included in th report are the status and progress of activities conducted by MIBNP-PAMO as part of the implementation of the stated subject in various phases as follows:

- Phase I: Completion of dossier of the identified IAS in the protected area mainly the Big-Leaf Mahogany and Yemane
- Phase II: Data collection and encoding
- Phase III: Mensuration and biometrics
- Phase4 IV: Spatial Analysis
- Phase V: Eradication Planning

For information and record.


HECTOR S. ARAGONES JR.



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Provincial Environment and Natural Resources Office
**MOUNTS IGLIT-BACO NATURAL PARK
PROTECTED AREA MANAGEMENT OFFICE**

November 14, 2022

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA Region
1525 L & S Bldg., Roxas Blvd., Ermita, Manila

THRU : The OIC-PENR Officer
Mamburao, Occidental Mindoro

FROM : The Protected Area Superintendent
Mts. Iglit-Baco Natural Park

SUBJECT : **SUBMISSION OF THE THIRD QUARTER PROGRESS
REPORT FOR THE EXPLORATORY STUDY FOR FISH
AND HERPETOFAUNA DIVERSITY IN MIBNP UNDER
AHP INITIATIVES**

Respectfully submitted is the 2022 Third Quarter Report of Mts. Iglit-Baco Natural Park – Protected Area Management Office (MIBNP-PAMO) on the Exploratory Study for fish and Herpetofauna diversity in MIBNP (Phase 1) under ASEAN Heritage Park (AHP) initiatives.

In line with the service and commitment of the Mts. Iglit Baco Natural Park-Protected Area Management office (MIBNP-PAMO) to improve the information available for decision-makers in protected areas through a regular collection of natural biological resources data and their utilization, the undersigned respectfully submits herewith the progress of activities conducted by MIBNP-PAMO as part of the implementation of the stated subject.

For information and record.


HECTOR S. ARAGONES JR.



Republic of the Philippines
Department of Environment and Natural Resources
MIMAROPA Region
Provincial Environment and Natural Resources Office
MOUNTS IGLIT-BACO NATURAL PARK
PROTECTED AREA MANAGEMENT OFFICE

November 14, 2022

MEMORANDUM

FOR : The Regional Executive Director
DENR MIMAROPA Region
1515 L & S Bldg., Roxas Blvd., Ermita, Manila

THRU : The OIC-PENR Officer
Mamburao, Occidental Mindoro

FROM : The Protected Area Superintendent
Mts. Iglit-Baco Natural Park

SUBJECT : **SUBMISSION OF THE THIRD QUARTER PROGRESS
REPORT FOR THE BASELINE STUDY ON GREEN
INDUSTRY RELATED TO THE LIVELIHOOD
ACTIVITIES OF INDIGENOUS PARK (AHP)
INITIATIVES**

Respectfully submitted is the progress report as of 3rd Quarter of October 2022 for the target activities of Mts. Iglit Baco Natural Park (MIBNP) under ASEAN Heritage Park (AHP) Initiatives.

Relative hereto, as a response of the MIBNP-PAMO on the conducted SIBOL activity in 2021, the MIBNP-PAMO provides an update and progress of activity under the Baseline Study on Green Industry related to the livelihood activities of indigenous people inside the MIBNP. Further, included in the report are the progress and status of activities conducted by MIBNP-PAMO in support to target activities under ASEAN Heritage Park (AHP).

For your information and record.


HECTOR S. ARAGONES JR.

DRAFT REPORT

**Technical Assistance for Exploratory Study for Fish
and Herpetofauna Diversity in Mts. Iglit-Baco Natural
Park.**

Province of Occidental Mindoro, Philippines

Prepared by

**Geographic Innovations for Development Solutions, Inc.
(GRIDS)**



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INTRODUCTION

A. Background of the Study

The island of Mindoro is the Philippines' 7th largest island with a total land area of 1,003,854 hectares and belongs to Region-IVB (MIMAROPA), which stands for Mindoro, Marinduque, Romblon and Palawan. The island is divided into two provinces, Oriental, and Occidental Mindoro. In addition, Mindoro is also known for its unique flora and fauna, some of which are only found in the island itself, (Gatumbato, 2009) as cited by Malabrigo et al. (2022) and Alviola et al. (2022).

Mounts Iglit-Baco Natural Park (MIBNP) is an ASEAN Heritage Park and only one of the seven natural parks designated as such in the country. It has a total land area of 75,445 hectares and is dominated by two big mountains, Mt. Baco (2,488 meters), which is the park's highest peak and Mt. Iglit (2,364), also known in Mangyan language as *Fungso Mangibok*. Mt. Iglit is also the area where the largest population of the Tamaraw (*Bubalus mindorensis*) in the whole island of Mindoro is located. Besides the Tamaraw, other Mindoro endemic fauna found in MIBNP are the Mindoro Imperial Pigeon (*Ducula mindorensis*), Mindoro Tarictic Hornbill (*Penelopides mindorensis*), Mindoro Bleeding Heart Pigeon (*Gallicolumba platenae*), and Mindoro Scops-Owl (*Otus mindorensis*) (BMB, 2015).

Besides mammals and birds, MIBNP is also home to four Mindoro endemic herpetofauna (three amphibians, one reptile) and these are the Mindoro Tree Frog (*Philautus schmackeri*), Mindoro Variable-backed Frog (*Pulchrana mangyanum*), Mindoro Litter Frog (*Leptobrachium mangyanorum*) and Bangon Monitor Lizard (*Varanus bangonorum*) (Afuang et al., 2020).

B. Significance of the Study

The significance of the study is help augment the collected data on herpetofaunal species found in MIBNP, that could help in the creation of plans and activities for the protected area. In addition, data collected could be used to help in the monitoring activities of MIBNP.

C. Objectives of the Study

The objectives of the study is to collect further information on herpetofaunal species diversity in MIBNP, along with determining the inclusion of herpetofaunal sampling activities in the conduct of BMS.

D. Scope and Limitations of the Study

The exploratory study is for herpetofaunal species counts and diversity in MIBNP. The scope of the study is herpetofaunal diversity and the feasibility of including herpetofaunal surveys during the conduct of the Biodiversity Monitoring System (BMS) activities. The limitation of the study is that it is mainly conducted on the five BMS lines and safety concerns, particularly during adverse weather conditions.



METHODOLOGY

A. Equipment:

Snake hook

Panasonic Lumix DMC TS30 for photo documentation

Ruler

Tape measure

Weighing scale

Digital Caliper

Plastic bags for samples

Colored Ribbons for tagging (pink/yellow)

Caterplan containers for pitfall traps

B. Sampling Methods

A single 1 kilometer by 10 meter transect lines were established on each of the 5 Biodiversity Monitoring System (BMS) lines which were divided into 20 points with 50-meter intervals. Every point is geotagged, and a labeled colored ribbon is put on as a marker. As for the pitfall traps, each trap is buried a few meters away from the transect line and is also geotagged. Diurnal and nocturnal transect walks were done for 5 sampling days (Bennett, 2009) and at least 2-3 hours sampling time is conducted on every walk. Opportunistic sampling is also done if the species were caught outside of transect activities. Observers are tasked to look under logs, rocks, plant axils and other possible hiding areas of herpetofauna. Habitat types are documented during sampling.

As for both activities, captured species are then put into plastic bags but are sorted per species. Snakes are put individually in separate bags (Alcala, 2009). Specimen processing is done in camp and morphometrics taken per species is Snout Vent Length (SVL), Tail Length (tL), Total Length (TL) and weight. Additional measurements are done if there is a need to double check the species captured. Gender and age are also determined during processing. After morphometrics are taken, the specimens are photographed and then released. Diversity indices like Shannon-Wiener (Shannon, 1948) and Simpson's (Simpson, 1949) were also used to compute the diversity of herpetofaunal species.

RESULTS

A. HABITAT CHARACTERIZATION OF THE FIVE BMS LINES

FUKURATO-FANGANDATAN

The Fukurato-Fangandatan BMS line encompasses grasslands, mixed secondary forest and climbing bamboo groves. The creek called *Bulo* also crosses parts of this BMS line, which was observed near forest edge and inside the forest. Different ages of *Igyo* (*Dysoxylum gaudichaudianum*) were also observed in the forest, along with some *Hauili* (*Ficus septica*). *Calamus* sp. and *Pandanus* sp. individuals were also observed. Lastly, it is also part of the core habitat of the *Tamaraw* (*Bubalus mindorensis*). Pictures of the different habitats that are represented by this BMS line are presented as Figure 1. and



Figure 1. Forest edge (A), Bulu Creek (B), Rock Crevice (C), and Bagtuan stand (D) in Fukurato-Fangandatan BMS Line.

