

TRANSLATING RESEARCH INTO MANAGEMENT: EXPERIENCES OF A CONVERSATION BIOLOGIST

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Abstract

The planning process in Ontario compels justification for development. Of particular interest to me are the hackneyed terms “enhancement” and “restoration” to justify development in or adjacent to natural heritage (NH) features, areas or systems. I submit we need increased collaboration to demonstrate, rather than assert, justification of development that: 1) improves compliance with yet-to-be-well-articulated ecological standards; 2) reduces costly maintenance of NH features that are not healthy or self-sustaining; 3) wisely uses healthy and sustainable NH features and areas without compromising this capacity; and, 4) lessens the effects of existing, pre-development impacts. I emphasize our need for research to explain NH systems as landscape infrastructure that actually sustains human health. We need, moreover, to foster use of plain language to describe high quality NH systems and to explain that these serve basic and common human needs. I challenge us not to accept a legacy of palliative care of our natural heritage.

Expertise within governments and agencies increasingly depends on research and the work of others to inform and influence local decision-making about development that can affect natural heritage (NH) features and areas. While this dependence is somewhat tempered by the amassed life experiences of these staff, they are not likely to be able to replicate or independently corroborate matters at hand given increasingly unforgiving approval timelines. The planning process in Ontario [pursuant to the *Planning Act* (1990) and ancillary *Provincial Policy Statement* (PPS) (OMMAH, 1997)] compels justification for development. People like me are routinely asked to accept reports that invariably assert that proposed development is not only compatible with NH features and areas but will improve them, in accordance with published provincial policy. How this is asserted through use of ‘eco-speak’ continues to fascinate me.

It has been my experience that these assertions are generally articulated using language that seemingly assures net gain of NH features and systems in either their extent or quality. Hence, ‘eco-speak’ figures prominently in development proposals. It seemingly provides the basis, having considered other matters of public interest, for which approvals are generally issued. And yet in the undertaking, we see continued encroachment into and outright loss of NH features. How can this be? Are we to accept that development that encroaches into a NH feature (say, to occupy part of woodland) is benign, that it actually “enhances” the functions for which the feature was identified? That while we continue to see encroachment presented as NH-enhancing, have we tacitly resigned ourselves to necessary modification of the landscape that is currently devoid of recognizable, identifiable and/or evaluated NH areas (significant or otherwise) to accommodate human habitation

with little done to improve the diversity of natural features and the connections between as required by policy 2.3.3 of the PPS?

The PPS can be read as a charter for NH net gain (that it may not be is another matter). It clearly states that “*NH features and areas will be protected from incompatible development*” (OMMAH, 1997). As mentioned above, it also states that “*The diversity of natural features in an area, and the natural connections between them should be maintained, and improved where possible*” (OMMAH, 1997). In accordance with provincial policy, we should be seeing net growth in the extent and quality of NH systems across the settled Ontario landscape driven by the land-use conversion process that the *Planning Act* (1990) regulates. The *Planning Act* (1990) as the little engine that could, so to speak. That this is apparently not the case beckons research attention, commentary and solution.

Decisions affecting growth and settlement are faith-based, in my opinion with much of this faith vested with experts both within and without the public service. The planning system relies on the players acting responsibly, competently and fairly. Decision-makers need to be able to place their trust in assertions of “no negative impact” on NH features and areas, or on the functions for which these have been identified since they generally can not actually see this demonstrated. They consent to change being well-informed and made for the common good. While consent can not practically be reserved or conveyed retroactively following demonstration of what has been asserted, it can be informed with knowledge of previous experiences. This illustrates another opportunity for research to inform management. Have consents been efficacious in achieving common good? Decision-makers are accountable to comply with “showing regard to the PPS” as the law requires, and the trust they place in others can be an effective shield should they be held accountable. In my opinion, anyone found on the playing field using a shield gilded with the terms “restoration” or “enhancement” needs to be engaged.

Enhancement should literally, and therefore reasonably, be premised on development effecting a treatment that will make things on the NH side better than they could otherwise inherently be. Restoration elicits nostalgic longings for the way things used to be, i.e., before current land-uses ruined the former, and reportedly better, condition that can now be recovered. To be fair, these terms are immensely appropriate (and marketable) when describing a human-centric landscape condition. And yet, more for our species generally spells less for all others. Is development being justified, or rationalized?

