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Conservation in Yanagi Pond through Transplantation of Native Plant Species

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Summary

We conducted research on "Habitat ex situ conservation of local endangered plants using reservoir" because biodiversity is declining rapidly today. We transplanted six native plants species. *Trapella sinensis* was great condition. *Eupatorium japonicum* and *Chrysanthemum japonense* were strong. *Pogostemon yata*, *Caldesia parnassi* and *Trapella sinensis* were poor growth.

Research background and Objective

Today, biodiversity is declining rapidly. Causes include feeding damage due to the increase in deer, stealing rare plants out of their habits, by humans, reduction of reservoirs, and abandoned satoyama woodland, semi-manicured woodland, which has been home to a variety of living things.

Method

(1) As pre-experimental research, a biological survey of the transplantation, and the effects of transplanting were discussed. Next, we estimated the soil humidity in the area to be transplanted, and based on the soil humidity.

(2) As main experimental research, we transplanted six endangered species to Yanagi Pond in Taishi Town General Park, and We recorded the growth of each plant. And we produce a botanical illustrated book of Yanagi Pond.

Result

(1) As a result of the vegetation survey, 53% were native species and 47% were exotic species. It was also found that there was a spring in the upper left of the planned transplant site.

(2) *Eupatorium japonicum* and *Chrysanthemum* grew well and flowered. *Trapella sinensis* was in excellent condition and has produced fruit. The Japanese knotweed was in poor condition due to a delay in the transplanting date. *Pogostemon yate* and *Caldesia parnass*, as shown on the lower side of the slide, unable to adapt to the fluctuating water levels in the Yanagi ponds.

Future prospect

We would like to foster local residents' interest in nature and living creatures at the Taishi Comprehensive Park Experience Learning Facility. With killifish abundant in Yanagi Pond, we would like to use the facility for killifish observation and research.