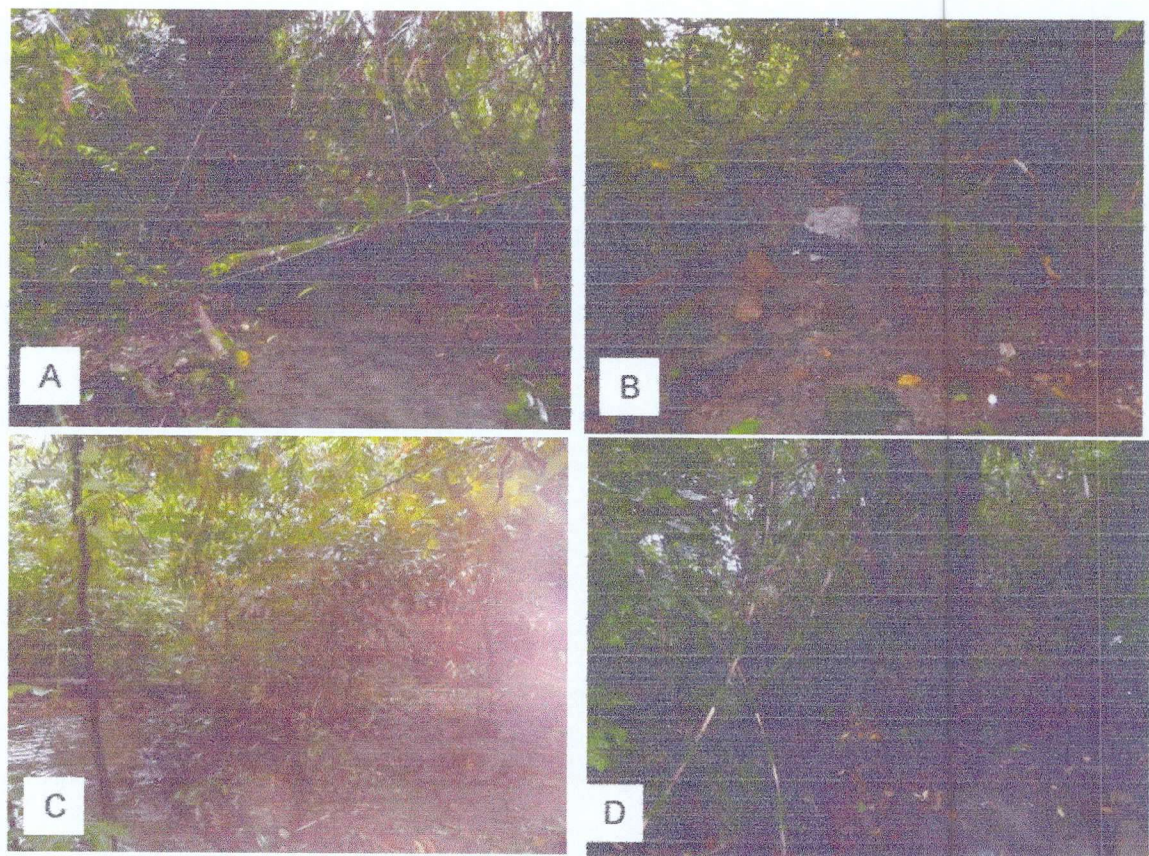


Figure 2. Forest creeks (A) & (B) and Secondary Forest (C) & (D) in Fukurato-Fangandatan
BMS Line

MAGAWANG-NAGBUBONG BMS LINE

The Magawang-Nagbubong BMS line is mostly grassland with an early secondary forest parallel to the BMS line. The early secondary forest parallel to the BMS line was observed to be dominated by *Hauili* (*Ficus septica*). Just like Fukurato-Fangandatan, it is also part of the *Bubalus mindorensis* core habitat, with the transect line established during the sampling study crossed into wading pools used by *B. mindorensis*. Habitat pictures are also included in Figure 3.



Figure 3. A small pool (A), and the secondary forest (B) & (C) in Magawang-Nagbubong BMS Line.

BULO CREEK-MEDALLA HILL

The Bulo Creek-Medalla Hill BMS line is characterized by grasslands, a small forest patch, disturbed areas and *kaingins* in either side of the BMS line. Clumps of *Kawayan Kiling* (*Bambusa vulgaris*) were present in the BMS line and the resting area going to Magawang Station, or Station 3 is called *Kiling* rest area, which was named after it. Individuals of *Musa sapientum* are common along the BMS line. Habitat pictures are represented by Figure 4.

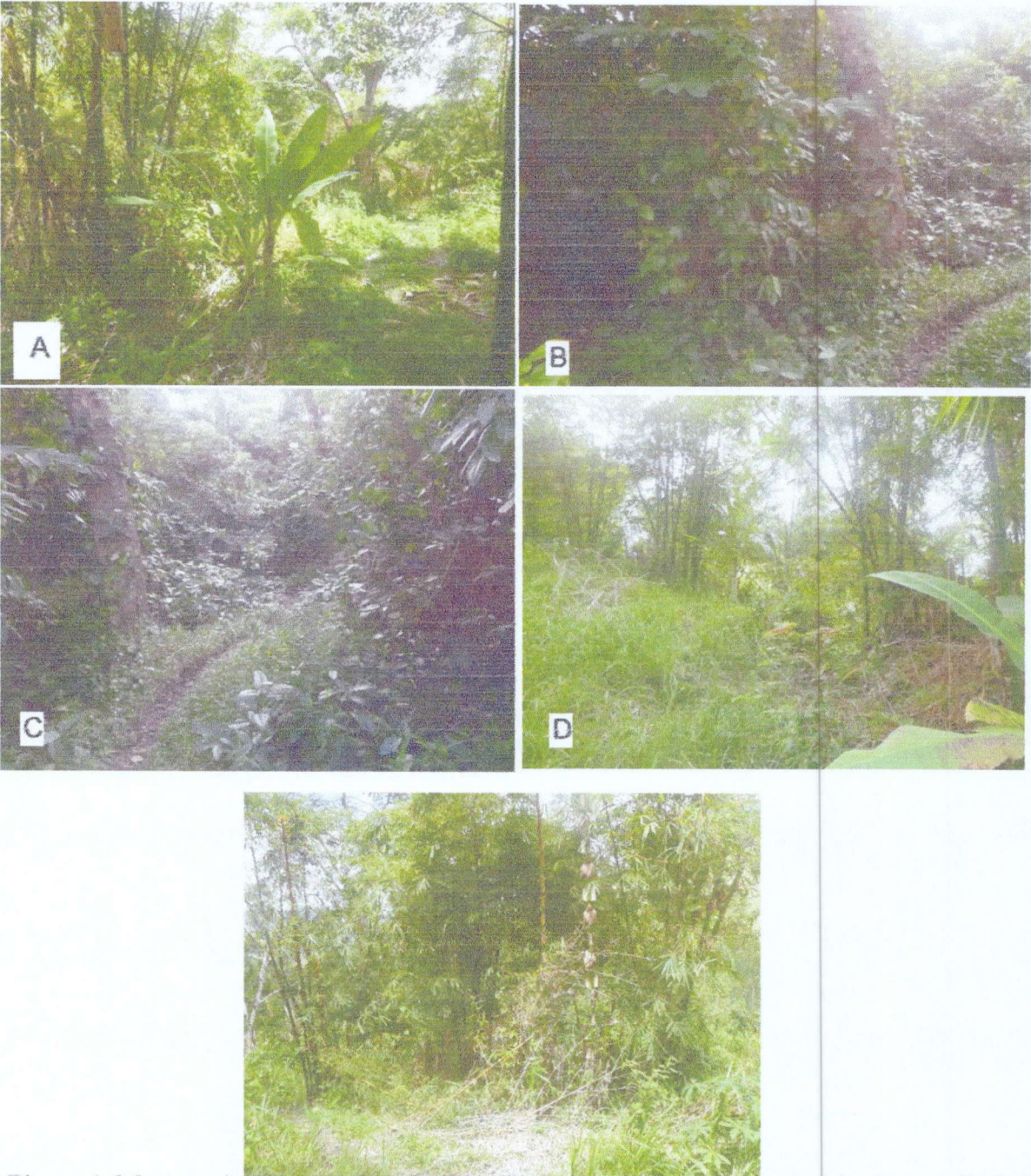


Figure 4. *Musa sapientum* (A), Mini-forest (B)&(C), and *Bambusa vulgaris* clumps (D)&(E) in Bulo Creek-Medalla Hill BMS Line

BAYOKBOK-IYAM BMS LINE

The Bayokbok-Iyam BMS line is primarily dominated by grasslands and the last one is that is part of the core habitat of *Bubalus mindorensis*. A secondary forest is passed by BMS line and some tree species present in the BMS line are *Akleng-Parang* (*Albizia procera*), Rain Tree (*Albizia saman*), and *Binunga* (*Macaranga tanarius*). Based on interviews with the rangers that accompanied me during sampling, *A. procera* is the dominant species in that forest. A part of the same forest is also covered with *Bagtuan*. Representative pictures of the forest near Bayokbok-Iyam is presented as Figure 5.



Figure 5. The forest (A) and Bagtuan stand (B) in Bayokbok-Iyam BMS Line.

