



Nature Centre provides habitat on its rooftop

PROJECT:	John Janzen Nature Centre
LOCATION:	7000 - 143 st NW Edmonton, T6H4P3
BUILDING TYPE:	Commercial (public nature centre)
TOTAL ROOF AREA:	137 m ²

Ecoroof details

ECOROOF AREA: 114 m²

DIRECTION: North-west facing

STOREY: 1

YEAR INSTALLED: 2011

NEW BUILD OR RETROFIT: New build

TYPE OF ECOROOF: Unknown

ECOROOF SYSTEM: Pre-grown modular trays

SUBSTRATE DEPTH: 10cm

PLANTS: Sedum species

INTERESTING FEATURES: Recycled rubber walkway and two benches plus an interpretive fence display with ecoroof information

ACCESS: Main Roof – publicly accessible via stairs during facility operating hours; Hallway roof and Vestibule roof - via roof hatch and small ladders

Description

The motivation behind the John Janzen Nature Centre ecoroof was to provide enhanced storm water management with the intent to also provide education on ecoroofs and their advantages.

There are three ecoroofs on at the Nature Centre, with the main building ecoroof being accessible to the public. The ecoroof is accessed via stairs, which remain open during all public hours at the facility. On the ecoroof there are many interesting features for visitors to experience: Recycled rubber walkway, two benches, an interpretive fence display with ecoroof information, and a native pollinator hotel; not to mention the occasional visit from geese.

Challenges

The large main roof is clear span so the roof had to be engineered properly to accommodate the weight of the ecoroof. This challenge was addressed by ensuring the work was completed by a reputable and trusted engineering firm. There were no challenges with the construction.

With regards to operations and maintenance, this ecoroof is starting to experience some challenges with weeds in containers on the roof and other local species taking over. There are also some small trees that are starting to get a foot-hold. These challenges are strictly due to a lack of proper maintenance. In spring of 2020 the Nature Centre will be looking at replacing a large number of containers to address this issue.

Benefits

Since the ecoroof was established in 2011 with a focus on education about the benefits ecoroofs provide, it has provided that opportunity with the presence of educational displays on the roof and open-access to the public during facility hours.

Researchers at the University of Alberta conducted a study on populations of spiders and beetles on urban green roofs, including the John Janzen Nature Centre ecoroof, and found that compared to ground-level sites, ecoroofs have lower abundance of spiders and beetles but the same number of species. Urban ecoroofs provide patches of habitat in an otherwise desolate landscape on a traditional roof.¹

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Lessons Learned

The primary lesson from the John Janzen Nature Centre ecoroof is the importance of establishing a long-term maintenance program and schedule that is adhered to. If this is not done, weeds will begin to take over the ecoroof and will be more time consuming to remove and maintain.



Photo by Edmonton and Area Land Trust

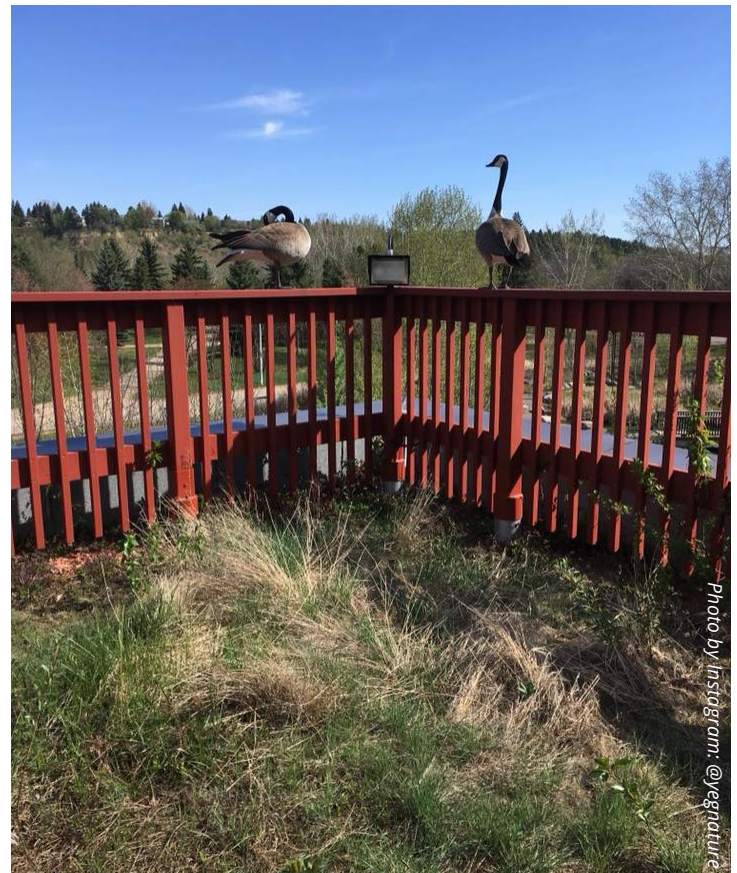


Photo by Instagram: @vegeture

¹ Bergeron, J. A. C., Pinzon, J., & Spence, J. R. (2018). Carabid and spider population dynamics on urban green roofs. *Zoosymposia*, 12(1), 69–89.