THE MVZ TEAM STRENGTHENS CONNECTIONS BOTH BETWEEN JAPAN AND INDOCHINA AND WITHIN THE INDOCHINA REGION

SPECIES DIVERSITY OF TERRESTRIAL VERTEBRATES IN INDOCHINA PROJECT

Supported by
Nagao
Natural Environment
Foundation

MARCH 2025

As part of the scientific exchange activities under the Species Diversity of Terrestrial Vertebrates in Indochina project, led by Prof. Masaharu Motokawa (Kyoto University Museum) as the principal investigator and sponsored by the Nagao NEF, the MVZ team collaborated with VNU University of Science, Vietnam National University of Forestry, and the Faculty of Environmental Science at the National University of Laos to organize seminars and workshops. These events were successfully conducted, making a significant contribution to scientific research and education on biodiversity and environmental conservation through the close cooperation of scientists and students from Japan, Laos, and Vietnam.

VNU University of Science
Hanoi, Vietnam
March 17th, 2025

With the support of the Nagao Environmental Foundation (Nagao NEF), professors and researchers from Japan, Laos, and Vietnam organized a seminar to share research experiences and promote international collaboration in the study of biodiversity, particularly the mechanisms of geographic isolation and speciation in vertebrates across Asia.

Prior to the seminar, scientists involved in the project, led by Prof. Masaharu Motokawa, met with the Vice-Rector of HUS, Assoc. Prof. Ngac An Bang, and the Vice-Dean of the Faculty of Biology, Assoc. Prof. Nguyen Thanh Nam, to discuss future cooperation.

The seminar took place on March 17, 2025, at the Faculty of Biology, HUS, with the participation of talented undergraduate students, master students and lecturers of the faculty of biology in the University. During the seminar, Prof. Masaharu Motokawa, Prof. Kanto Nishikawa, and Dr. Daosavanh Sanamxay delivered in-depth lectures on the role of geographic isolation in the speciation of various vertebrate taxa, including mice, shrews, moles, squirrels, as well as amphibians and reptiles—key research subjects of the project funded by Nagao NEF. These lectures provided a comprehensive overview of the formation of new species due to geographic isolation, emphasizing biodiversity patterns in Asia.

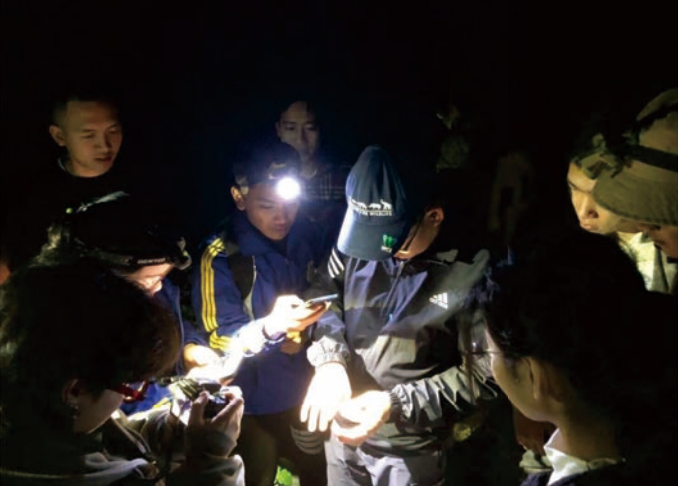
In the final session, after students and graduate participants had been introduced to the speciation processes in selected vertebrate groups, Dr. Bui Tuan Hai delivered a concluding lecture on the concepts of speciation, consolidating the knowledge acquired and reinforcing key theoretical frameworks. Additionally, Dr. Hai introduced the research team and its focal study subjects, providing valuable insights into ongoing projects and future research directions.

The seminar was attended by more than 50 participants, who raised many insightful questions for the speakers. Students and postgraduates were divided into two groups to discuss topics related to the presentations. Both groups engaged enthusiastically, generating valuable ideas on speciation and evolution.