DALIPI-BAYANAN

The last BMS line to be sampled during the study is Dalipi-Bayanan and much like Bulo Creek-Medalla Hill BMS line, it is a pathway to Iglit Station or Station 2. *Musa sapientum* and stands of *Bagtuan* were observed on both sides of the BMS line. In a part parallel to the BMS line, there is mini forest that is passed by natives when going to their *kaingin* plots. Individuals of *Albizia procera* were also observed in different parts of the line. Pictures of the areas sampled in Dalipi-Bayanan are represented as Figure 6.



Figure 6. Path to a Kaingin field (A), inside the forest (B)&(C) in Dalipi-Bayanan BMS Line.

B. HERPETOFAUNA

A grand total of 133 individuals from 24 species were documented during the 36-day study in MIBNP. Among the 24 species, 12 are endemic to the Philippines, four Mindoro endemics, seven natives and one introduced species. The four Mindoro endemics are all amphibians, and these are: Mindoro Tree Frog (*Philautus schmackeri*), Mindoro Variable-backed Frog (*Pulchrana mangyanum*), Mindoro Litter Frog (*Leptobrachium mangyanorum*), and Mindoro Fanged Frog (*Limnonectes beloncioi*). Among the Mindoro endemics, two are threatened species; *Philautus schmackeri* is classified as Endangered (EN) in International Union for Conservation of Nature (IUCN) Red List and Vulnerable (VU) in Philippine Red List Committee (PRLC) for Threatened Species or DENR Administrative Order (DAO) no. 2019-09. *Leptobrachium mangyanorum* is VU in IUCN and Other Threatened Species (OTS) in DAO no. 2019-09.

Amphibians

A total of 99 individuals from 11 species of amphibians were documented and as mentioned earlier, four are endemic only to the island of Mindoro. Four more amphibians are classified as Philippine endemics, while two are native species and a lone invasive species. For the species with the most no. of individuals documented is *Limnonectes beloncioi* with 28 individuals, followed by *Leptobrachium mangyanorum* with 24 individuals then finally *Platymantis corrugatus* with 22 individuals. As for where are they found, please refer to the species account part of this report. The most threatened species of all the amphibians found in the study is *Philautus schmackeri* and a lone individual was only found during the whole study. Further sampling attempts on other BMS lines and even opportunistic sampling efforts did not result in adding another individual for the said species. A lone invasive species, Chinese Tiger Frog (*Hoplobatrachus rugulosus*), was documented during the study and one individual even was captured inside the *Bubalus mindorensis* core habitat zone with an elevation of 960 masl.

Reptiles

A total of 32 individuals from 13 species of reptiles were documented and eight species are Philippine endemics and five are native species. Among all the species, the Mindoro narrow disked Gecko (*Gekko mindorensis*) has the most no. of individuals with 12 and this species was only documented only in the Dalipi-Bayanan BMS line. Cuming's Mabuya (*Eutropis cumingi*) followed with 5 individuals, but it is the only reptile species which was observed in three BMS lines. Further details on the reptile species are found in the species account part and the list for both amphibians and reptiles is noted as Table 1. on the following page.

Table 1. List of Amphibians and Reptiles caught during the MIBNP survey

Species	Scientific name	IUCN	DAO no. 2019-09	Endemicity
Amphibians				
Ceratobatrachidae				
Rough-backed Forest Frog	<i>Platymantis corrugatus</i>	LC	OWS	Philippine Endemic
Megophryidae				
Mindoro Litter Frog	<i>Leptobrachium mangyanorum</i>	VU	OTS	Mindoro Endemic
Ranidae				
Mindoro Variable Backed Frog	<i>Pulchrana mangyanum</i>	VU	OWS	Mindoro Endemic
Microhylidae				
Truncate-Toed Chorus Frog	<i>Kaloula conjuncta</i>	LC	OWS	Philippine Endemic
Philippine Painted Narrowmouth Toad	<i>Kaloula picta</i>	LC	OWS	Philippine Endemic
Dicroglossidae				
Chinese Tiger Frog	<i>Hoplobatrachus rugulosus</i>	LC	OWS	Introduced
Mindoro Fanged Frog	<i>Limnonectes beloncioi</i>	N/A	N/A	Mindoro Endemic
Brackish Frog	<i>Fejervarya moodiei</i>	DD	OWS	Native
Luzon Wart Frog	<i>Fejervarya vittigera</i>	LC	OWS	Philippine Endemic

Rhacophoridae					
Mindoro Tree Frog	<i>Philautus schmackeri</i>	EN	VU	Mindoro Endemic	
White-lipped Tree Frog	<i>Polypedates leucomystax</i>	LC	OWS	Native	
Reptiles					
Scincidae					
Jagor's Spheonomorphus	<i>Pinoyscincus jagori</i>	LC	OWS	Philippine Endemic	
Cuming's Mabuya	<i>Eutropis cumingi</i>	LC	OWS	Native	
Gekkonidae					
Tokay Gecko	<i>Gekko gekko</i>	LC	OTS	Native	
Philippine Bent-toed Gecko	<i>Cyrtodactylus philippinicus</i>	LC	OWS	Philippine Endemic	
Mindoro Narrow Disked Gecko	<i>Gekko mindorensis</i>	LC	OWS	Philippine Endemic	
Agamidae					
Green-crested Lizard	<i>Bronchocela cristatella</i>	LC	OTS	Native	
Pythonidae					
Reticulated Python	<i>Malayopython reticulatus</i>	LC	OWS	Native	
Colubridae					
Philippine Lamp-	<i>Dendrelaphis</i>	N/A	OWS	Philippine Endemic	

black Tree Snake	<i>fuliginosus</i>				
Gervais' Worm Snake	<i>Calamaria gervaisi</i>	LC	OWS	Philippine Endemic	
Northern Philippine Banded Burrowing Snake	<i>Oxyrhabdium leporinum</i>	LC	OWS	Philippine Endemic	
Common Wolf-snake	<i>Lycodon capucinus</i>	LC	OWS	Native	
Elapidae					
Barred Philippine False Coral Snake	<i>Hemibungarus calligaster</i>	LC	OWS	Philippine Endemic	
Northern Philippine Cobra	<i>Naja philippinensis</i>	NT	OTS	Philippine Endemic	

Legend:

LC – Least Concern NT – Near Threatened

VU – Vulnerable EN – Endangered

OTS – Other Threatened Species

OWS – Other Wildlife Species

N/A – Not Applicable

Herpetofaunal Species Diversity

Herpetofaunal species diversity during the study have ($H' = 2.46$, Simpson's Evenness = 0.88) and based on the Fernando Biodiversity Scale (Fernando, 1998), the herpetofaunal diversity is still in the low values based on the Shannon Index but it has high diversity in Simpson's. This is still higher compared to the values derived in Mt. Calavite (Alviola et al. 2022) which is pegged at ($H' = 1.539$, Simpson Evenness = 0.74). This can be possibly attributed to the number of sampling efforts done and the presence of many riparian areas in some of the BMS lines in MIBNP.

Herpetofaunal Sampling

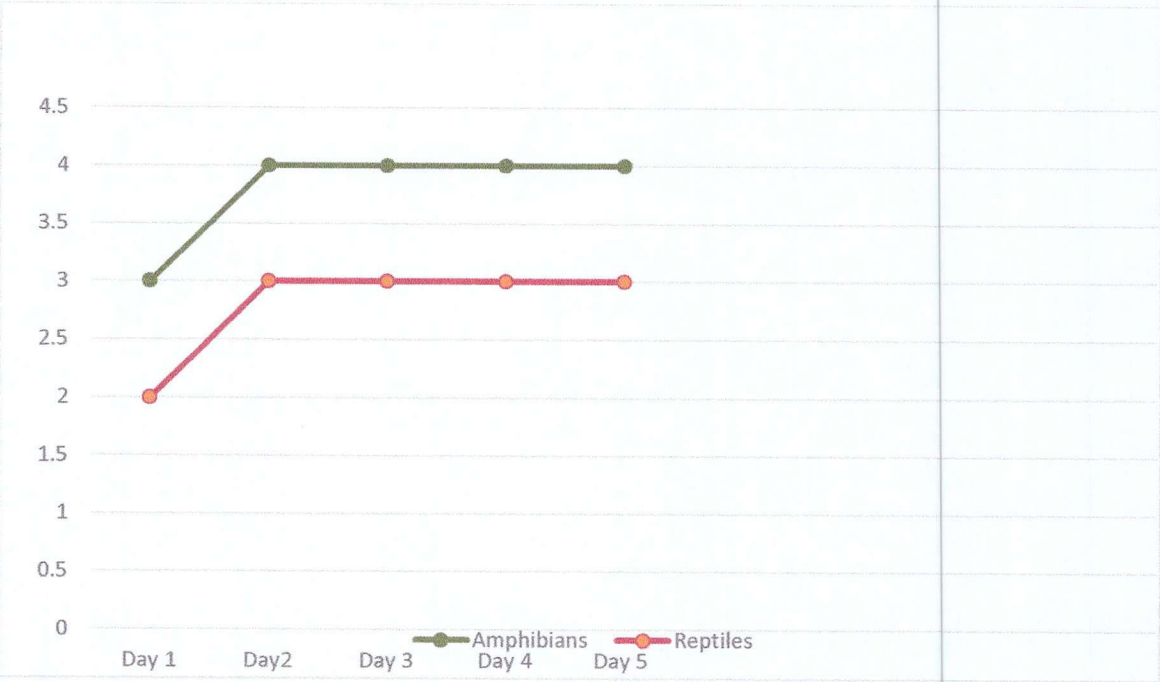


Figure 7. Sampling effort in Fukurato-Fangandatan BMS Line.

