Reading the urban landscape: the case of a campus tour at York University, Toronto, Ontario, Canada

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Abstract This paper presents a campus tour assignment in a first-year undergraduate environmental studies course at York University, Toronto, Canada. As a pedagogical tool, the assignment enables students to interrogate the dominant narratives of a university's immediate physical spaces and to apply broader theoretical and practical concepts to their meanings and understandings. An exploration of three sites on the tour is offered as illustrations: a storm water pond, a woodlot, and a native species garden. Complicating the histories of these sites provides entry points for a variety of conversations and debates in reference to environmental sustainability, social justice, and civic engagement. The main objective of the campus tour is to prompt students to move beyond description to analysis and to raise questions about campus features by making connections to historical choices, policy alternatives and self-reflexivity. Many of the ideas presented could be modified for use on other campuses and could invite a larger discursive discussion on social and sustainability issues.

Keywords Urban landscape · Campus tour · Narratives · Socionatures · York University

In the beginning was the story. Or rather: many stories, of many places, in many voices, pointing towards many ends. ~William Cronon, A place for stories: Nature, history and narrative (1992)

Campus familiarity can encourage student engagement in both their academic learning and institutional activities. At

the Faculty of Environmental Studies at York University in Toronto, a campus tour is used as a major assignment in a first year undergraduate course called "Taking Action: Engaging People and the Environment." The tour introduces students to a reading of the urban landscape in the form of their immediate environment, the university campus. The tour enables the students to learn and converse about the historical context of their university, it gives them the opportunity to explore and contest how the space is or could be used by members of the university community, and it allows them to envision and craft new stories about the campus space. The students are also encouraged to be reflexive about their own positions vis-à-vis the space-crafting not only alternative stories but also situating themselves in those stories. The stories on the tour include a study of the politics and power surrounding the choice of policy options, the management paths taken and not taken, and the inclusions and exclusions that are represented at different sites. Complicating the histories of the sites provides a basis from which to enter broader debates in reference to environmental sustainability, social justice, and civic engagement. The questioning aspects of the alternative campus tour set it apart from promotional campus tours that are typically celebratory rather than critical of the campus environment (Magolda 2000, 2001). We present the campus tour as an invitation for other course instructors to emulate and expand on in other university contexts in order to increase students' familiarity with their immediate environs, connect those insights with theoretical concepts learnt in courses, and to take strategic action to shape the university's future.

Logistics and objectives of the campus tour

Over the years, the course instructor, the teaching assistants, and the students have compiled and crafted narratives about

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12 stations or sites on the campus which form one of the basis of information for the students in studying their respective sites (Sandberg and Foster 2004, 2006; Sandberg 2009). In this article, we confine our discussion to three of these sites: a storm water pond, a woodlot, and a native species garden (Fig. 1).

The student tour occurs over three 3-h seminar blocks lead by teaching assistants over 3 weeks. There are typically 12 or more seminars in the course containing 25 students in each seminar group. In the first week, tutorial sessions are shaped around open discussions about each site based on readings, observations, and discussions about the sites. Students train and practice to be guides for one station on the tour. In the following 2 weeks, the students are split into two groups: 1 week, they are tour guides for one station and the other week, they are tourists who visit all stations. When they are tour guides, they remain at their station for the whole seminar block and engage in discussion with the roaming tourists. When they are tourists, they follow a map from station to station where they engage in discussions with tour guides and take notes. The teaching assistants at each site monitor the discussions and sign a sheet confirming a visit for each tourist. After the campus tour, the students are asked to identify their own campus feature and let the experience of the campus tour inform an investigation of the site in the form of a reflection essay.

