

Saving the Sarufutsu

In Sarufutsu, Hokkaido, conservationists and corporate executives have come together to protect one of Japan's most important wild salmon habitats. **Winifred Bird** reports.



WINIFRED BIRD

This tributary of the Sarufutsu-gawa river is the sort of winding stream in which taimen salmon prefer to spawn. Loss of such habitat has seen taimen, once abundant in Hokkaido, now listed as critically endangered.

In January 1977, a cheerful eleven-year-old fishing fanatic named Mihira Sanpei set out in pursuit of Japan's famed "phantom fish." To capture his quarry—a brilliant red ancestor of the common salmon said to swallow baby deer whole between its gaping jaws, grow to two meters or more, and live for over twenty years—he would

have to travel to the snowy streams of northern Hokkaido and improvise lures using field mice. But young Sanpei faced his challenge bravely, because hooking the red phantom was the ultimate fisherman's conquest.

In fact, Sanpei was not a real boy but the illustrated hero of manga artist Yaguchi Takao's popular serial comic

Tsurikichi Sanpei (Fishing-Crazy Sanpei). Strangely enough, the fish are real (although they don't eat deer). Called *itou* in Japanese, Sakhalin taimen or sea-run taimen in English, and *Hucho perryi* by scientists, the primordial creatures live in northern Japan and far eastern Russia. They are born in sheltered streams, descend to coastal areas or occasionally large dam lakes as adults, and return multiple times to the place where they were born to spawn. When they die, they enrich inland ecosystems with nutrients they've consumed at sea.

Yaguchi's comic transformed taimen into piscine celebrities for a generation of sports fishermen, who trekked to remote rivers to live out Sanpei's adventure for themselves. But today the fish are hard to find: the IUCN Red List of Threatened Species categorizes taimen as critically endangered, and scientists estimate the current population at just 5% of historic levels. In Japan, while sports fishing has contributed to the problem—and is now prohibited, by the Rare Species Conservation Act, in rivers with highly endangered subpopulations—habitat loss is the main culprit. Taimen need winding, unobstructed rivers to survive. With most of Japan's waterways altered in some way by engineering projects aimed at flood control and agricultural development, the fish have been reduced to just twelve rivers in Hokkaido—a quarter of their historic range.

Last December an unusual trio came together to protect one of those rivers. In a landmark private conservation agreement, the U.S.-based international nonprofit Wild Salmon Center and a local conservation group called the Itou no Kai worked with Japan's largest paper company, Oji Paper, to set aside 2,660 hectares of Oji's timber land surrounding northern Hokkaido's Sarufutsu-gawa river, a prime taimen habitat and one of Japan's last free-flowing salmon rivers. The protected area, called the Sarufutsu



The conservationists, from left to right: Sato Tamotsu (Oji Paper), Fukushima Michio (National Institute for Environmental Studies), Ogasawara Tetsuhiko (Oji Paper), Brian Caouette (Wild Salmon Center), Tsujimoto Atsuo (Oji Paper), Osanai Kouichi (Itou no Kai), Maruyama Yasuhiro (Oji Paper). The men are standing on Oji Paper land in Sarufutsu.

Environmental Conservation Forest, includes “no-cut” zones on floodplains and riverbanks that buffer critical taimen habitat, as well as wetlands recognized as “Important Bird Areas” by Birdlife International. Brian Caouette, director of the Sustainable Fisheries and Markets Program at the Wild Salmon Center, said the agreement impacts far more than just taimen. “Flood plains are one of the most developed habitats in Japan, one of the rarest ecosystems. When you set aside these areas, you cover dozens of other fish species, the birds, and the ecosystem services like clean water. It’s all in there. Wild rivers like the Sarufutsu that still have healthy and intact floodplains are seeds for rehabilitating freshwater ecosystems throughout Hokkaido,” said Caouette, who played a key role in negotiating the deal.

So how did an industrial giant, a handful of sports-fishermen-turned-conservationists, and some intrepid salmon-loving Americans make that deal happen? Below we take a closer look.

Oji Paper Land

It’s probably safe to say that ten years ago, not many people aside from sports fishermen cared about the future of sea-run taimen in the town of Sarufutsu.