Fukurato-Fangandatan

The sampling days for Fukurato-Fangandatan was done in 5 days, even when it is drizzling lightly. The weather conditions that could potentially or totally suspend field activities if strong rains or/with strong winds occur in the sampling area. The first 2 days of sampling saw an increase in species count since the Philippine Bent-Toed Gecko (*Cyrtodactylus philippinicus*) and Mindoro Variable-backed Frog (*Pulchrana mangyanum*) were captured on the 2nd day of field activities. However, the species accumulation curve plateaued on the 4th day and that trend continued the 5th day, signifying that the area has been sampled exhaustively. The species accumulation curve for this BMS line is represented as Figure 7.

Magawang-Nagbubong

Sampling in Magawang-Nagbubong was only conducted for 3 days and most of the field activities were only done in the morning. Unfortunately, no sampling activities were during the evening since adverse weather conditions were occurring at that time, particularly when Occidental Mindoro received a storm signal warning when Super Typhoon Karding. Activities were totally suspended for the safety of the field team. Unfortunately, not a single species of herpetofauna was seen or observed during the sampling period in Magawang-Nagbubong.

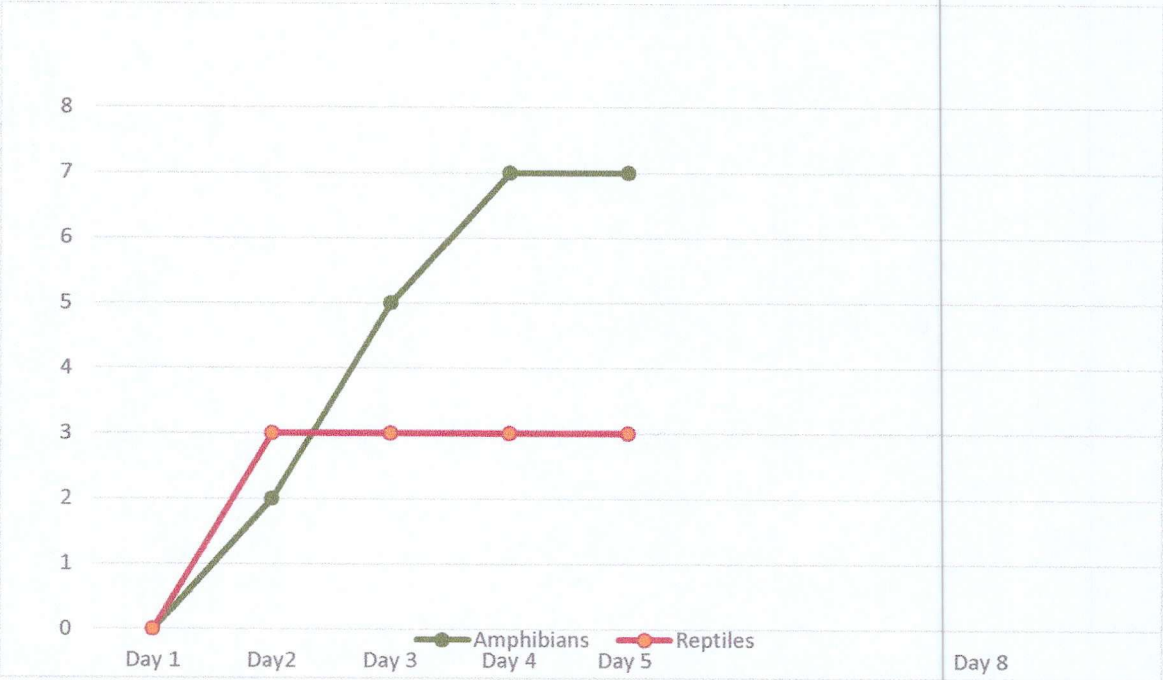


Figure 8. Sampling effort in Bulo Creek-Medalla Hill BMS Line

Bulo Creek-Medalla Hill

The evening sampling for the 1st day was not conducted since heavy rains during the afternoon contributed to the increase in water levels of parts of *Bulo Creek* and *Anahawin River* during the evening, hence making it dangerous to attempt crossing those bodies of water to the sampling area. Formal sampling activities were conducted during the 2nd day where the reptiles had three species captured while the amphibians only have two species. On the following sampling days, the amphibians saw an increase during the 3rd and 4th day since five more species were captured, including the Mindoro endemics like *Pulcharana mangyanum*, *Leptobrachium mangyanorum* and *Philautus schmackeri*, the latter was caught when the team was returning to the camp. Species Accumulation Curve for Bulo Creek-Medalla Hill BMS line is Figure 8.

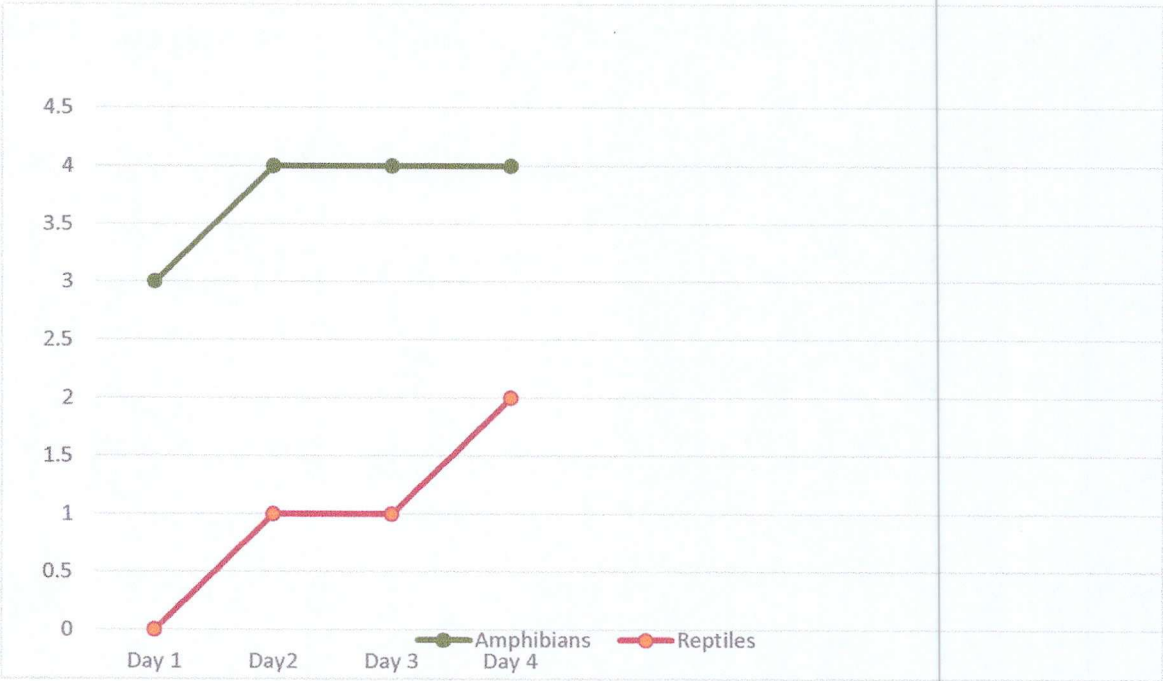


Figure 9. Sampling effort in Bayokbok-Iyam BMS Line.

Bayokbok-Iyam

Sampling in Bayokbok-Iyam was supposed to be done before Bulo Creek-Medalla Hill but adverse weather conditions near Bayokbok-Iyam at that time made it impossible to conduct the activity. The sampling was done in a later and based on the species accumulation curve above, the species count for amphibians had plateaued from the 3rd day and 4th day while the reptiles saw an increase in species, which could mean that there is still chance to encounter new reptile species in the area. However, strong rains during the afternoon on the 4th sampling day had led to suspension of activities and it also led to the decision to camp out the following day, instead of conducting another sampling day, due to the dangers posed by the bad weather in the area. Species Accumulation Curve for this BMS Line is Figure 9.

