

Elephants and Conservation Ecology: Thailand and Laos

Short Name: Thai & Lao Elephant Conserv

Credits: 4

Contact Hours: 68

Lecture Hours: 28

Direct Studies: 30 (80 at 2:1 ratio)

Course Description

Asian elephants are critical to the biodiversity of Southeast Asia, playing an essential role in maintaining the health of ecosystems through seed dispersal and habitat modification. However, due to habitat loss, human-wildlife conflict, and poaching, their populations have been significantly reduced. These majestic creatures face numerous threats, making their conservation vital not only for their survival but also for the preservation of the regions they inhabit. Their cultural and ecological significance makes them an invaluable focus for conservation efforts.

This immersive program offers a unique opportunity to study the conservation of Asian elephants through field-based experiences in Thailand and Laos. Students engage with elephant care in wildlife sanctuaries, elephant camps, and re-wilding centers, learning about the ecology, behavior, and health of these iconic animals. The course explores conservation challenges and strategies in a real-world context, emphasizing the intersection of biology, cultural practices, and conservation efforts.

Participants will learn about the challenges in managing human-elephant conflicts, elephant health, and understanding their ecological role in tropical environments. Through site visits to UNESCO World Heritage areas and involvement in local conservation projects, students will acquire the skills needed to assess and support elephant conservation initiatives. The course also integrates cultural perspectives on elephants, examining the societal and ethical aspects of their management in Southeast Asia.

Course Objectives

The objectives for this course are to:

- Develop an understanding of elephant biology, behavior, and ecology.
 - Analyze conservation strategies, including challenges and opportunities.
 - Evaluate the cultural, economic, and ecological roles of elephants in Thai and Lao societies.
 - Build skills in field research, ecological assessment, and cultural immersion.
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Methodology

This course combines lectures, readings, and discussions with hands-on field experiences. Activities include:

- Field research and ecological surveys.
- Cultural immersion through homestays and local collaborations.
- Guest lectures by conservationists, ecologists, and local experts.
- Visits to elephant sanctuaries, national parks, and UNESCO World Heritage sites.

Grading and Assessment

Component	Details	Total
Engagement	This means participation in and out of the classroom, being an active member of the course, and being fully present and engaged in the field. This includes participation in discussions during seminars and in the village, etc. This also means being an active and supportive member of the course, including as a designated leader and active follower/self leadership.	10
Writing	Seminar and Observation Notes (5): An important component of learning to observe and analyze the issues during this course is taking notes in class as well as keeping an on-going daily journal of observations outside the classroom. Please put the date at the top of each page. Field Research Notebook (15): A more structured way of taking notes and learning outside the classroom assigned to specific field studies. Essays (20): There are two (2) essays during the course. Essays should be 4-5 pages long in your journal, and cover the following points: • How this issue or topic links to the overall topic of the course. (1) • Why you are interested in this specific issue or topic. (1) • A description and analysis of the specific issue and why it is important. (5) • Reference to interviews or observations during the course. (2) • Other questions that this issue raises for you to explore further. (1)	40
Independent Field Research Project (IFRP)	Each student will choose an issue related to the course to study independently. This should be a combination of research, observations, and analysis of a topic that the student is interested in. The emphasis is primarily on field observations drawing on field studies as well as independent observations. This is not a book report or literature review, but field research. Students must receive instructor approval for their chosen topic/issue. Proposal (10): The IFRP proposal is a written outline and a short presentation to the class explaining the question, how it is related to the course topic, how data will be gathered, and any potential challenges you may anticipate running into. 1 page typed as well as an in-class presentation. Progress update (5): An update during the course on what the student has discovered about their topic so far, what further questions this raises, any challenges and how they have been overcome, as well as further information they will be looking for during the second half of the field study. 1 page written in your notebook as well as an in-class presentation. Final Presentation (15): On the last day of the course each student will give a five minute presentation on their research. Focus on clarity, field observations, interviews/discussions with community members, and analytical depth. 5-10 slides in PDF format. Organization for final presentation 1. What did you study/research focus? How is this related to the course topic? (2) 2. How did you study this, including observations and interviews? (3) 3. What did you learn? Findings and analysis. (8) 4. Further questions this raises for you. (1) 5. Final slide of references / interviews. (1)	30
Final Exam	The final exam will be a comprehensive review of course topics with an emphasis on what was learned during the field portion of the course. There will be 5 short answer questions. Students may use their notes but not their readers or the internet during the exam.	20
Total		100

Course Schedule

Please note: This schedule is subject to change based on partner availability, travel logistics, and other changes outside of our control. Students will need to be flexible and adaptive to the inherent challenges of remote travel and study.

