

**CROCODILE
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22nd CSG Working Meeting Colombo, Sri Lanka, 20-23 May 2013

The 22nd CSG Working Meeting will be held in Colombo, Sri Lanka, from 20-23 May 2013. This represents a slight deviation from normal CSG practice, in that this meeting will take place 12 months after the 21st Working Meeting.

With a “Living with Crocodilians” theme, we encourage people to participate in what will be the first CSG Working Meeting in the South Asia and Iran region since 1978.

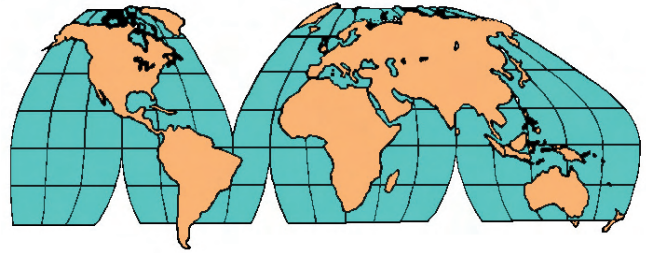
Details on the meeting will be available soon.

CSG Student Research Assistance Scheme Update

The CSG Student Research Assistance Scheme has provided funding to an additional 10 students in 2012:

1. Thialgo Portelina (Argentina): Home range and habitat use for *Caiman latirostris* in Santa Fe, Argentina.
2. Victor Batista (Brazil): Spatiotemporal dynamics of a Dwarf caiman (*Paleosuchus palpebrosus*) population in the Brazilian Cerrado.
3. Marissa Tellez (USA): Environmental perturbation impact on host-parasite dynamics of *Alligator mississippiensis* and its helminth parasites.
4. Carlos Chacin (Venezuela): Population state, space distribution and reproductive aspects of *Paleosuchus trigonatus* in the Kak'kada River, Venezuela.
5. Guiherme Freire (Brazil): Movement of resident and relocated male caimans between protected and impacted habitats in Amazonia.
6. Natalia Rivera (Costa Rica): Carrying capacity of the American crocodile population in the Tempisque River basin.
7. Thiago Marques (Brazil): Use of space, isotopic fractionation and genetic characterization of *Caiman latirostris* in eucalypt landscape.
8. Nidia Farfan (Colombia): Population ecology of *Crocodylus acutus* (Cuvier 1807) in Parque Nacional Tayrona, Colombian Caribbean.
9. Dani Rivera (Peru): Conservation status of *Caiman crocodilus* and *Melanosuchus niger* in the Galvez River basin, Loreto, Peru.
10. Gnanki Nathalie Kpera (Benin): Crocodile habitat use and strategies to reduce human-crocodile conflicts in agro-pastoral dams in northern Benin.

Regional Reports



Latin America and the Caribbean

Colombia

ATTACKS AND HUMAN-CROCODILE CONFLICT IN LOCAL COMMUNITIES IN COLOMBIA. Like many other countries with crocodilian populations, Colombia has a high cultural interaction between crocodiles and human communities. Religious beliefs of some indigenous cultures (eg Tumaco-La Tolita, Sinú, motilones: Medem 1981; Cardele de Schrimppff 2006; Ulloa-Delgado 2011) or festive rituals in some towns and provinces (Balaguera-Reina *et al.* 2012) are examples of these interactions. Despite these cultural interactions, overexploitation of crocodilian populations in the 20th century reduced some species to the point of extinction (*Crocodylus acutus*, *C. intermedius*, *Melanosuchus niger*) and eradicated them of some places in the country (Medem 1981; Barahona *et al.* 1996; Ulloa-Delgado and Sierra-Díaz 2002).

Currently, the development of conservation plans and protected areas has generated some successful recovery processes as well as increases in biodiversity (Delgado and Sierra-Díaz 2002; Vásquez and Serrano 2009), including the restocking of areas where the species were extirpated. These reintroductions, particularly in areas where the species has not occurred for some time and where human habitation has increased, have generated encounters between people who now have little knowledge about the species (Balaguera-Reina and González-Maya 2011).

General media (eg local and national newspapers) and environmental agency (eg Tayrona National Natural Park and North and Eastern Amazonian Regional Agency-CDA) records were evaluated, with the aim of quantifying negative relationships (space and/or resources conflicts) between crocodiles and human communities in Colombia. Over the last 14 years (1998-2012) there were 10 documents (Ramírez 1998; Martínez 2009; Tafur 2011a,b; González 2011; Moncada 2011; Cetina 2011; Caracol News 2011; El Espectador 2011; Redacción País 2011) and three personal communications (regional environmental agency staff) about negative relationships within 6 departments (Antioquia, Atlántico, Bolívar, Magdalena, Norte de Santander and Vaupés). *Crocodylus acutus* (12) and *M. niger* (1) are the species causing the conflict [community fear (11), fatal attack (2)]. Until now, two cases involving “fear” (Tayrona National Natural Park) and one case of attack (Villa del Carmen Province) resulted in the *C. acutus* being killed (two

confirmed and the other from community information).

The first fatal attack occurred in Villa del Carmen Province, Tibú Municipality, Norte de Santander Department, and involved a 3.8 m *C. acutus* and a local 6-year-old child. The local authority recorded drowning as cause of death and the crocodile was hunted by the local people.