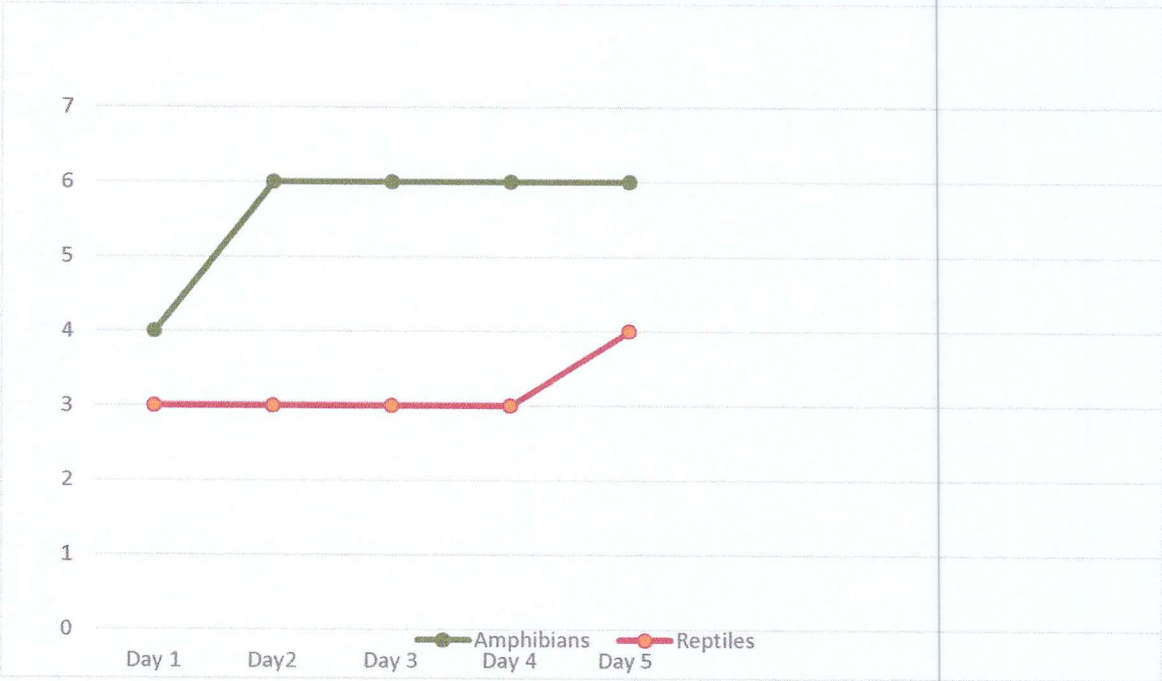


Figure 10. Sampling effort in Dalipi-Bayanan BMS Line.

Dalipi-Bayanan

The final sampling area was Dalipi-Bayanan and it is also has the lowest elevation among all the BMS lines sampled during the study. The 1st day of sampling was promising since both amphibians and reptiles captures have netted four and three species respectively. The amphibian species captured also saw an increase on the 2nd day with two more species added to the tally, but it also plateaued quickly as there was no increase in species captured as the sampling days continued. For reptiles, there was no observable increase in species counts after the 1st day sampling which could have led to it reaching a plateau mark until the surprise of the 5th and final sampling day where a lone Common Wolf-Snake (*Lycodon capucinus*) was captured; leading to an increase to the reptiles captured during the study to four. The final Species Accumulation Curve for Dalipi-Bayanan is represented as Figure 10.

C. SPECIES DOSSIER

AMPHIBIANS

Rough-backed Forest Frog (*Platymantis corrugatus*) (Figure 11)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Ceratobatrachidae
Genus	<i>Platymantis</i>
Species	<i>corrugatus</i>



Figure 11. *Platymantis corrugatus*

General habit:

A direct developing terrestrial frog species, like members of the genus *Platymantis*, this small frog species is commonly found in forests, particular on forest floors. This species was recorded in many parts of the country except in Palawan and Sulu Archipelago. (Diesmos et al. 2015)

Diet

Mainly consists of insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

This species is a Philippine Endemic. (Diesmos et al. 2015)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Helps in population control of insects.

Mindoro Litter Frog (*Leptobrachium mangyanorum*) (Figure 12)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Megophryidae
Genus	<i>Leptobrachium</i>
Species	<i>mangyanorum</i>



Figure 12. *Leptobrachium mangyanorum*

General habit:

A terrestrial frog species, mainly a forest dwelling species, it is commonly found in forests, particularly in primary forests. They are also known to tolerate habitat disturbances in low elevation areas.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

A Mindoro Endemic species, it is only found in the island of Mindoro was recorded to exist in MIBNP. (Afuang, L.E. et al 2020)

Conservation Status

IUCN	Vulnerable
DAO no. 2019-09	Other Threatened Species

Impacts

It helps in controlling insect populations

Mindoro Variable-backed Frog (*Pulchrana mangyanum*) (Figure 13)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Ranidae
Genus	<i>Pulchrana</i>
Species	<i>mangyanum</i>



Figure 13. *Pulchrana mangyanum*

General habit:

This frog species is a riparian species and prefers clean, running forest creeks and streams.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

It is also a Mindoro Endemic species and was also documented in MIBNP. (Afuang, L.E. et al 2020)

Conservation Status

IUCN	Vulnerable
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control

Truncate-Toed Chorus Frog (*Kaloula conjuncta*)(Figure 14)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Microhylidae
Genus	<i>Kaloula</i>
Species	<i>conjuncta</i>



Figure 14. *Kaloula conjuncta*

General habit:

Mostly a terrestrial and fossorial frog species, it is commonly found in forests and sometimes found near forest streams. Like other members of the family Microhylidae, they were observed to aestivate during the summer months.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

This species is a Philippine Endemic. (Diesmos et al. 2015)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control.

Philippine Painted Narrowmouth Toad (*Kaloula picta*)(Figure 15)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Microhylidae
Genus	<i>Kaloula</i>
Species	<i>picta</i>



Figure 15. *Kaloula picta*

General habit:

Another terrestrial and fossorial forest species, this species is a forest dweller but was also observed in areas outside of forests. Similar to *Kaloula conjuncta*, this species also undergoes aestivation during the summer months.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

This species is a Philippine endemic. (Diesmos et al. 2015)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control

Chinese Tiger Frog (*Hoplobatrachus rugulosus*)(Figure 16)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Dicroglossidae
Genus	<i>Hoplobatrachus</i>
Species	<i>rugulosus</i>



Figure 16. *Hoplobatrachus rugulosus*

General habit:

A large riparian frog species, they are mostly found in ricefields and near other bodies of water like creeks and rivers.

Diet

Other frog species, small vertebrates, insects and other small invertebrates.

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

It is an introduced species in the country. (Diesmos et al. 2015)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

A highly voracious species, it is observed to prey on juveniles and metamorphs of *Limnonectes* sp. (Herr et al. 2021).

Mindoro Fanged Frog (*Limnonectes beloncioi*)(Figure 17)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Dicroglossidae
Genus	<i>Limnonectes</i>
Species	<i>beloncioi</i>



Figure 17. *Limnonectes beloncioi*

General habit:

A medium sized Riparian frog species, it is found near bodies of water like creeks and forest streams.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Newly described Mindoro Endemic (Herr et al. 2021)

Conservation Status

IUCN	Not Applicable
DAO no. 2019-09	Not Applicable

Impacts

As a newly described species, not much is known about its impact.

Brackish Frog (*Fejervarya moodiei*)(Figure 18)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Dicroglossidae
Genus	<i>Fejervarya</i>
Species	<i>moodiei</i>



Figure 18. *Fejervarya moodiei*

General habit: Riparian frog species, it is found near bodies of water, ricefields and as its name implies, near brackish areas.

Diet

Insects and other small invertebrates, they are also known to prey on crabs.

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

It is a non-endemic frog species (Diesmos et al. 2015)

Conservation Status

IUCN	Data Deficient
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control and possible prey species of *Hoplobatrachus rugulosus*.

Luzon Wart Frog (*Fejervarya vittigera*)(Figure 19)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Dicroglossidae
Genus	<i>Fejervarya</i>
Species	<i>vittigera</i>



Figure 19. *Fejervarya vittigera*

General habit:

Another riparian species, it is commonly found near ricefields, forest streams and areas adjacent to bodies of water.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

It is a Philippine Endemic (Diesmos et al. 2015)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control

Mindoro Tree Frog (*Philautus schmackeri*)(Figure 20)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Rhacophoridae
Genus	<i>Philatus</i>
Species	<i>schmackeri</i>



Figure 20. *Philautus schmackeri*

General habit:

Like other members of the genus *Philautus*, this arboreal frog species is a direct developer. Mostly found in forests and known to lay eggs on tree fern humus, *Pandanus* and *Freycenetia* leaf axils.

