



plotting
points
2019

MUSEUMS FOR THE FUTURE

Connections • Interpretation • Impact

PHILIPPINE MUSEUMS SUMMIT

7 - 9 October 2019

Zoos as Museums

The Prospect of Zoos
as Important Science
and Information Centers

Noel Rafael

Curator & Conservation Program Director

AVILON WILDLIFE CONSERVATION FOUNDATION

& SCHOOL OF PRACTICAL VETERINARY MANAGEMENT, INC.

Executive Secretary

PHILIPPINE ZOOS & AQUARIUMS ASSOCIATION

Executive Secretary – Membership & Information Office

SOUTHEAST ASIAN ZOOS & AQUARIUMS ASSOCIATION



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“No one will protect what they don't care about, and no one will care about what they have never experienced.”

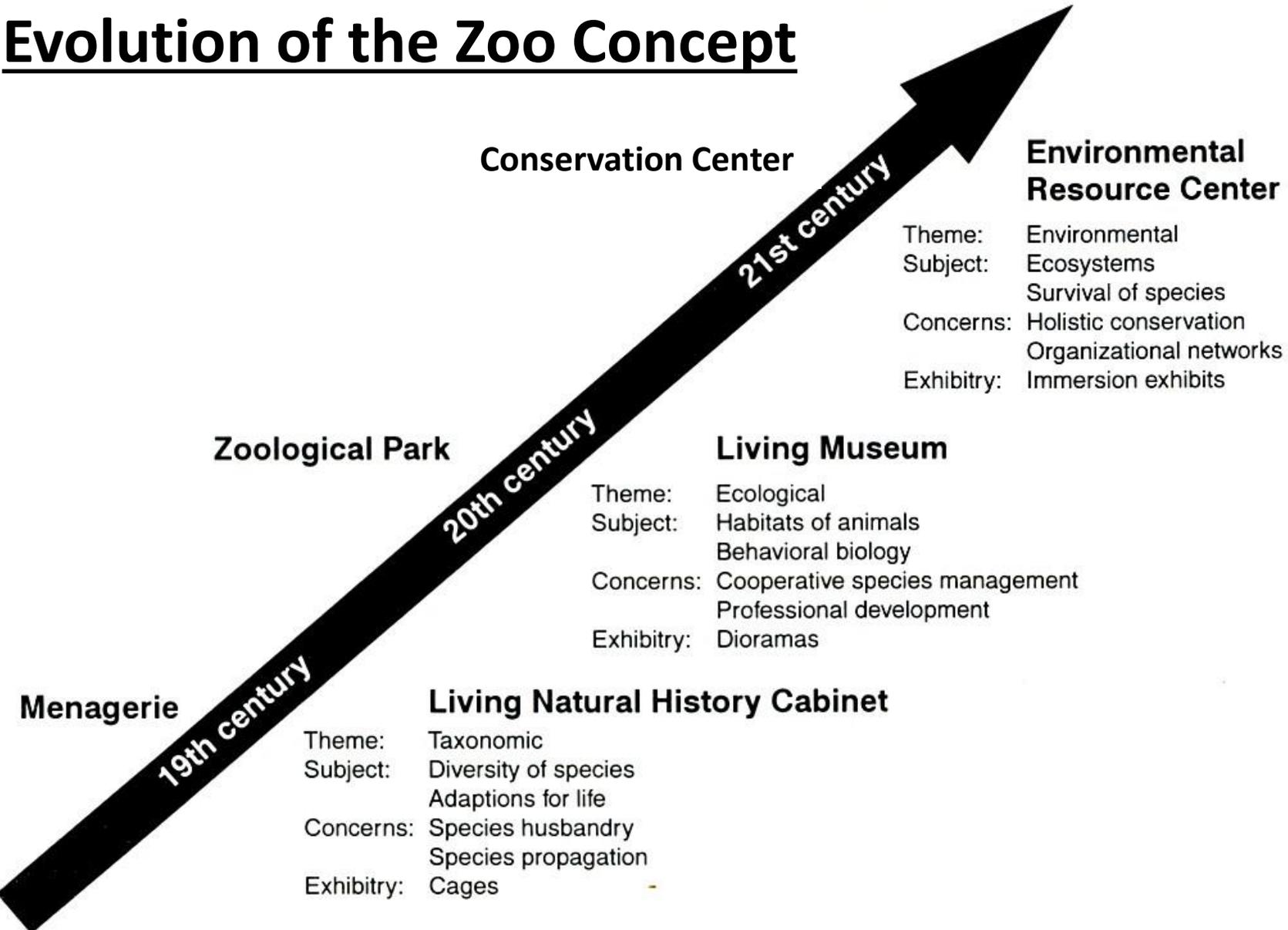
- Sir David Attenborough -

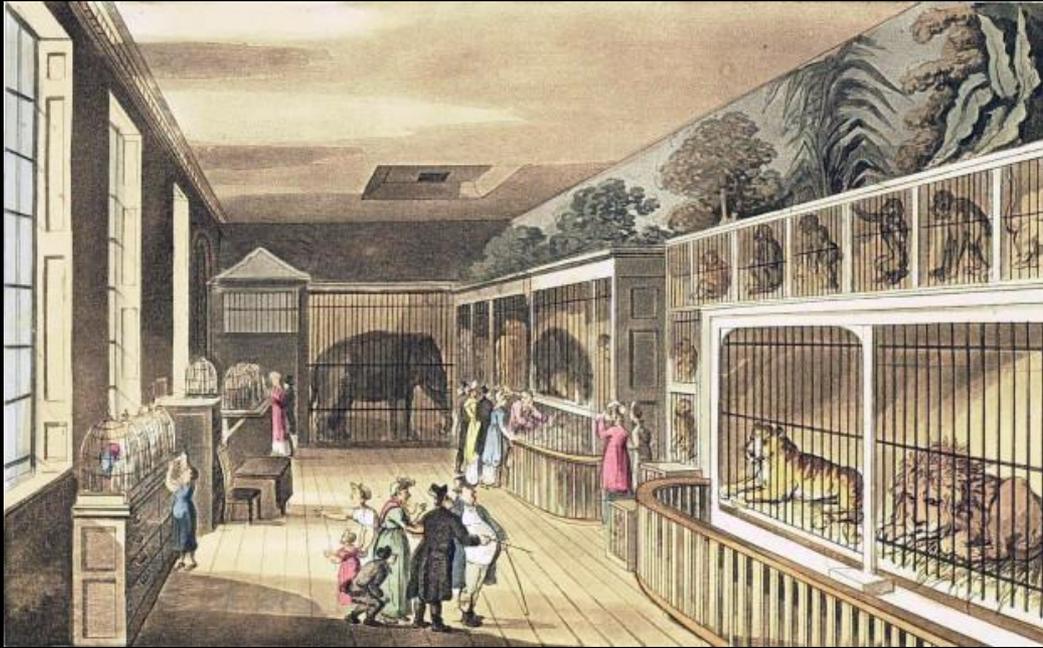


KEEPING IT REAL: It is an uncomfortable reality that we can see almost everything that is wrong in conservation in zoos; from trade and commercial exploitation, to unethical practices, misguided priorities and the very concept of conservation itself. However, we also cannot discount the huge potential of zoos to positively influence society to make significant impact on the preservation and protection of life if given the right direction, situation and motivation.

EFR @ UPLB OZOOMS Symposium / 12.NOV.2018

Evolution of the Zoo Concept











Animals as sentient beings

- ✓ Research has demonstrated pain, fear, and anxiety behaviour in a range of species including crustaceans
- ✓ If we accept that animals are sentient, we accept that they experience both **positive** and **negative** emotional (affective) states
- ✓ How we manage animals will affect how they feel and how an animal feels will influence its behaviour



ONE PLAN APPROACH

The ONE PLAN APPROACH (OPA) is defined as integrated conservation planning for a species **both inside and outside its natural range and under all conditions of management**, with all responsible parties and available resources engaged to produce one comprehensive conservation plan for the species.



