Children making briquettes from Katrin towels helps to reinforce the importance of recycling.

KATRIN®

Educating Kernow

With the idea of sustainability focussing on creating a better future for our children, the project currently running at Camp Kernow which gets kids actively involved in green activities, is certainly setting an example to all.

Nestled high on a hill, above Truro Town Centre, is Camp Kernow – an environmental adventure just waiting to happen. Sitting on five acres of the 200acre Park Farm, Camp Kernow is an 'off the grid, off the beaten track and almost off satnav', award-winning and innovative environmentally-focussed centre, dedicated to reconnecting and engaging children with the natural environment and inspiring them to live more sustainably.

Carbon-Free Fun

As with many good ideas, Camp Kernow was born out of a relaxed conversation on a beach between Charlie Nicholson, a sculptor by trade, and his partner, Claire Coombe, a project manager in the third sector. What started as a pipe dream quickly gained momentum as Charlie and Claire set about realising their vision, garnering support from the educational and environmental communities of Cornwall and beyond.

Three years on, Charlie explained: "The life cycle of water is symbolic of the entire camp, and it all starts with the bore hole." The camp sits 44m above sea level, and the bore hole goes from the solar tower right down 64m. The water is pumped up (using solar energy) through various filters, which take out manganese and iron, before being heated by the wood burner. The temperature is regulated, and it flows into the camp water system, where it is used for showers, washing up, drinking, and so on.

Ground Force

Once used, the waste water is captured and flows back into the drainage system, where is it piped to the top of a reed bed. It runs along a 1-100 slope, allowing the stones and reeds to naturally eliminate the impurities, and then along a soak away before it re-enters the ground underneath the Camp Kernow orchard, watering the growing produce.

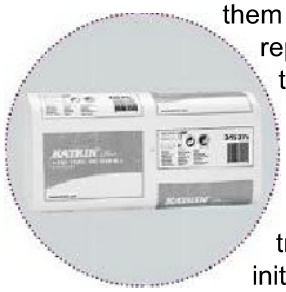
Camp Kernow has had great support from commercial partners and input from some of the latest thinking on renewable energy. The bore hole and closed loop water system was provided through support from Geologic Boreholes and WCI Sewage Treatment Ltd. The wood burners were designed by a student from Exeter University, Sonja Ashworth, as part of her final dissertation at the end of a Renewable Energy Degree. Solar panels to power the water pumping and filtration were donated by Clean Earth Energy, while Outback Power provided the charge controller and inverter which are required to run the solar voltaic system.

Replace And Re-use

The burners use fallen wood from the estate and thinnings harvested from the newly established woodland planted on Park Farm over the past 15 years. Colin Parker, who owns the estate, is very supportive of the camp's needs, and is proud to be involved in this child-friendly environment.

The burner also uses another innovative fuel: Katrin Hand Towels, from another commercial support partner, Metsä Tissue. Charlie commented: "We obviously need to maintain a good standard of hygiene for the children (and to address legislative requirements for such a camp), so we went out looking for a supplier of good hand towels – which once used for hand drying, could be re-used for fuel. Our objective was to collect the used hand towels and soak them in water, before using a briquette maker to create solid blocks of burnable paper."

Charlie tried a number of hand towels, but found that the breakdown process just didn't work. After trial and error, the KATRIN PLUS EasyFlush towels proved ideal for the purpose. Charlie continued: "They break down very quickly, and we can involve the children in the briquette production process as further evidence of the re-usability of most materials. The fact that Metsä Tissue has such a good environmental story gives us something extra to share with the children when they are making the briquettes. We especially like to tell them how Metsä replace every tree cut down with four new ones, which re-enforces our own tree planting initiatives."



Black Tomato And Borage Pizza

This summer, the camp has benefitted from an experienced environmental carpenter who has built the showers, a cob oven, the roof on the new office and a new garden area, which uses Hugelkultur for maximum horticultural efficiency. The camp grows and cooks all its own fruit and vegetables, including many varieties of vegetable which children may never have even seen, let alone tasted. Charlie explained: "If you make a pizza and add fennel, borage flowers, fresh beetroot and black tomatoes, you will be surprised how children who 'hate vegetables' will try most things. The best bit is that we plant, pick, chop and eat what we can, and then all the waste goes back on the land as compost – so, like the water system, food production is another "closed loop" system."

Of course, the vegetable patch, along with other areas of the camp, is rabbit-proof and fox-proof – something which will be especially important next year when the chicken run is finished. Charlie added: "Teaching children at the junior school age means that they will grow up with a far a better understanding of their own impact on the world, and start to take the lessons back into their own lives, both now, and into the future. Through our outreach project, we have so far nurtured 2,500 children, usually in groups of 30, giving them the right environment to understand the whole lifecycle of energy and how they impact on the environment around them."

Commenting on the credibility of staff, Claire said: "We have disabled access, and we use trained staff who all have a DBS check, to bring specific skills to the camp, such as black smiths, horticulturists and wild food foraging experts. Using a range of specialist staff with unique skills, and with the children in small, practical hands on groups, we can keep their interest and motivate them to want to know more."

Camping With A Difference

The sleeping accommodation is a range of timber frame canvas structures including a yurt, geodome, upturned boat hull and ger; Charlie adds that children, who universally love sleeping in a tent really enjoy this 'camping with a difference', and says they even see the toilets as another adventure.

The toilets feature two compartments separating liquid and solid to avoid an unpleasant smell. The urine is drained forwards, filtered and returned to the water system, while the rear of the toilet is used for solids and paper. Sawdust is added, and the waste is stored until it breaks down and the pathogens have been killed off, before being spread on the constantly evolving forest area, where 1,000 new trees are planted every year.

Newly arriving guests to the camp are dropped at the bottom of the hill and their first activity is to trek up to camp along a farm track. Then a typical itinerary starts with a tour of the camp, where children can discover how the sustainable systems onsite work, before moving into the structure which will be their home for the next few days. Each day then brings a series of fun environmental activities; the groups are swapped around and interspersed with food and free time, and the evening concludes with a camp fire, hot chocolate and marshmallows.

Energy Credits

Charlie and Claire have lots of plans for the future of the camp. Charlie concluded: "The most exciting thing for me is that we will install a 'Virtual Energy Credit System'. Children will wear a wrist band counter, which shows them how much energy they use and compare it with how much energy they have created whilst undertaking the various activities. This will bring home the message about only using what you need more than ever.

"We've come so far very quickly and we are very grateful to the support we've had from partners such as Metsä Tissue and Clean Earth Energy. The potential for teaching children about sustainability is enormous and invaluable, and we are very excited about the future."

www.campkernow.org.uk