

January 16, 2019

Photo exhibit displays cannibalistic mating behavior

Edmonton – Most people do anything and everything to avoid bugs and insects – but not Dr. Kevin Judge, associate professor, Department of Biological Sciences. He loves studying insects, especially grigs (genus *Cyphoderris*). Grigs are large, flightless relatives of crickets that have an unusual mating ritual.

After he received a 2017 NSERC Individual Discovery Grant, Judge used his love of grigs to study whether human changes to the environment – deforestation, pine beetle infestations and fires – could be linked to important evolutionary factors, like mate selection and cross breeding between species.

Over the course of his research, Judge has taken thousands of photos of grigs, some of which are now on display at MacEwan University

“Grigs are interesting because of their cannibalistic behavior,” he says. “Once a female approaches a potential mate, she mounts his back and begins to feed on his hind wings. The loss of wing tissue and blood is not fatal to the male, and may serve to distract the female while the male grasps the female in an attempt to copulate.”

“So the term ‘cannibal’ is technically true, but when you hear the term, you think death,” explains Judge. “The males don’t die. They display adaptations to their wings that make you think that they’ve evolved to sustain this damage from mating. It may even be a characteristic that evolved in males in order to feed the females.”

Judge says that being a researcher gives him direction in capturing his photos. He uses his camera as a magnifying lens and note-taking device, which enables him to continue making observations long after leaving the specimen’s natural environment. “There’s an art to photography and part of that comes from being interested in the animals and trying to capture their natural beauty. I love sitting and observing specimens and being in nature.”

About NSERC

NSERC aims to make Canada a country of discoverers and innovators for the benefit of all Canadians. The agency supports university students in their advanced studies, promotes and supports discovery research, and fosters innovation by encouraging Canadian companies to participate and invest in post-secondary research projects. NSERC researchers are on the vanguard of science, building on Canada’s long tradition of scientific excellence.

[The photo gallery is on display in the Office of Teaching and Learning at MacEwan University.](#)

When: January 24 - April 16

Where: 7-266 (Building seven, room 266, City Centre Campus)

Founded in 1971, MacEwan University inspires its students with a powerful combination of academic excellence and personal learning experiences. Offering more than 65 programs including undergraduate degrees, applied degrees, diplomas, certificates, continuing education and corporate training, the university provides a transformative education in a creative, collaborative and supportive learning environment where creativity and innovation thrive. Located in Edmonton, Alberta Canada, MacEwan University offers a unique student experience that opens up diverse pathways for achievement and growth.

For more information, please contact:

David Beharry, Media Relations Advisor

780-497-5586

Cell: 780- 231-5954

Email: beharryd@macewan.ca

Get MacEwan University news delivered to your inbox. [Sign up for our weekly e-newsletter.](#)