ONE PLAN APPROACH

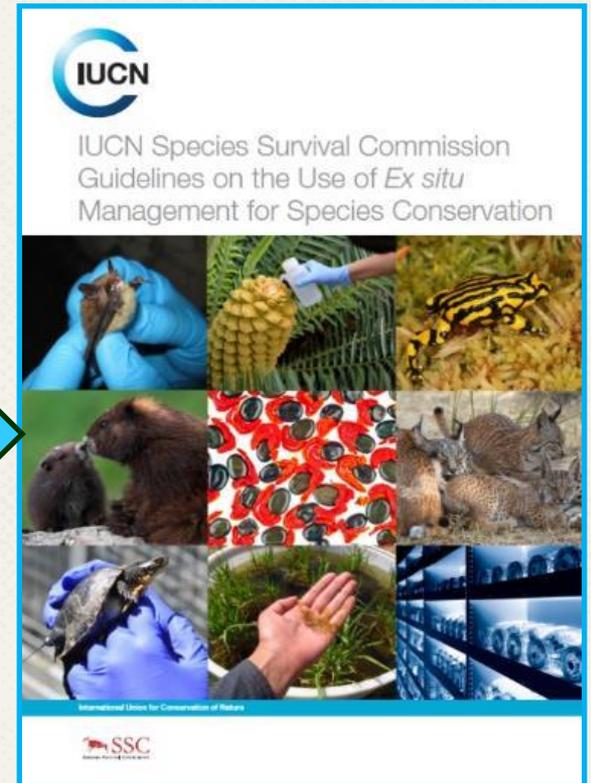
In situ conservation community and *ex situ* conservation community

Integrated Species Conservation Strategy

Conservation action plan to conserve the *in situ* population

Where appropriate:
Ex situ management plan

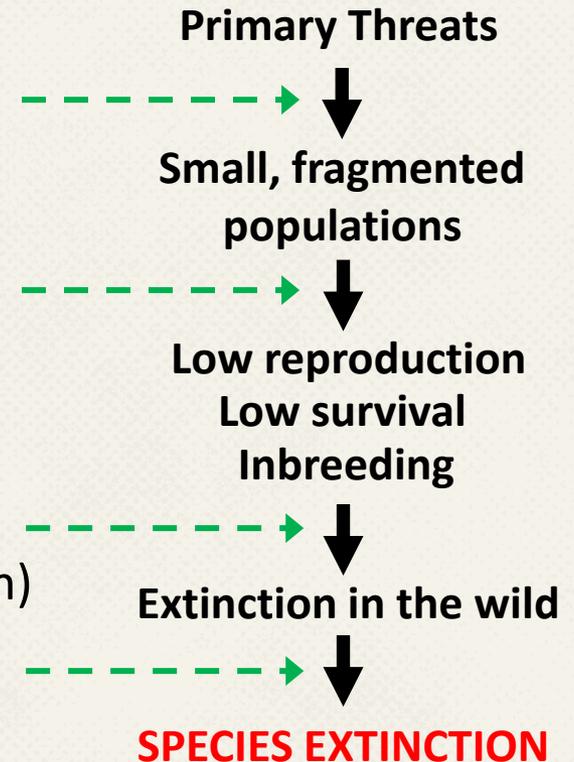
Common goal:
Viable *In Situ* Population



How can ex situ activities help in a threat situation?

Ex situ activities have the potential to:

- Address the (causes of) primary threats
(e.g., specific research, training or education activities that directly reduce threats; may also address important data gaps)
- Offset the effects of threats
(e.g., headstarting, population reinforcement)
- Restore wild populations
(e.g., population reinforcement or reintroduction)
- Buy time (e.g., rescue or assurance populations)





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AVILON WILDLIFE CONSERVATION FOUNDATION and School of Practical Veterinary Management, Inc. is a non-profit organization in the Philippines that is committed to significantly contribute to biodiversity conservation efforts through education and wildlife research projects.

AVILON WCF runs **AVILON ZOO** in Rodriguez, Rizal.

AVILON ZOO is a member of the **SOUTHEAST ASIAN ZOOS & AQUARIUMS ASSOCIATION (SEAZA)** and a pioneer member of the **PHILIPPINE ZOOS & AQUARIUMS ASSOCIATION (PHILZOOS)**.

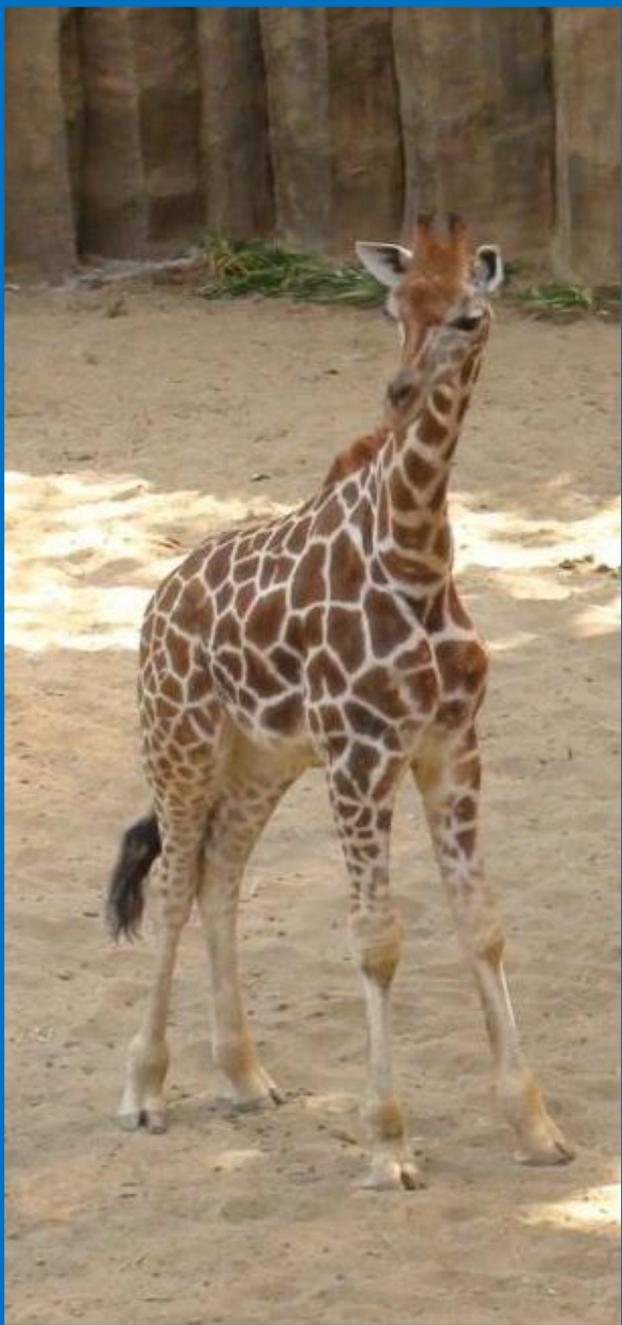


500+ species
of wildlife

biodiversity conservation
through education



www.avilonzoo.ph
www.philzoos.org
www.seaza.asia



AVILON ZOO

CELEBRATING LIFE!

Learning begins with Fascination...

Fascination creates Awareness...

Awareness promotes Action...

... Action makes a Difference.



Live Animal Exhibits



Exhibit Signage



NORTH LUZON GIANT CLOUD RAT

Phloeomys pallidus

CLASS: MAMMALIA ORDER: RODENTIA FAMILY: MURIDAE

Endemic to the Philippines; Found in Northern and Central Luzon

Inhabits primary and secondary montane and lowland tropical forests and forest edge habitats with large canopy trees

Largely arboreal and primarily nocturnal

Feeds mostly on tender leaves and succulent shoots of trees and epiphytes, as well as fruits and berries, buds and flowers

IUCN RED LIST STATUS: LEAST CONCERN (LC)



Partnership with UPLB Museum of Natural History



HARLEQUIN TREE FROG

Rhacophorus pardalis

CLASS: AMPHIBIA ORDER: ANURA FAMILY: RHACOPHORIDAE

Rhacophorus pardalis Günther, 1859

Found in Peninsular Malaysia, Sumatra, Borneo, and the Philippines*

*Taxonomic review needed, particularly of Philippine populations

Inhabits primary and secondary tropical rainforests, swampy forests and forest edge habitats with rain pools

Largely arboreal and primarily nocturnal

Preys mostly upon arboreal arthropods, but would also take on other terrestrial invertebrates if available

IUCN RED LIST STATUS: LEAST CONCERN (LC)





NATIONAL
GEOGRAPHIC

PHOTOARK
JOEL SARTORE

04.OCT
World
Animal
Day





AVILON

Wild.C.A.R.E.

Wildlife.Conservation.Action.Research.Education

Wild.C.A.R.E. (Wildlife.Conservation.Action.Research.Education) is a zoo-based protocol designed specifically for the development and conduct of biodiversity conservation-oriented wildlife research projects and education programs, with special focus on the Philippines and its indigenous wildlife species.