The objective is to learn about questions that can be posed about different features on the campus as well as their historical context. The campus tour presents students with several challenges. The first involves a critical commitment to reading landscapes and their multiple meanings. The second entails asking the students to engage in a high level of intellectual nimbleness to draw abstract connections between their reading of the landscape and broader socioecological and cultural issues. At a theoretical level, the campus tour introduces students to various novel concepts -including the production of landscapes, the social construction of nature, nature's agency, and the idea of socionatures. Among other readings, we use the concept of narratives by Cronon (1992) to convey the message that stories can be told or written differently while using the same facts, figures, and other empirical material. We also use Cronon (1992, 1996) to make the point that nature and culture are not divided but intertwined, and that the campus fall into the category of a socionature or human and natural place. Work within the broad spectrum of political ecology (Davis 1998; Foster and Sandberg 2004; Rudy and Konefal 2007) also demonstrates that landscapes are always assemblages of natural and social elements. Indeed a core tenet of political ecology is that it makes little sense to conceive of nature and society as separate (Castree 1995; Swyngedouw 1997). At a practical level, the tour presents the students with the possibility to enquire into the day-to-day operation of a major institution. In subsequent group projects, for example, the campus tour has inspired students to speak to and interview various professionals in charge of the



Fig. 1 The York University Campus and Immediate Surroundings. The heart of the campus is located within the circular road in the center of the map. Map credit: Rajiv Rawat

management of the campus and to publish results in the campus student newspaper (for two examples, see Ecotourism Group 1200 2011 and Water wars-broken fountains, empty wallets 2009).

At a broader scale, as Tim Leduc (2009) suggests, a campus tour may provide broader lessons for curriculum concerns in environmental studies. As he writes: "Each university has its own unique ecological, community, institutional and scholarly histories that can help exemplify for students the multiple dimensions any inquiry needs to consider, thus offering one more potential way of approaching core curriculum concerns." Engaging with the campus environment might here open up university classes and administrative procedures to transparent and democratic debate, "... an interdisciplinary foray into academia's relation with the local ecology that can potentially raise questions about dominant political economic and institutional forces which may impinge upon environmental thinking" (ibid.). The main objective of the campus tour is thus to move beyond description to analysis and to raise questions about the features. This is also the key to completing the rest of the assignment which is followed up with the reflection paper and final group projects where students are encouraged to tackle campus issues in more detail. This assignment invokes imagination and engages students where they study, and it provides them with deeper insights and considerations on urban nature that they can then take into their lives.

Managing stormwater at Stong Pond

Our first example of a station on the campus tour is a storm water pond named Stong Pond after one of the first settler families in the area (Fig. 2). We use the pond to present two narratives surrounding storm water management to the



Fig. 2 Stong Pond. The view is toward the south with two residence high rise towers for graduate students seen in the background to the left. There are other high rise residences in the distances. Photo credit: Adrin Bardekjian

students. Reeves and Palassio (2008) call these contrasting narratives the "engineered water cycle" and the "natural water cycle". The engineered water cycle involves the enclosure and funneling of stormwater and snow melt into drains and buried concrete pipes and ponds allowing for development to occur around and above these subterranean structures. We present the pond as an effective way of manipulating nature into submission to development, leaving a maximum of land area open to building structures. At the same time, however, it is a polluting system by channeling debris and pollutants on hard surfaces into water bodies, it involves huge capital expenditures to replace infrastructure when worn out, and it is likely to fail in the light of a changing and more extreme climate.

We present Stong Pond as a representation of one element of the engineered water cycle. It was built at an early stage in the campus' history when half the campus drained into the Humber River watershed to the west and the other half into the Don River watershed to the east. At that time, the pond fulfilled its function by collecting the stormwater from the Humber watershed; it remained partially filled most of the time, and for parts of the summer it was nearly empty. However, once the campus was developed, the roads were built and paved, and soils compacted by heavy equipment, the meandering streams that crossed the campus into the Don River Watershed had nowhere to go. The Boynton Woodlot and Pond Road that are located in the Don River watershed were flooded threatening the trees in the woodlot and disrupting the traffic on the road (Fig. 1).