Diet:

Small insects

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

This species is a Mindoro endemic. (Afuang, L.E. et al 2020)

Conservation Status

IUCN	Endangered
DAO no. 2019-09	Vulnerable

Impacts

Small insect population control

White-lipped Tree Frog (*Polypedates leucomystax*)(Figure 21)

Kingdom	Animalia
Phylum	Chordata
Class	Amphibia
Order	Anura
Family	Rhacophoridae
Genus	<i>Polypedates</i>
Species	<i>leucomystax</i>



Figure 21. *Polypedates leucomystax*

General habit:

An arboreal frog species, mostly found in forests but can tolerate disturbed areas and near human habitation.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Native amphibian species (Diesmos et al. 2015)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control

REPTILES

Jagor’s Sphenomorphus (*Pinoyscincus jagori*)(Figure 22)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Scincidae
Genus	<i>Pinoyscincus</i>
Species	<i>jagori</i>

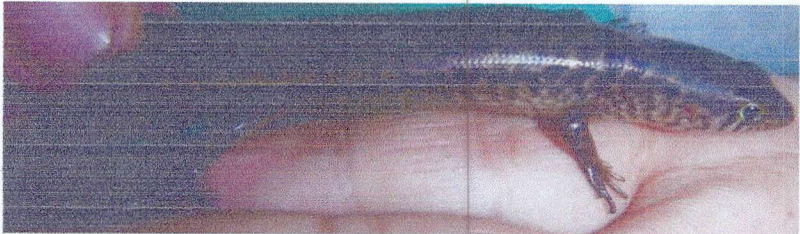


Figure 22. *Pinoyscincus jagori*

General habit:

A terrestrial skink, this species is commonly found in forests and trails near forests, where it is observed crossing during daytime.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

A Philippine Endemic species (*Mts. Iglit-Baco*. Mindoro Biodiversity Conservation Foundation, Inc. (n.d.). Retrieved November 2, 2022, from <http://database.mbcfi.org.ph/2012/03/05/mts-iglit-baco-2/>)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control

Cuming’s Mabuya (*Eutropis cumingi*)(Figure 23)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Scincidae
Genus	<i>Eutropis</i>
Species	<i>cumingi</i>



Figure 23. *Eutropis cumingi*

General habit:

Much like *Pinoyscincus jagori*, it is also a terrestrial skink and can be found in forests, in disturbed habitats and near human habitation.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Native species (*Mts. Iglit-Baco*, Mindoro Biodiversity Conservation Foundation, Inc. (n.d.). Retrieved November 2, 2022, from <http://database.mbcfi.org.ph/2012/03/05/mts-iglit-baco-2/>)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control

Tokay Gecko (*Gekko gecko*)(Figure 24)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Gekkonidae
Genus	<i>Gekko</i>
Species	<i>gecko</i>



Figure 24. *Gekko gecko*

General habit:

A large arboreal gecko species, it is found in forests but also in disturbed areas and near human habitation.

Diet

Insects, small vertebrates and invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Native species (*Mts. Iglit-Baco*. Mindoro Biodiversity Conservation Foundation, Inc. (n.d.). Retrieved November 2, 2022, from <http://database.mbcfi.org.ph/2012/03/05/mts-iglit-baco-2/>)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Threatened Species

Impacts

Insect and small vertebrates population control.

Philippine Bent-toed Gecko (*Cyrtodactylus philippinicus*)(Figure 25)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Gekkonidae
Genus	<i>Cyrtodactylus</i>
Species	<i>philippinicus</i>



Figure 25. *Cyrtodactylus philippinicus*

General habit:

A terrestrial gecko, it can be found in forests but were observed crawling near tree stumps and rock crevices.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Philippine Endemic (*Mts. Iglit-Baco*. Mindoro Biodiversity Conservation Foundation, Inc. (n.d.). Retrieved November 2, 2022, from <http://database.mbcfi.org.ph/2012/03/05/mts-iglit-baco-2/>)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control.

Mindoro Narrow Disked Gecko (*Gekko mindorensis*)(Figure 26)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Gekkonidae
Genus	<i>Gekko</i>
Species	<i>mindorensis</i>



Figure 26. *Gekko mindorensis*

General habit:

Another terrestrial gecko, this species is also found in forests but is more common near rocks and crevices.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Philippine Endemic (*Mts. Iglit-Baco*. Mindoro Biodiversity Conservation Foundation, Inc. (n.d.). Retrieved November 2, 2022, from <http://database.mbcfi.org.ph/2012/03/05/mts-iglit-baco-2/>)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control

Green Crested Lizard (*Bronchocela cristatella*)(Figure 27)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Agamidae
Genus	<i>Bronchocela</i>
Species	<i>cristatella</i>



Figure 27. *Bronchocela cristatella*

General habit:

An arboreal agamid lizard, it is observed climbing on trees and it changes color when stressed.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Native species

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Threatened Species

Impacts

Insect population control

Reticulated Python (*Malayopython reticulatus*)(Figure 28)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Pythonidae
Genus	<i>Malayopython</i>
Species	<i>reticulatus</i>



Figure 28. *Malayopython reticulatus*

General habit:

A very large snake species, mostly arboreal and a forest-dweller but is also encountered near or on human habitation.

Diet

Mostly vertebrate species like other snakes and birds

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Native species (Leviton, A.E., 2018)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

- Population control of other vertebrate species like rats.

Philippine Lamp-Black Tree Snake (*Dendrelaphis fuliginosus*)(Figure 29)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Colubridae
Genus	<i>Dendrelaphis</i>
Species	<i>fuliginosus</i>



Figure 29. *Dendrelaphis fuliginosus*

General habit:

A small but long arboreal snake species, it is mostly found in forests but is encountered near disturbed habitats.

Diet

Vertebrates like frogs and small lizards

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Philippine Endemic (Leviton, A.E., 2018)

Conservation Status

IUCN	Not Applicable
DAO no. 2019-09	Other Wildlife Species

Impacts

-Frog and lizard population control

Gervais' Worm Snake (*Calamaria gervaisi*)(Figure 30)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Colubridae
Genus	<i>Calamaria</i>
Species	<i>gervaisi</i>



Figure 30. *Calamaria gervaisi*

General habit:

A small terrestrial snake, it is often observed in forests or areas near forests.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Philippine Endemic (Leviton, A.E., 2018)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Insect population control.

Northern Philippine Banded Burrowing Snake (*Oxyrhabdium leporinum*)(Figure 31)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Colubridae
Genus	<i>Oxyrhabdium</i>
Species	<i>leporinum</i>



Figure 31. *Oxyrhabdium leporinum*

General habit:

Another terrestrial snake species, it is mostly found in forests or areas near forests.

Diet

Small vertebrates, insects and small invertebrates.

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Philippine Endemic (Leviton, A.E., 2018)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Small vertebrate and insect population control.

Common Wolf Snake (*Lycodon capucinus*)(Figure 32)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Colubridae
Genus	<i>Lycodon</i>
Species	<i>capucinus</i>



Figure 32. *Lycodon capucinus*

General habit:

Terrestrial snake species, a forest-dweller but it is often observed near or inside human homes.

Diet

Insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Native species (Leviton, A.E., 2018)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Small vertebrate and insect population control

Barred Philippine False Coral Snake (*Hemibungarus calligaster*)(Figure 33)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Elapidae
Genus	<i>Hemibungarus</i>
Species	<i>calligaster</i>



Figure 33. *Hemibungarus calligaster*

General habit:

Terrestrial venomous snake species, it is most found in forests but is also encountered in areas outside it.

Diet

Small vertebrate, insects and other small invertebrates

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Philippine Endemic (Leviton, A.E., 2018)

Conservation Status

IUCN	Least Concern
DAO no. 2019-09	Other Wildlife Species

Impacts

Small vertebrate and insect population control

Northern Philippine Cobra (*Naja philippinensis*)(Figure 34)

Kingdom	Animalia
Phylum	Chordata
Class	Reptilia
Order	Squamata
Family	Elapidae
Genus	<i>Naja</i>
Species	<i>philippinensis</i>



Figure 34. *Naja philippinensis*

General habit:

A highly venomous terrestrial snake, it is encountered in forests but can also be found near ricefields and sometimes, near human habitation.

Diet

Small to medium size vertebrates like rats

Occurrence in Mts. Iglit-Baco Natural Park (MIBNP)

Philippine Endemic (Leviton, A.E., 2018)

Conservation Status

IUCN	Near Threatened
DAO no. 2019-09	Other Threatened Species

Impacts

Rat population control

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APPENDIX

SPECIES ACCOUNTS

AMPHIBIANS

Platymantis corrugatus (Dumeril, 1853)

As it is now understood, *Platymantis corrugatus* is a widespread endemic species that can be found all throughout the Philippines. Although collected specimens were seen to have a variety of color patterns, they can normally be identified by their medium body size, a dark facial mask (either gray, black, or brown), and elongate tubercular ridges that run down the dorsal surface. (Brown et al., 2013). Specimens were captured in forests or near forested areas, even near *Bambusa vulgaris* clumps. Documented in all BMS lines except Magawang-Nagbubong. (Fig 35)



Figure 35. An adult *Platymantis corrugatus* from the Bayokbok-Iyam BMS line.

Leptobrachium mangyanorum (Brown, Siler, Diesmos and Alcala 2009)

This Mindoro endemic species was observed in different habitat types like forests, near creeks and occasionally on grassland areas. It was documented on Mt. Calavite Wildlife Sanctuary (MCWS) in an expedition conducted by Mindoro Biodiversity Conservation Foundation Inc. (MBCFI) during the year 2014 and by Alviola et al. in 2022. Field observations also noted that this species has been active in making mating calls and two pairs of individuals in amplexus were documented during the study. Same with *Platymantis corrugatus*, *L. mangyanorum* was documented in all BMS lines except Magawang-Nagbubong. (Fig 36)



Figure 36. Pair of *Leptobrachium mangyanorum* in amplexus.

