

Case study

2

Client: Carlshead Farm, Wetherby Project: Boardwalk and Bridge Consultant: Environments for People



A SURE-FOOTED solution to providing environmental field trips for school children in Yorkshire has been made possible with boardwalks made entirely from recycled plastic carrier bags and bottles.

A 30m-long walkway, 6m bridge and pond dipping platform have been built from Centriforce posts and planks produced from recycled plastic waste. They enable safe and slip-free fieldwork by students visiting the pioneering Carlshead Farm near Wetherby.

The award-winning 273-hectare farm in the lower Wharfedale Valley is a leading national example of innovation and diversification in farming featuring a range of complementary educational and environmental projects, including a biomass plantation and a training centre for excluded teenagers.

Project Consultant 'Environments for People' designed and built the boardwalks to facilitate educational visits by local primary and special needs schools. The structures provide raised access across boggy ground and a low-lying platform for pupils to get up close and safely explore pond wildlife.

Using recycled plastic profiles instead of wood provided a more durable and maintenance-free solution that was also more practical to design and build, explained Hugh Roberts from Environments for People: "Unlike the wooden alternative, Centriforce planks have a slip-resistant and splinter-free surface, and don't need to be fixed with chicken wire or nails. So the children have a safe platform to walk, or even to lie on to investigate wildlife habitats."





Centriforce recycled plastic posts and bearers were used to form the base structure of the walkways and the company's plank-like decking was then laid on top and finished with an edging strip. All elements were manufactured from 100% HDPE post-consumer waste, and all can be drilled and sawn like timber. A treated wooden post can easily split when driven into the ground causing rot and subsequent leaching of chemicals into the soil; recycled plastic products don't split or rot and are completely inert.

"During construction, the recycled plastic proved to be very forgiving," said Hugh Roberts. "The Centriforce profiles do not deform, chip or split and offer a truly sustainable solution. There's no maintenance and no ongoing costs involved in looking after the boardwalk. Even on wet and marshy ground, the boardwalk is rot and algaefree, but still looks and feels like wood and blends nicely with the environment."

The boardwalk access at Carlshead Farm was provided with 80% government grant aid via Natural England's Higher-Level Stewardship scheme. The farm is currently expanding its facilities to provide a Green Barn educational centre with residential facilities.

"The boardwalk has been problem-free since it was installed. The recycled plastic solution was a great idea, mostly because it is such a practical and durable material with a long lifespan and no maintenance. It also fits well with our environmental credentials and carbon-neutral targets," said Carlshead farmer Gareth Gaunt.