The Arboretum Committee, a group of faculty members, administrators, and university engineers, collectively advised the University to divert the streams flowing into the Don River watershed into Stong Pond and, then, of course, further into the Humber River watershed. The consequence of the change in drainage pattern is that the storm water of the whole campus now drains into Stong Pond and the Humber River Watershed. The engineered diversion solved the problem of the flooding of Pond Road and the Boynton Woodlot, but it created another problem. Stong Pond became inadequate as a storm water reservoir because it was always full, with a steady stream of water flowing into the creek that drained the pond, Hoover Creek, which then became seriously eroded. In 2006, the "inadequacy" of Stong Pond failed to assist in the amelioration of the effect of a serious storm when the campus was flooded and the Black Creek River overwhelmed a culvert that caused a portion of an important arterial road, Finch Avenue, to collapse at the south end of the campus (Fig. 1). Stong Pond has since been expanded to "take care" of future serious storms and floods that may affect the campus. Interestingly, in the maps describing the watersheds of the Toronto region published by the Toronto Region Conservation Authority, the public institution overseeing the watershed, the York University Campus area along with a strip of land east of Keele Street are included in the Humber River Watershed.

The artificial drainage pattern of the "engineered water cycle" has in fact become naturalized through the map representation (Fig. 1).

At the same time as we recount the Stong Pond expansion and the engineering philosophy attached to it, we point to the natural water cycle as a more water sensitive urban design to storm water management (Reeves and Palassio 2008). Such a system takes responsibility for the water drainage pattern locally by adopting measures like limiting development; disconnecting downspouts; building wetlands, swales, and green roofs; removing impermeable surfaces; and planting trees and other flora. To be sure, there is evidence of some of these features on the campus. At other stations of the campus tour, we point to the presence of two green roofs on campus that absorb and cleanse rainwater. We also point to the construction of swales along roadways and paths. We even encourage the students to consider the presence of a local statue, planted in the soil rather than mounted on a concrete pad, as an inspiration of building for water permeability (Sandberg 2009). We also look at various sites of the campus where natural water cycle measures could be implemented. However, these efforts are sparse and constitute a mere complement rather than serious alternative to the engineered water cycle. We thus proceed to discuss some of the structural and institutional constraints involved in moving from an engineered to a natural water cycle (Brown 2005; Roy et al. 2008).

Telling stories at the Michael Boyer Woodlot

The second illustration of the campus tour is the Michael Boyer Woodlot, named after a retired biology professor for his efforts to conserve green spaces on campus. The Boyer Woodlot is one of four urban woodlots now formally recognized on the York campus (Fig. 3). The woodlots reflect both development impacts on nature, nature's agency on development, and different ways of seeing and interacting with nonhuman nature. We identify three distinct narratives on the woodlot: obstacle, management unit, and refuge. Before the 1970s, the Boyer Woodlot constituted an obstacle to development. The mood and practice at the time revolved around clearing trees for farmers' fields, and then for homes, institutions, parking lots, and roads. One cue to why the campus woodlots were allowed to stay during the agricultural era is provided by three York academics. They suggest that the woodlot's respite during the farming era had more to do with its poor agricultural potential than a conscious attempt to conserve it (Boyer et al. 1986). The woodlots maintained some of their original ecological and hydrological roles during the farming era. The Boyer Woodlot maintained a variety of trees and housed two ponds that served as resting places for migratory birds and as a key habitat for a colony of wood frogs.

Once the university started its rapid construction phase. the natural integrity of the woodlots suffered from development pressures. It gave rise to an interest in the woodlots on campus. They became viewed as management units, places to be tended, signed, and policed. During the initial phases of the management era, the trees and understory were of prime interest for their own sake. Several concerns were articulated: A sustained and balanced moisture regime was changed into one of extreme spring floods and summer droughts; as a result, the soils shrank greatly and exposed feeder and buttress roots (Boyer et al. 1986); extensive construction across the campus forced the meadow voles that had lived in the agricultural fields to invade the woodlots causing extensive damage; and the increased traffic associated with the construction boom carried with it disease vectors that affected the trees and plants. Ninety percent of the elm trees on campus that lined many of the roads, for example, succumbed to the Dutch Elm Disease.

An Arboretum Committee was formed by maintenance crews and faculty members and sponsored by a senior administrator to deal with the state of the campus' woodlots and trees. The first thing the committee did was consider the rehabilitation of the four woodlots. Supported by the Ministry of Natural Resources, who offered free planting stock at the time, the Committee initiated annual planting days. For the Boyer Woodlot, two extensions were made (Landscape Inventory and Impact Study, York Campus, c. 1990, p. 84). The Boyer Woodlot is now valued as a forest remnant with a species composition typical of the Great Lakes St. Lawrence forest zone, including Manitoba maple, sugar maple, white ash, ironwood, white pine, trembling aspen, red oak, black locust and white elm (York University Secondary Plan Update 2008). In addition, the woodlot is seen as habitat and part of a migratory corridor for animals such as rabbits, groundhogs, and increasing numbers of deer.



