

# Tiger Rising

By Andrea Heydlauff

I'm sitting in an American-style café in Hunchun City, Jilin Province, a few miles from China's borders with Russia and the Democratic People's Republic of Korea. It's early morning. My colleagues from WCS-China, Eve Li and Donna Xiao, are treating me to a Chinese interpretation of a Western breakfast—chocolate milk and beef sandwiches. I've been in China for four weeks, and they think I'm missing American food. So I smile and dig in. Halfway through the meal, Eve's cell phone rings. The conversation is serious and short. She hangs up and says hurriedly, "Change of plans. Two cows are dead. We must go to the reserve now."

Minutes later, we are met by a minivan filled with Hunchun Nature Reserve staff led by the director of the reserve, Mr. Donghao Li, who is dressed in fatigues. The three of us cram in, and off we go, only to stop a few minutes later for provisions—water and something akin to a giant pepperoni wrapped in plastic. We are traveling along a twisting, bumpy dirt road, and the car is moving a little too fast for comfort. Turning a corner, the driver slams on the brakes as we come head to head with a herd of goats. A massive truck behind us almost rams our van, and horns blast. Despite the trucks, this seems to be a pristine area, with winding rivers and broadleaf forest on both sides of the road. As we continue toward the reserve entrance, we pass bulldozers. A vast tract of thick forest has been leveled to make way for a reservoir.

We enter the reserve and after a ten-minute drive, come to a village of small brick homes, each with little fenced gardens, dogs barking, and cows tethered to trees. Two villagers meet us. They talk in muffled voices, pointing toward the forest behind their homes. As we walk along a stream, we meet the odd free-ranging cow. By now, our delegation has grown to 20 or so, mainly reserve staff, including a Forestry Bureau photographer and the official data recorder, who looks like he just stepped out of a bank on Wall Street. Dressed in a pinstripe suit and leather loafers (many of the staff are wearing rubber slickers over their shoes) and carrying his notebook, paperwork, and pen in a scarlet bag, he expertly navigates the muddy path, determined to get to the scene.

We find the first dead cow: an adult, with puncture wounds to the neck and half eaten from the rear end. Less than 50 feet away lies a dead calf, also with puncture wounds but its body intact. The team photographs the carcasses, measures the puncture marks, and searches for signs of the elusive tiger. This is clearly a tiger kill, so the team tries to collect any information left in the earth and under leaves, such as tiger footprints (or pugmarks), that may provide valuable data on the tigers in Hunchun Nature Reserve.

Not long ago, this scene was extremely rare in this part of China. Tigers numbered so few here, if there were any at

all, that their presence was seldom known. However, the fact that tigers have killed 40 cows in Hunchun this year alone is both cause for celebration—tigers are back—and concern—they are causing problems.

As we make our way out of the forest, we are met by another villager. He says that, less than a mile away, two more cows have been found, also killed by a tiger. So we head back to begin our second investigation of the morning.

"Tigers do not need visas or passports," says Eve Li, who has coordinated the Transboundary Tiger Project for the Wildlife Conservation Society (WCS) in China for the past four years. Such is the case for all wildlife, technically immune from political borders. However, wildlife can face very different realities, depending literally on which side of the fence they are on. Understanding the necessity for collaboration between and among countries to conserve species, WCS has been engaged in the Transboundary Tiger Project since the late 1990s. Based on tiger surveys led by WCS staff in 1998 and '99, the State Forestry Administration established the Hunchun Tiger and Leopard Reserve in 2001, a move that brought warm praise from the international conservation community to the Chinese government for its commitment to tiger conservation. The 400-square-mile Hunchun Reserve borders a critical area in the Russian Far East that is home to a healthy population of Amur tigers. The area is now a Tigers Forever site. Tigers Forever is a Panthera project in collaboration with WCS, that aims to increase tiger numbers by 50 percent at key sites over the next ten years.

Tigers in China and Russia have shared a perilous and circular past. Today, most of the estimated 500 tigers live in the Russian Far East, but this was not always the case. In the

**Not many years ago, a tiger sighting in China (pages 26–27) was a rare event. Today, due to measures such as the creation of the Hunchun Tiger and Leopard Reserve (opposite), the big cats are showing up again—a credit to the Chinese State Forest Administration's commitment to tiger conservation.**

1800s, the region was a minor portion of the Amur tiger's range, with the majority of these big cats residing in northeastern China and the Korean peninsula. During the 1940s, tigers were almost eliminated in Russia. The population plummeted to as few as 20 due to hunting and the capture of cubs for zoos around the world. In 1947, Russia outlawed tiger hunting and the population began to recover. Subsequently, strict hunting laws, the establishment of protected areas, and the maintenance of large tracts of tiger habitat outside of the protected zones helped the tiger make a comeback. But as the numbers were rebounding in Russia, they were declining in nearby China and Korea, due to habitat degradation and intensive hunting of tigers and their prey. Tigers have not been reported in South Korea in decades, and no one knows if any remain in North Korea.

