

Beehive fences as a sustainable local solution to human-elephant conflict in Thailand

Antoinette van de Water^{1,2} Lucy E. King^{3,4} Rachaya Arkajak⁵ Jirachai Arkajak⁵ Nick van Doormaal⁶
Viviana Ceccarelli² Liesbeth Sluiter² Suzan M. Doornwaard⁷ Vera Praet² David Owen^{1,2}
and Kevin Matteson¹

ABSTRACT

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As human-elephant conflict (HEC) increases, a better understanding of the human dimensions of these conflicts and non-violent mitigation methods are needed to foster long-term coexistence. In this study, we conducted household questionnaires ($n = 296$) to assess the prevalence of HEC and attitudes towards elephants in four rural villages in Thailand. In addition, we evaluated a pilot beehive fence as a sustainable solution for HEC. The majority of the households reported seeing or hearing elephants near their property at least once a week (84.9%) and experienced negative impacts from elephants in the last 5 years, (81.0%). The beehive fence deterred 88.4% of individual elephants ($n = 155$) and 64.3% of elephant groups ($n = 28$) that approached the fence. Most elephants (70.7%) exhibited behaviors suggesting heightened attentiveness or alarm. The farm owner reported economic and social benefits of the beehive fence. By contributing to farmer income and reducing crop damage caused by wild elephants, beehive fencing may provide an important locally-managed complement to regional HEC mitigation methods.

KEYWORDS: asian elephants, beehive fence, camera-traps, citizen science, coexistence, crop raiding, human dimensions, human-elephant conflict, sustainability

¹Department of Biology, Miami University, Oxford, Ohio

²Bring The Elephant Home, Vlaardingen, The Netherlands

³Department of Zoology, University of Oxford, Oxford, UK

⁴Save the Elephants, Nairobi, Kenya

⁵Phluang Wildlife Research Station, Department of National Parks, Wildlife and Plant Conservation, Bangkok, Thailand

⁶Future For Nature Academy, Wildlife Ecology and Conservation Group, Wageningen, the Netherlands

⁷The Elephant Path, Rotterdam, the Netherlands

งบประมาณที่ได้รับการสนับสนุนในการทำวิจัย

สำนักวิจัยการอนุรักษ์ป่าไม้และพันธุ์พืช แผนงานพื้นฐานด้านการสร้างการเติบโตบนคุณภาพชีวิตที่เป็นมิตรต่อสิ่งแวดล้อม ผลผลิตที่ 1 : พื้นที่ป่าอนุรักษ์ที่ได้รับการบริหารจัดการ กิจกรรมองค์ความรู้ด้านการอนุรักษ์ป่าไม้และสัตว์ป่า กิจกรรมบริหารจัดการด้านป่าไม้และสัตว์ป่า และมูลนิธิฯ ช่างกลับบ้าน

เอกสารอ้างอิง

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