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## **East and Southeast Asia**

### **Laos**

CAMERA TRAP CONFIRMATION OF ANOTHER SIAMESE CROCODILE (*CROCODYLUS SIAMENSIS*) POPULATION IN KHAMMOUANE PROVINCE, CENTRAL LAO PDR, WITH NOTES ON CONSERVATION PLANNING. The Siamese crocodile (*Crocodylus siamensis*) was once widespread in Southeast Asia. To date, its distribution range has been diminished and fragmented, with remaining populations confined to Cambodia, Indonesia, Laos, Thailand and Vietnam, where it was reintroduced recently. It is listed as Critically Endangered on the IUCN Red List, with decreasing population trends, and is included in Appendix I of CITES (Bezuijen *et al.* 2012). In Laos, *C. siamensis* is considered "at Risk", which is the highest national ranking of extinction threat (Bezuijen *et al.* 2006). It is one of the most endangered species in Laos because many local populations are either small and isolated or have been extirpated (Salter 1993; Bezuijen *et al.* 2013). The largest remnant populations have been recorded in 8 river systems in Attapu, Salavan and Savannakhet Provinces (Bezuijen *et al.* 2006).

The Siamese crocodile was believed to be extinct in Khammouane Province in central Laos (Fig. 1) until its recent

rediscovery (Ziegler *et al.* 2015) and genetic confirmation as pure *C. siamensis* (Nguyen *et al.* 2018). Besides this record from Ban Soc, another overlooked population at Nong Boua Ta Lake, near Ka Cham Village in Khammouane, was first revealed through interviews with local people and later confirmed by faecal evidence and potential resting sites (Souvannasy *et al.* 2018).

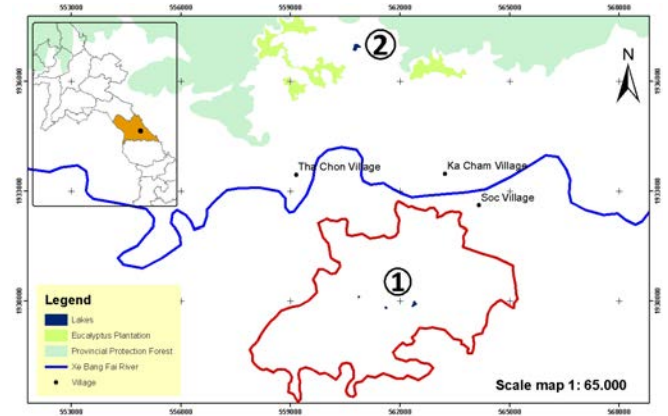


Figure 1. Khammouane Province, central Laos (inset), with Siamese crocodile location (black dot). 1= Siamese crocodile site near Ban Soc Village, within Ban Soc Crocodile Conservation Area; 2= Siamese crocodile site near Ka Cham Village, where camera traps were set up at Nong Boua Ta Lake.

To investigate the population status of *C. siamensis* at the new site in Khammouane Province, two field surveys were conducted around Ka Cham Village on 19 April-8 May and 1-20 June 2021. We detected crawling signs, resting sites and crocodile faeces (Fig. 2), but no direct observations. To improve the probability of recording crocodiles, five camera traps were set up on tree branches above a hole on the shore of Nong Boua Ta Lake (Fig. 3). The hole where the camera trap was deployed was over the water, about 3.5 m from the bank. Two photographic sequences were obtained from one of the cameras on 5 May and 9 May 2021, showing a medium-large *C. siamensis* (Fig. 4).



Figure 2. Crocodile faeces at Nong Boua Ta Lake, 1 June 2021. Photograph: Paseun Souvannasy.



Figure 3. Nong Boua Ta Lake, 25 April 2021. Photograph: Paseun Souvannasy.

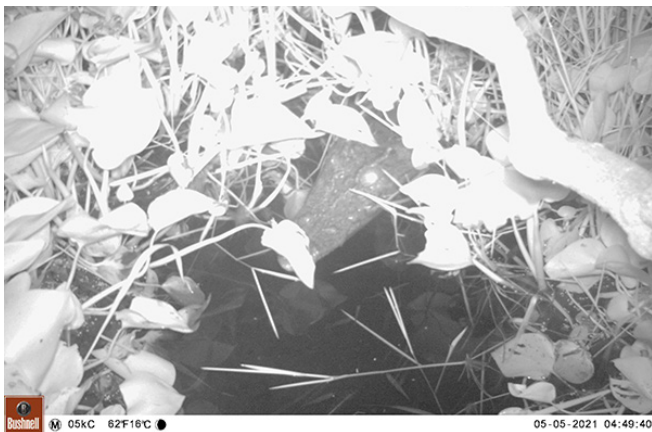


Figure 4. Photographs of Siamese crocodile from camera trap at Nong Boua Ta Lake on 5 May 2021 (top) and 9 May 2021 (bottom).

We can therefore confirm the persistence of a *C. siamensis* population at Nong Boua Ta Lake, which, based on interviews with local people, Souvannasy *et al.* (2018) estimated to comprise 2-4 individuals (adults and juveniles).

