



08-Aug-18

To: AASHE STARS Committee

Dear STARS Committee Members,

I am writing to you as a director and vice-president of Spruce Permaculture which serves as the managing contractor for the MacEwan Indoor Urban Food Systems to offer my support for MacEwan University's STARS credit for this innovative food program.

The three hydroponic Indoor Urban Food Systems have been in operation since 2016 and demonstrate the university's commitment to sustainable food on campus and in the Edmonton Community. Because hydroponics allows for light, water and temperature to be closely controlled, the systems use a fraction of the water, land and fertilizers necessary to grow conventional crops. Because they are situated indoors in underutilized space they allow campus to access fresh basil, tomatoes, lettuce and more in downtown Edmonton in January (where temperatures can surpass -30c) and year-round.

Of the three systems, the most interesting is the aquaponics garden operated in conjunction with the Early Learning at MacEwan childcare center. The unit serves not only as an aquaponic garden -growing fresh vegetables using the waste from pet goldfish as nutrients- but also as a learning opportunity, living lab and source of connection and calm for the children. Children in the center select and plant the seeds they want to grow. They monitor their growth for weeks and months. Finally, they get to harvest what they sowed, bring it to the on-site chef and enjoy eating it in their lunch or snack that day. The goldfish and bubbling, running water in the aquariums are a source of calm for the children, who often sit in front of the unit to ease their minds throughout the ups and downs of the day. Educators use the life cycle processes in the aquaponics system in their curricula and daily programming to teach various lessons and allow children to explore plant and animal processes in a safe, rewarding and delicious way.

I look forward to continuing to work with MacEwan University to innovate and grow these indoor food systems for years to come and to bring more local food and learning to all members of the campus community, big and small!

Sincerely,

A handwritten signature in black ink that reads "Kazimir Haykowsky". The signature is fluid and cursive, with the first name being the most prominent.

Kazimir Haykowsky, BA

Director & Vice-President

Spruce Permaculture Landscaping Ltd.