

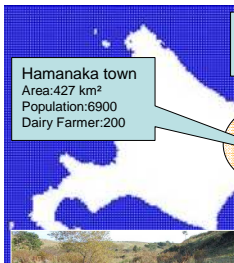
THE SABURO-GAWA PROJECT

Activities to Rehabilitate and Conserve River Ecosystems
In Dairy Producing Areas Together with Local Communities and Local NGO

Daisuke Nakagawa


NGO Hokkaido Freshwater Fish Conservation Network

2-83 Minato-machi, Akkeshi, Hokkaido, 088-1128 Japan Email:d-nak@hokkaido-np.co.jp



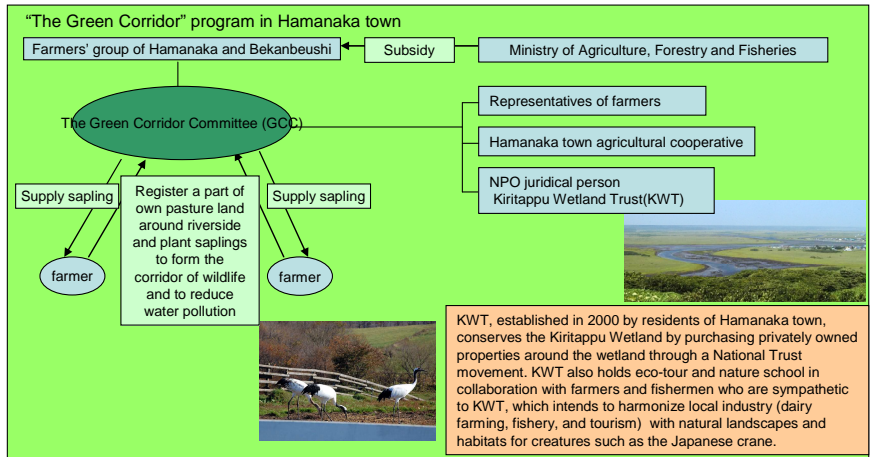
Eastern Hokkaido
a leading area of dairy farming in Japan

Hamanaka town
Area:427 km²
Population:6900
Dairy Farmer:200



Since the 1960's, a large-scale development of pasture land and increase of cattle damaged the river ecosystem in eastern Hokkaido. In the 2000's, farmers living in Hamanaka town began to think more about sustainability than productivity because they felt that agricultural development caused river water pollution, damage to the river ecosystem, and fishing in the lower part of a river. Intending to reduce such damage and restore biodiversity of the river basin, they started "the Green Corridor" program in 2001.

"The Green Corridor" program in Hamanaka town



Farmers' group of Hamanaka and Bekkanbeushi ← Subsidy ← Ministry of Agriculture, Forestry and Fisheries


The Green Corridor Committee (GCC)

- Representatives of farmers
- Hamanaka town agricultural cooperative
- NPO juridical person Kiritappu Wetland Trust(KWT)

Supply sapling → Register a part of own pasture land around riverside and plant saplings to form the corridor of wildlife and to reduce water pollution → farmer

KWT, established in 2000 by residents of Hamanaka town, conserves the Kiritappu Wetland by purchasing privately owned properties around the wetland through a National Trust movement. KWT also holds eco-tour and nature school in collaboration with farmers and fishermen who are sympathetic to KWT, which intends to harmonize local industry (dairy farming, fishery, and tourism) with natural landscapes and habitats for creatures such as the Japanese crane.

The Saburo River
The Saburo River is a tributary of Furen River and runs as a border line of Hamanaka town and Bekkai town.

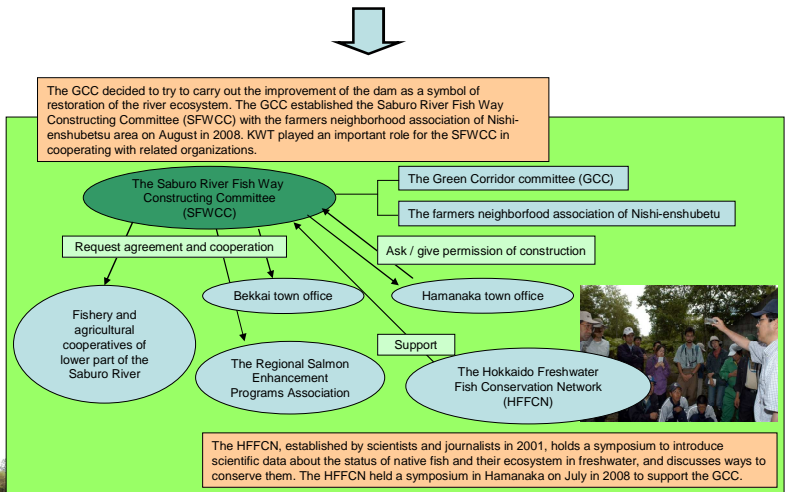


Redds of taimen were found only in the lower part of the dam by Kazuhiro Nomoto in 2007-08.

The water height to top of the dam is about one meter under ordinary conditions and there is no fish ladder.