Wild.C.A.R.E. Mission:

To conduct biodiversity and ecological studies in wildlife habitats in the Philippines and in other conservation priority areas;

To implement *in situ* - *ex situ* wildlife research projects and conservation breeding programs involving Philippine indigenous species and other conservation priority species;

To actively and effectively promote biodiversity conservation awareness and action through education programs;

To work with government, academic and scientific institutions and organizations in the common pursuit of furthering biodiversity and habitat conservation awareness and action

www.avilonzoo.ph/wildcare

Pamitinan Protected Landscape, Rizal, Philippines

KEEPERS OF THE FOREST

AVILON Wild.C.A.R.E. FLAGSHIP SPECIES



BUTAAN
Varanus olivaceus



LUZON RUFIOUS HORNBILL
Buceros hydrocorax



SOUTH LUZON GIANT CLOUD RAT
Phloeomys cumingi



NORTH LUZON GIANT CLOUD RAT
Phloeomys pallidus



KEY OBSERVATIONS ON *Varanus olivaceus* IN AVILON ZOO, RIZAL, PHILIPPINES WITH IMPLICATIONS ON *IN SITU* RESEARCH AND CONSERVATION

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UPLB, College, Los Baños, Laguna, Philippines



Varanus olivaceus Hallowell, 1857

SUBGENUS *Philippinosaurus*

BUTAAN or **GRAY'S MONITOR LIZARD** (*Varanus olivaceus*)

- Found in Southern Luzon, inc. Bicol Peninsula, Polillo Island & Catanduanes Island

BITATAWA or **NORTHERN SIERRA MADRE FOREST MONITOR LIZARD** (*V. bitatawa*)

- Found in Northeastern Luzon

MABITANG or **PANAY FOREST MONITOR LIZARD** (*V. mabitang*)

- Found in Panay Island in the Visayas



BUTAAN

Varanus olivaceus

BITATAWA

Varanus bitatawa

MABITANG

Varanus mabitang

SUBGENUS *Philippinosaurus*

ENDEMIC TO THE PHILIPPINES

INHABIT PRIMARY & SECONDARY TROPICAL FORESTS & FOREST EDGE HABITATS WITH ROCKY OUTCROPS & CLIFFS

HIGHLY ARBOREAL & RARELY FOUND ON THE GROUND

FEED PRIMARILY ON FRUITS; PREY UPON GASTROPODS & ARTHROPODS



BUTAAN

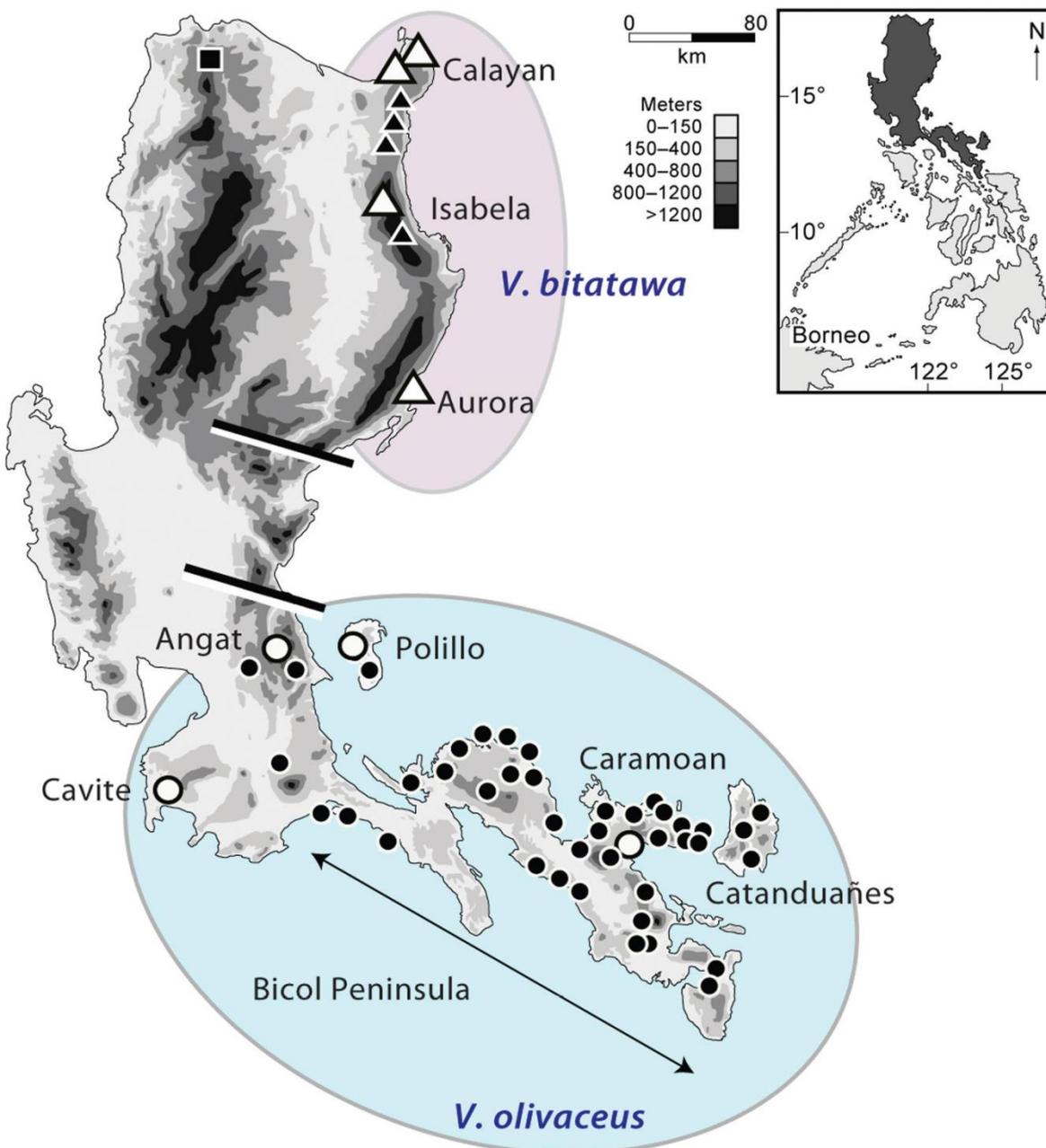
Varanus olivaceus

BITATAWA

Varanus bitatawa

MABITANG

Varanus mabitang



BUTAAN
Varanus olivaceus

Fig. at left. KNOWN DISTRIBUTION OF LUZON'S ARBOREAL, FRUGIVOROUS MONITOR LIZARD SPECIES

Circles denote known localities for *Varanus olivaceus*; Triangles indicate voucher localities for *V. bitatawa*

Small, closed symbols represent past records (Auffenberg, 1988; Welton, et al., 2010); Large, non-shaded symbols are recent records for which genetic samples from both species were available for Welton, et al. (2010, 2012).

The darkened square indicates the Municipality of Adams, where possible signs of an arboreal monitor lizard were observed in June 2011.

Black bars indicate the approximate boundaries of the Mid-Sierra Madre Filter Zone, as defined by Welton et al. (2010).



BUTAAN
Varanus olivaceus

A. Example of *Varanus olivaceus* habitat with several visible food source

B. Fruits of *Pinanga insignis*

C. Drupes of *Pandanus* sp

D. Fruits of *Canarium ovatum*

E-F. *Helicostyla* sp



B



C



D



E



F



IUCN RED LIST: VULNERABLE (VU)

BUTAAN Feeding Trials in AVILON ZOO



Example of *Varanus olivaceus* outdoor enclosure setup in AVILON ZOO



Examples of *Varanus olivaceus* indoor enclosure setup in AVILON ZOO Herpetology Building. Note the provision of large trunks and branches to allow for the Butaans' arboreal habits.