Vietnam National University of Forestry
Hanoi, Vietnam
March 18th, 2025

Following the success of the event at HUS, on March 18, 2025, Prof. Motokawa, Prof. Nishikawa, Dr. Hai, and Dr. Daosavanh compiring with their students (Ms. Tasaki Nagisa, Mr. Ito Jumpei and Mr. Keovongsy Chanthavong) visited the Faculty of Forest Resources and Environmental Management at VNUF to advance scientific collaboration and training initiatives.

A seminar with similar content was also held, attended by approximately 40 students, and proved to be highly effective. The students actively engaged and responded with enthusiasm. Additionally, students participated in fieldwork activities led by Prof. Nishikawa on the VNUF practice forest. By observing amphibian and reptile species and exchanging practical fieldwork skills with the professor, both students and researchers gained invaluable hands-on experience in ecological survey methods and species identification.



These seminars not only facilitated academic exchange between students, graduate researchers, and international scientists but also enhanced awareness and understanding of speciation—one of the fundamental mechanisms driving biodiversity on Earth.

The events were conducted with remarkable enthusiasm, featuring active involvement from students. Throughout the questioning and interactive sessions with experts, the students courageously shared their viewpoints and ideas, while also gaining insightful critiques from both local and international specialists.


Speciation by geographic isolation
Rats, mice, shrews, moles
Masahiro Motokawa
Seminar on
SPECIATION BY GEOGRAPHIC ISOLATION
VIET NAM NATIONAL UNIVERSITY OF FORESTRY


DISCUSSION QUESTIONS
Explain the difference between vicariance and dispersal in allopatric speciation. Provide an example to illustrate.
Is it possible for humans to evolve different species in the future?


Seminar on
SPECIATION BY GEOGRAPHIC ISOLATION
VIET NAM NATIONAL UNIVERSITY OF FORESTRY


ON QUESTIONS

National University of Laos
Vientiane, Lao PDR
March 19th -26th, 2025

On March 21, 2025, as part of the collaborative framework of the Nagao NEF project, the Faculty of Environmental Sciences (FES) at the National University of Laos (NUoL) hosted a meeting between university representatives and MZV team's members, with a focus on collaborative research on vertebrate diversity, including species identification, ecological studies, and conservation efforts. The meeting featured the Vertebrate Diversity Research in Lao PDR, followed by a specialized workshop on Vertebrate Species Identification. This congregation brought together a miscellaneous group of researchers, and students, all driven by a shared interest in exploring and understanding the rich biodiversity of Southeast Asia.

The Vertebrate Diversity Research in Lao PDR Meeting and Workshop focused on advancing biodiversity research and conservation through strategic collaboration. Key discussions involved Asst. Prof. Amphai Darasouk (Vice-dean, FES) and Prof. Masaharu Motokawa (Kyoto University Museum) exploring joint research, academic exchanges, and capacity-building efforts. The meeting underscored interdisciplinary collaboration in biodiversity conservation and strengthened long-term scientific partnerships.

A major outcome was the agreement to enhance research initiatives and training programs, reinforcing commitments to biodiversity management in Southeast Asia. The meeting featured insightful presentations on vertebrate diversity, including:

- *History of Research Collaboration* – Prof. Motokawa highlighted Kyoto University Museum and FES's longstanding partnership, including field surveys in Nam Poui (2024) and Phou Den Din (2023).
- *Reptile & Amphibian Research* – Prof. Kanto Nishikawa discussed biodiversity patterns and conservation challenges in Southeast Asia.
- *Wildlife Research in Vietnam* – Dr. Bui Tuan Hai emphasized the need for cross-border conservation efforts.
- *Camera Trap Monitoring* – Dr. Thanan Khotphathoum showcased technology for wildlife assessment.
- *Saola conservation* – The Saola Foundation detailed efforts to locate and protect the critically endangered species.

In the afternoon session, the event transitioned into an interactive workshop, attracting several students from the FES. The workshop began with a series of expert presentations, providing students with a comprehensive overview of the external identification characteristics of various vertebrate groups, including rodents, insectivores, amphibians, and reptiles. The presentations highlighted key distinguishing features, such as body size, coloration, limb structure, and specific adaptations that are crucial for accurate species identification in the field.

