<u>Song of the Gibbon</u>

by Francis Commercon

An ecologist in China once mentioned to me that the memory of the gibbon's song might inspire local villagers to conserve their remaining wildlife. *No one forgets that sound*, she told me. *It might remind them of what they have lost.* That was my first visit to Xishuangbanna Tropical Botanical Gardens (XTBG), Yunnan, and gibbons were the first of many local animals I would learn about only from stories of the past. In Xishuangbanna, the northernmost of Southeast Asia's tropical rainforests, local smallholder farmers have stripped the jungle from the hillsides to plant monoculture cash crop plantations. Motivated by recreation and luxury meat consumption, villagers have overhunted the remaining forest patches until few large animals remain. Surveys in Xishuangbanna from the 1980s documented more than one hundred groups of White-cheeked Gibbons, yet the species is now extinct in China*. I returned to the region twice since then to study hunter motivations in the Dai ethnic minority villages of the lowlands, living with a Dai host family in a village near XTBG. I became acquainted with a vibrant and complex local culture. But I only ever knew a quiet rainforest.

Impossibly loud wails, sometimes playful sometimes eerie and sad, filled every corner of the jungle. Standing in Kaeng Krachan National Park, Thailand, I strained to see the hidden singers through the dense green canopy. A branch quaked high overhead; a golden blonde being seemed to float in the air as it hung from its long arms. The gibbon's wails crescendoed briefly to a piercing cry before falling into low, soothing notes. In Xishuangbanna, I had been told of spirits in the forest. But I had not believed in them until now.

One late night in my host village, my friend and his father explained for me how to respect the spirits of the mountain. *One must take only as much firewood as one person can carry alone. When retrieving water from the stream, do not collect other things on your way—that is greedy. When setting up camp, you must introduce yourself to the big trees nearby and ask permission to stay in their home.* The father recalled how the elders had told him not to hunt palm civets. When he went to hunt, it rained until he turned home empty-handed. My friend cautioned me to respect the souls of the dead whose ashes rest in the burial forest. Once, he collected a plant from that forest and immediately felt a mysterious force suffocating him. Yet my friend recognized that most people are no longer afraid of the forest. Few people still believe in the old superstitions. Large trees are now few, and the spirit of the mountain is weak.

The fig tree houses the most revered spirit in the jungle. That morning in Thailand I had passed a large fig near the park's middle ranger station and noticed two small shrines at its base. Colorful ribbons hugged the trunk. I was familiar with sacred figs from my experience in China; the figs around my host village have small shrines as well. In fact, the babblers and bulbuls and several shrubs and trees I saw in Thailand were mostly familiar characters from Xishuangbanna—perhaps the similarities between the Thai and Dai cultures mirror their common ecosystems. Yet it was only when I traveled to Thailand that I fully understand why figs play a star role in both cultures. As I stood beneath this sacred fig, I watched a family of Dusky Langurs forage in the crown. Orange infants clung to their mothers as small gray adolescents burnt off energy chasing each other around. Oriental Pied Hornbills soared on massive wings from one section of the tree to another. The foliage buzzed with the activity of small birds and mammals. I never saw anything like this in China. I had only heard about it in hunters' tales: *The Black-crested Bulbuls swarmed around the fruiting fig like bees around their*

hive. The tree is like a buffet, one kind of bird flies in after another kind eats and leaves. Fruits knocked to the ground will even attract pheasants and wild boar! The bat hunter knows to place his nets where he finds figs on the ground. The farmer knows not to cut the fig tree in his plantation. The Buddha image in the temple sits at the base of a fig tree painted on the wall.