A



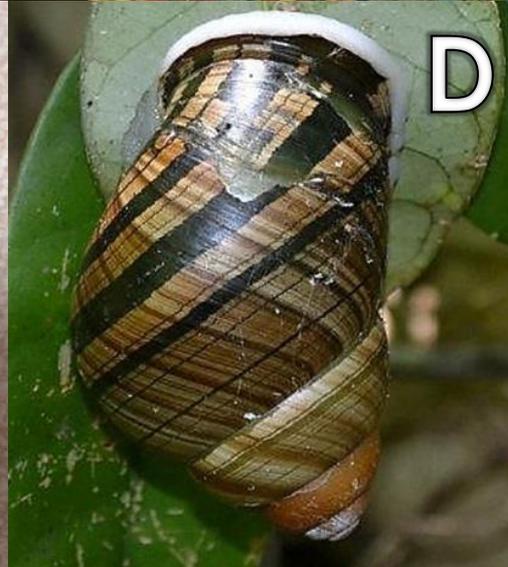
B



Sub-adult female *Varanus olivaceus* in AVILON ZOO feeding on grapes



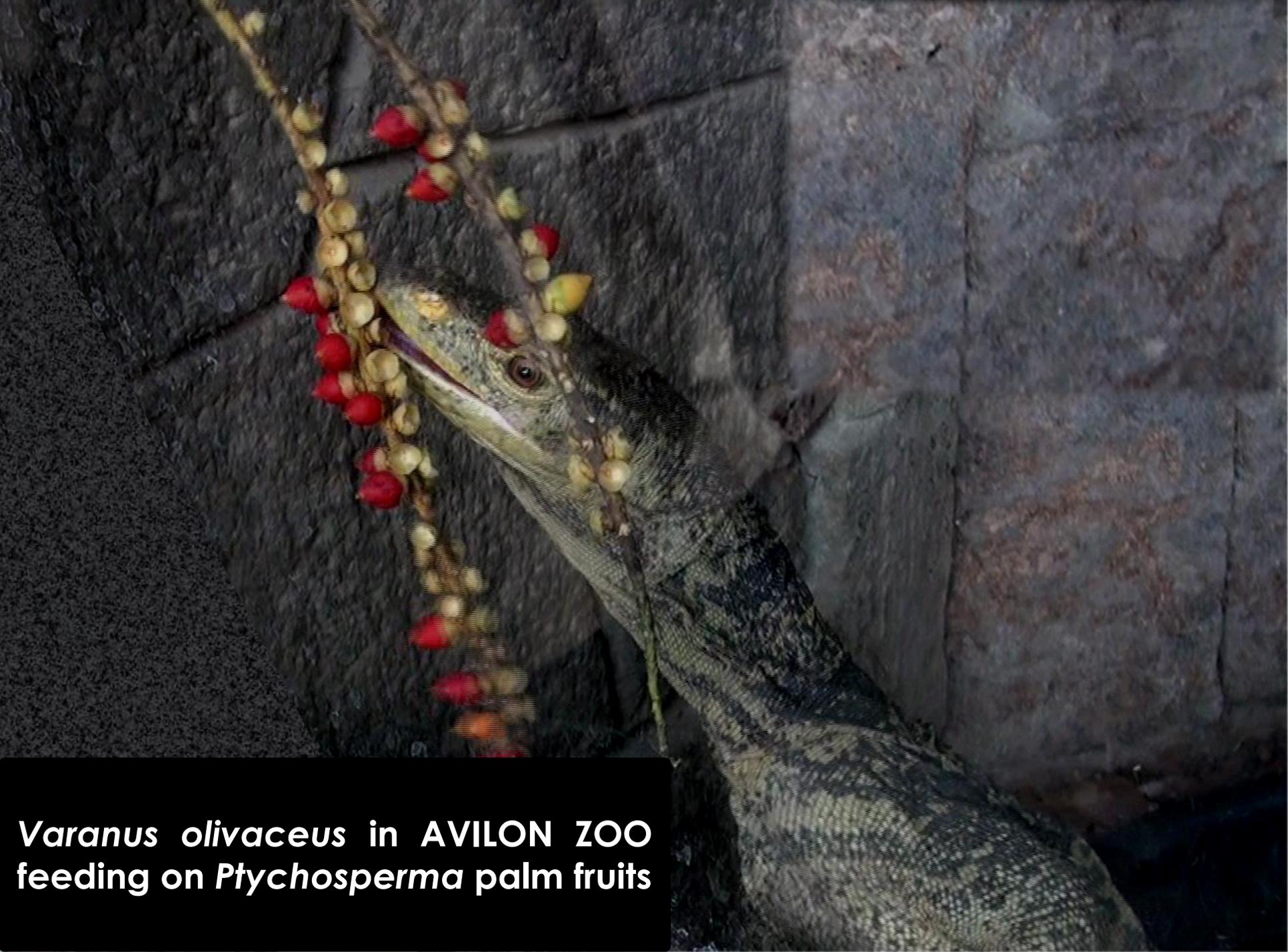
C



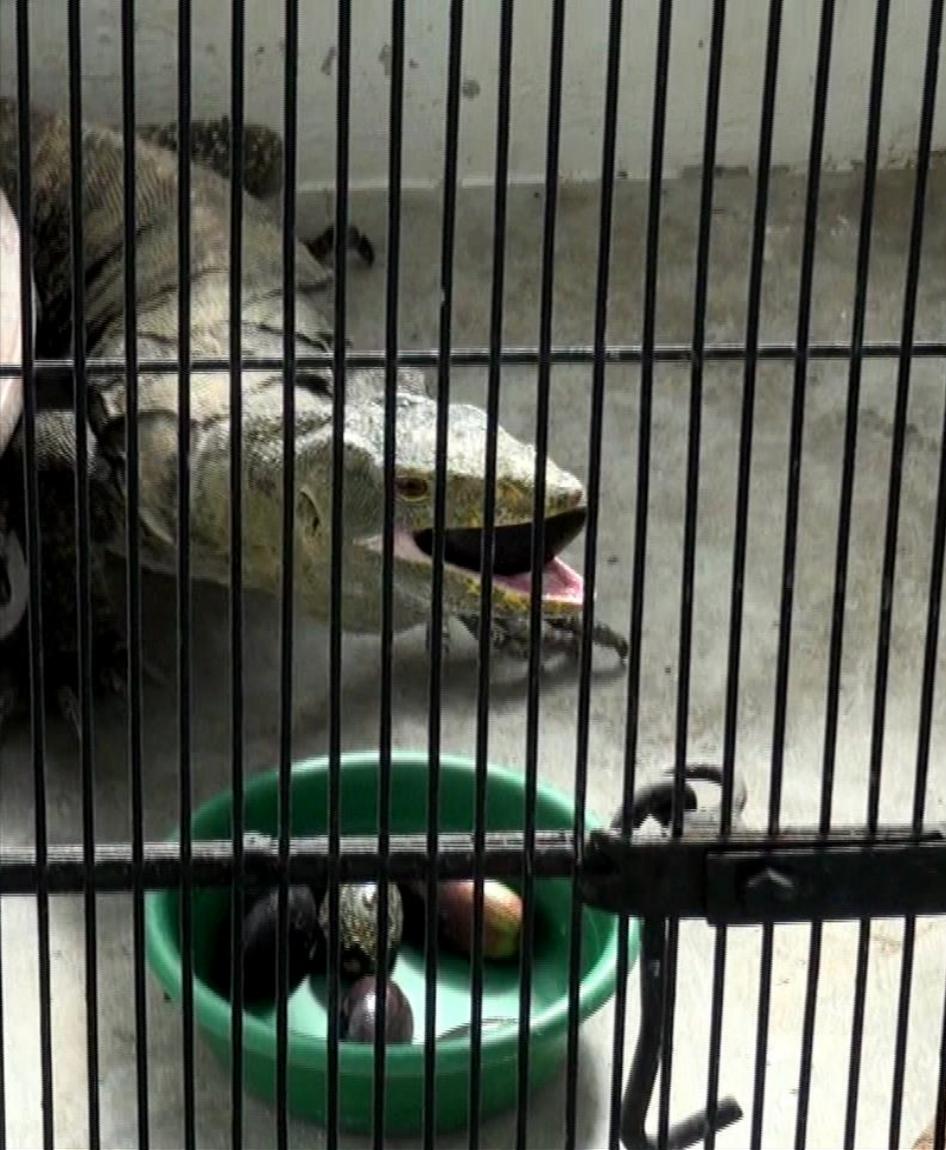
D

- A. Fruits of *Ptychosperma macarthurii*
- B. Fruits of *Ptychosperma* sp Palm Tree
- C. Fruits of *Canarium ovatum*
- D. *Helicostyla portei*

EXPERIMENTAL FOOD ITEMS USED IN AVILON ZOO BUTAAN FEEDING TRIALS

A close-up photograph of a Varanus olivaceus lizard, characterized by its dark, textured scales and a lighter-colored head. The lizard is positioned vertically, facing upwards, and is actively consuming a cluster of small, round, red and yellow fruits from a palm branch. The background is a dark, textured stone wall. The lighting is focused on the lizard and the fruit, creating a high-contrast scene.

***Varanus olivaceus* in AVILON ZOO
feeding on *Ptychosperma* palm fruits**



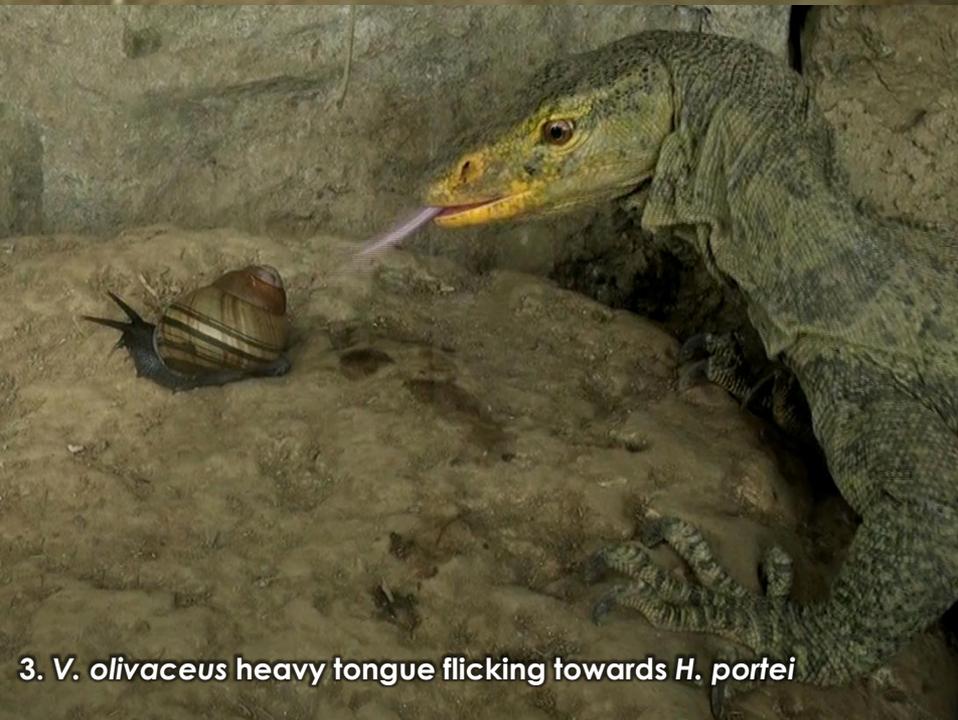
Large male *Varanus olivaceus* in AVILON ZOO feeding on fruits of *Canarium ovatum*. Note the subject animal positioning the pointed end of the fruit towards its throat for ease of consumption. All fruits were swallowed whole by the BUTAAN.