Following the presentations, the students were divided into smaller groups, where they engaged in hands-on activities and collaborative discussions under the guidance and sharing of scientists from Kyoto University, VAST, and NUoL. The groups were tasked with identifying different species based on a set of physical traits and distinguishing features provided through visual aids and field samples. This practical experience allowed students to apply their knowledge in real-time, honing their skills in species recognition and reinforcing the importance of accurate data collection in biodiversity research.

The workshop also served as a platform for fostering scientific collaboration, with students not only learning valuable skills but also exchanging ideas and insights with experts from different institutions. It was a dynamic environment for cultivating critical thinking and problem-solving abilities, preparing students to contribute meaningfully to conservation efforts in the future.

This event stands as a demonstration to the shared commitment of all participating institutions to explore, understand, and protect the vertebrate diversity of Southeast Asia. By providing students with the tools and knowledge necessary for successful fieldwork and research, the workshop played a crucial role in promoting collaboration, strengthening regional expertise, and nurturing the next generation of biodiversity stewards who will continue to safeguard the natural heritage of the region.



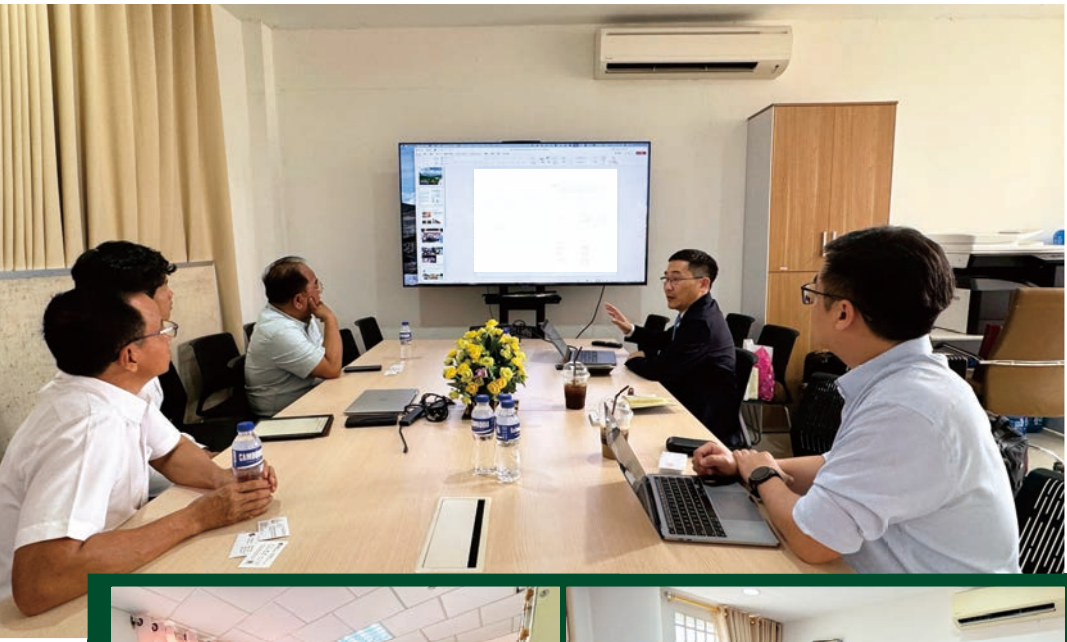

Specimens preparation and examination in FES

Also, within the framework of activities sponsored by Nagao NEF, Prof. Motokawa and Dr. Hai, along with Vietnamese and Lao students, dedicated several days at the FES Laboratory to meticulously prepare and examine specimens collected during the most recent field surveys in Laos.

Royal University of Phnom Penh
Phnom Penh, Cambodia
March 27th -28th, 2025

To strengthen connections between Japan and Indochina in biodiversity and environmental research, Prof. Motokawa, Dr. Sanamxay, and Dr. Hai had an important working session at the Faculty of Science (FoS), Royal University of Phnom Penh (RUPP). They were welcomed by Asst. Prof. Meak Kamerane, Dean of FoS, along with Mr. Uk On Norong, Head of the Department of Biology, and Dr. Ith Saveng, a faculty member of FoS.