The sparsely populated 590-square-kilometer district is buried in snow for six months of the year, and residents eke out a living raising dairy cows, fishing off the coast, and farming scallops. Wilderness abounds thanks mainly to climate and geography: too cold for most agriculture and too flat to build hydroelectric dams, the town has remained a wooded, wild paradise for fish.

The centerpiece of that paradise is, of course, the Sarufutsu. From high on a ridge that marks the western limit of town, a network of clear streams trickle

through the forested hills. In the lowlands they coalesce into a single channel that winds through the hay fields and finally empty into the Sea of Okhotsk on the eastern edge of town. Although concrete banks contain the river where it passes through inhabited areas and a few small check dams transverse its tributary streams, the Sarufutsu is for the most part free to twist and turn as it will—providing an abundance of places where young fish can hide from predators and adults can lay their eggs.

Sarufutsu native and construction company owner Osanai Kouichi has been fishing white-spotted char and cherry, pink, and chum salmon from these streams since he was seven years old. Back then, he didn’t catch taimen (as fellow-fisherman Kasai Mikiya put it, “it’s not the kind of fish a kid can catch”), but as an adult he enjoys catch-and-release taimen fishing. When he became head of the Young Businessperson’s Division of the Sarufutsu Chamber of Commerce in



Two male taimen fight in a Sarufutsu tributary.



MINIFRED BIRD

The Sarufutsu, one of the last free-flowing salmon rivers in Japan, just before it empties into the Sea of Okhotsk

1998, Osanai wondered if the legendary fish might somehow be able to help revive his town's lagging economy.

"I thought of taimen as a tourist resource, of taimen fishing as a business. As I studied the issue, though, I realized we couldn't do that. Taimen are something apart from money. But I wondered if there wasn't still some way to use them, since they show what a wonderful environment we have," he said. In 1999, he organized fellow fishing enthusiasts to work on the project, calling the group the Itou no Kai.

Meanwhile, on the other side of the Pacific in Portland, Oregon, the Wild Salmon Center was getting interested in the region. The Center works internationally to preserve the world's remaining wild salmon populations, and in 2006 the Center's Peter Rand headed an IUCN Red List team assessing the status of taimen in Russia and Hokkaido. The team soon heard about the Sarufutsu.

"If your goal is the conservation of taimen and wild salmon, there are only a handful of places left in Japan. This was the best river," said Caouette, who had previously spent time in Hokkaido as a graduate student. Caouette began visit-

ing the town to look into a possible conservation project. That's when he met Osanai—an encounter Osanai described as akin to the landing of Commodore Matthew Perry's trade ships in Japan a century and a half earlier.

"I was a little suspicious," recalled the compact, energetic fisherman with a grin. Soon, however, he realized that Brian's approach was neither pushy nor adversarial. "He didn't force us to do anything. He accepted us and wanted to work together."

The next step was approaching Oji Paper, the largest private landowner in Sarufutsu (and the largest corporate forest owner in Japan, where over half of all forests are privately owned). Oji forest makes up a full thirty percent of the town, including key taimen spawning areas and wetlands, so working with the company seemed like the easiest way to ensure the taimen habitat was protected. As it turned out, the circumstances couldn't have been better.

"We'd had the Sarufutsu land since before World War II. These days it's not really profitable for paper production, but we have a policy of never selling off our forest land," said Tsujimoto Atsuo,

manager of Oji's Forest Department, adding that the company selectively harvests only one percent of its Sarufutsu holdings each year. Executives had no idea the land was one of Japan's most important wild salmon habitats.

They were, however, looking for ways to boost the company's environmental record. While Oji has focused on sustainability in the past—for instance, all its domestic forests have Sustainable Green Ecosystem certification (a Japanese version of the international Forest Stewardship Council system)—in 2007 the company admitted to violating local pollution regulations at several plants, and the next year admitted it had greatly overstated the percentage of recycled material in some paper products. In the wake of those incidents, Oji publicly renewed its commitment to corporate responsibility, and when Caouette and Osanai suggested the company act to protect taimen in Sarufutsu, executives responded positively.