1. *Helicostyla portei* placed in AVILON ZOO BUTAAN enclosure



2. *Varanus olivaceus* immediately sensing *H. portei* in enclosure

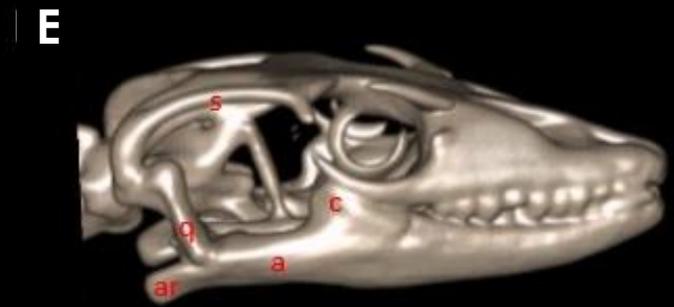
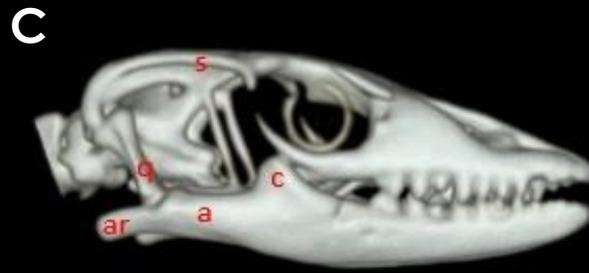
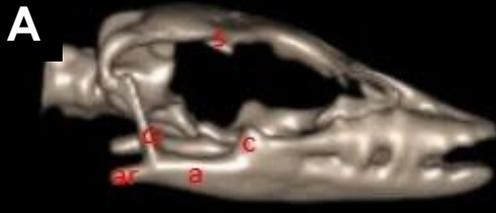


3. *V. olivaceus* heavy tongue flicking towards *H. portei*



4. *V. olivaceus* preying upon *H. portei*

Varanus olivaceus Dental Morphology at Different Life Stages



A. CT Scan of juvenile

C. CT Scan of sub-adult

E. CT Scan of adult

B. X-Ray Scan of juvenile

D. X-Ray Scan of sub-adult

F. X-Ray Scan of adult

Note the dramatic change in dentition, from serrated in juvenile to blunted in adult

NOTABLE *EX SITU* OBSERVATIONS

Varanus olivaceus preference to feeding on fruits is instinctive; *Ex situ* hatched and reared juveniles with serrated teeth and never provided with fruit prior to feeding trials were able to recognize, demonstrate much interest (head bobbing, heavy tongue-flicking) and eventually feed on fruits that were presented to them.

Ex situ managed *V. olivaceus*, under favorable conditions, would take on substitute food items that are very similar to what they would feed on in the wild.

The change in *V. olivaceus* dental morphology, where adults develop blunt teeth designed for crushing, was found to be an adaptation to feeding on snails; Adults were observed to have special preference to preying on snails especially during mating season.

V. olivaceus in *ex situ* setting would feed on fruits hanged up on branches as well as forage on the ground for larger sized fruits and snails.

V. olivaceus in *ex situ* setting is observed to be strictly diurnal, with foraging and most activity exhibited at 0700 to 0900 and again at 1500 to 1700. In between peaks of activity, *V. olivaceus* prefer to stay up on the highest branches of the enclosure or hide underneath logs and other fixtures.

BUTAAN Conservation Breeding in AVILON ZOO



A



B

A. *Ex situ* hatched *V. olivaceus* neonate (M. D. Yuyek, 2012)

B. "GRASYA", the 1st recorded *ex situ* hatched & reared BUTAAN

CONSERVATION BREEDING NOTES

Varanus olivaceus mating season in *ex situ* setting was observed to be between April to August.

The onset of rain appears to signal the start of mating season; Mating behaviors are initially observed in the first rains of April and May.

Nesting in *ex situ* setting is observed between May to September.

Artificial incubation period is recorded at 209-217 days. (Yuyek, 2012)



Varanus olivaceus ex situ research results and observations should provide researchers and conservationists...

... relevant & valuable information on the biology and ecology of *V. olivaceus* that would otherwise be extremely difficult to observe in the wild.

... guiding information on what to look out for and when and where to best observe *V. olivaceus* in natural habitats.

... significant information on *V. olivaceus* vulnerability, as well as potential threats to the species and its habitat.

... HOPE... that the BUTAAN and its habitat shall be accorded greater protection with the implementation of more effective, information-based conservation measures.



AVILON MONTALBAN PROJECT

Biodiversity and Ecological Study of Pamitinan Protected Landscape
and Upper Marikina River Basin Protected Landscape,
Rizal, Philippines

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**²MUSEUM OF NATURAL HISTORY
UNIVERSITY OF THE PHILIPPINES LOS BAÑOS**

UPLB, Los Baños, Laguna, Philippines



AVILON MONTALBAN PROJECT

The **AVILON MONTALBAN PROJECT** is the flagship *in situ* project of the **AVILON Wild.C.A.R.E. PROGRAM** aimed at conducting biodiversity surveys, habitat assessments, wildlife research and ecological studies in **PAMITINAN PROTECTED LANDSCAPE (PPL)** and **UPPER MARIKINA RIVER BASIN PROTECTED LANDSCAPE (UMRBPL)** in the province of Rizal, with the primary purpose of providing necessary scientific information that should lead to environmentally sound development projects, sustainable utilization of natural resources, and greater wildlife habitat preservation and protection efforts in the subject areas.



PAMITINAN PROTECTED LANDSCAPE

608 hectares

Characterized by limestone formations and caves, forests over limestone, secondary forests, freshwater rivers, streams and falls

Declared as protected area by virtue of Presidential Proclamation No. 901



UPPER MARIKINA RIVER BASIN PROTECTED LANDSCAPE

26,125.64 hectares

The Upper Marikina River and its tributaries runs along 5 towns of Rizal Province (Rodriguez, San Mateo, Baras, Tanay and Antipolo City); The landscape is connected to the Southern Sierra Madre Mountain Range

Declared as protected area by virtue of Presidential Proclamation No. 296



AVILON MONTALBAN PROJECT



Varanus marmoratus in Pamitinan Protected Landscape, Rizal, Philippines

PROJECT OBJECTIVES

To document and study the biological diversity of wildlife habitats and other conservation priority areas; To document and study the natural history and ecology of wildlife habitats and determine the factors and threats influencing biological diversity;

AVILON MONTALBAN PROJECT

Phloeomys pallidus from Pamitinan Protected Landscape, Rizal, Philippines



PROJECT OBJECTIVES

To gather data *in situ* which can be utilized to enhance *ex situ* wildlife research and conservation breeding programs for conservation priority species in AVILON ZOO; To collect specimens, as necessary, for *ex situ* research purposes;

AVILON MONTALBAN PROJECT



Natural Freshwater Stream in Pamitinan Protected Landscape, Rizal, Philippines

PROJECT OBJECTIVES

To survey wildlife habitats which could potentially be developed as viable and sustainable reintroduction/translocation sites and sanctuaries for conservation priority wildlife species under the AVILON WILD.C.A.R.E. PROGRAM;

