



BARTSCHLEVER (RIGHT)

The author (opposite, standing) listens for a signal from one of his team's radio-collared tigers (above, tigress Nellie). Working with him in the field are Russian capture specialists Nikolai Reebin and his brother, Alexander Reebin (wearing cap).

**20 November 2003.** When the phone rings, I answer groggily. I have been up half the night guarding Lidya and her three cubs. They were too close to a road, and roads in the Russian Far East are one of the biggest threats to tigers because they provide access to poachers. Lidya is one of more than 30 Siberian tigers we have radio-collared during the past 11 years as part of a Russian-American project between the Wildlife Conservation Society's Hornocker Wildlife Institute and the Sikhote-Alin Zapovednik (Reserve) [see "Time for Tigers," February 2002]. A week ago, a passing car separated Lidya from two of her cubs. A cautious tiger, she stayed nearby, waiting for them to cross the road to her. The driver had a gun and could have killed her, but he shot photos instead. Last night, I didn't want Lidya's luck to run out.

Every day for six weeks I've been on call because I have five men in the field trapping tigers. And every day, I've heard the word *poosta*, meaning "empty" in Russian—no capture. Morale among my crew is at an all-time low. Tomorrow, a big storm is supposed to hit, followed by a cold arctic front from Siberia, and that means we'll probably have to stop trapping until spring.

This morning, though, a woman's voice excitedly informs me that "Maple 13 caught a tiger!"

Lidya . . . Nellie . . . Mary Ivanovna. We cannot afford to lose a single tiger.

# TEAM TIGER

Story and photos by John Goodrich



Maple 13 is the radio call name for our Koorima trap site, a 45-minute drive to the south, close to the cabin that serves as the base for our capture operation. I hurry out to pick up my field assistant Andrei Saphonov. Half an hour later, a road block stops our progress on a two-track dirt road. This indicates that we've captured the tiger in a four-foot-long snare cable that we attached to a tree along the road (we can set snares safely along this road because it goes through a forest guard's front yard). Andrei and I jump out and start walking. As we approach the first snare, there is no sign of a tiger.

## Getting an adult tiger high enough off the ground to weigh is no easy task.

"Isn't the next snare a long way from here?" he asks.

"Yes," I reply.

"So why have they blocked the road here?"

Two steps later, we have our answer: A tiger leaps out onto the road 50 feet in front of us and lets out a deafening roar. We back off and head for the cabin.

Clearly, this cat is a female, but we didn't see any radio collar.



JOHN GOODRICH (2)

Nellie, the tigress in this area, has a collar, so who can this cat be? It's puzzling because tigers are territorial, and very rarely intrude on each other's territories. We have been trying hard to recapture Nellie to change her radio collar, because the batteries are overdue to fail, but Nellie learned her lesson well the one and only time we captured her.

When we arrive at the cabin, Sasha has just finished loading the tranquilizer darts. I ask him how big he thinks this tiger is and what dose he's estimated for it. He looks at me as if I'm an idiot, replying, "I loaded the same dose we gave her three years ago."

It is Nellie! What a relief.

I assign everyone a job. Sasha will dart and monitor anesthesia. Andrei will collect blood, tissue, and hair samples for disease and genetic analyses. Volodia will change the radio collar. Sergei will check vital signs. I'll assess Nellie's physical condition and help as needed. Whoever finishes first will take measurements.

Nellie is calm in the snare—for a tiger. She roars as we walk toward her, then keeps up a low growl, punctuated by hisses. Sasha lands the dart squarely in the large muscle mass on her shoulder. With a roar of displeasure, she snaps at the dart.

From a distance, Sergei begins monitoring her respiration. It drops from 24 breaths per minute to 20, to 16, as she falls into a deeper sleep. Kola and Roma show up to lend a hand. Sasha lubricates Nellie's eyes and covers them with a fleece blindfold. Nellie is breathing at a safe 12 breaths per minute; her temperature is 102.3 degrees Fahrenheit, the high end of normal. That's good, because with an air temperature of six degrees Fahrenheit, I don't want her to be too cold. When I remove the snare, I notice that she's a bit thin. I'm surprised to see that she still has her summer coat. It looks dull and brittle. She doesn't appear sick and there's no sign of injury, but she's not in great shape. Her condition explains why she hasn't given birth to another litter of cubs. On average, tigers give birth every 22 months, but it has been 26 months with no new cubs for Nellie. Perhaps she hasn't recovered from the physically stressful task of managing to raise three cubs from her last litter. The analysis of her blood samples may shed light on her condition.

I examine her teeth. Her lower left canine is broken at the gum line and her upper right is broken in half. She's also missing most of her incisors. When we captured her in 1999, I estimated her age to be eight years old. Since then, I've often wondered whether I overestimated. At the time, she had just moved in to fill a vacancy created when Natasha left this area in 1998. Usually we expect young tigers to do that. Now, as I look at her teeth, I realize that I must have underestimated her age because these look to be the well-worn teeth of an old tiger. But that doesn't concern me much, because several of our tigers—Mary Ivanovna, Katya, Misha—had two or more broken canines and seemed to have no trouble killing prey.

The last piece of information we need is her body weight. Getting an adult tiger high enough off the ground for a weigh-in is no easy task, unless you happen to have six big Russian guys at your disposal, and a block and tackle with a spring-scale at-



The information that is being obtained from radio-collared cats is helping the U.S./Russia Tiger Team keep Siberian tigers (above) alive in the Russian Far East. Nikolai Reebin (opposite) supports a tiger's head while Andrei Saphonov hoists her in the air for a weigh-in.

tached. We fix ropes around Nellie's feet, and, with Volodia holding her head, we slowly pull her up off the ground. Held aloft by a sturdy tree limb, she weighs 270 pounds. I'm surprised and pleased. Three years ago, she weighed 265 pounds, and I thought she would be lighter now judging by her thin frame.

Nellie begins to move her head as we gather our gear and take a few photos. Sasha removes her blindfold and gently lays her head on a cloth, which he folds over her eyes. In darkness, Nellie will come out of the anesthesia peacefully. Sasha will stay behind to guard her until she wakes up. The rest of us take off. I return to Terney to prepare the blood samples for storage until they can be sent to the U.S. for analysis, and to write up and file the necessary reports for the Russian Ministry of Natural Resources, the Sikhote-Alin Zapovednik, and WCS.

On this project, it always seems that things come together at the very last possible minute, and I'm constantly reminded of the importance of patience and perseverance. Indeed, in 1999 we captured Nellie on the very last day of our trapping season. This time, Nellie's collar should have failed months ago, yet it continued to work for us. Last night, she walked our entire trap line,

stepping over 13 snares before she finally stepped in the second to the last one on the line. In the end, we have managed to keep a valuable study animal on the air.

The next day the promised storm moves in. Although we have captured no new tigers this season, I'm more than satisfied because of Nellie. With long-lived species that reproduce slowly, long-term data on individuals is invaluable to estimating reproductive life span, the interval between litters, and the number of cubs an animal produces during its life. In turn, these details are essential to conservation plans, providing answers to important questions, such as how many cubs can we expect a protected area to yield each year, and how much poaching can the tiger population withstand?

We have been tracking Nellie for four years now, through two litters, and we expect a third litter any time. This new collar should last four to five years, and the data we collect will tell us much about Siberian tigers in the latter half of their lives.

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