

Editorial

Disturbing the ecosystem, albeit in small ways, provides experimental opportunity for ecologists but raises questions about ecological regeneration. The paper by Treberg and Turkington in this issue reports some simple and hopefully valuable information for those who wish to remove individual species from an experimental plot and to germinate wild collected seed to study potential for regeneration. Much is already well known among plant growers, but it was apparent during the peer review that what some take as common knowledge is not as widely known as experts have come to assume. Choice of removal method, with or without herbicide, must consider long-term impact to ensure that the research stays within ethical limits and requires determination of effectiveness. The paper reminds us of the need to consider local circumstances.

The paper by Waters et al. reports a natural situation that is inherently less scientifically 'controllable'. Relatively regular events, such as the annual flooding of the Red River in Manitoba, present real challenges for ecological interpretation. The best laid plans to study 'before and after' conditions inevitably miss the demands of the so-called 'scientific method' and the comparative observations are critical. Even in the controlled world of botanical gardens, unpredictable natural disasters leave us relying on well kept records to understand the consequences of small and massive changes in our biological surroundings.

Much ecological understanding in both wild and controlled systems depends on long-term studies where results are accumulated and interpreted as time passes. Careful and rigorous recording is essential whether by academics and members of natural history societies who describe ecological change, or by horticulturists whose collections have thrived as a result of expertise in growing plants in variously controlled gardens. It is increasingly important for these results to be submitted for peer review and publication, so that we can add to and expand the strong observational history upon which our understanding of biodiversity rests.

Iain E.P. Taylor, Professor of Botany and Research Director,
UBC Botanical Garden and Centre for Plant Research,
6804 SW Marine Drive, Vancouver, BC, Canada, V6T 1Z4.
iain.taylor@ubc.ca