AVILON MONTALBAN PROJECT

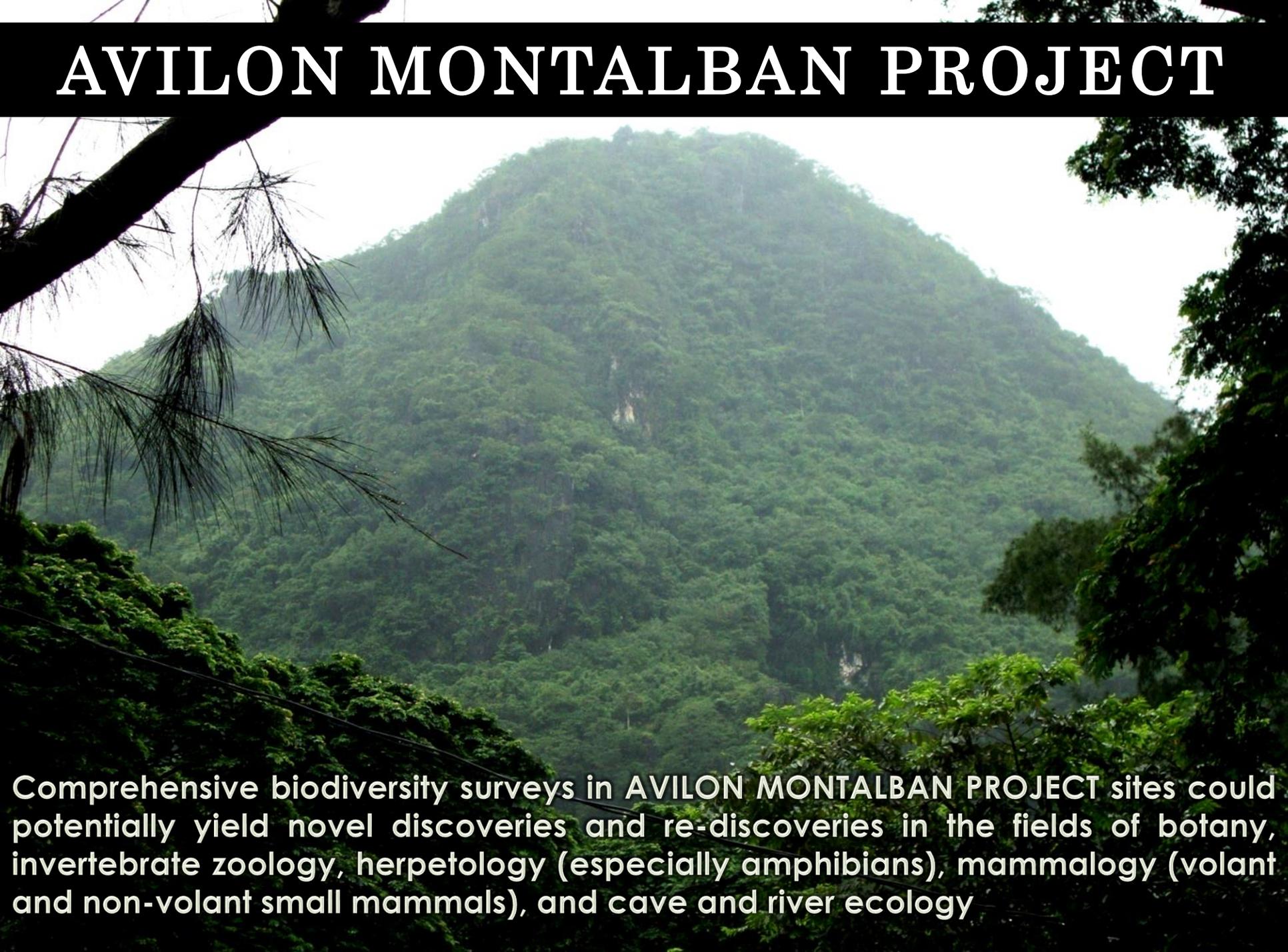


Plantation Forest in Pamitinan Protected Landscape, Rizal, Philippines

PROJECT OBJECTIVES

To propose recommendations to government agencies/units and non-government stakeholders for the proper management, sustainable development and utilization and effective protection and preservation of wildlife habitats and conservation priority areas

AVILON MONTALBAN PROJECT

A photograph of a large, forested mountain peak. The mountain is covered in dense, vibrant green vegetation. In the foreground, there are dark, silhouetted branches of trees, including what appears to be a pine tree on the left. The sky is a pale, overcast white. The overall scene is a natural, scenic view of a mountainous region.

Comprehensive biodiversity surveys in AVILON MONTALBAN PROJECT sites could potentially yield novel discoveries and re-discoveries in the fields of botany, invertebrate zoology, herpetology (especially amphibians), mammalogy (volant and non-volant small mammals), and cave and river ecology

AVILON MONTALBAN PROJECT

CURRENT RESEARCH UNDERTAKINGS

FIELD SURVEY & SPECIMEN COLLECTION

MALACOFAUNAL SURVEY

ARTHROPOD SURVEY

FRESHWATER ICHTHYOLOGICAL SURVEY

HERPETOFAUNAL SURVEY

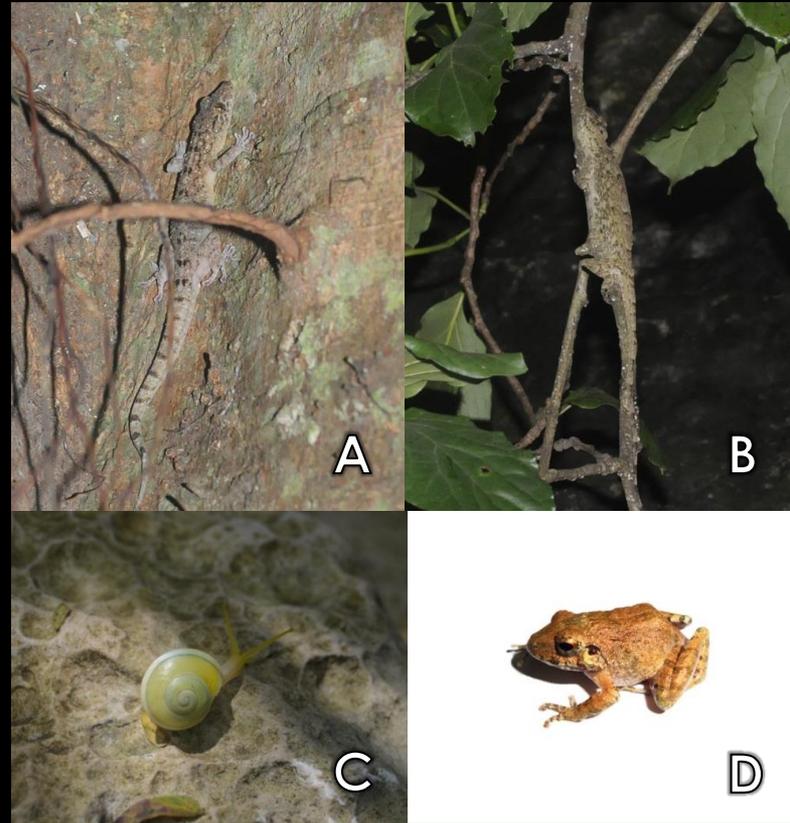
AVIFAUNAL SURVEY

VOLANT MAMMAL SURVEY

TERRESTRIAL MAMMAL SURVEY

SPECIES IDENTIFICATION & DOCUMENTATION

All voucher/type and live specimens shall be subjected to biometric analysis upon collection. Tissue and/or blood samples shall also be collected from each specimen for genetic analysis. Specimens shall be properly tagged/labeled and specimen data shall be properly documented in a catalogue. Each specimen tag/label and data entry should indicate the species name, date and place of collection, and age and gender of specimen.



From Wawa Dam, PPL, 20 August 2014:

A. *Gekko kikuchii*

B. *Draco spilopterus*

From Mt. Pamitinan, PPL, 29 August 2015:

C. *Chloraea dryope*

From Mt. Pamitinan, PPL, 03 October 2014:

D. *Platymantis mimulus*

AVILON MONTALBAN PROJECT

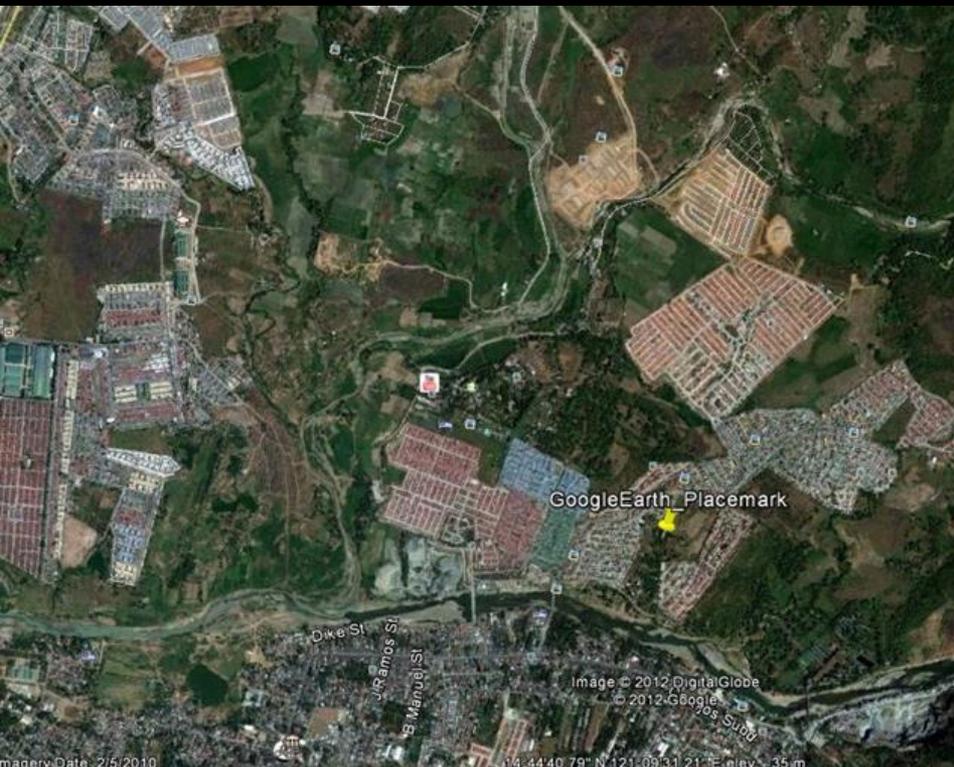
THREATS TO PPL BIODIVERSITY



CONTINUOUS ENCROACHMENT OF WILDLIFE HABITATS
& OVER-UTILIZATION OF NATURAL RESOURCES

AVILON MONTALBAN PROJECT

THREATS TO PPL BIODIVERSITY



WILDLIFE HABITAT CONVERSION & LOSS
AT A VERY ALARMING RATE & SCALE

AVILON MONTALBAN PROJECT

MOVING FORWARD

Complete all scheduled biological and ecological studies

Collate all data for a comprehensive assessment of PPL and UMRBPL

Utilize scientific information to develop recommendations for proper and sustainable natural resources management and development planning for PPL & UMRBPL

Utilize scientific information to develop recommendations for the accordance of greater protection and preservation measures on the remaining wildlife habitats in PPL & UMRBPL

Utilize scientific information to implement a PPL-UMRBPL wildlife habitat conservation advocacy campaign in AVILON ZOO and its partner institutions

AVILON BUWAYA PROJECT

EX SITU RESEARCH & CONSERVATION BREEDING PROGRAMS ON *Crocodylus mindorensis* & *C. porosus*

REINTRODUCTION OF EX SITU HATCHED + REARED *Crocodylus mindorensis* & *C. porosus*
TO WILDLIFE SANCTUARIES IN SOUTHERN LUZON & ADJACENT ISLANDS

*AVILON WCF / AVILON ZOO is a party to the PHILIPPINE NATIONAL COMMITTEE ON CROCODILE CONSERVATION



AVILON LUZON MEGAFUNA PROJECT

**LUZON WARTY PIG (*Sus philippensis*) & PHILIPPINE BROWN DEER (*Rusa marianna*)
IN SITU - EX SITU RESEARCH & CONSERVATION BREEDING PROGRAMS**

***AVILON WILDLIFE CONSERVATION FOUNDATION and the Ecosystems Research and Development Bureau (ERDB) of the Department of Environment and Natural Resources (DENR) will jointly conduct the LUZON MEGAFUNA PROJECT**



Sus philippensis



Sus philippensis



Rusa marianna



AVILON ORANG-UTAN PROJECT

**SOUTHERN BORNEAN ORANG-UTAN (*Pongo pygmaeus wurmbii*)
EX SITU RESEARCH & CONSERVATION BREEDING PROGRAM**

AVILON WCF / AVILON ZOO is a party to the ORANG-UTAN Regional Species Management Program for Asia



PHILZOOS

Philippine Zoos and Aquariums Association

PHILZOOS: Setting the standards for Philippine zoological institutions

The PHILIPPINE ZOOS & AQUARIUMS ASSOCIATION (PHILZOOS) is a non-profit association of zoological institutions, individuals, and organizations whose primary aims are to uphold acceptable standards for zoos and aquariums in the Philippines and to promote biodiversity conservation awareness and action through integrated conservation programs.

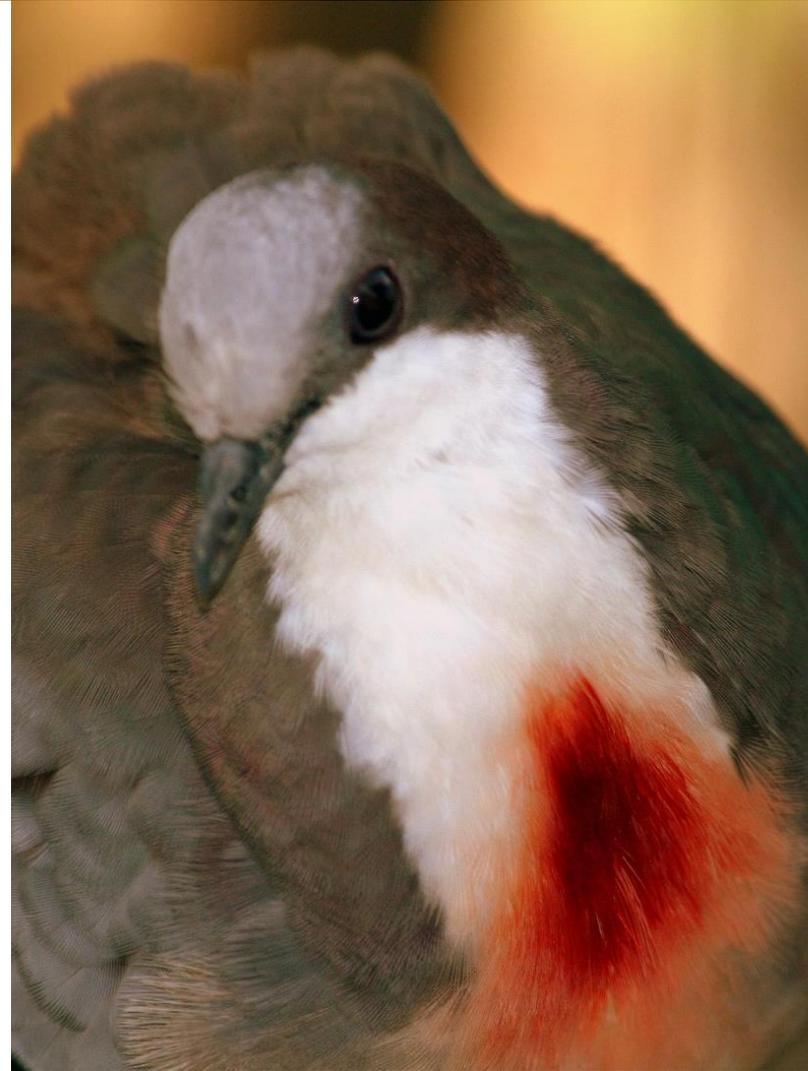
PHILZOOS was founded in August 2010 and is an Association Member of the SOUTHEAST ASIAN ZOOS & AQUARIUMS ASSOCIATION (SEAZA).

PHILZOOS Welfare & Ethics Strategy

Application of ANIMAL WELFARE & ETHICS principles which would fit Philippine settings and provision of biological, ecological and veterinary requirements for each species in collection should be primary considerations in developing feasible management frameworks for Philippine zoological institutions.

PHILZOOS aims to:

- implement *ex situ* animal management practices that should provide each animal in collection the best possible living conditions;
- implement ethical methods of animal exhibitions and special use;
- implement zoo & aquarium management programs that would encourage zoological institution personnel to understand and apply animal welfare and ethics principles in their respective duties and endeavors; and
- ensure that its members adhere to existing Philippine laws and regulations pertaining to animal welfare and to standards as shall be imposed by the Association.



PHILZOOS Species Management Strategy

SPECIES MANAGEMENT for Philippine zoological institutions would be the organized and sustainable practice of managing and keeping animal collection populations in *ex situ* conditions.

PHILZOOS aims to:

- develop and implement sustainable *ex situ* animal breeding and population management programs designed as practical and applicable to Philippine settings; and
- develop and implement practicable animal information and data management programs.





PHILZOOS Conservation & Education Strategy

The primary motivation for Philippine zoological institutions to contribute to wildlife species and habitat preservation and protection efforts should be the opportunity to act as primary and important centers for biodiversity conservation action and education.

PHILZOOS aims to:

- actively and effectively promote appreciation and understanding of wildlife and natural history to the public, with special focus on the Philippines and its indigenous species, through the development and implementation of education programs designed for this purpose;
- actively and effectively convey environmental issues and promote conservation awareness and action to the public, with special focus on the Philippines and its **THREATENED** species and habitats, through the development and implementation of initiatives and advocacy programs designed for this purpose; and
- develop and implement effective and sustainable conservation breeding programs and relevant scientific research projects on *ex situ* populations of wildlife, with special focus on Philippine indigenous species.

