Getting Back to a Resilient Normal

by Ralph C. Martin

To avoid the discomfort of being too hot in July, our thermostats can guarantee a cool air bath and in January the same thermostat can prevent the inconvenience of wearing a sweater. I wonder what is missed in the human experience when we can so consistently dial up a ‘normal’ comfort level. Of course, the cost of maintaining volumes of air temperatures in the sweet spot, between no sweating and no shivering, is energy, and lots of it. We could accept more heat in summer and more cold in winter.

After the floods in Alberta and the recent heavy rainfall in Toronto, many people were quoted as saying “what I most want is to get back to normal.” Many of us would respond this way.

However, the norm keeps advancing and that too is accepted as normal. It probably didn’t occur to my grandparents to maintain cubic metres of air at the same temperature all year, not to mention the air around them as they travelled. With a bit of luck, there was a gentle breeze over their open buggy when the sun was hot and plenty of blankets and turned up collars when the cutter runners squeaked through snow. As far as I know they were just as happy as we are.

The ecologist, C.S. Holling, described 4 stages of an adaptive ecosystem cycle, from renewal to growth to consolidation to release. It is in the consolidation stage that systems appear to be successful, stable and normal. Nevertheless, consolidation can become brittle and inflexible. Forests may accumulate most of their biomass in one dominant species, for example hemlock, and eventually the dry old trees are susceptible to disease, fire or strong winds. Their collapse leads to the stage of releasing energy and subsequent renewal.

Arguably, many human systems are now in the consolidation stage when so much is accumulated for our benefit, and like the hemlocks, we think it’s all about us. We consolidate materials and energy for our apparent needs. As we become more efficient in this process, we consider our inflated birthright and our impact to be normal.

Within the consolidation stage, a response might be to deliberately introduce a mini-cycle of release, renewal and growth, to stimulate adaptation and thus avoid a major
collapse. For example, a forest manager might initiate a controlled burn in a mature forest to reduce brittle undergrowth and dead material and stimulate species to grow which normally wait for a major collapse.

To some extent Hurricane Hazel, in 1954, was a gift (although resulting deaths were very sad and tragic) and a wake-up call in Ontario. The mini-cycle of collapse and release led to renewing water management with conservation authorities and flood plain regulations. With regard to flooding, Hurricane Hazel disrupted our march to consolidating and accumulating, and helped us adapt and recalibrate to a more resilient normal. On July 8, 2013 more water fell on Toronto, and the abnormal shock was absorbed with less loss, than during Hurricane Hazel. Without the mini-cycle, this month’s deluge may have caused more harm.

Today we increasingly accept unprecedented flows of energy and material consumption to buttress our comforts at the expense of Earth’s resilience. Within the last half century or so, our lives in this flurry of consolidation seem to be normal. However, even without the increasing variability of weather events, the risk of system collapse rises as hoarding humans tax abiotic parts of the ecosystem and impinge on other living species.

Similarly, the trend of the top 1% of Canadian earners with incomes of 10 times the income of the remaining 99% is a type of consolidation that atrophies long term resilience. However, as an example of a transparent social indicator, a Nova Scotia coffee co-op, Just Us! (http://justuscoffee.com), reveals that their highest to lowest wage ratio is 4 : 1. Many organizations have ratios far beyond that.

Stan Rowe, an ecologist from Saskatchewan wrote Home Place. “How shall we come to terms with the ecological insight that people are not the wholes but inseparable parts of the natural world, and that when parts attempt to dominate the Earth-whole they cause pathological problems? … We have moments of enlightenment. Collectively and recurrently we show our truer colours, banding together to accomplish worthy goals, freely giving in the interests of a perceived higher good, responding to prophetic visions in times of crisis…. What the Home Place needs from us is more modest furnishings, less extravagance, more tender loving care.”
We could choose to see our extravagant consolidation as diverging from normal and recalibrate with mini-cycles of normal housekeeping. Earth can handle most of our aspirations, if we respect resilience.

*Ralph C. Martin, Ph.D., P.Ag. is the Loblaw Chair, Sustainable Food Production and Professor, Ontario Agricultural College, University of Guelph. Comments welcome at rcmartin@uoguelph.ca*