Students arrive in Chiang Mai on Saturday. Orientation is held on Sunday, and a Survival Thai class meets Monday morning before seminars and field modules formally begin.

Module 1 — Introduction and Thung Yai–Huai Kha Khaeng Wildlife Sanctuary

May 30–June 5 · Chiang Mai & Uthai Thani, Thailand

This module introduces the course, its field research methods, and the ecological context of Asian elephant conservation. The program begins at ISDSI's campus in Chiang Mai before traveling to the Thung Yai–Huai Kha Khaeng Wildlife Sanctuary in Uthai Thani Province, one of Southeast Asia's most significant UNESCO World Heritage natural sites.

Observing Asian elephants in the wild is particularly challenging due to their preference for dense, forested habitats, which can be difficult to access and navigate. Their extensive home ranges and ability to move quietly through thick vegetation complicate tracking efforts. Additionally, human presence can alter their behavior, requiring researchers to adopt non-intrusive observation methods. Studying these elephants necessitates patience and a deep understanding of their ecological behaviors, as their movements and interactions with the environment are often subtle and fleeting. While at the sanctuary, students will meet with park rangers and other stakeholders and begin observing the wild elephant population firsthand.

Focus Topics

- Elephant behavior and ecology
- Human–elephant conflict
- UNESCO World Heritage management
- Introduction to field research methods

Readings

- Olivier, R. C. D. (1978). Conservation of the Asian Elephant. *Environmental Conservation*, 5(2), 146.
- Fritz, H. (2017). Long-term field studies of elephants: understanding the ecology and conservation of a long-lived ecosystem engineer. *Journal of Mammalogy*, 98(3), 603–611.
- Sukumar, R. (2003). *The Living Elephants: Evolutionary Ecology, Behavior, and Conservation*. Oxford University Press, Chapters 3–5, pp. 45–110.
- Fernando, P. & Leimgruber, P. (2011). Asian elephants and seasonally dry forests. In McShea et al. (Eds.), *The ecology and conservation of seasonally dry forests in Asia* (pp. 151–163). Smithsonian Institution Scholarly Press.
- Sukumar, R. (1989). *The Asian Elephant: Ecology and Management*. Cambridge University Press, Chapters 2 and 4, pp. 22–78.
- Lekagul, B. & McNeely, J. A. (1977). *Mammals of Thailand*. Association for the Conservation of Wildlife, pp. 220–240.

Schedule

Monday - May 31

Program introduction seminar (PM); welcome dinner (6:00 PM) — Chiang Mai

Tuesday - June 1

Travel to Thung Yai–Huai Kha Khaeng Wildlife Sanctuary, Uthai Thani Province (8-hour drive); lunch along the way; dinner and check-in at the sanctuary

Wednesday - June 2

Meet with park rangers; introduction to Huai Kha Khaeng Wildlife Sanctuary and the Seub Nakhasathien Memorial House; hike the Baan Kong Suea nature trail and world heritage exhibition hall; observe elephant surveillance officers in Ban Bueng / camera traps

Thursday - June 3

Lecture on elephants by park rangers; hike the Kao Hin Daeng nature trail; observe elephant surveillance officers in Ban Bueng / check traps

Friday - June 4

Visit the Huai Kha Khaeng Wildlife Breeding Station; visit the Pong Chang Phueak wildlife observation tower; observe elephant surveillance officers in Ban Bueng / check traps

Saturday - June 5

Wildlife observation behind the museum; independent research / interviews; observe elephant surveillance officers in Ban Bueng / check traps

Module 2 — Elephant Care, Veterinary Practice, and Conservation in Northern Thailand

June 6–16 · Chiang Mai, Thailand

This module focuses on elephant care and conservation in and around Chiang Mai, exploring the wide range of approaches taken by elephant camps, sanctuaries, and conservation centers operating in the region. Students will examine initiatives centered on reproduction, rehabilitation, and welfare, as well as efforts around standards of care, certification, and ethical management of elephants under human care.

