Drawing by **Yana Eglit**

BOGS

FALL 2020 NEWSLETTER

EVENTS, HOBBIES, PUBLICATIONS, DIVERSITY OF NATURE, NEWS AND MUCH MORE!

UPCOMING EVENTS

Exciting Word Fight

Describe your thesis using the 1000 most common words in English
splasho.com/upgoer5
Submit your entry to loay.jabre@dal.ca by December 10th to win prizes!

Holiday Cookie Swap and Canned Food Drive

December 10th
Contact Isabelle Hurley at irochehurley@gmail.com to participate/for questions

BioCoffee
Tuesdays @ 10:30 AM

FISH Talks
Fridays @ 3:30 PM

Departmental Seminars
Thursdays @ 11:30 AM
www.youtube.com/channel/UCSU09HUAYP6ayKrMHBbYK-w

Contact BOGS social coordinators Mili Sanchez and Megan Roberts for event ideas!

... LOAY SAYS HI ...

I want to begin this newsletter by welcoming all our new graduate students to BOGS and to the Biology Department! Just the other day I overhead one of the new students ask "what's an LSC?" and it made me realize how absolutely bonkers this year has been!! It breaks my heart that some of you have yet to explore the magical LSC, but I could not be happier to see you at BOGS events, virtual or otherwise. With patience and luck, one day you too might get a chance to meet the LSC mice or even wait 45 minutes in line for a Tim's coffee.

I also want to congratulate all BOGS members on their recent achievements, no matter how big or small. In the midst of a pandemic, you managed to take ATC exams, finish pre-lims, defend theses, attend virtual conferences and write papers! You also still managed to collect data, write a sentence or two, or even think about school. The mere fact that you are a graduate student right now is impressive and you should be proud!

It is no secret that the last few months have been especially difficult for everyone in BOGS. We were unable to hold some of our most cherished events, and social interactions were severely cut down. However, thanks to the hard work of the most incredible group of people, BOGS is THRIVING. Thanks to social coordinators **Mili Sanchez** and **Megan Roberts**, we still enjoyed fun outings and virtual events. Thanks to **Daniela Notte** and **Sonja Rose,** the (bio)beer kept flowing and, thanks to **Olivia Pisano** and **Connor Mackie**, we were still able to have chats and coffee on Tuesdays. Thanks to **Cat Bannon** and **Hunter Stevens,** FISH talks remained the Friday staple, and thanks to all members and allies, BOGS kept on being the powerhouse of the Biology Department.

On a final note, I cannot wait for the pandemic to be over with. In the mean time, let's continue looking out for one another, and we'll soon be able to bump into each other in the hallways of the LSC.

Stay safe,
Loay Jabre - BOGS President

SOMETHING ELSE

ONE GOOD THING THAT COMES OF OUT BEING SQUIRRELED AWAY AT HOME IS THAT WE GET TO PERFECT OUR HOBBIES AND EXPLORE NEW INTERESTS. HERE'S WHAT SOME BOGS MEMBERS HAVE BEEN UP TO.
WHAT WILL YOU DO NEXT?

Loay Jabre recently fell in love with mushrooming. There is an immense variety of mushroom shapes, colors, textures and sizes all over Halifax, and some even grow well into the winter! Make sure to be *extra* careful if you're collecting mushrooms for eating purposes.

Megan Roberts was busy turning some clay! Not happy with the way your coffee mug sits on your lips? Fear not, you can rent a pottery wheel and make mugs to your exact specifications. Ask Megan about pottery the next time you see her!

BOGS members trekked around Point Pleasant park and played a fierce game of croquet.
There are many easily accessible trails and parks around Halifax that you can enjoy. As winter approaches, many trails will also be open to snowshoeing and cross country skiing.

Hunter Stevens spent a lot of time exploring the deep blue. There are several diving schools around Halifax that can teach you how to dive, but only Hunter can show you where to find glowing pumpkins. Ask Hunter about diving and snorkeling next time you see him!

RECENT PUBLICATIONS

Congrats to BOGS members on their new publications!

Laura Steeves et al. (2020) Exploring feeding physiology of Mytilus edulis across geographic and fjord gradients in low-seston environments. MEPS. doi.org/10.3354/meps13455
This research explored differences in the feeding physiology of the blue mussel, by conducting field experiments between and within Norwegian fjords.

Loay Jabre and Erin Bertrand. (2020) Interactive effects of iron and temperature on the growth of Fragilariopsis cylindrus. L&O Letters. doi.org/10.1002/lol2.10158
I grew a polar diatom under different environmental conditions in the lab and discovered that warmer waters allow it to reduce the amount of essential iron needed for its growth. Find out why!

Loay Jabre,… **J. Scott. P. McCain** et al. (2020) Molecular underpinnings and biogeochemical consequences of enhanced diatom growth in a warming Southern Ocean. bioRxiv. doi.org/10.1101/2020.07.01.177865
Molecular data all the way to the Antarctic allowed us to explore how a warming ocean influences phytoplankton growth and nutrient cycling. Dig in for all the juicy details!