I ask that we reconsider the pursuit of landscape restoration at least to the extent that I may misunderstand the term. I suggest we can really only strive to inform the present so as to influence choices about the future. Informing the present does include reflecting on the past but while it is prudent to check the rearview mirror from time to time, we must always be mindful that we are driving forward. Paradoxically, even drivers glance at their rearview mirrors to see what is in, or fast approaching, the near present. Most of the time, they are focused on the imminent future, namely what’s directly in their path (or soon to be). I submit there are practical difficulties with restoration-motivated development. Chiefly, how are we to reconcile the paradox of how to remove, displace, or otherwise relocate, our current human population so as to allow the as near to pre-settlement landscape condition to reappear while proposing to accommodate human growth and settle-

ment? We have not reserved much of our landscape for the public good in settled southern Ontario and while much has been said for intensification to arrest urban sprawl, it really only slows the consumption of land as our selfish genes apply themselves to their prime directive. If restoration is guided by the formula that the quality of NH systems is an inverse function of human density on landscapes, how are we to do the math to achieve measurable improvement in NH quality? One need only consider the extent of built infrastructure, especially roads, as an index of human density on the landscape of southern Ontario, to contemplate how much needs to be undone. Indeed, I challenge why any of this need be undone in any case since NH values are a time-space phenomenon, constructed by and for humans, and generally only relevant when time equals now. Hasn't our legacy been to adapt to environmental degradation rather than prevent it?

I also ask that we reserve enhancement to describe actions that contrive a state that is not inherently sustainable and which therefore requires subsidy, facilitation or other interference, to maintain the enhanced state. Since it is not generally clear who will provide the interference under the post-development regime, I see the term (as I understand it) reasonably and quickly falling into disuse. In my view, assertions that claim to enhance NH features and systems should be dismissed as relying on beauty being only skin deep after all. Either that or we should require the equivalent of doping tests from future performance-enhanced NH features and areas to see what we are getting ourselves into. Enhancement motivation can lead to NH features and areas being made too utilitarian for their own good. Consider storm water management facilities being passed off as artificial wetlands rather than as the sewage storage depressions they are. If restoration is guided by the formula above, then enhancement is guided by NH quality that is directly related to utility of NH features and areas to people. To accept enhancement as an appropriate approach to managing NH systems, requires us to, I submit, being called landscape horticulturists. And while we can be as organic about it as we want, we will still have to subsidize natural processes. Sustainability, abstraction that it may be, probably requires minimal overhead costs to succeed.

Given the lexicon of terms in current use to justify development, perhaps assertions about the consequences (good and not so good) of development could rely more on terms like remediation, rehabilitation, conservation and mitigation. These are not only more relevant than superfluous; they also compel action more likely to facilitate achievement of the abstraction of sustainability. We need increased collaboration among players in the growth game to demonstrate (not assert) that justification for development is sound. In that regard, I think we urgently need research into development that has already been approved and implemented to find those that actually: 1) comply with yet-to-be-well-articulated ecological standards; 2) reduce costly maintenance of NH features that were not beforehand healthy or self-sustaining; 3) wisely use already healthy and sustainable NH features and areas without compromising this capacity; and, 4) lessen the persistent negative effects of pre-development impacts. Simply stated, we need research that affirms NH net gain, being the desired outcome of the PPS (as I read it anyway).

Research findings will allow us to assess the efficacy of managing growth to effect remediation, rehabilitation and conservation of NH features of areas, using the most efficient means that are economically available. Else, we can plod along placing blind faith in the

restorative and enhancing (if not outright benign) impacts of growth on our NH systems. We need to be resolved on achieving our desired outcomes of sustainable development regardless that we may not fully apprehend what it is. And while that is hardly a strong foundation upon which to launch a mission, engaging uncertainty reasonably is the essence of adaptive management. Moreover, we need to consider that it is often very difficult to discriminate treatment that is rehabilitative from palliative, i.e., unless you know something about the trajectory of the patient's well-being. In an effort to achieve ecological health (something arguably as abstract as sustainability), we must not confuse feeling better with real improvement.

In conclusion, conversation biologists generally agree that the general condition of the human-inclusive ecological landscape for much of intensively settled southern Ontario is marked by widespread concern about persistent impairment of the quality of air, water and soil. We are now being increasingly alerted to environmental factors compromising human health. We now need to accept that these environmental factors are by and large human-induced and to call on our research-oriented colleagues to find ways to mitigate our tendency to render our habitat unfit even for us. We think one way to encourage stewardship of our habitat (our life support system) may be to emphasize research that explains NH systems as landscape infrastructure that sustains both individual human health, namely morally and physically, but also that of human communities, namely socially and economically. And so I call for renewed effort to identify what amount and extent of NH is required for a healthy landscape condition. How can it be described in geometrical or other relevant and salient ways? Can we guard against creating, let alone moving, lines in the sand where there should be no adversarial context for securing habitat that ensures quality of life for all? In the final analysis, we need to foster use of plain language to describe high quality NH systems and to explain that these serve basic and common human needs. We need to inform decisions by managing uncertainty reasonably, not by condoning those that are unreasonably certain. Let us not accept a legacy of palliative care of our natural heritage. To lose it is to lose ourselves.

References

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