Fig. 3 The Michael Boyer Woodlot. The view is from the southwest corner of the woodlot looking east. The sign honors Michael Boyer for his efforts to conserve the campus woodlots. The Lumbers Building is seen to the left in the photo. Photo credit: Adrina Bardekjian

Like most large urban green spaces, it is a critical part of the ecosystem.

But the means and goals of the management of the woodlots have also changed. The Arboretum Committee has folded as a result of a decline in interest and the erosion of funds. The campus woodlots have emerged as a habitat for mosquitoes spreading the West Nile virus, leading to debates over the benefits and costs of spraying efforts (they are currently favored). There are also questions on whether the woodlots' woody debris and standing snags constitute nesting sites for fauna or hazards for humans. The woodlots have also come to be seen as places that must be held accountable and yield benefits. For example, though minute in size, the woodlots have been studied as carbon sequesters (Royle et al. 2009). As Biology Professor Dawn Bazely states: "We're very interested in understanding the contribution that trees make to reducing carbon dioxide and combating climate change, and ... to get a good idea of how our campus trees might be affecting York's ecological footprint, ..." (2007). The woodlots are also expected to bring exposure and monetary value to the university. Students' photos of the Boyer Woodlot are part of Fall Wallpaper Packs made to brand and market the university.¹ And one of the services that York offers is a Commemorative Tree Program. For a price, the university will plant a tree or cluster of trees to commemorate individuals or an event.

The third narrative we explore in relation to the Boyer Woodlot is the woodlot as escape. Testimonies to such a narrative are difficult to access and document but we find them through informal sources like private conversations and entries on the internet and various social networking sites. The escape narrative is the informal, social, and personal experiences shared with nature, everyday narratives of woodlot patrons' spiritual experiences in and encounters with the woodlot. Testimonies show that students bury their pets, observe decomposing wildlife, and find a peaceful place to smoke in the woodlot. One testimonial bears witness to the personal significance of the woodlot to a foreign student:

The woodlot was York's saving grace for me on manya-day when I just wanted to burn the whole place down. It was my escape. There aren't many places like that here in urban China. I think I'll visit the campus when I am back on vacation next summer. I hope they haven't plowed the woodlot over.

One of our colleagues has noticed that the Boyer Woodlot is often an informal site for students to display art. At one point, she came across a "found art" in the shape of a bright satin dress laid out carefully on top of a log (personal correspondence, Beth Franklyn 2011). Yet the woodlot does not constitute an escape for all campus visitors and dwellers. This is for good reason. Occasional robberies and rapes and even a recent murder on or close to the campus testify to the vulnerability of certain groups, especially women, at certain sites on the campus. Franklyn provides another example:

I discovered a dancing woman made of dead leaves stuffed in chicken wire suspended in the air, attached to a tall tree ... it seemed so magical, all alone in the woods. I began to regularly visit the woman as I walked my dog each day. One day I came across the woman and saw she had been mutilated. Someone had driven long sticks through her. It was a very disturbing sight. I photographed the impaled figure and then removed the sticks ... (personal correspondence, Beth Franklyn 2011).

The woodlot as refuge, then, must be considered in a wider context. Not all campus residents see or experience the woodlot in the same way.

Interrogating the health, nursing, and environmental studies native species garden

Beth Franklyn's statement about inclusion and exclusion in the woodlot narrative provides a stepping stone to our third illustration of a station on the tour. At the Health, Nursing and Environmental Studies (HNES) building, we present the garden as potentially both building as well as undermining "biodiversity" by reminding students that the garden may be a physical environment that welcomes some groups more than others (Fig. 4). Many conventional plant and animal biologists lament the loss of native species biodiversity at the hands of exotic and invasive species. Invasive species specifically are often charged with crowding out biodiversity and are cited as being both economically and ecologically damaging. In fact, some prominent biologists explicitly define invasive species as "the subset of non-indigenous species that cause economic or environmental damage" (Lodge and Shrader-Frechette 2003, quoted in Foster and Sandberg 2004, 178).² Against this backdrop, a group of faculty and students from the Faculty of Environmental Studies, along with the Manager of Grounds, Fleets and Waste Management, gathered in 2005 to begin planning for the HNES Garden, a modest garden plot abutting the building of its namesake (Raincheques and Groundhogs 2011).