The Saburo River Dam was constructed by Hamanaka town government on Nishi-enshubetsu area in 1972 to obtain drinking water for residents. The dam is an upstream migration barrier for freshwater fish (Sakuramasu, Sakhalin taimen, white-spotted charr, and etc.). Kazuhiro Nomoto, a graduate student of Hokkaido University who researches natural spawning of taimen, and Daisuke Nakagawa, a member of NGO Hokkaido Freshwater Fish Conservation Network, recommended dam improvements to KWT in 2007.

The GCC decided to try to carry out the improvement of the dam as a symbol of restoration of the river ecosystem. The GCC established the Saburo River Fish Way Constructing Committee (SFWCC) with the farmers neighborhood association of Nishi-enshubetsu area on August in 2008. KWT played an important role for the SFWCC in cooperating with related organizations.



The Saburo River Fish Way Constructing Committee (SFWCC)

- The Green Corridor committee (GCC)
- The farmers neighborhood association of Nishi-enshubetsu

Request agreement and cooperation → Fishery and agricultural cooperatives of lower part of the Saburo River

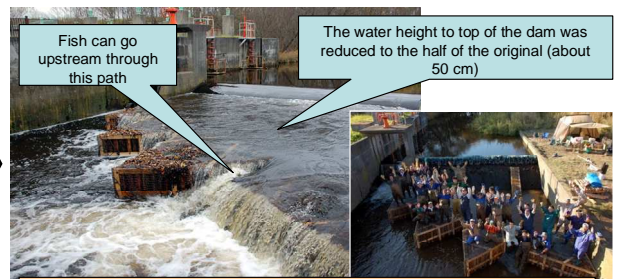
Ask / give permission of construction → Bekkai town office, Hamanaka town office

Support → The Regional Salmon Enhancement Programs Association, The Hokkaido Freshwater Fish Conservation Network (HFFCN)

The HFFCN, established by scientists and journalists in 2001, holds a symposium to introduce scientific data about the status of native fish and their ecosystem in freshwater, and discusses ways to conserve them. The HFFCN held a symposium in Hamanaka on July in 2008 to support the GCC.



The SFWCC constructed a pool style fish way at the Saburo River Dam with about 200 local residents and volunteers from September to October in 2008. The triangular groins designed voluntarily by Haruo Iwase, an engineer of Hokkaido Gijutsu Consultants, were made with wood, sandbags (made from sand piled in the river bed), gum sheets, nylon net, and steel wire. They didn't use concrete and any construction machines. It cost only 1,200,000 yen (about \$13,000), paid for by KWT.



Fish can go upstream through this path

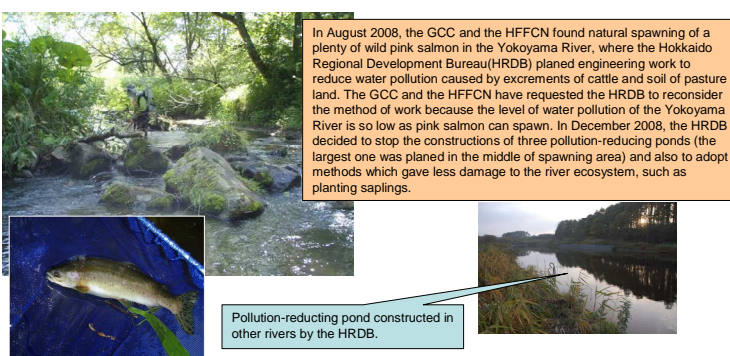
The water height to top of the dam was reduced to the half of the original (about 50 cm)

The SFWCC regards the fish way as a trial and will improve it through monitoring about upstream migration of freshwater fish. It also plans to carry on an educational program about the river ecosystem for local residents and children at the dam. The GCC plans to increase a number of collaborators by announcing that their effort to harmonize dairy farming with nature conservation, such as the Saburo River project, will lead to appreciation among consumers and raise the value of milk they produce.

Farmers began to think deeply about restoration of the river ecosystem through the collaboration with the KWT and the HFFCN and fishermen.



Yokoyama River, Hamanaka town



In August 2008, the GCC and the HFFCN found natural spawning of a plenty of wild pink salmon in the Yokoyama River, where the Hokkaido Regional Development Bureau(HRDB) planned engineering work to reduce water pollution caused by excrements of cattle and soil of pasture land. The GCC and the HFFCN have requested the HRDB to reconsider the method of work because the level of water pollution of the Yokoyama River is so low as pink salmon can spawn. In December 2008, the HRDB decided to stop the constructions of three pollution-reducing ponds (the largest one was planned in the middle of spawning area) and also to adopt methods which gave less damage to the river ecosystem, such as planting saplings.

Pollution-reducing pond constructed in other rivers by the HRDB.

=ACKNOWLEDGEMENTS=
I deeply appreciate all members of the GCC and the KWT. Kazuhiro Nomoto provided research data about natural spawning and photos of Sakhalin taimen in the Saburo River for this poster. Haruo Iwase provided the design of fish path for free and permitted to carry photos of construction of fish path on this poster.