A few days after our late night discussion, my good friend and I searched for birds along the nature reserve's edge. As we rode toward the reserve, I asked him why the elders told his father not to hunt palm civets. *Don't take those stories too seriously. The elders are always claiming this or that animal is some ancestor.* When we joined up with my friend from another village and his godson, I sensed a gap in different generations' relationship with nature. My friend stopped us at the edge of a deep ravine. A stream trickled below and the trees grew lush and tall. The godson used his slingshot to shoot at small birds in the bushes. But the godfather drew my attention to the four-winged insects rising from the damp earth. *We call those 'mao,'* he said, referring to their name in Dai. *They come out when it rains. That's the reason all the birds are here.* The trees were alive with Grey-eyed and Puff-throated Bulbuls and Blue-winged Leafbirds gorging themselves on termites. He said that if we waited, larger birds might come, *because they know they are safe when small birds are active.*

Later that summer, as I surveyed in his village, the godfather explained to me the differences between older and younger generations of hunters. *Young people just shoot whatever they see at the most convenient hours. They don't understand the forest. But the older hunters know when different species emerge to forage, so they know when to go hunt certain animals. They seldom shoot prey smaller than a wild cat. And they don't hunt during the breeding season, because they want more animals to hunt the next year.*

Indeed, it is in the hunter's interest to be a good friend to the forest—this is where he tests his courage and sharpens his skill. Now plantation farming and economic development keep most villagers busy away from the forest, and most people rely on the market or domestic animals for meat. Recreational hunters are the main remaining stakeholders who might be interested in the well-being of wildlife populations. So why does this group not show much respect for wildlife conservation laws? Probably because the laws do not allow them to hunt.

Most people, even the hunters, view wildlife management purely as a law enforcement issue. Hunting any animal in any amount is illegal in the nature reserves, where most people hunt, and hunting is inextricably linked with a national ban on firearms. Wildlife conservation is a question of crime and domestic security, to be addressed by a branch of the police. Most villagers told me wildlife protection requires stricter patrolling and better awareness of laws. One young scientist said the solution to overhunting is to increase the severity of the punishment; punishing rule-breakers harshly enough will frighten their friends into compliance.

To advocates of biodiversity, it would seem intuitive that destructive human beings must be separated from imperiled ecosystems. This was accomplished geographically through relocation of villages outside the nature reserve in the 1980s, and it is now happening psychologically as younger generations focus their attention to smartphones and television. But centuries of living with the jungle cannot be erased so quickly. A clear fondness for consuming wild meat persists in the communities I surveyed. Many people who disapproved of others hunting saw little wrong with others eating the barbecued product.

These thoughts churned in my mind as I wandered alone through the Thai Jungle. The biodiversity I saw there persists because human density in the national park is very low. But in China, absence of human influence is unrealistic. Are people necessarily incompatible with

nature? The apparent impossibility of forcing compliance with conservation laws would certainly suggest this. Yet I feel that in Dai culture, so steeped in biodiversity, in these rural communities so closely connected with the forest, solutions to overhunting ought to be found in the people's own history, customs, and habits of thought. Still, when the mountain is weak and the spirits are gone, how many people respect the forest like they used to? When hunting is a crime, why would younger generations learn to do it "right"? Would illegal hunters, who hide their guns and conceal their guilty pleasure from all but close friends, step forward to offer solutions? What could they suggest when any amount of regulation—apart from a complete ban—is against the law? Will the rest of the community truly care about the animals disappearing from the forest? Few of the villagers in my study communities have ever heard the Song of the Gibbon. Most people's only memories are of two gibbons that lived in captivity at XTBG a decade ago. *We seldom go the mountain these days. Wildlife is the government's problem.*

A wildlife biologist in Thailand told me that local people's close relationship with nature, even if it is through consumptive use, is a community's greatest asset for developing support of conservation. Perhaps communities struggle to maintain a harmonious relationship with their environment because they have lost their connection with it, because their way of appreciating animals is no longer permitted. Although hunting is a severe threat to Xishuangbanna's biodiversity, maintaining some form of regulated, species-specific wildlife use—with methods other than guns—might be the best way to preserve the people's connection to wildlife, to harness existing local knowledge to develop a conservation ethic for the modern era.

*Gibbons in Mengla, China, were White-cheeked Gibbons (*Nomascus leucogenys*), while the gibbons described in Thailand are White-handed Gibbons (*Hylobates lar*): (1) Fan, P.F. (2016) The Past, Present, and Future of Gibbons in China, *Biological Conservation* 210B 29-39; (2) Zhang, J.H., Cao, M. (1995) Tropical Forest of Xishuangbanna SW China and it Secondary Changes, with Special Reference to Some Problems in Local Nature Conservation. *Biological Conservation* (73) 229-238