



Week 33, 2020

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The Bolin Centre is a multi-disciplinary consortium of over 350 scientists in Sweden that conducts research and graduate education related to the Earth's climate.



Welcome back!

The weekly newsletter is back on track.
We hope you find it useful!

Science Advisory Group Retreat on Utö, September 7-8

The SAG Retreat will focus on the development of Bolin Centre. More information to the participants will be sent later this week.

Apply for funding from Research Area 5

Travel and work restrictions due to COVID-19 continue to cause problems and may require spontaneous modifications of previous plans (e.g. fieldwork in Sweden instead of abroad etc).

Until further notice, RA5 members of Bolin Centre for Climate Research can now apply at any time for funding from RA5.

A new application will not affect a previous grant you may have on hold. Please write an email to frederik.schenk@geo.su.se and malin.kylander@geo.su.se with a brief description of when you want to do what and where, and who would be involved. We can then discuss if and how we can provide funding (fieldwork, travel, lab costs, etc).

Office staff - Bolin Centre at campus

Due to COVID-19, the Bolin Centre Office will be irregularly staffed at the University. Like many of you, we work from home. Don't hesitate to get in touch with us via mobile or e-mail.

- Magnus: 076-695 70 78, magnus.atterfors@su.se (Communications)
- Annika: 072-148 91 49, annika.granebeck@su.se (Coordination)
- Eva: 076-650 03 08, eva.gylfe@su.se (Supports the office part-time during the autumn).

BOLIN CENTRE EVENTS

25-26

November

Bolin Days

The Bolin Days will take place in a COVID-19- adjusted format. If you are interested in Climate and the Earth Sciences, you are welcome to join in! More info will follow.

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October

Bolin Centre Seminar Series | Research Area 8

Time & place: Oct 20 at 16h00, Zoom

Titel: The interplay of plasticity and evolution in insect responses to variable, changing environments

Speaker: Lauren Buckley, Department of Biology, University of Washington

Abstract: to be announced

OTHER EVENTS AND INFORMATION

Arctic Avenue Fall Call 2020

The Arctic Avenue Fall Call 2020 is now open. Application deadline is October 20, 2020. [Specific information for the call and application »](#)

Please send the application to the Arctic Avenue Steering Committee by email to [Annika Granebeck](#) and [Kaarina Weckström](#). State *Application for Arctic Avenue funding* in the subject heading.

A call is also planned for spring 2021. Welcome with your application!

NEWS FROM THE WEB

Large stocks of peatland carbon and nitrogen are vulnerable to permafrost thaw

A study by Gustaf Hugelius et al finds that warming will likely shift the greenhouse gas balance of northern peatlands. At present, peatlands cool the climate, but anthropogenic warming can shift them into a net source of warming. [Read more and listen to news piece on SR Vetenskapsradion \(in Swedish\)».](#)

How ice sheets rip rocks apart

An international team of researchers working in eastern Sweden for SKB has recognised a new process of glacial erosion, the first for nearly 200 years. It's called glacial ripping. [Read more on Department of Physical Geography».](#)

New article in The Conversation "Iran: decades of unsustainable water use has dried up lakes and caused environmental destruction"

The article is written by Zahra Kalantari, Associate Professor, Georgia Destouni, Professor of Hydrology, Hydrogeology and Water Resources, and Davood Moshir Panahi, PhD Student, all at the Department of Physical Geography, Stockholm University. [Read the article».](#)

Priming effect of plant roots boosts carbon emissions

A key uncertainty in climate projections is the amount of carbon emitted by thawing permafrost in the Arctic. Plant roots in soil stimulate microbial decomposition, a mechanism called the priming effect. An international research team from Stockholm University, Umeå University and the French National Research Institute for Agriculture, Food and Environment (INRAE) shows that the priming effect alone can cause emission of 40 gigatons of carbon from thawing permafrost by 2100. [Read more on Department of Environmental Science».](#)

Discovery of an unrecognized pathway carrying overflow waters toward the Faroe Bank Channel

An international team discovered a previously unrecognized ocean current that transports water to one of the world's largest "waterfalls" in the North Atlantic Ocean: the Faroe Bank Channel Overflow into the deep North Atlantic. While investigating the pathways that water takes to feed this major waterfall, the research team identified a surprising path of the cold and dense water flowing at depth, which led to the discovery of this new ocean current. [Read the article».](#)

Pristine environments offer a window to our cloudy past

A new study uses satellite data over the Southern Hemisphere to understand global cloud composition during the industrial revolution. This research tackles one of the largest uncertainties in today's climate models. [Read the article».](#)

New soil models may ease atmospheric CO2

To remove carbon dioxide from the Earth's atmosphere in an effort to slow climate change, scientists must get their hands dirty and peek underground. [Read the article».](#)

New outreach brief published



Heat waves, heavy rainfall and flooding are the three climate extremes that describe Sweden's future. The Rossby Centre at SMHI, a Bolin Centre partner, has concluded a summarizing report of future climate extremes. Based on the report, Eva Gylfe has produced a brief aimed for a broader audience and schools. Helena Martins and Ralf Döscher from the Rossby Centre has contributed. [Read the brief \(in Swedish\)»](#).

Here you'll find [other briefs in the communication project Digitala forskningsblad \(based on other scientific articles and reports, all in Swedish\)»](#).

The **Bolin Centre Weekly News** provides you with a selection of our current activities and latest news and is sent to all members of the Bolin Centre. If you have suggestions that you would like to include in coming Weekly News, you are welcome to send these to bolin@su.se.

Editor: Magnus Atterfors
Foto: Martin Jakobsson, Pavel Koubek

Stay updated

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