

Dear supporters and friends,

This first update of 2018 is devoted to exciting new work, all involving large-scale conservation initiatives. Your support for any of this work is welcome!

### Nepal: the world's steepest wildlife corridor

The small nation of Nepal boasts many superlatives, most famously the highest mountain in the world, Mt. Everest. It is also home of the third tallest mountain in the world, Kanchenjunga, and despite being one of the smallest nations in the world, is ranked 21st in global biodiversity. Last fall we received a proposal from Rajeev Goyal to help his non-profit KTK-BELT Inc. establish a wildlife corridor from the heights of Kanchenjunga to the "bottom" of Nepal on the border with India. This corridor will be like an emerald necklace winding downward from 8,586 meters elevation for 250 kilometers along ridges and valleys to bottom out on Nepal's largest freshwater wetland. Along the corridor are six core reserve areas, each with its own unique array of fauna and flora. Partly due to this 8,500-meter span in elevation there are 144 forest types, comprised of over 10,000 species of plants. Also recorded are 800 species of birds and 144 species of mammals, including snow leopard, red panda, and pangolins.

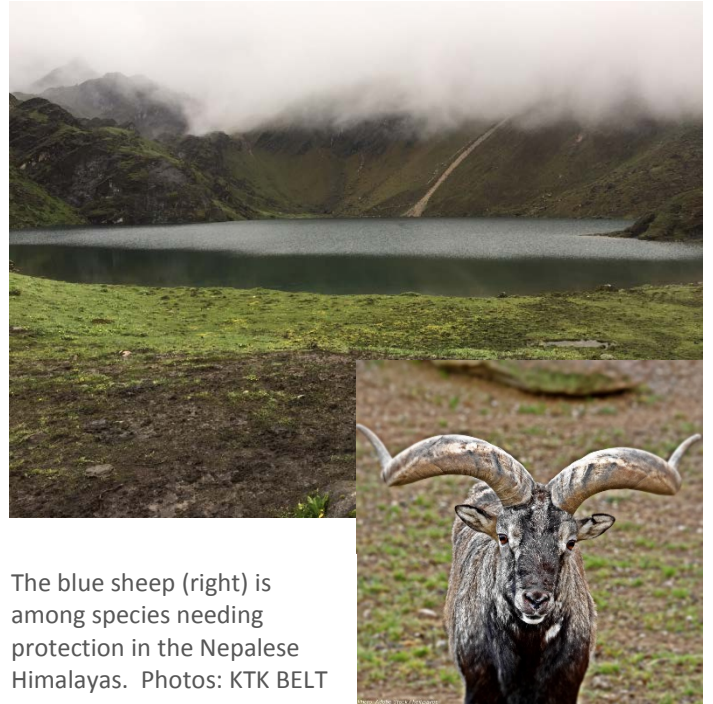
White-throated Kingfisher at Koshi Tappu Nature Reserve in Nepal. Photo: Paul Wilson



ICFC is supporting conservation activities at the two bookends of the corridor at Kanchenjunga Conservation Reserve and the Koshi Tappu Wetland Reserve. Threatened wildlife in these two sections include snow leopard, Himalayan black bear, and steppe eagle in Kanchenjunga and wild water buffalo, Ganges river dolphin, Bengal florican, and swamp francolin at Koshi Tappu. Project activities include outreach and enforcement to curtail illegal harvesting of timber and wildlife, habitat protection, restoration of overgrazed grassland and forest, and development of alternative employment opportunities in education, sustainable resource use, and ecotourism. We are also helping to purchase land at both locations.

At Koshi Tappu an important opportunity arose to purchase 40 acres of riparian buffer along the eastern edge of the 175-square-kilometer wetland. We are purchasing this critically important parcel that provides a barrier to encroaching development, legal access to the reserve itself, and important habitat for many of the species found in the larger reserve.

At Kanchenjunga, we will be helping to fund the purchase of 100 acres to form part of a conservation zone for snow leopards to traverse between the Makalu-Barun National Park and the Kanchenjunga Conservation Area. This will be done in collaboration with the Papung Village Development Council. Overgrazing by yak herders in this high-altitude lake region has resulted in a decline of the blue sheep population, the preferred prey of the snow leopard.



The blue sheep (right) is among species needing protection in the Nepalese Himalayas. Photos: KTK BELT

### Preventing Ecosystem Collapse at the Osa Peninsula in Costa Rica

ICFC has partnered with Osa Conservation in a project called "Osa SAFER" (Osa Surveillance Alliance for Ecosystem Resilience) aimed at restoring apex predator and prey populations and habitat connectivity in Costa Rica's Osa Peninsula. The goal is nothing less than enabling the long-term survival of the Osa's famed ecosystems.