***Pulchrana mangyanum* (Brown and Guttman 2002)**

Another Mindoro endemic, this frog species was documented in MCWS in 2014 by MBCFI and Alviola et al in 2022. This species is found near riparian areas like forest streams and creeks. Field observations during the study noted that it prefers clear forest streams but can tolerate muddy waters. Individuals were documented in Fukurato-Fangandatan, Bulo Creek-Medalla Hill and Dalipi-Bayanan BMS lines. (Fig 37)



Figure 37. *Pulchrana mangyanum* adult from the Fukurato-Fangandatan BMS line.

***Kaloula conjuncta* (Peters, 1863)**

Each member of the *Kaloula conjuncta* group may require a distinct classification due to its patchy and unpredictable distribution (e.g., *K. conjuncta conjuncta* from Luzon and *K. conjuncta negrosensis* from Western Visayan islands of Panay, and Negros). Recent phylogenetic research showed that each subspecies was monophyletic and unique (Blackburn et al. 2013). Given the variations in advertisement calls from West Visayan (Negros and Panay) populations and levels of genetic variation separating Romblon from West Visayan populations, further taxonomic research is required (Blackburn et al. 2013, referenced by Meneses et al. at 2022).. This endemic species' conservation status is classified as Least Concern (IUCN 2022). A single individual was captured in the forests surrounding Iglit Station. (Fig 38)



Figure 38. The lone *Kaloula conjuncta* caught on Iglit Station.

***Kaloula picta* (Dumeril and Bibron 1841)**

According to Brown et al. (2013), *Kaloula picta* is a common Philippine endemic that is found in low elevation agricultural areas, along riparian habitats in mountain slopes, along low-elevation river valleys, and along coastal areas (Inger 1954; Brown and Alcala 1970a; Alcala and Brown 1998). A lone froglet was captured near a *Bambusa vulgaris* clump on the Bulo-Creek Medalla BMS line. (Fig 39)



Figure 39. *Kaloula picta* froglet from Bulo Creek-Medalla Hill BMS line.

***Hoplobatrachus rugulosus* (Wiegmann, 1834)**

Since its initial discovery in Laguna province in 1996 (Diesmos et al. 2006), this imported species has been found on all the Philippines' major islands' low-lying valley systems (Brown et al., 2013). Individuals of this microglossid were captured near *Dalipi* creek on the Dalipi-Bayanan BMS line and inside the core habitat of *Bubalus mindorensis* near the Magawang Station or Station 3. (Fig 40)



Figure 40. *Hoplobatrachus rugulosus* caught from Dalipi Creek near the Dalipi-Bayanan BMS line.

***Limnonectes beloncioi* (Herr, 2021)**

This newly described Mindoro endemic species is commonly found in riparian areas, mostly above rocks, sandy shingles and muddy riverbanks near streams and rivers (Herr et al. 2021). It is mainly differentiated from its closest relative, *Limnonectes acanthi*, by the male advertisement call. Individuals of this species are observed to be most active on rainy nights. Present in all BMS lines except Magawang-Nagbubong BMS line. (Fig 41)



Figure 41. *Limnonectes beloncioi* caught in Dalipi-Bayanan BMS line

***Fejervarya moodiei* (Taylor 1920)**

The widespread estuarine amphibian species, *Fejervarya moodiei*, inhabits brackish water swamps among other coastal habitats. It used to be conspecific with the widespread Southeast Asian species, *Fejervarya cancrivora*. Recent genetic investigations (Kurniawan et al. 2010, 2011), have determined that the Philippine population is genetically distinct from *F. cancrivora*, cited by Brown et al. (2013). A single individual was caught near Iglit Station along with *Limnonectes beloncioi*. (Fig 42)



Figure 39. *Kaloula picta* froglet from Bulo Creek-Medalla Hill BMS line.

***Hoplobatrachus rugulosus* (Wiegmann, 1834)**

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Figure 42. *Fejervarya moodiei* caught in waters near Iglit Station.

Fejervarya vittigera (Wiegmann, 1834)

A widespread low elevation endemic species, *Fejervarya vittigera* is generally found close to heavily disturbed places with standing water (ricefields, ponds, and lakes) or along rivers and canals close to agricultural areas (Brown et al, 2013). Individuals were caught near Dalipi-Bayanan BMS line. (Fig 43)



Figure 43. *Fejervarya vittigera* caught in Dalipi-Bayanan BMS line

***Philautus schmackeri* (Boettger 1892)**

A small frog, this species was documented in Mts. Halcon and Malasimbo in Oriental Mindoro and Mts. Iglit-Baco Natural Park in Occidental Mindoro (Afuang, L. E. et al., 2020). It was also observed moving from one plant to another. A single individual was documented in a small forest patch in the Bulu Creek-Medalla Hill BMS Line. (Fig 44)



Figure 44. *Philautus schmackeri* from the small forest patch in Bulu Creek-Medalla Hill BMS line.

***Polypedates leucomystax* (Gravenhorst, 1829)**

Throughout much of Southeast Asia, the Philippine *Polypedates leucomystax* species complex has several genetically different subspecies (Inger 1954, 1999; Brown et al. 2010a; Kuriashi et al. 2012). Although this species is genetically identical across the majority of the archipelago, two genetic types have been identified in the Mindanao faunal region (Brown and Diesmos, 2002, 2009), one of which is shared with northern Borneo and southern Peninsular Malaysia, indicating that the Philippines may have been invaded twice (Brown et al. 2010a). Brown et al. (2010a) hypothesized that the widespread single haplotype in the Philippines may have resulted from demographic range expansion in the wake of habitat alteration and human-mediated dispersal during the preceding several centuries. According to Brown et al. (2013), this species can be found from arid, coastal regions close to farmland to elevations of more than 1000 m in the Northern Cordillera, where it has been discovered in pristine woods at a high elevation. Individuals were caught on trees in near Bulu Creek-Medalla Hill and Dalipi-Bayanan BMS lines. (Fig 45)



Figure 45. *Polypedates leucomystax* caught on a tree in the Dalipi-Bayanan BMS line.

REPTILES

Pinoyscincus jagori (Peters, 1864)

P. abdictus and *P. coxi*, two taxonomically muddled and extremely polyphyletic "species," belong to a single monophyletic group (Linkem et al. 2010b, 2011). Known from eastern Mindanao, Dinagat, and Siargao, populations keying out to *P. jagori* represent four different, genetically diverse lineages; three of them are designated as *P. jagori jagori*, while the population known as *P. jagori grandis* is nestled among them (Linkem et al. 2010b, 2011) (from the Western Visayan islands; Brown and Alcala 1980). From near sea level to 500 or 600 m, these large-bodied skinks are prevalent across disturbed and wooded habitats (RMB personal observation). According to Brown et al. (2016), this widespread species is classified as "Least Concern" (LC; IUCN 2010, 2016). Like other skink species in MIBNP, rangers noted that they are hunted by Mangyans as food (MVCS, pers. Comm). A lone individual was caught in the Fukurato-Fangandatan BMS line. (Fig 46)

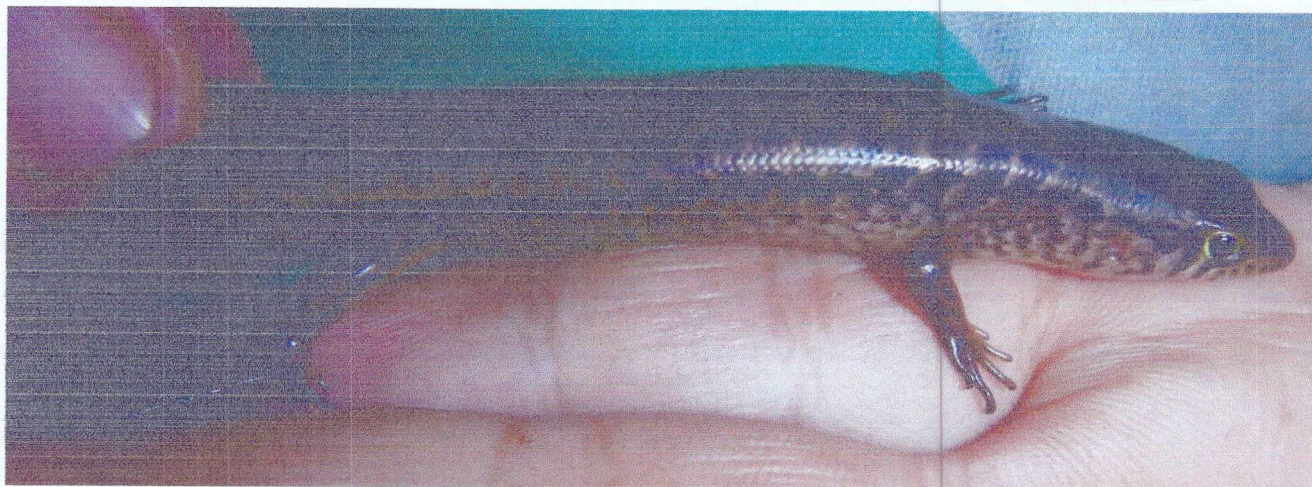


Figure 46. juvenile *Pinoyscincus jagori* from Fukurato-Fangandatan BMS line.