¹ Fall Wallpaper packs: http://experienceyork.apps01.yorku.ca/ wordpress/2009/10/15/boyer-woodlot-wallpaper-pack/

 $^{^{2}}$ It is important to note, however, that scholars working within the conventional natural sciences have begun to question the received wisdom that "exotic" and "invasive" species are always bad for "natural" environments (see for example, Davis et al. 2011; Sax and Gaines 2008.)



Fig. 4 The Health, Nursing, and Environmental Studies Native Species Garden. The view is from the western edge of the garden looking east. The HNES Building is located to the right. The Ross Building, named after the first President of the University, Murray Ross, towers in the background. In between the Ross Building and the Garden stands Mark di Suvero's sculpture *The Sticky Wicket* which forms a part of the larger campus tour (Sandberg 2009). Photo credit: Adrina Bardekjian

We begin by inviting the students to consider the many benefits the HNES Native Species Garden has brought to the campus. Most obviously, the garden has re-introduced native species to the campus, including elderberry, lobelia, Canadian columbine, various kinds of woodland and prairie grasses, witch hazel, cardinal plant, and pagoda dogwoods. Indeed, garden volunteers talk about the garden as a site of ecological restoration—returning a part of the campus to its original ecological form (Pitt-Clark 2010). The garden also provides refuge for a number of fauna as well, including groundhogs and robins (HNES native plant garden at York University, blog 2011).

The initial development of the garden brought together faculty members, university grounds staff, and students in a collective and ultimately successful project. This, we emphasize to students, is an example of how the traditional hierarchies typically associated with the division of labor on many university campuses can be transcended through collective action. The garden itself, with the recent addition of permanent name markers for each species in the garden, is increasingly being used by faculty and students as an educational tool. One Master's student explained how she used the garden in such a way:

I was in a class and we had an opportunity to do any kind of presentation we wanted. I brought the students out to the garden and we planted flowers ... What surprised me was that a number of people in the class had never planted seeds before (quoted in Pitt-Clark 2010).

These social aspects of the garden—the labor that goes into it, the social connections made because of it, the educational experiences it affords-allow us to highlight to students that the garden is more than simply a "natural" space, but that it is in fact a socionatural space, comprised of both natural and social elements. This observation brings into fine relief the ways in which the garden can be approached with a more critical posture. Consider again the name of the garden: The HNES Native Species Garden. The implication, by design, is that interloper exotic species are not welcome. Larson (2005) has argued that the discourse of invasion biology is beset with militaristic metaphors which create an inaccurate representation of invasive species that can also lead to social misunderstandings and xenophobia. Foster and Sandberg (2004), meanwhile, have demonstrated the socio-ecological benefits of invasive species and have revealed how naturalization projects tend to benefit wealthy over poor communities. What other implications might there be, when looking through the lens of political ecology, to excluding exotic species from the garden?

It is at this point that we introduce a cluster of non-native Japanese Flowering Cherry Trees within eyeshot of the garden. This group of trees, along with roughly 250 similar trees, was given to York University by the Consulate General of Japan to celebrate the close ties between Japan and York University. These "exotic" trees represent the celebration of social and cultural ties between the government of Japan and York University. Moreover, from a plant biology perspective, the trees are esthetically pleasing, have adapted nicely to Toronto's climate, have not proven to be invasive and require very little maintenance or horticultural attention. If we return to the central argument of Larson (2008) about the power of language to shape discourse, we can understand the implications of the native-good, exotic/foreign-bad dichotomy. This is particularly true if we take seriously the indivisibility of nature and society, and understand the HNES garden as a socionatural site. When applied to humans, the kind of intentional separation of "native" and "exotic/foreign" promoted within the garden, is called racism, and it certainly is not welcome or tolerated on campus. Rather, we want to celebrate diversity and revel in the symbiotic opportunities it presents.