Melanie Massey and Hutchings, J. A. (2020). Thermal variability during ectotherm incubation: A synthesis and framework. J. Exp. Zool. Part A: Ecological and Integrative Physiology. doi.org/10.1002/jez.2400
In nature, temperatures are rarely constant... so why do we use constant temperatures in experiments? See what happens when researchers play with thermal variability in fishes, reptiles, amphibians in this review!

Noor Youssef et al. (2020) The ups and downs of amino acid co-evolution: evolutionary Stokes and anti-Stokes shifts. bioRxiv. doi.org/10.1101/2020.08.31.271775
Random changes in genotype have often been accused of having an adaptive origin. This paper challenges recent claims that reductions in amino acid fitness over time must be the result of adaptations to a changing environment and provides a new mechanism for its occurrence.

Stewart DT,...**Brent M Robicheau**,...**Noor Youssef**, Garrido-Ramos MA. (2020). An Unusual Evolutionary Strategy: The Origins, Genetic Repertoire, and Implications of Doubly Uniparental Inheritance of Mitochondrial DNA in Bivalves. In: Pontarotti P (eds) Evolutionary Biology—A Transdisciplinary Approach. Springer, Cham.
link.springer.com/chapter/10.1007/978-3-030-57246-4_12
Marine bivalves exhibit a unique form of mitochondrial DNA inheritance called 'DUI' where both maternal and paternal lineages are maintained between generations. In this recent book chapter, Brent & Noor team up with recent departmental seminar speaker, Dr. Sophie Breton, as well as others from France and Spain, to review the current state of DUI research

Terebiznik, M,….**Melanie Massey**, et al. (2020) Hatchling turtles ingest natural and artificial incubation substrates at high frequency. Behav. Ecol. Sociobiol. doi.org/10.1007/s00265-020-02913-1
We dug up the dirty details on baby turtles who eat the sand, gravel, and vermiculite around them upon nest emergence. Do they do it on purpose? You find out!

DIVERSITY OF NATURE

BOGS members Catalina, Melanie and Suchinta make waves!

Amidst mass protests in support of Black Lives Matter earlier this year, Catalina Albury, Suchinta Arif, and I found ourselves asking, "what can we do to help? How can we support Black, Indigenous, and other marginalized groups in this inequitable world?". We decided to leverage our privilege as scientists and our skills as educators to create the **Diversity of Nature** program: an overnight field expedition for BIPOC high school students, taught by BIPOC mentors. Our program is designed to give local BIPOC students an immersive, hands-on, and cost-free nature experience where they will learn ecological methods directly from graduate student knowledge-makers.

Photo: Carolina Andrade

Catalina will be spearheading a microscopy workshop, Suchinta is tackling marine ecosystems, and I will deliver a scientific illustration workshop – among many other exciting programs like birding and plant identification. We've successfully crowdfunded $12,500 to support our program with the help of Dalhousie, and earned a $37,500 grant from The Marine Environmental Observation Prediction and Response Network (MEOPAR), enabling us to fund our program for at least 2 years. We hope to show young BIPOC individuals that scientists can and do look like them. We can't wait! - **By Melanie Massey.**

No in-person meetings? No problem!
BOGS members have adjusted to life in the VR. From lab meetings to BioCoffee and seminars, our social interactions have become...virtually virtual. Learn more about virtual workplace etiquettes here: **tinyurl.com/y4leotws**

NEWS AND VIEWS

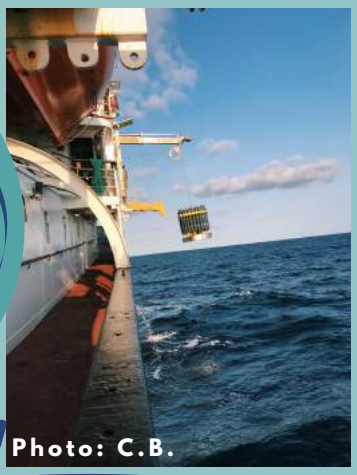

Photo: C.B.

Mili Sanchez and **Brent Robicheau** organized an awesome game of BioJeopardy. While every team in attendance managed to lose (not kidding), one important lesson prevailed: *don't put all your eggs in one basket.* Will you be the first BioJeopardy winner?

After a myriad of logistical nightmares, **Cat Bannon** and **Liam MacNiel** completed a successful research cruise in the North Atlantic! This photo captures a moment on the cruise when a CTD rosette was being lowered to collect water samples.

COVID took 2020 BioBall from us, but it couldn't stop us from looking snazzy while eating garlic fingers. I am crossing my fingers and hoping for a grand BioBall in 2021. Stay tuned for updates.

MENTAL HEALTH AT DAL

Graduate students experience unique mental health challenges. ***You are not alone.*** Don't hesitate to reach out for help if you feel like you need it.
dal.ca/mentalhealth

get in touch

Melanie Massey has been busy updating the BOGS website with a new Bulletin Board and FAQs section. Get in touch with Melanie if have website ideas or if you have news you'd like to put up on the board.
www.dalhousiebogs.ca

I would love to hear your thoughts and ideas for our next newsletter. Please send any comments and content ideas to **loay.jabre@dal.ca**