***Eutropis cumingi* (Brown & Alcala, 1980)**

This sun skink species was described in 1980 from several small series of specimens from Subic Bay, southwest Luzon (CAS 15473; holotype, and CAS 15452, 15454–56, and 15472, 60955–64, paratypes), “northern Luzon” (FMNH 161666–68, paratypes), Ifugao (FMNH 177299–300, paratypes), and generally, “Luzon” (exact locality unknown; FMNH 177304–09, 177311, paratypes). Given its wide distribution, we are not surprised to find specimens diagnosable as this species in the Northern Sierra Madre. Past studies have also found it present in the Babuyan and Batanes islands to the north, on Lanyu Island near Taiwan (Oliveros et al. 2010), and in the northern Cordillera of Luzon (Diesmos 2008; Diesmos et al. 2005). This species is identified based on its small body size, distinctive scalation, and bright red-orange coloration on the throats of males., according to Brown et al. (2013). Individuals of this species were caught in Bulo Creek-Medalla Hill, Bayokbok-Iyam and Dalipi-Bayanan BMS lines and commonly observed near Iglit Station. (Fig 47)



Figure 47. juvenile *Eutropis cumingi* caught on Bulo Creek-Medalla Hill BMS line.

***Gekko gecko* (Linnaeus, 1758)**

According to Oliveros et al. (2011) and Macleod et al. (2011), this species is known to exist across the Philippines with the exception of the Batanes and Babuyan Island group. Adults and juveniles of Tokay Gecko were caught on trees on the Bulo Creek-Medalla Hill and Dalipi-Bayanan BMS lines. (Fig 48)



Figure 48. Adult *Gekko gecko* caught from Bulo Creek-Medalla Hill BMS line.

***Cyrtodactylus philippinus* (Steindachner, 1867)**

Cyrtodactylus philippinus is among the most prevalent squamates in the northern Philippines and is common from low- to mid-elevation forests, with elevations from 800-900 m (Brown et al. 1996, 2000a, 2012; Diesmos et al. 2005; Siler et al. quoted in Brown et al., 2013 (2011a). A lone individual was caught on a rock crevice in the Fukurato-Fangandatan BMS line. (Fig 49)



Figure 49. *Cyrtodactylus philippinus* from Fukurato-Fangandatan BMS line.

Gekko mindorensis (Taylor, 1919)

This Philippine endemic species is divided into eight genetically distinct and geographically distinct clades, according to a recent phylogeographic study (Siler et al. 2012c, 2014b). This finding supports earlier theories (Ferner et al. 2001; Brown et al. 2013) that several Philippine populations make up a cryptic species complex. *G. kikuchii* was identified by Siler et al. (2014b) and in a follow-up investigation, determined that *G. kikuchii* populations from the islands of Luzon (northern Philippines) and Lanyu (Taiwan) were a part of the distribution for *G. kikuchii*. Since these modifications make *G. mindorensis* paraphyletic, according to Siler et al. (2014b), populations from the Mindoro PAIC, the Visayan PAIC, the Bicol Peninsula and Catanduanes Island of the Luzon PAIC, and the islands of Bohol and Camiguin Sur islands of the Mindanao PAIC make up the monophyletic clade. This research has led us to identify the populations of Camiguin Sur and Panglao as *G. cf. mindorensis*. In anticipation of the taxonomic resolution of this intricate and varied group of Philippine indigenous geckos, *Gekko mindorensis* was previously listed as "Least Concern" (LC; IUCN 2016) but is now better categorized as "Data Deficient" (DD; IUCN 2010) pending the completion of a taxonomic assessment of species diversity (Brown et al., 2016). This species was observed to be thriving in the area surrounding the Dalipi-Bayanan BMS line. (Fig 50)



Figure 50. *Gekko mindorensis* adult from Dalipi-Bayanan BMS line.

***Bronchocela cristatella* (Kuhl, 1820)**

According to Alcala (1986), this arboreal lizard can be found from lowland farmed areas to lower mid-mountain primary and secondary forests. They are most frequently seen sleeping at night in vegetation beside streams. Even though Negros and Panay specimens are keyed to previous descriptions of both *B. marmorata* and *B. cristatella* (Taylor, 1922c; Alcala, 1986) (Taylor, 1922c; Alcala, 1986), both “species” appear to be highly variable and diagnostic characters vary ontogenetically, as mentioned by Ferner et al. (2000). A single individual was captured near Iglit Station. (Fig 51)



Figure 51. *Bronchocela cristatella* from Iglit Station.

***Malayopython reticulatus* (Schneider, 1801)**

Residential areas, agricultural plantations, and the slash-and-burn shifting disturbed forests typical of the foothills of major Sierra Madre mountain slopes are just a few of the low-to-mid elevation habitats where reticulated pythons are abundant. According to Brown et al. (2013), it is also hunted for meat and leather (Gaulke 1998). A medium-sized individual was caught in the forests on the Fukurato-Fangandatan BMS line. (Fig 52)



Figure 52. *Malayopython reticulatus* from Fukurato-Fangandatan BMS line.

***Dendrelaphis fuliginosus* (Griffin, 1909)**

This species undergone taxonomic revision in 2012 by Roojien and Vogel and is documented in Mindoro, Negros, Panay and Masbate Islands. A lone individual was caught on a tree in the Bulo Creek-Medalla Hill BMS line. (Fig 53)



Figure 53. *Dendrelaphis fuliginosus* from Bulo Creek-Medalla Hill BMS line.

***Calamaria gervaisi* (Dumeril, Bibron, and Dumeril, 1854)**

This species is widely dispersed in the Philippines (Inger and Marx 1965) and has been recorded in numerous locations across Luzon (Brown et al. 1996, 2000a, (2012), Diesmos et al. (2005), Siler et al. (2011), and McLeod et al. (2011)), mentioned in Brown et al. (2013). An individual was caught near the *kubo* in Iglit Station. (Fig 54)



Figure 54. *Calamaria gervaisi* from Iglit Station.

***Oxyrhabdium leporinum* (Gunther 1858)**

Adults of this widespread Luzon fauna endemic are regularly seen actively feeding along stream banks in disturbed woodlands (Leviton 1964c); Juveniles are most common (Brown et al. 2000a, 2012; Diesmos et al. 2005; Siler et al. 2011); frequently observed sleeping in ferns, tiny trees, and other plant life in the herbaceous layer at night and along riparian habitats with shrubs (McLeod et al. 2011) (Brown et al. 2013). Two individuals were caught near Iglit-Station and another one on the forest near the Bayokbok-Iyam BMS line. (Fig 55)



Figure 55. *Oxyrhabdium leporinum* from Iglit Station

***Lycodon capucinus* (H. Boie in F. Boie, 1827)**

In the Philippines and Southeast Asia, *L. capucinus* is widespread and frequent (Leviton 1963a, 1965b; Manthey and Grossman 1997; Inger and Voris 2001). even in low-elevation residential and agricultural areas, Recent evolutionary research on Moderate levels of genetic variety were found among examined populations, according to Siler et al. (2013) of *L. capucinus* throughout the known range in Southeast Asia.. The species relationship with the morphologically similar species *L. aulicus* (Linnaeus 1758) has long been controversial (review: Siler et al. in press b), and future studies focused on the *L. aulicus* and *L. capucinus* will be needed to fully resolve species boundaries within this widespread species complex (Brown et al., 2013). A single individual was caught on the final sampling day on the Dalipi-Bayanan BMS line. (Fig 56)



Figure 56. *Lycodon capucinus* from Dalipi-Bayanan BMS line.

***Hemibungarus calligaster* (Wiegmann, 1835)**

Although it is common throughout Luzon's eastern seaboard, there is still no documentation yet in the Cordilleras (Diesmos et al. 2005; Brown et al. 2012). (Brown et al., 2013). A pair of *H.calligaster* was observed on a possible mating dance while the team was moving from Magawang Station to Iglit Station along the trail on the Bulo Creek- Medalla Hill BMS line. (Fig 57)



Figure 57. *Hemibungarus calligaster* pair on Bulo Creek-Medalla Hill BMS line.

Naja philippinensis (Taylor 1922)

Historical records (Leviton et al. 1964b) and recent observations of this species in Aurora Province (Siler et al. 2011) imply that it is widespread and common throughout the Sierra Madre. Potential risks to the conservation of this species include persecution and exploitation (Gaulke 1998; Brown et al. 2002; IUCN 2011). (Brown et al., 2013). A large individual was observed under the roots of an *Anapla* or commonly known as *Akleng Parang* (*Albizia procera*). Attempts to document the head for confirmation was deemed dangerous since the said individual was already agitated. (Fig 58)



Figure 58. Body of *Naja philippinensis* under the *Akleng Parang* (*Albizia procera*).