The habitat at Nong Boua Ta Lake, near Ka Cham Village (17° 31'3.6" N, 105° 34'18.0" E), at elevations ranging from ca. 90 to 180 m asl, mainly contains floating grass mats, and is surrounded by secondary forest, shrubs and bamboo. In the dry season, water levels drop to about 1 m (compared to 3.5 m in the rainy season). The inaccessible wetland area, covering approximately 3 ha in the dry season and 4 ha in the rainy season, is about 0.5 km from the border with Nam

In-Hou Hin Lek Phai Provincial Protection Forest and 30 km from Hin Nam No National Protected Area.

The status of Nong Boua Ta Lake as a local “holy” place (a ritual place protected by a god), benefits the protection of this crocodile population. However, protection measures are required, and there are plans to establish a conservation management committee at the local level. The lake is already very overgrown with plants, and habitat modification such as removal of grass mat at some places to restore the open water surface, are necessary. The activity will also help continued monitoring of the species at the site by providing a better population estimate. The lake can certainly serve as a site for future restocking.

In order to better protect the population of *C. siamensis* in Nong Boua Ta Lake, plans to establish up a new protected area have been developed. Ka Cham Village is approximately 4 km from the nearest population of *C. siamensis* in Ban Soc Village, for which the 2000 ha Ban Soc Crocodile Conservation Area (BSCCA) was established by the Khammouane Provincial Authority in December 2016. However, as the sites are separated by Xebangfai River, the current plans, which are currently in discussion with the Khammouane Provincial Authority, have been designed to create a new reserve instead of extending the Ban Soc Crocodile Conservation Area.

#### Acknowledgements

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## Latin America and the Caribbean

### Brazil

FIRST CONGRESS ON BRAZILIAN CROCODYLIANS. The 1st Congress on Brazilian Crocodilians was held as a virtual event on 14-15 August 2021. Hosted by the Marcos Daniel Institute and the Federal Rural University of Pernambuco, there were some 1130 participants from 23 countries. The theme of the Congress was “Scientific Plurality in the Name of Conservation”, highlighting the union of research, conservation and education in favor of the conservation of crocodilians in Brazil and South America.

The opening took place with speeches by Marcelo Renan, André Felipe and Yhuri Nóbrega, which were followed by a welcome from CSG Chair Grahame Webb, and a keynote presentation by Alejandro Larriera (on world crocodilian conservation) (see <https://www.youtube.com/watch?v=jDcf9plJfHM>).

The first day included the launch of “Tratado de Crocodilianos do Brasil” (Treatise on Crocodilians of Brazil; see page 7) and three children’s books (see pages 7-8), and was dedicated to updating information about crocodilians in Latin America and

Brazil (<https://www.youtube.com/watch?v=-FzzGfNiRc>):

- Crocodilians from Latin America (Pablo Siroski)
- ICMBio and the crocodilians in Brazil (Marcos Coutinho)
- CSG Brasil (Luís Bassetti)
- Crocodilians from Northern Brazil (Fernanda Pereira)
- Crocodilians from the Midwest of Brazil (Thais Figueiredo)
- Crocodilians from the Northeast of Brazil (Jozélia Correia)
- Crocodilians from Southeast Brazil (Iago Ornellas)
- Crocodilians from Southern Brazil (Mariana Luchese)

The second day dealt with various themes ([https://www.youtube.com/watch?v=48WhV5R\\_xP4](https://www.youtube.com/watch?v=48WhV5R_xP4)):

- Paleontology (Rodrigo Giesta)
- Taxonomy of Brazilian crocodiles (Igor Joventino)
- Conservation genetics (Fabio Muniz)
- Introduction to research with crocodiles (Paulo Roberto)
- Trophic ecology (Thiago Marques)
- Sustainable use of crocodilians (Luís Bassetti)
- Sustainable use in traditional communities (Diogo Lima)
- Crocodilian anesthesia (Gianmarco Rojas)
- Necropsy techniques (Paulo Quadros)
- Ethnobiology (Rafael Barbosa)
- Environmental education (Yhuri Nóbrega)
- Scientific dissemination (Paulo Miranda)

The Organising Committee (Gabriel Gomes Dias, Fernando Paulino Alvarenga, Iago Silva Ornellas, Lucas Yu Fraga, Tamiris da Penha Chinelato, Daniel do Nascimento Santos Neves, Marcelo Renan de Deus Santos, Barbara Nedelly Mello Silva, Yhuri Cardoso Nóbrega) and the Federal Rural University of Pernambuco (Jozélia Correia, Ednilza Maranhão, Paulo Braga Mascarenhas Junior, Rafael Barbosa) assisted with the complex logistic arrangements and coordinated the program.

The quality of presentations was very high, indicating the high levels of research on crocodilians in Brazil and the region as a whole. Following the presentations, there were opportunities for discussion between researchers and participants, generating interesting interactions, especially with young researchers and students. Last but not least, the Congress attracted a large number of researchers and CSG members, who enhanced the event.

Pablo Siroski (*CSG Regional Chair for Latin America and the Caribbean*) and Luís Bassetti (*CSG Regional Vice Chair for Latin America and the Caribbean*).

ZILCA CAMPOS AWARD FOR THE CONSERVATION OF CROCODYLIANS IN BRAZIL. Instituto Marcos Daniel (IMD), through “Projeto Caiman - Jacarés da Mata Atlântica” and the Universidade Federal Rural de Pernambuco (UFRPE), through Laboratório Interdisciplinar de Répteis e Anfíbios (LIAR), presented the “Zilca Campos Award for the Conservation of Crocodilians in Brazil” at the First Congress on Brazilian Crocodilians (August 2021; see page 24).