Following the meeting, the MVZ team toured the laboratories, the insect and vertebrate collections, and the biodiversity conservation center. This visit marks a promising step toward deeper collaboration in the future.



TRƯỜNG ĐHKHTN - ĐHQGHN
KHOA SINH HỌC
FACULTY OF BIOLOGY - HUS

Lectures on

SPECIATION BY GEOGRAPHIC ISOLATION

8:00 8:30	Welcome and Greeting of VNU University of Science, Hanoi
8:30 8:55	Lecture 1: Prof. Masaharu MOTOKAWA Speciation due to geographic isolation in some species of rats and shrews (or moles)
8:55 9:20	Lecture 2: Dr. Daosavanh SANAMXAY Speciation due to geographic isolation in some species of squirrels.
9:20 - 9:25	Break time
9:25 9:50	Lecture 3: Prof. Kanto NISHIKAWA Speciation due to geographic isolation in some spedes of reptiles and amphibians.
9:50 10:10	Q&A
10:10 10:20	PRACTICE: Dr. BUI Tuan Hai Introduce the concept of speciation and provide discussion questions for student groups
10:20 - 10:25	Break time
10:25 11:00	Students present the results of practice

Venue: Room 421-T1
VNU University of Science
Date: March 17, 2025

Supported by
Nagao Natural Environment Foundation
NEF

MVZ TEAM
MOTOKAWA VERTEBRATE ZOOLOGY

Prof. Dr. Masaharu MOTOKAWA

Prof. Dr. Kanto NISHIKAWA

Dr. Daosavanh SANAMXAY

Dr. BUI Tuan Hai

Lectures on

SPECIATION BY GEOGRAPHIC ISOLATION

Supported by
Nagao Natural Environment Foundation

VNU University of Science, Hanoi
17/3/2025

ວາລະກອງປະຊຸມກ່ຽວກັບການສຶກສາຄວາມຫຼາກຫຼາຍຂອງສັດມີກະດູກສັນຫຼັງ ຢູ່ ສປປ ລາວ ແລະ ການຝຶກອົບຮົມການຈຳແນກຊະນິດມີກະດູກສັນຫຼັງ
ວັນທີ 21/03/2025 ທີ່ຫ້ອງປະຊຸມຊັ້ນ 3 ຄສວ, ມຊ

Agenda on
Vertebrate Diversity Research in Lao PDR Meeting and Workshop on the Vertebrate Species Identification

Date: 21/03/2025
Venue: Faculty of Environmental Sciences, National University of Laos
Dongdok Campus, Xaythany District, P.O.Box 7322, Vientiane Capital, Lao PDR