The Osa Peninsula contains the largest remaining mesic rainforest on the Pacific slope of Central America, largely within Corcovado National Park. It also has the largest expanse of mangrove wetlands the Central American Pacific slope and a unique coastal marine ecosystem—the Golfo Dulce tropical fjord. The Osa is estimated to house 2.5% of the world's biodiversity while covering less than 0.001% of its total surface area and was described by National Geographic as "the most biologically intense place on earth". Osa Peninsula is considered critical for the biological continuity provided by the Mesoamerican Biological Corridor.



"The rebound of wildlife will establish the long-term viability of the most important rainforest conservation location in Costa Rica."

-- biologist/conservationist Adrian Forsyth





The jaguar's survival in the Osa Peninsula depends on restoring populations of its prey species by reducing illegal hunting. Photo: Juan Carlos Cruz

The goal of the Corridor is to ensure the viability of these highly mobile species within the larger Maya Biosphere Reserve that spans from Guatemala to Mexico. This purchase increases the habitats protected within the corridor by the Belize Zoo to 1,147 hectares.



Camera traps documented the presence of this Central American tapir and jaguar on the acquired property in Belize

However, despite the existence of two national parks, biological corridors, and various private conservation areas, the region continues to suffer from human-induced threats. The main concern is illegal hunting, which is still prevalent in the region. The threat is greatest for species such as: lowland paca, white-lipped peccary, and collared peccary. Many other species are hunted to a lesser degree, including game birds such as: tinamou and great curassow.

But there is a solution! The local economy is heavily based on wildlife-related tourism, with dozens of ecolodges, hundreds of nature guides, many communities, and a diverse cross-section of service providers that rely on the Osa Peninsula's wilderness for their livelihood. Our plan, along with more on-the-ground monitoring and enforcement, is to increase public awareness of how recreational illegal hunting imperils this economy to build the local support to halt the decline of these keystone prey species. Our approach includes:

- o A region-wide scientific surveillance initiative to improve and extend the existing large citizen science-based camera trap grid and drone monitoring program that detects wildlife and poacher activity. We will also install Rainforest Connection's acoustic monitoring systems that can remotely detect hunting and logging and enable rapid responses;
- o Working with other NGOs, government, ecotourist operators, and communities to create a framework for a social and technical wildlife protection system, and to improve enforcement of wildlife related infractions.

### Expanding the Río Canandé Reserve in Ecuador

ICFC and colleague Rainforest Trust are supporting the further expansion of a private reserve in one of the world's great biodiversity hotspots. Owned and managed by our partner Fundación Jocotoco, Río Canandé Reserve lies within the Tumbes-Chocó-Magdalena biodiversity hotspot. This is a place where a variety of ecosystems are packed in a relatively small area, leading to exceptionally high levels of species diversity and endemism. Canandé Reserve was identified by BirdLife International as an Endemic Bird Area due to having one of the highest numbers of range-restricted species (62) in the world. In addition, more than 100 species of mammals have been recorded in the reserve, including iconic species such as the jaguar and probably the most important population of the Critically Endangered brown-headed spider monkey – one of the 25 most endangered primates in the world.



Central American Spider Monkey. Photo: Manuel Sanchez

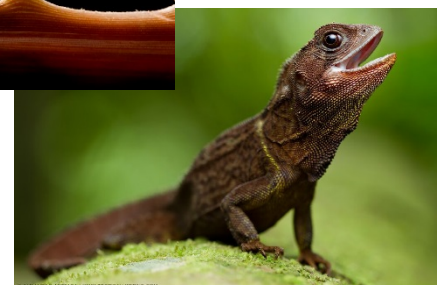
Furthermore, when it comes to protecting amphibians and reptiles, no other ecological region could benefit more from critical conservation efforts than the Ecuadorian Chocó (Ortega-Andrade et al. 2010). Three facts illustrate the importance of this project to herpetofauna: (1) as many as 212 species of amphibians and reptiles are known to occur in the Ecuadorian Chocó; (2) 134 species occur specifically in the Río Canandé Reserve and neighbouring areas, including at least 27 globally threatened amphibians (!); and (3) there is a high rate of habitat degradation and conversion ongoing in the region.

### Protecting the Central Belize Wildlife Corridor:

The small country of Belize has the lowest population density of any Latin American country, with 16 people per sq km – less than half the density of the United States. This helps to explain Belize's laudable conservation record: 26% of its land is under conservation protection and an even higher percentage is in marine reserves. The opportunity for ICFC to assist the Belize Zoo and Tropical Education Center to purchase 348 hectares in a targeted acquisition that helps link the two largest protected areas in Belize was an easy "yes". ICFC's contribution of \$25,000 completes the funding for this \$300,000 project. The purchase is within the Central Belize Wildlife Corridor, a patchwork of mostly private land that still supports viable populations of jaguars, tapirs and white-lipped peccaries, all of which are increasingly rare in more developed regions of Latin America.



A yet to be described species (above). Bocourt's dwarf iguana (right; photo: Alejandro Arteaga).



To learn more about these projects or support them please visit our website at [ICFCanada.org](http://ICFCanada.org)

Thank you for your support!