Listening to students and revisiting our own positions

Over the years, students have expressed a particular fondness for the campus tour. They have indicated that the lessons learned during the tour have been most important and applicable to their other courses and their outlook on space in general. By taking responsibility for one site, students have stated that they feel important, like they are contributing to the history of their school. One of the many ways that the campus tour captivates students is also due to its experiential nature. Students appreciate time outside the conventional classroom; they benefit from the participatory learning approach by experiencing their environment in a new light. The conversations, presentations, and interactions during classes following the tour have been intelligent, focused, on topic, and the students are more engaged with a new respect for their surroundings.

For many students, the campus tour is the most celebrated part of the course. Perspectives have changed to their surprise and delight. Some even offer to return and share their experiences with new students in the years following. It is at this moment that we find ourselves, as the facilitators of this experience, also changed. Like the quiet hush before a rainstorm, it is quite an extraordinary experience to watch the moment of realization when students' perspectives shift and their perspective begin to deepen and widen. Though feeling uncertain at first, students begin to celebrate their new found insights and start questioning the confines within which they find themselves. Some wrestle with it, the way one does with unfamiliar truths, some embrace it, others do not realize that something has even changed in them until months pass. As a result, our own perspectives of ourselves deepen from year to year while we continually engage and interact with the students. For this, the campus tour envelopes layers of intellectual and emotional complexity.

Conclusion

Within the broad contexts of social justice, environmental sustainability, and civic engagement, the campus tour described here challenges students to critically trace theoretical and practical threads between the landscapes they encounter and the generalized unchallenged wisdoms they receive about those spaces; more importantly, it *permits* and *encour*ages them to do so. If conventional campus tours invite students to consume their campus (uncritically accepting dominant and depoliticized narratives), the alternative campus tour invites students to see themselves as *producers*—of their campus, their narratives, their landscapes, and new knowledge(s)-within a critical, ethical, and moral framework. It goes beyond what we are tempted to label "onedimensional critical thinking"-that which is confined to a particular discipline, or within a narrow epistemological or ontological orientation. Rather, the mode of analysis promoted by our campus tour calls for a horizontally (within the academy) and vertically (beyond it) integrated disciplinarity which questions the very premise of particular challenges: NOT "how do we manage storm water, woodlots and species biodiversity on campus?" but instead "what are the social, cultural, political and ecological implications of promoting specific types of management regimes?"

We believe our campus tour promotes a rigorous antidisciplinarity grounded in social justice, environmental sustainability and civic engagement. Students are encouraged to interrogate their immediate landscapes with this in mind, but also to see themselves within the narrative of the campus landscape. In this respect, the campus tour can be a profoundly political exercise which stands in stark relief to the conventional campus tour model.

The campus tour can also be expanded to serve a larger community. We are currently in the process of designing an interactive website about the campus tour where the York Community can interact with one another, engage in discussion, and share stories about these spaces. We have also started an initiative to introduce the campus tour to various communities that surround the campus, a first experience involved students from a local high school, residents of a local seniors' home, and single moms from a local shelter. We have also conducted the tour as a Jane's Walk, a growing international effort to promote conversational walking inspired by the teaching of urban philosopher Jane Jacobs. In these instances, the community campus tours are constructed as "intellectual exchanges" rather than as recruitment, promotional, and mere teaching events.