"They didn't say, 'Don't cut anything.' Instead they proposed a win-win plan," said Tsujimoto. Over the course of half a dozen meetings, Osanai, Caouette, and a rotating selection of

scientists laid out their case in detail. In 2009, Oji agreed to set aside fifteen percent of its Sarufutsu land with the goal of preserving aquatic biodiversity. While the company retains ownership of the property, they make a commitment both publicly and within their long-term business plan to protect it.

The deal also established a stakeholder organization called the Itou Conservation Council made up of scientists, members of the Itou no Kai, local government officials, and representatives from Oji. Through this Council, those most tied to the future of taimen remain connected to one another and involved in ongoing conservation activities. That means what's already been protected is likely to stay that way—and work to conserve critical taimen habitat will not end with this agreement.

Investing in Healthy Habitats

Not too long after the Conservation Forest was announced, a motley group of sports fishermen, local forestry officials, scientists, and paper-company executives clad in rubber boots and parkas gathered in front of the Sarufutsu town hall. Caouette was there, and Tsujimoto and Osanai. They had spent the previous afternoon at a symposium on taimen, and the evening toasting their accomplishments. Now, bleary-eyed at eight a.m., the group piled into cars and headed out to Oji land.

It was the end of April, and Sarufutsu's rolling hills were just beginning to awaken from their frozen slumber. Sun filtered through the still-bare branches of birch, oak, and elm, melting Swiss-cheese holes in the snow where butterbur and skunk cabbage pushed through the earth. Somewhere in the forest brown bears were stirring, deer were nibbling the first spring shoots, and whooper swans were gliding across newly thawed lakes. But as the group headed into the woods, they were looking for just one thing: taimen shimmying and jumping their way up the intricate network of streams in search of places

to spawn.

Gingerly, Tsujimoto sidled down to the edge of one of those streams, steadied himself against a grandfatherly elm, and peered in. He didn't see a taimen (no one did), but he did see a large rotting log resting in the streambed. He contemplated it. "We used to think it was best to clear this kind of debris out of the river," he said. "Now we realize it's important to leave it in to provide habitat for fry."

Scientists agree. In a 2001 study by Inoue Mikio and Nakano Shigeru



Two taimen breeding in the Sarufutsu

KAWAHARA MITSURU

published in the journal *Ecological Research*, salmon abundance in streams in Northern Hokkaido was strongly linked to the presence of riparian forests. Beyond providing dead wood, forests also shade rivers, stabilize banks, filter sediments, and provide food via overhanging branches. These impacts are strongest up to a distance approximately equal to the height of the tallest trees in the forest. In the Sarufutsu Environmental Conservation Forest, that translates into a streamside buffer zone of 30 meters; on floodplains, where the path of the river changes over time, nearly the whole valley floor is protected.

But were these trees really in danger

of being cut, or the river in danger of being developed if a conservation agreement hadn't been reached? Tsujimoto said Oji rarely cut on the floodplains anyway, and Fukushima Michio, a senior researcher at the National Institute for Environmental Studies and one of Japan's leading taimen experts, said the risk of development was probably low—for now.

"If things stayed the way they are, I think the taimen here would be okay. But if technology advances, or global warming continues and air temperatures rise, the area will become better for agricultural development, and the habitat is likely to deteriorate," he said. Such changes are already taking place in Greenland, where agriculture is enjoying a revival for the first time since the last warm spell ended 700 years ago.

For Caouette, the fact that there was no impending environmental crisis in Sarufutsu is exactly what made it such an appealing target for action.

"Why do you have to wait till you have a disaster to act? Why not act when there's not all this conflict and tension?" he asked. "In the United States, we spend the most money on the most degraded areas. That's like investing in the riskiest stocks. Instead, why not invest in the blue chip stocks? We should be focusing our conservation efforts on the healthiest habitats when they are still in good condition."

In Sarufutsu, that strategy successfully protected one of Japan's most important wild salmon habitats. Conservationists and corporate executives were able to work together in the space where business and environmental interests overlapped. That is a rare narrative in this era of conflict over the management of tuna, whales, and other wildlife—and one that will need to become more common if we are to halt our accelerating slide towards global biodiversity loss. ■

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