ເວລາ (Time)	ເນື້ອໃນ (Items)	ຜູ້ຮັບຜິດຊອບ (Responding person)
	ພາກການບັນຍາຍຫົວຂໍ້ຕ່າງໆ Presentation section	
8:00-8:30	ເຕົ້າໂຮມແຂກ Register	Committee
8:30-8:40	ກ່າວຈຸດປະສົງ ແລະ ສະເໜີຜູ້ເຂົ້າຮ່ວມ Delivery Objectives and introduce participants	Committee
8:40-8:50	ຄະນະນຳ ຄສວ ກ່າວຕ້ອນຮັບແຂກ ແລະ ເປີດພິທີຢ່າງເປັນທາງການ Official welcome visitors and opening remark	ຮສ. ປອ. ໄກສອນ ເພັງໂສພາ Assoc. Prof. Dr. Kaisone Phengsopha
8:50-9:20	ກ່າວໂດຍຫຍໍ້ກ່ຽວກັບການຮ່ວມມືພາຍໃຕ້ໂຄງການນາກາໂອະ Brief speech of collaboration under Nagao Project and concept of research under this project	ສຈ. ປອ. ມາຊາຮາລຸ ໂມໂຕກາວະ Prof. Dr. Masaharu Motokawa
9:20-9:50	ການຄົ້ນຄວ້າກ່ຽວກັບສັດເລືອຄານ ແລະ ສັດເຄິ່ງບົກເຄິ່ງນ້ຳ ໃນອາຊີຕາເວັນອອກສ່ຽງໃຕ້ Reptiles and amphibian research in South East Asia	ສຈ. ປອ. ຄັນໂຕະ ນິຊິກະວະ Prof. Dr. Kanto Nishikawa
9:50-10:05	ພັກຜ່ອນ Coffee break	ທຸກທ່ານ All participants
10:05-10:35	ພາບລວມການສຶກສາກ່ຽວກັບສັດປ່າໃນ ສສ ຫວຽດນາມ An overview of wildlife research in Vietnam	ປອ. ບຸຍຕວນໄຮ Dr. Bui Tuan Hai
10:35-11:05	ການສຶກສາ ແລະ ການຕິດຕາມສັດຂະໜາດໃຫຍ່ໂດຍການນຳໃຊ້ກ້ອງດັກຖ່າຍພາບ Study and monitoring of animals using camera traps	ປອ. ທະນັນ ໂຄດປະທຸມ Dr. Thanan Khotphathoum
11:05-11:35	ເສົາຫຼາ : ຊະນິດພັນສະເພາະຖິ່ນຂອງສາຍພູຫຼວງ The Saola : An Elusive endemic of the Annamite in Laos	ມູນນິທິເສົາຫຼາ Representative from the Saola Foumdation
11:35-11:45	ປຶກສາຫາລື ແລະ ປະກອບຄຳເຫັນໂດຍທົ່ວໄປ ແລະ ກ່າວປິດງານພາກເຊົ້າ General discussion and closing presentation section	ທຸກທ່ານ All participants

ພາກບ່າຍ

ເວລາ (Time)	ເນື້ອໃນ (Items)	ຜູ້ຮັບຜິດຊອບ (Responding person)
	ພາກການຝຶກອົບຮົມ (ເນັ້ນໃສ່ສະເພາະນັກສຶກສາ ສຳລັບອາຈານແມ່ນສາມາດພັກຜ່ອນຕາມອັດທະຍາໄສ) Workshop section (focus on students only)	
13:30-13:45	ການຈຳແນກຊະນິດກະຮອກ ແລະ ບ່າງ Squirrels identification	ຊອ. ປອ. ດາວສະຫວັນ ສະໜາມໄຊ Dr. Daosavanh Sanamxay
13:45-14:00	ການຈຳແນກຊະນິດໜູ Rats identification	ສຈ. ປອ. ມາຊາຮາລຸ ໂມໂຕກາວະ Prof. Dr. Masaharu Motokawa

14:00-14:15	ການຈຳແນກຊະນິດສັດກິນແມງໄມ້ Insectivorous identification	ປອ. ບຸຍຕວນໄຮ; ທ່ານ ທິຮວາງເຢັ້ນ; ທ່ານ ວູກິມລວາ Dr. Bui Tuan Hai; Ms. Thi Huong Yen; Mr. Vu Kim Luong
14:15-14:30	ການຈຳແນກຊະນິດສັດເລືອຄານ ແລະ ສັດເຄິ່ງບົກເຄິ່ງນ້ຳ Reptiles and amphibians identification	ສຈ. ປອ. ຄັນໂຕະ ນິຊິກະວະ; ທ່ານ ນາກິຊາ ທາຊາກິ; ທ່ານ ຈຸມເປ ອິໂຕະ Prof. Dr. Kanto Nishikawa; Ms. Nagisa Tasaki; Mr. Jumpei Ito
14:30-14:45	ພັກຜ່ອນ Coffee break	ທຸກທ່ານ All participants
14:45-16:00	ຝຶກການຈຳແນກຊະນິດສັດໂດຍນຳໃຊ້ຊາກສັດຕົວຢ່າງທີ່ຫ້ອງເກັບຕົວຢ່າງ ຄສວ Practice to identify from specimens at FES collection room	ທຸກທ່ານ All participants
16:00-16:10	ກ່າວປິດງານຢ່າງເປັນທາງການ Closing celemony	ຮສ. ປອ. ໄກສອນ ເພັ້ງໂສພາ Assoc. Prof. Dr. Kaisone Phengsopha

THANKS

The MVZ team

March 2025

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