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References

- Bazely D (2007) Woodlots on campus serve as outdoor classrooms. YFile. York University. http://www.yorku.ca/yfile/archive/ index.asp?Article=8790 Accessed 10 May 2010
- Boyer M, Hough M, Furedy C (1986) Environ Conserv 13(3):263-265
- Brown R (2005) Impediments to integrated urban stormwater management: the need for institutional reform. Environ Manag 36 (3):455–468
- Castree N (1995) The nature of produced nature: materiality and knowledge construction in Marxism. Antipode 27:12–18
- Cronon W (1991) Nature's metropolis: Chicago and the Great West. Norton, New York
- Cronon W (1992) A place for stories: nature, history and narrative. J Am Hist 4(78):1347–1376
- Cronon W (1996) The trouble with wilderness; or, getting back to the wrong in nature. In: Cronon W (ed) Uncommon ground: rethinking the human place in nature. Norton, New York, pp 69–90
- Davis M (1998) Ecology of fear: Los Angeles and the imagination of disaster. Henry Holt, New York
- Davis M, Chew MK, Hobbs RJ, Lugo AE, Ewel JJ, Vermeij GJ, Brown JH, Rosenzweig ML, Gardener MR, Carrol SP, Thompson K, Pickett STA, Stromberg JC, Tredici PD, Suding KN, Ehrenfeld JG, Grime JP, Mascaro J, Briggs JC (2011) Don't judge species on their origin. Nature 474(7350):153–154
- Ecotourism Group 1200 (2011) Ecotourism: the good, the bad, and the environmentally ludicrous. Excalibur. http://www.excal.on.ca/? p=5757. Accessed 26 June 2011
- Foster J, Sandberg LA (2004) Friends or foe? Invasive species and public green space in Toronto. Geogr Rev 94(2):178–198

- Larson B (2005) The war of the roses: demilitarizing invasion biology. Front Ecol Environ 3(9):495–500
- Larson B (2008) Friend, foe, wonder, peril. Alternatives J 34(1):14-17
- Leduc T (2009) The fallacy of environmental studies? Critiques of Canadian interdisciplinary Programs. Environ J 37(2):1–28
- Magolda P (2000) The campus tour: ritual and community in higher education. Anthropol Educ Q 31(1):24c-46
- Magolda P (2001) What our rituals tell us about community on campus: a look at the campus tour. About Campus 5(6): 2–8. http:// www.myacpa.org/pub/documents/Magolda.pdf
- Pitt-Clark, J (19 August 2010) Native garden on Keele campus shows benefits of eco-restoration. Y-File York's Daily Bulletin. http:// www.yorku.ca/yfile/archive/index.asp?Article=15347. Accessed 26 August 2011
- Raincheques and groundhogs. HNES native plant garden at York University (2011) http://hnesnativeplantgarden.wordpress.com/. 4 June 2011. Accessed 26 August 2011
- Reeves W, Palassio C (2008) Introduction: Bridging the past, present and future of Toronto's water. In: Reeves W, Palassio C (eds) HTO: Toronto's water from Lake Iroquois to lost rivers to lowflow toilets. Coach House Books, Toronto, pp 12–22
- Roy AH, Wenger SJ, Fletcher TD, Walsh CJ, Ladson AR, Shuster WD, Thurston HW, Brown RR (2008) Impediments and solutions to sustainable, watershed-scale urban stormwater management: lessons from Australia and the United States. Environ Manag 42:344–359

- Royle A, Tagliavia C, Bazely D (2009) The value of the Keele Campus urban forest. Institute for Research and Innovation in Sustainability, York University, Toronto
- Rudy A, Konefal J (2007) Nature, sociology, and social justice: environmental sociology, pedagogy, and the curriculum. Am Behav Sci 51(4):494–515
- Sandberg LA (2009) Promoting environmental education at the university: the campus as a sticky wicket. Our Schools Our Selves 19 (1):113–120
- Sandberg LA, Foster J (2004) Playing tennis at York University: game, set, match tennis Canada. Critical Times 3(1):6
- Sandberg LA, Foster J (2006) Stormy weather: on hurricanes, water, and hard choices at York University. Critical Times 3(5):6–7
- Sax D, Gaines SD (2008) Species invasions and extinction: the future of native biodiversity on islands. Proc Natl Acad Sci U S A 105 (1):11490–11497
- Swyngedouw E (1997) Power, nature and the city: the conquest of water and the political ecology of urbanization in Guayaquil, Ecuador: 1880–1990. Environ Plan A 29(2):311–332
- Water wars-broken fountains, empty wallets (2009) Parts 1 and 2. http://www.youtube.com/watch?v=TJn3Mlr4NtY&feature=related and http://www.youtube.com/watch?v=YHaZDVQGgBY& feature=related. Accessed 26 June 2011
- York University Secondary Plan Update (2008) Natural Environment Features and Systems