


Living Alongside Wildlife

A natural history of the fascinating animals that share our landscapes

Saturday, February 9, 2019

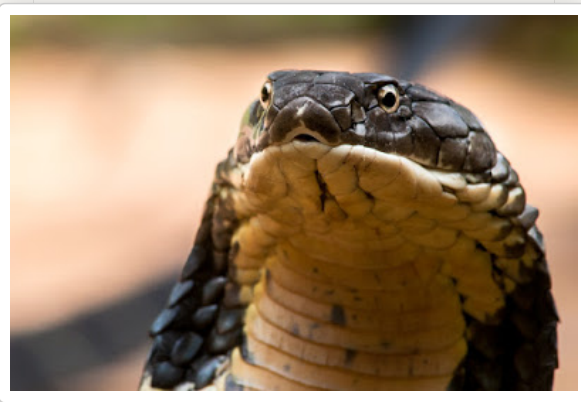
The King Cobras of Northeast Thailand — Researching Lives and Threats --- Guest Post ---

 Like 497 people like this. [Sign Up](#) to see what your friends like.

Across the globe there is a tendency for people to view snakes in a negative light, a fear born of unfamiliarity. It is difficult to imagine a scenario where snakes are protected from threats, like habitat loss and persecution, without countering innate anti-snake bias. As we learn about snakes, we can present them in more relatable ways.

Questions concerning snakes are bountiful everywhere, but especially in Southeast Asia. Many species across the region have scant natural history information and remain taxonomically ambiguous. Even the most charismatic snake species lack widespread work that would help us understand their populations and threats they face.

We at the [Sakaearat Conservation and Snake Education Team](#) (find us on [Instagram!](#)) are exploring the lives of snakes (king cobras, green pit vipers, green cat-eyed snakes, Burmese pythons and kraits) with the goal of understanding their habitat and space requirements. The longest running project involves perhaps the best ambassador for Southeast Asian snakes — the king cobra. They are instantly recognizable, strikingly beautiful, and (perhaps surprisingly to some people) infrequently appear in hospital snakebite records. Despite their charisma and wide-distribution, almost all the modern work on the ecology of king cobras has been limited to the western Ghats in India.



Device Training Dog Barking

A pet trainer helped L
to tame her non-stop
barking dog with this
new training device.



[trypetgentle.com](#)

Visit The Alongside Wildlife
Foundation



We are working in Thailand's northeast province of Nakhon Ratchasima, in the Sakaerat Biosphere Reserve. The reserve presents an opportunity to study king cobras in a number of habitats. The core of the reserve is protected old growth forest and seasonally burnt dry [dipterocarp](#) forest. Surrounding the oldest forests are plantations, attempting to restore a larger area to a forested state. Beyond the reforestation area is a mix of agriculture and small villages. Typical crops for the region are rice, sugar cane and corn, often interspersed with orchards. Straight through the middle of agricultural land, and bordering the forest is a four-lane highway connecting the Northeast to Bangkok. This complex landscape of competing interests and land-use is where our king cobras live, and where the team follows their every move.



King cobras are elusive, presenting a myriad of problems when studying them. Because of the difficulty recapturing kings, we turned to radio-telemetry. Kings of sufficient size and health have radio-transmitters implanted, allowing a signal to be detected and followed. Every day the team heads out, into forest, fields and streambeds to record the kings' locations.



After years of tracking, we are gaining a glimpse into king cobra life. We have documented the huge areas they span, over 700 ha (~2.7 square miles) for the adult males. While there is some indication that they prefer the safety (or food) of the forest, they are willing to traverse highways and fields, especially while searching for mates. A dangerous habit given how king cobras are one of the most feared snake species in the region. The pattern of tracked king cobra mortalities in unprotected areas suggest that the fear is leading to persecution.

Our inability to use systematic trapping prevents any conclusions on whether the persecution and accidental deaths in unprotected areas are undermining the king cobra population. But the trend of finding dead kings outside the protected area, together with seeing few instances of natural deaths, is worrying.



The figure consists of three main components. At the top left is an inset map of Thailand with a white dot indicating the study site's location. The main map is a detailed view of the study area, showing the Sakaerat Biosphere Reserve and Thap Lan National Park. A central line represents the 304 highway, and white areas with solid outlines represent protected areas. A dashed line indicates the buffer area. The map is overlaid with a grid showing latitude (14.450 to 14.550) and longitude (101.875 to 101.975). A scale bar indicates 1 km and 2 km. A legend titled 'Cause of Death' lists seven categories with corresponding symbols: Eaten (blue circle with 'E'), Persecution (blue circle with 'P'), Poison (blue circle with 'X'), Predation (blue circle with 'P'), Roadkill (blue circle with 'R'), Starvation (blue circle with 'S'), and Unknown (red circle with 'U'). The map also shows various symbols for different types of deaths, including a blue circle with 'E', a blue circle with 'P', a blue circle with 'X', a blue circle with 'P', a blue circle with 'R', a blue circle with 'S', and a red circle with 'U'.



A black cobra snake with a white and black patterned hood, standing upright in a grassy field. The snake's body is black with a white and black patterned hood. It is standing upright, with its head raised and its hood expanded. The background is a grassy field with some small plants.

Strine, C. T., Silva, I., Crane, M., Nadolski, B., Artchawakom, T., Goode, M., & Suwanwaree, P. (2014). Mortality of a wild king cobra, *Ophiophagus hannah* Cantor, 1836 (Serpentes: Elapidae) from Northeast Thailand after ingesting a plastic bag. *Asian Herpetological Research*, 5(4), 284–286.
<https://doi.org/10.3724/SP.J.1245.2014.00284>

Benjamin Marshall is a researcher at the Suranaree University of Technology, where he focuses on the analysis of radio-telemetry data. Also keen to communicate research, Ben co-hosts a fortnightly Herpetological podcast that looks at recent research findings.

The Sakaerat Conservation and Snake Education Team was set-up by Dr Colin Strine and is currently being led by Doctoral student Max Jones.