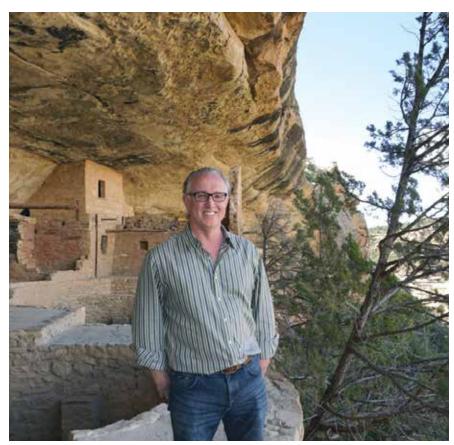


Sun, Rain, Wind & Time

Exploring traces of past civilizations is always fascinating. My home country of Ireland has an ancient past and the countryside is dotted with sites of civilization going back thousands of years. So on a recent trip to the US southwest, it was exciting to find well preserved, advanced settlements dating from the 9th to 14th centuries; particularly given the fact that the North American continent was only 'discovered' 500 years ago and the current Republic is little more than 240 years old.

The Ancestral Puebloan peoples of the US southwest left more than just traces, however. Not only do they have direct lineage in their current populations but they left thousands of structures and buildings across a wide tract of the country. Some of the most amazing of these can be seen at Chaco Valley in New Mexico where archaeologists continue to study dwellings which were up to five stories tall and held as many as 1000 people. So too at Mesa Verde in Colorado, where the cliff dwellings look otherworldly. These are not just cave dwellings they used well-made bricks and functional designs which would not be out of place in later civilizations in other parts of the world. The sites leave you wondering what life must have been like a millennium ago - undoubtedly harder and shorter but certainly simpler in many ways.

Many of the Hopi people of the region worship the Sun Spirit, Tawa, as a creator and believe that we live in the Fourth World created by Tawa. Interestingly, they believe that the previous three were destroyed because the people drifted away from and disobeyed Tawa's plan (I wonder where Tawa thinks we are now in that



Mesa Verde, Colorado – Breath-taking Cliff Dwellings Frozen in Time

pattern?). While the sun no doubt played a significant part in their lives and worship, it is also likely that rapid changes in the local climate and loss of rainfall caused the people to abandon their communities in such pristine condition. Without water, life at Chaco Canyon went from thriving agriculture to a desert which could not support them within a matter of a few generations. Abandoned to the elements, wind and time buried their structures until they were rediscovered in the late

1800s. With no written word, we have to depend on the traditions handed down to local communities, insights of forensic archaeologists and our imagination to recreate their world.

Water Driven Molding

Running out of water may be a routine pattern for the Southwest. The region has been suffering cycles of low waterfall followed by respite for a long time but this has now been exacerbated by population

movements and agricultural demands on the aquifers. Capture, conservation, and recycling are becoming more urgent as the climate warms.

Water wars have been quietly escalating in various regions around the world where shared rivers, lakes, and access to water cause tension between and within countries. Predictions of all-out war over water may yet come true but at the very least, population growth and quality of life will be affected in many areas.

And along comes rotomolding, perhaps the ultimate environmental plastics process. Collecting water, storing water, dispensing water, treating water, disposing of water, recreation on water: no process offers so much in terms of freedom of design and application. We should at least be able to offer some respite with such a range of options within our portfolio.

California had to implement unprecedented laws to restrict water use in 2015 due to the drought conditions; Arizona, New Mexico, and other states have similar issues. This may open up opportunities for rotomolders to look at tanks for storage and recycling systems for treating waste water so that it can be used as 'gray' water. Scandinavian countries have been working on treatment systems for many years and the application of their rotomolding technology may be applicable in the US – opportunities exist for licensing technology but requires investment in understanding state law and market needs. Rainwater harvesting systems have been the norm in Australia for many years.

Large tank manufacturers have taken notice in the last few years of the shift in both climate and state regulations and have started applying the market lessons learned in many other countries around the world to provide local water capture and storage for homes. The ubiquitous 'tinaco' in South America and roof top water tanks around the world constitute a large proportion of the rotomolding market and some form of this may now become the norm in the drier states of the US.

Green building codes such as LEED increasingly demand more efficient use of rainwater and waste water and will no doubt expand as water stress grows in certain regions. Well-designed solutions from rotomolders might be a good opportunity not only for businesses but home systems too.

Advice to rotomolders – take a look at water saving systems in dry regions. Advice to everyone else – make sure you live somewhere where it rains a lot.

