S210 Slow Falling Shape

おちにくいかたち

■Purpose of Exhibition

All things on Earth are attracted by the Earth's gravity toward falling.

Let's try to imagine the conditions required for things falling through the air to fall as slowly as possible.



■Additional Knowledge

In this exhibit, the purpose is to observe conditions in which an object flying overhead by force of wind is falling down. In order for the object to fall as slowly as possible, we thought the object should be made as light as it can possibly be.

However, the structure of the object cannot be too light, as it could not sustain its form. Therefore, it is designed balanced, taking into consideration its lightness and structure.

[Plants Seeds]

Plants use different ways of disseminating seeds. Some seeds are transported to other locations to get animals to eat the fruit, and others are transported to other locations by the flow of the water.

Among them, many plants are disseminating seeds using the power of the wind. Because some seeds have a thin membrane attached, they can fly while rotating in the wind. Others fly in the wind, like dandelion seeds. The exhibition was basically created using the image of the dandelion seeds, with a structure that effectively uses the resistance of the air so that it will fall slowly.

[Parachutes]

Speaking of things falling slowly from the sky, there are parachutes which are used for skydiving from airplanes. There existed an idea in ancient times that a parachute falls using air resistance from a high place, and its records have remained since the Middle Ages in Europe.

Article by Yoshitaka Yamada, curator