

Editorial: The accelerating pace of environmental change

Mark Everard and Adam Donnan

Fifty years is nothing when measured against the origination of *Homo sapiens* in Africa 200,000 years ago. It is even more insignificant when compared with the age of the remains of the first stone tools used by hominins dated to some 3.3 million years ago. It is roughly half a per cent of the span of the Neolithic era, and only one per cent of history since the earliest known human writing systems around 5,000 years ago.

Now half a century ago, 1972 represents a watershed moment in human history when we recognised that our activities were not only impacting ecosystems but also feeding back directly into human wellbeing and future prospects. In 1972 – a decade on from the publication of Rachel Carson’s seminal book *Silent Spring*[1] and in the wake of the dreadful Minamata Bay mercury poisoning in Japan – there was still not one government department in the world with environmental responsibility.

Yet 1972 really was a momentous year in raising the political and public consciousness of environmental issues. Famously, this included the 1972 United Nations (UN) Conference on the Human Environment, held in Stockholm and instigating decadal cycles of UN conferences seeking global consensus and action around what we now term sustainable development. This pivotal year also saw the publication of the influential Club of Rome report *The Limits to Growth*[2], which modelled how growth must necessarily be finite if we exploit resources beyond their rates of renewal. That year also saw the founding of the UN Environment Programme, designed to coordinate action at intergovernmental level. Greenpeace and Friends of the Earth were slightly ahead of the curve, both having been founded a year earlier, in 1971.

The founding of the IES in 1972 was also very much part of the birth of modern environmentalism. The Institution’s founding members foresaw that a professional association was needed to support both academics teaching the emerging discipline of environmental science and the new scientific profession that would grow across government and industry to support this rising tide of environmental concern and consciousness. And therefore, when we look back on the history of the IES in this, our 50th anniversary year, it is fitting to consider our evolving role in relation to development of the environmental sector.

Today, we take it for granted that all governments have departments with environmental responsibilities and that the language of sustainable development is embedded across society. Business recognises its social and environmental responsibilities: leaders through proactive recognition of the benefits of so doing, and laggards by sometimes grudging *de minimus* compliance with a regulatory system that was largely absent 50 years ago. In that regard, the world is profoundly changed, albeit imperfectly, recognising the interconnected environmental and social ramifications of human activities.

Other perspectives of the world in 2022 compared to 1972 are less cheerful. The global human population over that time has doubled from around 3.8 to 7.9 billion people, with the urban proportion rising from 37 per cent to 54 per cent. Per capita meat consumption has soared by nearly 60 per cent and the number of cars on the world’s roads has grown to 1.2 billion, both indicators of intensifying pressures on ecosystems. It is no surprise that global forest cover, fishery viability, climate stability and biodiversity are on steeply downward trajectories. Alarmingly, growing

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knowledge and increasingly comprehensive legislation still correlate with declining environmental health, resilience and supportive capacities.

And so 2022 is a moment in history; a chance to celebrate the substantial societal changes in environmental and social awareness witnessed since 1972. Yet, viewed as a midpoint in a century-long process of cultural transformation, we clearly have so much more to do. We hope that readers of this edition can join us in celebrating our collective achievements but also redouble efforts to achieve a sustainable accommodation with the ecosystems upon which we are wholly reliant.

References

[1] Carson, R. (1962) *Silent Spring*. Boston: Houghton Mifflin.

[2] Meadows, D.H., Meadows, D., Randers, J. and Behrens, W.W. III. (1972) *The Limits to Growth*. <https://www.donellameadows.org/wp-content/>.

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