

Spotlight

Transforming glass waste into community pathsMarch 2024



How it started

BSCC continually seeks innovative ways to address waste management challenges and promote sustainability. A significant such challenge was identified at Camping Skye, BSCC's campsite, where the accumulation of glass waste was leading to high recycling transportation costs and associated environmental impact.

"We wanted to do something different" explains Emma Bee, HCWP Project Officer for BSCC; "Instead of sending glass away to the other side of Scotland for recycling at a cost, why not recycle it right here and use it to enhance our community?"

n response, we proposed the purchase of a glass crusher to create sand aggregate from glass waste. Our efforts built on BSCC's broader sustainability initiatives, aligning with our mission to foster a more circular economy and reduce external material dependency for path maintenance. By using the crushed glass on local paths, the project aims to decrease costs and contribute to environmental stewardship.







What we did

In November 2024, the glass crusher was installed at Camping Skye and we began to train the campsite manager and staff on proper operation, maintenance and safety procedures.

We collected glass from the campsite and surrounding community and a month later we processed the first batch of of smooth versatile sand which was stored on site.





BSCC's Growers Hub which is a vital space for local gardeners. It was also used to maintain campsite walkways.

The project quickly captured local attention. Volunteers and families were keen to get involved, and even local schools began getting practical lessons on how to process the glass into sand and promote sustainable practices.



Students visited the campsite to see the machine in action, sparking conversations about recycling and the environment.

One student, shared, "It's so amazing to see the bottles turning into sand and seeing other ways that the bottles can be used."

Community members have responded positively, noting the environmental benefits and improved path quality.

One local volunteer stated, "It's incredible to see waste glass transformed into something so useful for our community."

Impact

In the short time the project has been active, it has demonstrated several positive outcomes:

- Waste Reduction: 640 bottles were recycled in the first two months (this will increase in high season). 200kg of glass waste has been processed already, showing quickly how this can be used to reduce waste and lessen transportation emissions.
- **Cost Savings:** An estimated £500 has been saved in material costs for maintaining existing pathways and building new pathways.
- **Community Engagement:** Local schools have participated in educational workshops, fostering a culture of sustainability.

Learning

We did face some challenges with this project. Aside from the purchase of the glass crusher, the initial set up required extensive staff training.

Also, the limited crusher capacity means planning is necessary during peak waste periods to process and store the sand.

In the future, we would like to increase crusher capacity during high-use periods to resolve this and seek further collaborations with local businesses to expand glass collections.



Key takeaways

The glass crusher isn't just about saving money (though it has the potential to save hundreds for local communities). It's about showing how communities can turn waste into opportunity.

By reusing what we already have, BSCC is lowering carbon emissions, saving on transport costs, and setting an inspiring example for other villages.

This initiative has shown that small-scale circular economy projects can deliver meaningful environmental and economic benefits. The collaboration with local schools has enriched the project's educational impact, inspiring younger generations to engage with sustainable practices.

Next steps

The glass crusher will remain a key part of BSCC's sustainability strategy. Crushed glass will continue to be used for path maintenance and other projects. We aim to share the crusher's benefits with neighbouring communities and expand community engagement events.

Future plans also include hosting workshops to show other groups how they can adopt similar initiatives. By continuing to build on this work, BSCC ensures the legacy of the glass crusher project as a model for sustainable community development.

If you walk along one of the new, shimmering paths at Camping Skye or the Growers Hub, you'll be walking on what was once glass waste. But it's more than that—it's a story of innovation, collaboration, and a community determined to make a difference

Learn more: www.broadfordandstrath.org

The Highland Community Waste Partnership (2022-2025)

Funded by The National Lottery Climate Action Fund, and coordinated by Keep Scotland Beautiful, the Highland Community Waste Partnership (HCWP) brought together eight community groups in the Highlands to reduce waste and promote more sustainable consumption.

Learn more here: <u>www.keepscotlandbeautiful.org/highlandcommunitywaste</u>/