

Farm visiting reports <Part 4>

The Small Farm, Sakura

This is the fourth in an irregular series of 'Farm visiting report' introducing farms in Japan, reporting 'The Small Farm, Sakura' in the Yagi district of Sakura City, Chiba Prefecture. The Yagi district is a farming area slightly outside the urban area of Sakura City. It is a rice-growing area with well-developed paddy fields along the Takasaki River in the Inba-numa basin and traditional paddy fields known as 'yatsuda' in several narrow valley strips on hilly terrain. The farm covers 1.8 ha of paddy fields, 0.8 ha of upland fields, 0.1 ha of orchards and 0.7 ha of forest land, and is engaged in pesticide- and chemical-free farming. We visited the farm on 25 August 2023, the first day of harvesting this season, and interviewed the owner while helping him harvest the rice in the lingering summer heat.

The owner, Michio Ogawa, comes from a non-farming family in the prefecture, but as a child he used to play in the neighboring paddy fields, catching fish, frogs and insects. One day, he read in a newspaper that paddy field insects such as the *Lethocerus* species and the diving beetle were in danger of extinction due to pesticides and domestic wastewater. At that time, he dreamt that when he grew up, he would like to create paddy fields that would be habitable for living creatures without the use of pesticides. He later graduated from a university with a degree in agriculture and worked with the Japan Overseas Cooperation Volunteers and an NGO in rural areas overseas. He then worked as an apprentice with a pesticide-free farmer in the prefecture before starting his own farm here in 2011 with a farmhouse and approximately 2 ha of farmland, including paddy field, upland fields and forests.

In rice cultivation of the farm, rice bran and mineral materials derived from shellfish fossils are applied instead of chemical fertilizers, and larger seedlings than usual are planted at rice planting. The farm doesn't use pesticide, but it has few problems with rice pests and diseases. This is thought to be due to the fact that the absence of chemicals has resulted in a rich biota in the rice fields, with a good balance of both pests and beneficial insects, and that the application of rice bran and minerals has kept the nutritional status of the rice in good balance. In particular, the application of rice bran may enrich the microflora in the soil, according to Mr. Ogawa. Although he cannot see the micro-organisms with the naked eye, he believes that

the increase in earthworms, shellfish, tadpoles and frogs is proof of this. The challenge of pesticide-free cultivation is weeding, which is very hard work. The farm try to cope by planting rice seedlings at narrower intervals in heavily weeded fields so that they can withstand competition from the weeds, and by weeding with a power weeder, but weeding is sometimes not completed in time.

However, in recent years it has become possible to manage paddy fields where crayfish are abundant so that weeds do not flourish and weeding is almost unnecessary. Crayfish are not very welcome creatures, as they make holes in the ridge between paddy fields, and when they grow they can damage rice plants, but they also eat weeds, which makes them effective weed killers. The timing of when the water level is raised and lowered is adjusted to encourage or inhibit reproduction of them, so that rice plants and crayfish can coexist. Some people have suggested releasing crayfish into other paddy fields, but Mr. Ogawa is against the artificial introduction of the creatures.

We finished harvesting rice in the early afternoon and Mr. Ogawa showed us around the back hills and neighboring valley fields in the afternoon. Since the time He started farming, there has been an increase in abandoned farmland, and there are many rough fields. When upstream valley fields are abandoned, the flow of water is slowed down, affecting the paddy fields downstream. He has been entrusted with the cultivation of some valley paddy fields and is also mowing the rough irrigation canals upstream. As the flow of water improves, the living creatures are regenerating, such as killifish in the waterways and fireflies in the paddy field in the hillside.

It must be tough work for Mr. Ogawa to manage the rice cultivation in the plain paddy fields and valley paddy fields, as well as the cultivation of fruit trees and mushrooms, and the management of the forest



Mr. Ogawa works on a combine harvester.

behind the farm. However, when I walked around the forest and community while listening to his story, I felt that the farm is a place where diverse living creatures and the farmer's life coexist and where there is much joy.