

SCIENCE HIGHLIGHT

Open data: a promising compromise

The journal *Trends in Ecology and Evolution* recently published an opinion paper (Mills et al. 2015. *TREE* (10):581-9) about the ongoing debate concerning the recent trend for funding agencies and journals to require researchers to provide free, open access to data. These requests are causing some uneasiness across scientific disciplines, but this article specifically relates to the apprehension felt amongst researchers conducting long-term ecological studies. These researchers have been reluctant to make their raw data publicly available for several reasons. They worry about data reuse by researchers who are not well informed on the environmental context related to the data, thereby resulting in false interpretation.

Researchers are also concerned that open access to data from long-term studies could lead to a reduction in these types of studies as well as decreased opportunities for collaborative research. Open access to data from long-term studies is advantageous to those using the data; however, the data contributors who laboriously collected the data in the field over many years, are the sole bearers of the costs. The article then proceeds to present solutions which could render data sharing practices more acceptable to those who collect data over the long term. One recommendation is to promote collaborations by collating all metadata on a single website, so that potential collaborators can obtain preliminary information on the collected data along with the data contributor's contact information. That said, advocates of open access data policies argue that studies resulting from the combination of several datasets allow scientists to make quantum leaps in advancing knowledge whereas this would not be possible when using smaller datasets (Poisot et al. 2013. *IEE* 6(2) 11-19).

CEN's initiative

CEN is sensitive and responsive to these arguments. A new policy at CEN is now requiring that its researchers provide metadata on their projects. Researchers must submit their metadata records (the "what", "where", "when" and "why" of their work) to database centres such as the Polar Data Catalogue (www.polardata.ca). CEN envisions that this sharing of metadata will lead to productive collaborations that will develop into exciting and relevant discoveries while officially recognizing the efforts of data contributors. In conjunction with this data policy, CEN developed *Nordicana D*, a collection of freely available online datasets. The data series include meteorological data from the CEN SILA network as well as temperature data from boreholes, data from the groundwater monitoring network, and lemming population data. CEN researchers are invited to submit their data to *Nordicana D* and once the data is approved and curated, it will be attributed a Digital Object Identifier (DOI), allowing users to properly cite the data and the authors, thereby recognizing researchers' efforts and increasing the visibility and the value of CEN data for reuse. The legacy of the data is ensured and its reuse can generate broader, overarching synthesis studies.



Photo: Gonçalo Vieira launching a UAV (credit: João Canário)

NEWS FROM OUR STATIONS

CEN's Whapmagoostui-Kuujuarapik station was visited by a team of Portuguese scientists who came to study the aquatic systems and wetland vegetation in the surrounding area. Researchers J. Canário, G. Vieira and their collaborators made measurements using an unmanned aerial vehicle (photo above) flying at an altitude of 90 m and with a 3 cm resolution.

This year, ten new measurement sites were added to our SILA network of climate stations which now counts more than 120 stations.

In September, a consultation took place in Kangiqsualujuaq to discuss the possibility of establishing a CEN "Centre for Northern Research and Innovation in Knowledge Exchange" in this community. The discussions were very positive and the local community is favourable to the project.



CEN Bulletin

CEN RESEARCHER: NICOLAS LECOMTE

Nicolas Lecomte is a regular member at CEN since May 2015. Nicolas, professor at Université de Moncton and associate professor at UQAR, holds a Canada Research Chair in Polar and Boreal Ecology. His research program mainly focuses on the study of terrestrial community dynamics in the Arctic and Subarctic Regions. He is particularly interested in detecting the impacts of climate change and anthropogenic pressure on tundra ecosystems. Nicolas and his team measure the importance and magnitude of these effects through long-term ecological monitoring of key species and ecosystems at multiple spatial scales.

A WORD FROM OUR STUDENT REPS

Although the year has already begun, we would like to wish you a great 2015-2016 and welcome the new students. We hope you had a great summer and that your fieldwork went smoothly.

This year, your D vou  Comit   tudiant (devoted student committee, DC ) changed considerably by welcoming three new members: Sophie Crevecoeur, PhD student in Biology at Universit  Laval, Sophie Dufour-Beaus jour, PhD student in Water Sciences at INRS, and Caroline Dolant, PhD student in Remote Sensing at Universit  de Sherbrooke. They joined the veteran members who are Samuel Gagnon, PhD student in Geography at Universit  Laval, and Florence Lapierre Poulin, Master's student in Biology at UQAR.

Finally, we are currently revising the awards and scholarships applications offered to students who are CEN members. Indeed, your CEN student status allows you to apply for different awards and scholarships (scientific paper publication, participation to conferences or internships, etc.). The next deadline to submit an application is March 1st, 2016. For more details, please consult the section "Bourses et prix du CEN" (in French) at www.cen.ulaval.ca or contact us at etudiants@cen.ulaval.ca.

We wish you a good fall semester and hope to see you at the CEN's annual symposium which will take place at UQTR, February 11, 2016!

POLAR MEDAL

CEN researcher and ex-director Michel Allard is one of this year's recipients of the prestigious Polar Medal. This famous medal celebrates Canada's northern heritage and rewards those who provide extraordinary services to the Northern parts of the country. Indeed, Professor Allard's contribution in the fields of permafrost science, in the study of Inuit communities' vulnerability to climate warming, and in the development of adaptive strategies is absolutely remarkable.

The CEN Bulletin is written for CEN members and the scientific community and others interested in northern environmental research. The material provided showcases the work of its members and aims to disseminate information on CEN activities.



Photo: Nicolas Lecomte (credit: M-A. Giroux)

MARK YOUR CALENDARS!

We are pleased to announce that the 2016 Centre for Northern Studies (CEN) annual meeting will be held at the Pavillon Ringuet (Atrium C.E.U.) at **Universit  du Qu bec   Trois-Rivi res, on February 11, 2016**. CALL FOR ABSTRACTS: We are accepting abstracts for oral and poster presentations. Prospective presenters should submit their abstract via the [online registration form](#). The deadline for abstract submission is December 18, 2015.

ArcticNet and its partners invite the arctic scientific community to participate to its next [annual meeting](#) which will be held in Vancouver from the 7th to the 11th December 2015.



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