In the 1950s, in what Mao called the Great Leap Forward, not just Amur tigers but all tiger subspecies in China and other predators such as leopards and wolves were declared pests and actively hunted. This attitude changed in the late 1970s, and it became illegal to hunt tigers. In 1993, the Chinese government outlawed the sale of tiger bone, a key ingredient in

traditional medicines. The international conservation community hailed this legislation as one of the great tiger conservation achievements of the 1990s, and it helped immensely to reduce demand for tiger parts worldwide. These changes almost came too late. Surveys organized by WCS in the late 1990s estimated that perhaps 12 tigers remained in China's northeastern provinces of Heilongjiang and Jilin, and there was no evidence of reproduction. Since then, with active conservation measures such as creation of the Hunchun Reserve, tigers are appearing in both provinces—a credit to the Chinese State Forestry Administration's commitment to tiger conservation.

Dale Miquelle, director of WCS-Russia, believes that Amur tigers have survived in northeastern Asia because they regularly cross international borders. "Russia enacted critical measures to save the Amur tiger in the 1940s, but it is very plausible that movement of tigers from a healthy population in China assisted recovery efforts in Russia. In a sense, tigers that are emigrating back to China from Russia are 'returning home.' Although tigers from Russia are helping to repopulate China today, not so long ago, it was the other way around."





The Amur tiger is not “Russian” or “Chinese,” adds Miquelle. “It is a northeastern Asian subspecies, and it requires coordinated conservation efforts across international borders to survive.”

The tiger may be coming home, but can it afford to stay?

Snares pose the most pressing threat. Since the 1990s, hunting of all wildlife in northeastern China has been banned and gun ownership is illegal. The regulation has been effective in eliminating guns, but people have turned to wire snares, which kill animals indiscriminately and are cheap, easy to make, and set in abundance. Surveys indicate that hunters are setting snares to supplement their income, not to provide food for the table. It is believed that as many as 2,200 prey species—mainly deer and wild boar—may be killed in snares annually in Hunchun Reserve alone.

Snares also take their toll on tigers. In 2002, a tiger wounded in a snare killed a local woman before eventually dying of its injuries. In 2006, a tiger was found dead, entangled in two snares, in Heilongjiang Province. In response, WCS and Hunchun Nature Reserve staff organized a snare removal campaign in 2006. Volunteers from all over China

paid their own way to visit Hunchun to remove snares. To date, more than 10,000 snares have been collected, and there are signs that the prey numbers are recovering.

Now, WCS is working with reserve staff on antipoaching patrols and mechanisms to prosecute poachers. Only a fraction of the local people use snares, and in such small communities, most villagers know who they are. But, there is no incentive to come forward and identify the perpetrators.

Conflict with livestock owners is also growing. As tiger numbers rebound, livestock losses increase. People graze cattle in and around the reserve, even in core areas where such activity is illegal. Cattle often range freely overnight, and in forests where natural prey has still not fully recovered, a plump and slow cow is an easy catch for a hungry tiger. From 2002 to 2006, as many as 100 cows were killed or injured around Hunchun. WCS is working with local people to help improve livestock husbandry practices, such as corralling cattle at night, and educate people as to where cattle are legally allowed to graze. WCS is working with the Hunchun Nature Reserve to improve the compensation plan for livestock losses so that villagers are rewarded for tiger-friendly



During 2007, tigers killed 40 cows in Hunchun Reserve—a cause for both celebration and concern. The good news is that tigers have returned to China, but conservationists are concerned that the predators are creating problems and impacting the livelihoods of livestock owners. Left: The reserve staff (including the official data recorder who is dressed more like a Wall Street banker) inspect a dead cow, looking for evidence that a tiger was responsible for the kill (below, a puncture wound to the neck).



ANDREA HEYLAUFF (2)



**The Wildlife Conservation Society and Panthera have proposed a number of measures to ensure that the Amur tiger (opposite) survives, but the species' future lies in the will of China to protect this natural resource for future generations (above).**

behavior. This includes allowing compensation only if a cow is attacked outside the core area or in a corral, and if snares are no longer found in and around their village.

In addition, linkages between the populations of tigers in China and Russia must be ensured. Protected area for tigers between Jilin and Heilongjiang Provinces amounts to less than 920 square miles. Because of the low prey availability in the region, each tiger requires as much as 180 square miles. To sustain a healthy breeding population, a contiguous block of habitat amounting to at least 4,000 square miles is needed. Miquelle has proposed a network of protected areas, multiple-use areas, and tiger management zones in the provinces based on existing tracts of good habitat that would have little impact on forestry production and local communities.

With all of these proposals, however, political will matters most. WCS can present and enact solutions based on scientific findings and lessons learned, but they won't succeed without government support. Hunchun Nature Reserve has taken

many necessary steps, such as establishing conservation monitoring stations and enacting a human-livestock depredation team. But without effective enforcement, disincentives, and alternatives, some people will continue to set snares, and tigers will continue to kill cows, angering villagers and reducing their tolerance to living with the wildlife that we on the outside view as majestic, inspiring, and charismatic.

Contrary to reports from across Asia that tiger numbers are falling, in northeastern China, tiger numbers are rising. This unlikely and remote corner of the world, once proclaimed by Mao as the Cradle of Industrialization, ironically could be the cradle of hope for wild tigers in China. China has a unique opportunity, with relatively small investments of money and human resources, to help tigers recover. Not only would this be heralded as a national success, but a global one. The homecoming of the wild Amur tiger in China could be one of the greatest conservation stories ever told.

*Andrea Heydlauff is managing director of Panthera, a non-profit organization dedicated to saving wild cats. After writing this article, Heydlauff learned that Mr. Donghai Li was killed in an automobile accident. He was a close friend to WCS and to wild Amur tigers in China. Our heartfelt condolences go to his family and friends.*