Zoo Welfare in the Philippines

“Animal Welfare Act of the Philippines”

Republic Act 8485 (as amended by RA 10631)

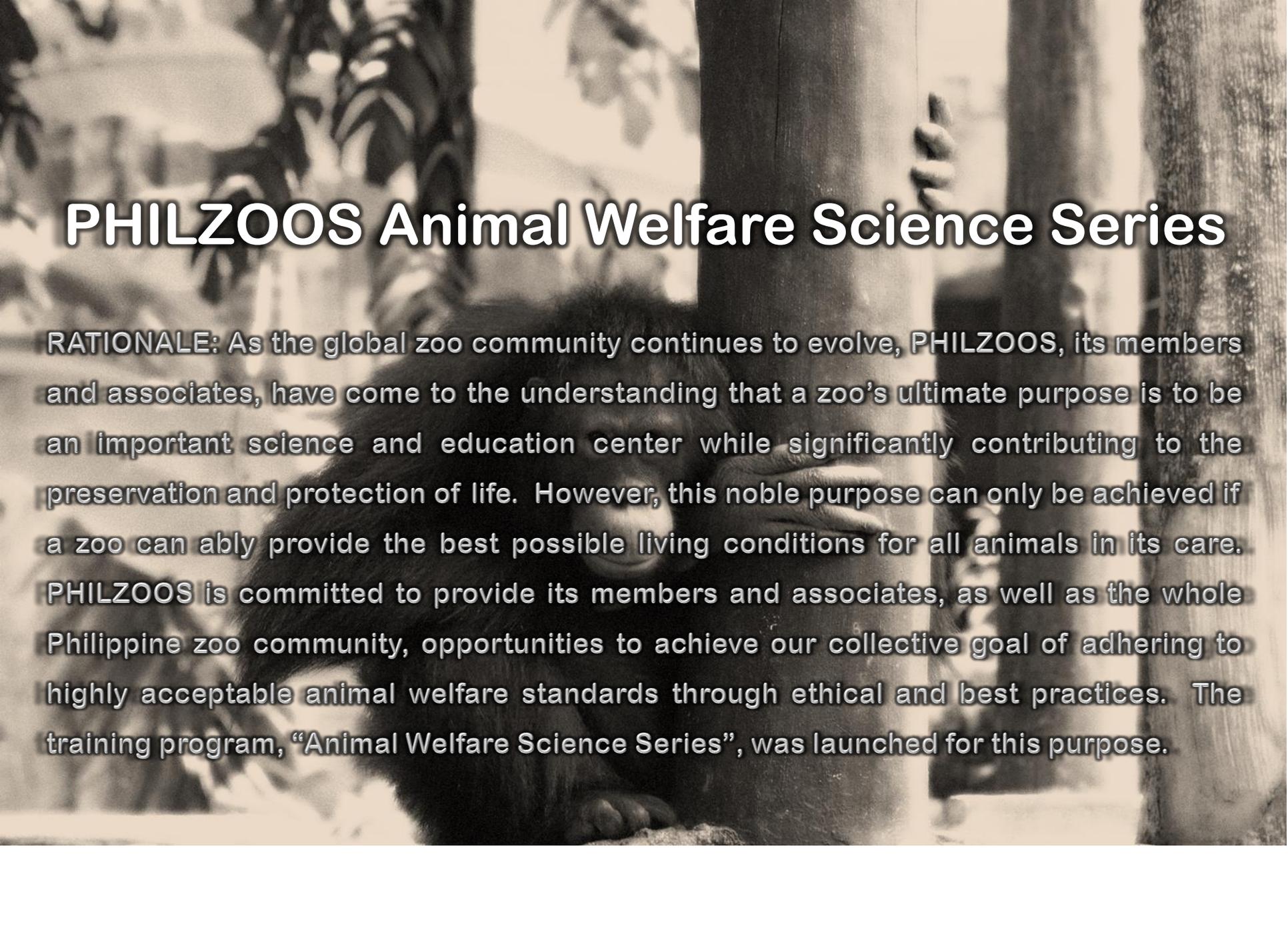
“Wildlife Resources Conservation and Protection Act of the Philippines”

Republic Act 9147

SEAZA Code of Animal Welfare and Ethics

SEAZA Animal Welfare Standards

(adhered to by SEAZA and PHILZOOS member institutions)



PHILZOOS Animal Welfare Science Series

RATIONALE: As the global zoo community continues to evolve, PHILZOOS, its members and associates, have come to the understanding that a zoo's ultimate purpose is to be an important science and education center while significantly contributing to the preservation and protection of life. However, this noble purpose can only be achieved if a zoo can ably provide the best possible living conditions for all animals in its care. PHILZOOS is committed to provide its members and associates, as well as the whole Philippine zoo community, opportunities to achieve our collective goal of adhering to highly acceptable animal welfare standards through ethical and best practices. The training program, "Animal Welfare Science Series", was launched for this purpose.

PHILZOOS Animal Welfare Science Series

PHILZOOS Directors' Meeting

Course I: Animal Welfare & Ethics for Zoo Decision-Makers

March 2019 | Ninoy Aquino Parks & Wildlife Center, Quezon City



Resource Speakers:

Biodiversity Management Bureau

Department of Environment and Natural Resources

Bureau of Animal Industry

Department of Agriculture

Dave Morgan

Wild Welfare

Dr. Juan Carlos T. Gonzalez

Director, UPLB Museum of Natural History

PHILZOOS Animal Welfare Science Series

Course II : Practical Veterinary Management 1

Course III: Zoo Nutrition Management 1

June 2019 | Bureau of Animal Industry Complex, Quezon City

Course Facilitators:

Dr. Shangzhe Xie

Veterinarian, Wildlife Reserves Singapore

Dr. Francis Cabana

Animal Nutritionist, Wildlife Reserves Singapore

Course II focused on fundamentals and basic principles of zoo veterinary medicine and welfare management

Course III focused on fundamentals and basic principles of zoo nutrition management and its implications on welfare



PHILZOOS Animal Welfare Science Series

Course IV: Practical Veterinary Management 2

August 2019 | Davao Crocodile Park & Zoo, Davao City



Course Facilitators:

Dr. Kevin Lazarus

Director, Zoo Taiping & Night Safari

Chairman, Malaysian Association of Zoological Parks & Aquaria

Dr. Romulo Bernardo

Wildlife Veterinarian

former Director, Manila Zoological & Botanical Gardens

Course focused on management of mammalian collections, with special attention to practical veterinary principles and welfare science fundamentals

Davao Crocodile Park & Zoo Wildlife Rescue & Rehabilitation

In April 2019, Philippine government operatives apprehended an illegal wildlife trafficking operation in Mindanao where more than 500 Indonesian wildlife were confiscated;

Davao Crocodile Park & Zoo, a PHILZOOS Institutional Member, immediately heeded the call of authorities to take in the rescued animals; Davao Crocodile Park & Zoo sent a veterinary team to assist in stabilizing the conditions of the rescued animals (almost all of which were in very dire situations) and assess the suitability of each animal for transfer;

After legal procedures and emergency on-site rehabilitation for the rescued animals, these were finally transferred to more suitable temporary habitats in Davao Crocodile Park & Zoo; PHILZOOS continue to support the zoo in its effort to provide the best possible living conditions for the rescued animals.





Philippine Zoo Welfare Standards & Guidelines

The Bureau of Animal Industry (BAI), Biodiversity Management Bureau (BMB), and PHILZOOS Technical Working Committee, shall work closely on developing a Zoo Welfare Standards & Guidelines for the Philippines;

The Philippine zoo standards shall be supplementary to the currently implemented laws, RA 8485 (as amended by RA 10631) or the Animal Welfare Act of the Philippines, and RA 9147 or the Wildlife Resources Conservation and Protection Act of the Philippines;

The SEAZA Welfare Standards shall be utilized as primary reference in drafting the Philippine zoo standards, taking into consideration the country's socio-economic factors;

The joint BAI-BMB-PHILZOOS Technical Working Group aim to pass the standards towards the end of 2019, with initial implementation of finalized rules and regulations targeted by 2nd quarter of 2020.

PHILZOOS Welfare Advocacy & Mission

We shall continue to pursue our goal to further develop our respective capacities and capabilities so we can ably provide the animals in our care the best quality of life possible. We will achieve this with the continuation of the Animal Welfare Science Series and the conduct of other programs, such as seminar-workshops on institutional sustainability and zoo education.

We shall continue to work closely with the government and other institutional partners in the development and implementation of policies and guidelines directly affecting the zoo community and industry. As a SEAZA Association Member, we shall also work towards SEAZA's goal of achieving 100% compliance to the SEAZA Welfare Standards by 2023.

Finally, we will prime our Association to be of service to the Philippine zoo community, to PHILZOOS Institutional Members, or to any other zoological institution which would require assistance and proper guidance.

We humans are but part of the greater scheme of things. We go with the flow, not sway it unevenly towards our selfish and misdirected liking. We've done more than enough manipulation and damage to benefit only our species... So, enough... Give back... It's time...

EFR, 2018

Maraming salamat po!





plotting
points
2019

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7 - 9 October 2019