

January 2018

LACF AWARDS \$22,000 IN GRANTS FOR 2018

The Landscape Architecture Canada Foundation (LACF) is pleased to announce the recipients of its 2018 grants in support of research, communication and scholarship.

"LACF is proud to announce the six grant recipients for 2018. Each project exemplifies the Canadian Landscape Charter; by documenting the expanding role landscape architects play in providing social, cultural, ecological, economic and health benefits to society", said LACF President, Vincent Asselin, FCSLA. "The grants impact is multiplied as the recipients are required to share the results of their work." The grants for 2018 cover a range of topics and tackle issues from detail design to global warming. Documentation of each grant is accessible through LACF's online portfolio found at http://lacf.ca/grants-portfolio."

2018 marks the first time a grant has been awarded from the Northern Research Fund.

Annual grant proposals are adjudicated and awarded by a national jury composed of six individuals from public, and private practice with academic credentials representing the Atlantic, Quebec, Ontario, Prairie, British Columbia regions and Canada's north. The Board of the Landscape Architecture Canada Foundation extends recognition to the many individuals and component associations who through their annual donations make these grants possible.

PROFESSIONAL PROJECTS

136 GROWING GRIT:

Low Nutrient Mineral Substrates for Resilient Perennial Planting

Ben O'Brien, Wild by Design, Picton, Ontario Grant \$3,000

In current landscape architectural practice ever-greater demands are placed on designed vegetation. 21st century plantings must be dramatically beautiful, sustain local wildlife, capture and filter storm water, green our roofs, clean our air, and preserve biodiversity all while resources for horticultural maintenance are on the decline. The challenge facing landscape architects today is how to create beautiful, biodiverse, and resilient designed vegetation.

The Low Nutrient Mineral Substrates for Resilient Perennial Planting project will investigate the potential of substrates as an alternative to conventional planting soil. LACF funding will help

fund construction, planting, and two years of monitoring of a trial garden. The garden will test the performance of 49 different herbaceous plants and 36 different bulbs on 4 substrates: 2 commercial green roof soils, and 2 different mixtures of recycled concrete aggregate and compost. It is hoped that, if successful, similar substrates and plant communities may become more widely adopted in Canadian landscape practice.

#137 _ **INCLUDING THE VOICE OF INDIGENOUS YOUTH IN GREEN INFRASTRUCTURE** Sheila Boudreau, Fred Martin, and Liat Margolis Grant \$7,000

Green infrastructure, which works with natural processes to provide invaluable ecosystem services, is advocated by conservation authorities and communities. A significant gap remains in our understanding of how to collaborate effectively across disciplines and in particular to co-produce solutions with First Nations, Inuit and Métis peoples

This project is being co-developed by the Toronto and Region Conservation Authority (TRCA), the Native Canadian Centre of Toronto (NCCT), and the University of Toronto (UofT), with support from Ryerson Urban Water to explore a participatory model that includes the voice of Indigenous youth.

The project is motivated by three aspirations: 1) to define the role of Landscape Architecture in responding to the Truth and Reconciliation Commission of Canada's Calls to Action, 2) to develop a 'learning-by-doing' example for integrating Indigenous Ways of Knowing including themes of Respect, Relationship, Reciprocity, Responsibility, and 3) to help bridge the intergenerational gap on traditional knowledge.

The intent is to learn and share the experience of how Indigenous high-school students and NCCT mentors invited to participate in landbased graduate courses, at the UofT and Ryerson University, can bring the voice of Indigenous youth to green infrastructure and Indigenous place-making.

#138 _ A MOSS MACHINE FOR GREEN ARCHITECTURE AND RESTORATIVE ECOLOGY: a scalable growing system to supply green roofs and living walls with moss and lichen cover Sean R. Haughian and Jeremy L. Lundholm Grant \$3,000

Mosses and lichens have many beneficial qualities that make them suitable for horticultural applications; however they are under-utilized in Canadian landscape architecture. Mosses and lichens lack extensive roots systems, and therefore do not require much soil. This means they could be applied to rooftops with little to no structural enhancement. The combination of small shoot-size with a colonial, mat-forming growth habit makes them amenable to applications ranging from small-scale, indoor greenery to large-scale outdoor rehabilitation projects. Adding mosses and lichens to the suite of green architecture species expands the market to include residential, as well as commercial structures, thereby increasing access to green roof esthetics and ecological services for all Canadians.

The "Moss Machine" growth chamber, is a multi-layered, low-cost rapid cultivation of matforming mosses and lichens over layers of organic fabric, resulting in blankets of live, desiccation-resistant vegetation. The space-saving requirements of advanced stacked-tray hothouse production systems will also be employed. We intend to take advantage of recent advances in small-scale LED grow-lighting systems to limit the cost and stressful temperature increases associated with halogen or fluorescent lighting in growth carts.

