

# The Environment – Where Would We Be Without It?

Glenn Sutter – Published *Museums and Sustainability*, Museums Association of Saskatchewan, 2012

Sustainability is partly about how we affect the environment – the world around us – as we try to meet our individual and collective needs. For thousands of years, people altered their surroundings by tilling land, cutting down trees, damming waterways, building settlements, and fighting wars. Their impacts were restricted to local and regional scales because of their low numbers and limited technologies, but that started to change in the last part of the 18<sup>th</sup> century with the Industrial Revolution. As coal, oil, and then electricity became widely available, our numbers increased, our technologies became more powerful, and the pace and scope of our activities increased, to the point where we started to have global impacts. Now we face a sobering list of issues that include climate change, species at risk, air and water pollution, shrinking forests, spreading deserts, urban sprawl, eroded soil, mountains of garbage. These are just some of the environmental problems caused by how and where we live, how we feed ourselves, how we move around, and our voracious appetite for energy and stuff.

The environment is more than a place where problems are happening, of course. As terrestrial, upright mammals, we are completely dependent on conditions and resources that the environment provides. This can be hard to appreciate, given our technologies and ingenuity, but it only takes a moment to realize that water doesn't come from a tap (or a bottle!), any more than electricity comes from a plug, or food from a store. Ultimately, we rely on the Earth for our survival, and we always will. That's why the environment is the biggest circle in our sustainability model, and why social, economic, and cultural aspects are nested within it (Fig. 1).

Focusing on environmental issues can be an effective way to stimulate awareness and actions aimed at sustainability. Despite their complexity, and driving forces that may be invisible or hard appreciate, environmental problems are often associated with relationships and indicators that are clear and tangible. It is easy to appreciate how cars and factories cause air pollution, for example, how improved insulation can save energy, or how the pressure on a landfill can be reduced by recycling. The connections are clear in each case, and the impacts are measurable.

One of the more compelling environmental indicators is the ecological footprint, a measure of impact that was developed by Canadian researchers Bill Rees and Mathus Wackernagel and is now used by teachers, planners, and governments around the world. Footprint calculators like the one developed by the RSM are based on the amount of land and water it takes to provide us with the things we use and to absorb our wastes, wherever that land or water may be.

Ecological footprints are often used in sustainability work, for several reasons. To start with, they show how big our impacts are in spatial terms, translating a range of activities into a common unit (acres or hectares) that people can relate to. Second, they provide a baseline

that can be tracked over time and compared to other populations, to highlight disparities, and to the amount of arable land and fresh water in a given region, to identify surpluses and deficits. Footprint estimates can also be used to show what would happen if people made different decisions about the things they buy, where they live, and how they get around. This sort of feedback can highlight the importance of individual and collective choices, fostering a sense of empowerment and ideas for action. Finally, footprints can be calculated for a range of spatial scales, from the global population and individual countries, to specific neighbourhoods, buildings, and individuals. This feature is especially important for educational activities, where the goal is to help people see how the environmental dimensions of sustainability affect them on a personal level.

But sustainability is not just about the environment, of course. In fact, environmental issues are often the symptoms of deeper problems that reflect how we organize ourselves as communities and organizations (our societies), how we interact to generate and distribute wealth (our economies), and how we live as individuals and groups (our cultures). These other dimensions quickly become apparent when environmental issues are examined in detail. Consider poor water quality. While poor water may be identified as an environmental problem, the underlying issues may have to do with settlement patterns, economic activities, and consumer choices that shape the land.

In the end it doesn't really matter how we label the problems we face. For museums that want to get involved in sustainability work, issues that are considered to be 'environmental' can provide good access points for visitors, stakeholders, and the institution itself. They can also be important reminders of the larger challenge in front of us: living sustainably in a globalized world with over 7 billion other people.