The second incident occurred in Bocas de Taraira Province, Taraira Municipality, Vaupés Department, and allegedly involved a *M. niger* and a local child (approximately 6 years old). Authorities could not confirm that the caiman or another large predator was responsible for the child's death. Nonetheless, the incident encouraged the local people to hunt *M. niger* in the area, declaring that they were dangerous and there were many of them.

The majority (84.6%) of "fear" incidents occurred over the last two years in towns near wetlands (Puerto Colombia, Tayrona National Natural Park), mangroves (Cartagena), rivers (Villa del Carmen) and lakes (Campo de la Cruz) connected with big rivers (Magdalena and Apaporis Rivers). All cases were derived from specimen translocations (Fig. 1).

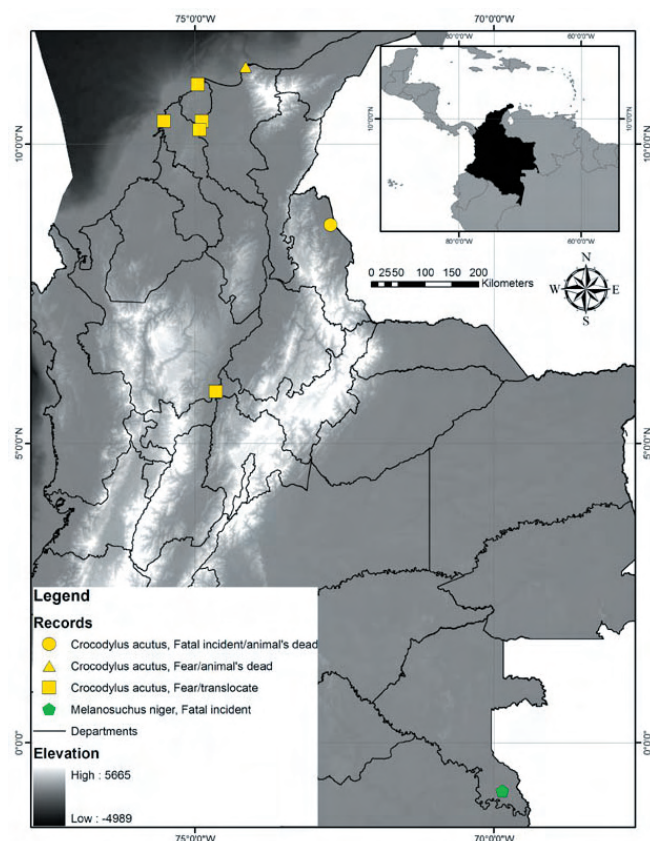


Figure 1. Distribution of attacks and human-crocodile conflict records in Colombia, 1998-2012.

All these cases of negative human-crocodile conflict were generated by a disorderly extension of human settlements and the lack of planning in urban development. The loss of historical cultural relationships between people and biodiversity (Balaguera-Reina and González-Maya 2011) has complicated the management of this natural resource.

Relocation of problem animals is a short-term solution that does not necessarily take into account the requirements of the species or the ecosystem, and promotes the outlook within the community that the species is not necessary in the area from which it is being removed, and thus being detrimental to future conservation processes.

Currently, gaps in knowledge on crocodylian distribution, densities and habitat status are severe limitations to the development of appropriate management plans to reduce space and/or resource conflicts between crocodylians and the human population. The lack of records on attacks and human-crocodile conflicts in Colombia also highlights the need to improve the dissemination of information so that strategies for the management of these events can be implemented.

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South Asia and Iran

Nepal

100 GHARIAL RELEASED INTO CHITWAN NATIONAL PARK, NEPAL, JANUARY-APRIL 2012. Between 7 January and 15 April 2012, 100 *Gavialis gangeticus* (19 M, 81 F) reared at the Gharial Conservation Breeding Center (GCBC), Kasara, Chitwan National Park, were released into the Rapti River. Animals were of varying ages (58 @ 6 y; 27 @ 7 y; 13 @ 8 y; 1 @ 11 y; 1 @ 15 y), and were scute-clipped, measured and sexed prior to release. They ranged between 139 and 192 cm total length (mean= 157.6 cm, SD= 8.48, N= 100) and between 6.0 and 29 kg bodyweight (mean= 9.6 kg, SD= 2.85, N= 80).

The Gharial were transported to release sites in ventilated wooden boxes (20 x 30 x 180 cm). As with previous releases (Khadka 2010), the Gharials were not released directly into the river, but rather they were released into small enclosures at the water's edge so they could to adapt to natural conditions. These pre-release enclosures were made of elephant grass, and situated in parts of the river where water flow is slow, and fish are able to enter the enclosure. The animals must break out of the enclosure and enter the river by themselves.

Gharials were released on 7 January (Kasara; N= 20), World Wetland Day, 2 February (Kasara, N= 20; Sauraha, 18 km upstream of GCBC, N= 20) and Wildlife Week, 15 April (Kasara N= 40). Participants included the Chairman of Buffer Zone Council, Chairman of the Regional Hotel Union, Director General of Department of National Parks and Wildlife Conservation, Civil District Officer, representative of Bird Education Society, buffer zone community forestry, reporters, conservationists and students.

The Gharial release program began in 1981, and since that time 861 *G. gangeticus* have been released into different river systems in Nepal. Some 580 Gharials are currently held in captivity at GCBC.

Gharial releases follow a similar procedure every year (eg Khadka 2010). According to official data, previous releases