

Typhoon damage and reconstruction assistance

Experience of volunteer participation at the bee farm

On October 12, 2019, Typhoon No. 19 'Hagibis' swept from eastern Japan to the north and caused great damage. Earlier that year, in June, I had visited The Ishizuka Bee farm, located in Marumori Town, Miyagi Prefecture which was in Hagibis's path. I watched the typhoon's progress on media and saw the pelting rain, the flooding of the Abukuma river, landslides and other catastrophes and I contacted my friends at the bee farm as soon as I could. Nobody had died or been physically injured, which was a relief, but the beekeeper told me most of the hives had been damaged. I wanted to help with the reconstruction and decided to go there for five days as a volunteer.

On October 21, nine days after the typhoon had passed, I was finally able to make it through to the site. Flood water pools had largely receded but I could observe driftwood and other debris as well as day to day necessities still scattered in the paddy fields. Traces of landslides were still visible. The Self-Defense Force officials were organizing traffic on the road along the Abukuma River. The sediments were actually being removed as I drove through on the mountainside towards the bee farm. There were many places where the road had collapsed and been cracked in half. Even in such a disastrous situation, warning signs, road cones, and sandbags had been placed here and there so that people could safely pass through the dangerous areas and the collapsed areas. This was largely due to the efforts of local youth and fire brigade members who went around the road one by one the day after the disaster and exchanged information. As a result, residents could share the status of the route with each town, along with information about hazards, and this proved useful when it came to bringing in supplies.

At Ishizuka Bee farm, about 400 bee hives were washed away. One cause of the widespread damage was that the hives were placed near the river, because October is the honey season for wildflowers that grow on the riverbank. In addition, the hives to rent for pollination to strawberry farmers, which is one of the farm's main income sources, were scheduled to be sent in late October, had been assembled, then damaged. As a result, the beekeepers were unable to accommodate the strawberry farmers they had already contracted with. They had to bring hives from a bee colony from their beekeeper friends, put these in their own hives, and then send them to the strawberry farmers.

Due to these emergency measures, normal work such as honey extraction from undamaged hives was being delayed.

The bee farm was working hard to catch up with the delays in the work. I was engaged in beekeeping work under the direction of



Replacing pollinated bees to their own hive

beekeeper, Mr. Yoshizawa. My first task was to divide the water-soaked combs into those which had more than 80% of the honey remaining, those with less than half, and those with almost no honey at all. These combs were then placed in an undamaged hive. The honey stored in the comb becomes food, and the empty comb is cleaned and regenerated by the bees themselves. I felt the profound nature of beekeeping in this process - it was the bees themselves repairing the comb damaged by the natural disasters. In addition, as a measure against the cold, I installed animal feed bags in hives, and also helped with other urgent chores such as collecting comb with honey frames from hives, and extracted honey using a centrifuge. It took patience for each task. However, in five days, I could feel that the accumulation of these tasks would lead to reconstruction.

During the volunteer period, I had the opportunity to eat with Mr. Ishizuka, the representative of the bee farm, Mr. Yoshizawa, a staff member, and the coordinator of the community. Despite the great damage, the three of them were always positive. They were discussing concrete ideas about what to do next to brighten the area and bring it back. I felt that the basis for this positivity was the constant connections these people had within the community.

This article was first written in January 2020. It is now more than a year and a half since the disaster. The other day, I had the opportunity to meet a beekeeper from those days. Marumori Town is gradually recovering.

We would like to express our deepest sympathies to those affected by this disaster and pray for the earliest possible reconstruction!