



Colby 2021 - large-scale upcycling of plastic bottle caps

Goals for the year

Colby's focus for the year was Project Recology, his school's project to upcycle plastic bottle caps that would otherwise go to landfill. He wanted to help reduce plastic pollution at his school and at home. His school has a plastic recycling shed and workspace which was established earlier this year, and he works there every recess and lunch when possible.

Callum is a full-time teacher in the workspace, and Colby's friends join him most days in the upcycling hub. The process starts with collecting the bottle caps, which are donated by the school community as well as different community groups in town. The caps are sorted into colours and shredded in a machine. These tiny pieces are then melted in a sheet press machine in single or multiple colours and patterns, depending on the desired end product. This creates a thick sheet of plastic which has unique and cool colours.

This sheet then becomes the base material from which shapes or images can be cut or created using a laser cutter. The workspace allows the team to make a wide range of recycled plastic products - skateboards, mini xmas trees, coasters, coffee cup holders and table tops to name a few. They can also employ a toastie press to make smaller items like plastic plates. In eight months, they have already saved 5 tonnes of plastic from going to waste.

Advice to other students

Start early in the year, try and do as much as possible in your project, and have fun when you do it.