Elephant veterinary care in Northern Thailand plays a crucial role in ensuring the health and wellbeing of the region's Asian elephant population. Specialized clinics and hospitals address health issues ranging from physical injuries to chronic conditions such as arthritis and foot problems. Students will study both modern veterinary approaches and the traditional knowledge of mahouts, including herbal remedies and other indigenous practices related to elephant health and care.

Focus Topics

- Elephant health, care standards, and welfare assessment
- Captive elephant management and certification efforts
- Cultural significance of elephants in Thai traditions
- Mahout knowledge and indigenous practice
- Ecotourism models and their impacts

Readings

- Kontogeorgopoulos, N. (2009). Wildlife tourism in semi-captive settings: A case study of elephant camps in northern Thailand. *Current Issues in Tourism*, 12(5), 429–449.
- Lair, R. C. (1997). *Gone Astray: The Care and Management of the Asian Elephant in Domesticity*. FAO Regional Office for Asia and the Pacific, Chapters 1–3, pp. 1–65.
- Suter, I. (2020). Rewilding or reviewing: Conservation and the elephant-based tourism industry. *Animal Sentience*, 28(3), 1–4.
- Schmidt-Burbach, J., et al. (2015). Asian elephant (*Elephas maximus*) welfare assessment. *Animal Welfare*, 24, 15–26.

- Fowler, M. E. & Mikota, S. K. (2006). *Biology, Medicine, and Surgery of Elephants*. Blackwell Publishing, Chapters 7–8, pp. 120–175.
- Bansiddhi, P., Brown, J. L., Thitaram, C. (2020). Welfare assessment and activities of captive elephants in Thailand: the epicenter of elephant tourism. *Animals*, 10, 919–937.
- Hvistendahl, M. (2019). The human cost of elephant tourism. *The Atlantic Monthly*.
- Bansiddhi, P., et al. (2019). Management factors affecting adrenal glucocorticoid activity of tourist camp elephants in Thailand. *PLOS ONE*, 14(10), e0221537.

Schedule

Sunday - June 6

Breakfast at Huai Kha Khaeng; travel back to Chiang Mai; lunch along the way; free time (PM)

Monday - June 7

Day off

Tuesday - June 8

All-day veterinary assistance training at Elephant Jungle Sanctuary

Wednesday - June 9

All-day veterinary assistance training at Elephant Jungle Sanctuary

Thursday - June 10

Seminar / introduction to the Thai Elephant Conservation Center (TECC), Lampang (AM); mahout training (PM)

Friday - June 11

All-day activities at Patara Elephant Conservation; meeting with veterinarian; talk with mahouts

Saturday - June 12

All-day activities at Maetaeng Elephant Camp; talk with mahouts

Sunday - June 13

Chiang Mai Zoo (AM); travel to Huay Pak Krut (PM)

Monday - June 14

Huay Pak Krut activities

Tuesday - June 15

Travel to Chiang Mai from Huay Pak Krut

Wednesday - June 16

Day off

Module 3 — Elephant Conservation in Laos: Xayaburi, Luang Prabang, and Vientiane

June 17–23 · Xayaburi, Luang Prabang & Vientiane, Laos

This module travels to Laos to study the cultural and ecological context of elephant conservation in a setting that differs from Thailand in important ways. While strong cultural and historical links connect Northern Thailand and Laos, the two countries diverge significantly in terms of governance structures, levels of

economic development, and the specific pressures facing elephants and local ecosystems. Students will examine these differences directly through site visits, institutional partnerships, and fieldwork.

The module begins in Luang Prabang, a UNESCO World Heritage site, before traveling to Xayaburi to visit the Elephant Conservation Center (ECC) and Mandalao Elephant Camp. The module then moves to Vientiane, where students will engage with national conservation institutions and wildlife rescue organizations.