The results of the project will be (1) a prototype growth chamber (the Moss Machine) that can produce field-ready mats of moss and lichen species, (2) an ongoing field experiment to evaluate the persistence and rigour of moss mats on residential rooftops, and (3) a new resource for landscape architects to use in numerous applications.

The geographical distance between Canada's landscape architecture schools poses a barrier to advancing knowledge and collaborating on research projects. A multi-researcher presentation, *Crosscountry Check-up: A transect of landscape architecture research across Canada*, at the 2017 World Design Summit in Montreal (WDSM) was an essential first step in conquering the spatial divide and addressing links between research, education, and landscape architecture. The WDSM presentation focused on what types of research questions educators ask and how they reinforce learning in both studio and classroom. At the conference, researchers shared limited surveys of what lies behind their regional and pedagogical approaches to landscape architecture. The presentation generated much discussion.

We intend to continue the conversation to address common research questions, and reveal the potential for more informed and collaborative research. The goal is to create a forum for this discussion on landscape architecture research and education in Canada and form the foundation of a research group. With a nationally developed research network, landscape architecture research across the country can advance agendas and, most importantly, assist professionals by critically examining many of the pressing issues currently facing Canadian society and the environment.

Our project plan is to bring research professors together to design a studio that occurs at each of the schools simultaneously. We anticipate the results will be documentation of what challenges and opportunities there are as a collective.

STUDENT PROJECTS

#140 _ BURNING MAN: A Guiding Light for Participatory Community Design Sarah Luce-Andreyko, University of Guelph Grant \$1500

Black Rock City is an ephemeral community (Burning Man) emerging in the landscape for nine days a year. It achieves better place attachment and interactions for its 70,000 participants than permanent landscapes in urban areas designed to serve far larger communities. Burning Man will be analyzed for its ability to inform community design in what is known as the 'default world'- the world that exists beyond the perimeter of Burning Man. Burning Man is not confined to Black Rock City by any means, as it is first and foremost considered a cultural movement. Similar regional cultural movements exist across the globe, and although very specific to their sites, the values remain. Participants follow 10 Principles, the very foundation Burning Man is built upon. These Principles include: Radical Inclusion, Gifting, Decommodification, Radical Self-Reliance, Radical Self-Expression, Communal Effort, Civic Responsibility, Leaving No Trace, Participation, and Immediacy. There is considerable to be learned from the principles alone, but more interesting is the way in which they are expressed on the landscape, through regional events, and the way in which they can directly affect the idea of community design founded through civic engagement.

Supported through the community development philosophy of Randolph T. Hester, a design process framework will be generated through a reworking of participatory design. This process, rooted in the concept of 'build your own experience', will inform a design proposal for the University of Guelph campus, submitted to the 2018 Burning Man Global Art Grant.

#141_VISUALIZING CLIMATE IMPLICATIONS ON FOOD SOURCES IN THE CANADIAN ARCTIC Jessica MacDaniel, University of British Columbia Northern Research Bursary Fund Grant \$2,000

The Arctic is undergoing changes to the landscape due to global temperatures rising. The melting of ice and permafrost are affecting many small communities in the north. Not only are homes and communities under threat, but traditional ways of living are being altered due to changes in wildlife health and migration patterns. This master's thesis project will look at how these factors implicate the foodscape of the community, Old Crow, Yukon of the Arctic region.

Landscape architecture can operate in expansive ways in the Canadian Arctic, and can be an asset to other professionals, and communities working with issues related to the climate in the Arctic. The profession of landscape architecture has multi-faceted ways of understanding and visualizing the landscape. By creating visual information, through reference of studies, oral histories, and on-site documentation, the historical, current and projected information of the land, its patterns, and systems can be illustrated. This project will investigate how landscape architects can create information to be used as communication tools by working with community members and referencing research from other disciplines. This project will develop visual maps, timelines, 3D models and diagrams that can be used as tools for community

members wanting to speak about the climate threats that they are facing, and will continue to face. This can allow for discussions between communities, researchers, and decisions makers. The visual information produced through this project will be given to the Vuntut Gwitchen First Nation community in Old Crow.

The intent of this project is to explore how landscape architects can work towards assisting communities in finding solutions to adapt to food sources changing in the Canadian Arctic's Tundra landscape.

-30-

For information contact
Faye Langmaid, FCSLA, MCIP
Chair of the Annual Grants Program
Lacf.grants@gmail.com

Website: lacf.ca