Focus Topics

- Governance and conservation in Lao PDR
- Wildlife rescue and rehabilitation
- Field research methodologies
- Captive elephant care and camp models in Laos
- Community engagement and sustainable livelihoods
- Comparative Thai–Lao conservation approaches

Readings

- Lainé, N. (2018). Asian elephant conservation: Too elephantocentric? Towards a biocultural approach of conservation. *Asian Bioethics Review*, 10(3), 279–293.
- Duffillot, S. (2019). Re: Asian elephant conservation—Too elephantocentric? *Asian Bioethics Review*, pp. 133–139.
- Clements, H. S., et al. (2010). Ecotourism and biodiversity conservation. *Conservation Biology*, 24(3), 621–629.
- Khamkhoun, B. (2002). The care and management of domesticated Asian elephants in Lao PDR. In Baker, I. & Kashio, M. (Eds.), *Giants on Our Hands* (pp. 172–180). FAO Regional Office for Asia and the Pacific.
- Duckworth, J. W., Salter, R. E., & Khounbolin, K. (1999). The geography and biogeography of Lao PDR; Human use of wildlife. *Wildlife in Lao PDR: 1999 Status Report* (pp. 2–22). IUCN / WCS / CPAWM.
- Goswami, V. R., Madhusudan, M. D., & Sukumar, R. (2021). Living with elephants: Evidence-based planning to conserve wild populations across varied land use regimes. *Frontiers in Conservation Science*, 2, 682590.
- Berkmüller, K., Evans, T., Timmins, R., & Vongphet, V. (1995). Recent advances in nature conservation in the Lao PDR. *Oryx*, 29(4), 253–260.
- Chanthasene, S., et al. (2022). Willingness to pay for conservation of the Asian elephant in Nakai Nam Theun National Protected Area in Laos. *Open Journal of Business and Management*, 10(3), 1327–1343.
- Moss, C. J. (2006). *Elephant Memories: Thirteen Years in the Life of an Elephant Family*. University of Chicago Press, Chapters 10–12, pp. 204–280.
- IUCN. (2023). Elephant range states from Southeast Asia review implementation of CITES MIKE programme.

Schedule

Thursday - June 17

Flight Chiang Mai to Luang Prabang, via Bangkok (CNX–DMK–LPQ); explore Luang Prabang (PM)

Friday - June 18

Travel to the Elephant Conservation Center (ECC), Xayaburi; elephant observation

Saturday - June 19

ECC programs; travel back to Luang Prabang; talk with mahouts

Sunday - June 20

Mandalao Elephant Camp (AM); train to Vientiane (PM)

Monday - June 21

Visit National University and Veterinary School (AM); visit the Lao Conservation Trust for Wildlife (LCTW) (PM)

Tuesday - June 22

Visit WWF and/or other NGOs in Vientiane (AM); explore Vientiane (PM)

Wednesday - June 23

Return travel Laos to Chiang Mai: Vientiane–Bangkok 13:50–15:00; Bangkok–Chiang Mai 18:15–19:30

Module 4 — Synthesis and Final Presentations

June 24–26 · Chiang Mai, Thailand

The final module returns to Chiang Mai for synthesis and presentation of student research. Students will have a day off to rest and prepare before presenting their Independent Field Research Project findings to the full group on the penultimate day of the course. All written deliverables are due that same day.

Focus Topics

- Synthesis of field research findings
- Analytical depth and communication of research
- Peer learning and course reflection

Schedule**Thursday - June 24**

Day off

Friday - June 25

Final exam; final presentations; Essay #2 due; field notes due; farewell dinner (6:00 PM)

Saturday - June 26

Departure day

Course Policies

Attendance Policy

Students are expected to be on time and attend all classes. If you are ill or otherwise need to miss a class, please inform your instructor or teaching assistant.

Academic Integrity

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in ISDSI courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own can result in disciplinary action.

Scholastic Dishonesty

Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering forging, or misusing an academic record; or fabricating or falsifying data, research procedures, or data analysis. Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to and including an "F" or "N" for the course. If you have any questions regarding the expectations for a specific assignment or exam, ask.

Grading Standards

Letter grade	Score or percentage	Description
A	93–100	Achievement that is outstanding relative to the level necessary to meet course requirements.
A-	90–92	Achievement that is significantly above the level necessary to meet course requirements.
B+	87–89	Achievement that is significantly above the level necessary to meet course requirements.
B	83–86	Achievement that is significantly above the level necessary to meet course requirements.
B-	80–82	Achievement that meets the course requirements in every respect.
C+	77–79	Achievement that meets the course requirements in every respect.
C	73–76	Achievement that meets the course requirements in every respect.
C-	70-72	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
D+	67-69	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
D	60-66	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
F	0-59	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an Incomplete.