

Lars J. Munkholm

Fortunately, COVID19 vaccinations are globally being rolled out at increasing pace. This means that we are slowly – but steadily – normalizing to a post COVID-19 daily life. It may feel like ages ago since we use our real office every day, interact face-to-face with colleagues – not to say physically attended conferences and workshops. In other words – freedom will soon follow all the restrictions. ISTRO is also slowly adjusting to post COVID19 life. Our working group on conservation tillage is hoping to hold their 2nd working group workshop in September as a fully on-site event (see attached flyer). And we are optimistic about having a physical ISTRO conference next year in Dublin.

Below a picture from field work in April. After a long winter of home officing we finally had the opportunity to do some real experimental field work, Alvaro Calleja-Huerta evaluated of the risk of soil compaction for a light weight autonomous field robot.



Photo: Alea Scoville.

ISTRO2021/2022 22nd ISTRO International Conference - Update

New dates: 22-26 May 2022

Same venue: Dublin, Ireland



The long term prospects for international travel to and from Ireland remain unclear, but at the moment, we expect travel to open up from August 2021. We will open abstract submission for the 22nd ISTRO International Conference (now ISTRO2022) at the beginning of September 2021 with a submission deadline of late December 2021.

The theme of the conference remains ‘Soil and tillage and the transition to digital agriculture.’ We welcome contributions on basic and applied soil and tillage research, but we are looking for contributions related to digital agriculture technologies (data, sensors, networking, earth observation, recommender systems and so on) so please encourage colleagues and collaborators to consider presenting their work at ISTRO2022. Please plan to prepare and submit your contribution to the conference, whether oral presentation or poster as soon as we open the call in September 2021.

We look forward to seeing as many ISTRO members, their colleague and collaborators in Dublin in 2022.

⌘ David McKenzie - awarded JA Prescott medal

David McKenzie, a long-term ISTRO member, gave a key note address at the SSA/NZSSS Virtual World Soil Day event 2020 as a follow up on being awarded the prestigious JA Prescott medal by Soil Science Australia. The presentation was entitled "Many 'soil management generalists' in Australian agriculture have failed: They require expertise from Soil Science Specialists". David has worked in both soil science research and private consultancy. He has for decades been a leading member of the ISTRO working group F: Visual Soil Evaluation and Examination.



David McKenzie demonstrating SOILpak at the ISTRO workshop in Ireland, 2017. Photo: Paul Murphy.

⌘ 2nd workshop working group on Conservation Tillage [WG-CST]

WG-CST will organize a 2nd Workshop relating to and dealing mainly with ISTRO interest areas (e.g. Soil and Water Management, Tillage role on Greenhouse Gases Emissions, Plant Nutrition, Tillage tools and Implements, Crop Protection, etc.) but also any other topics related to Conservation Soil Tillage. WG-CST 2nd Workshop aims to open discussion and gathering basic and specific knowledge about current situation in science and professional work in domain of Conservation Soil Tillage.

Due to the evolution of circumstances related to Covid-19 pandemic, we believe that 2nd Workshop will be held and organized with success. Final

decision about the format of the conference /physical meeting, on-line or hybrid/ will be determined and confirmed in August 2021 depending on the existing pandemic situation.

Workshop dates: 7th-8th September, 2021, Osijek, Croatia

For more information see attached flyer.

Danijel Jug

⌘ New PhD graduate awarded a 3-year ISTRO membership ⌘ New PhD

Lidong Ren recently finished his PhD defence with the Ghent University in Belgium in 2020. His PhD thesis is entitled 'Evaluation of soil compaction: effects, prevention, alleviation and detection'. Lidong addressed these four aspects of soil compaction on loamy soils from the Flemish region of Belgium and Denmark – all under temperate maritime. The thesis included a couple of papers published in Soil and Tillage Research "Effects of soil wetness and tyre pressure on soil physical quality and maize growth by a slurry spreader system" (2019), 195, 104344 and "Short-term effects of cover crops and tillage methods on soil physical properties and maize growth in a sandy loam soil (2019), 192, 76-86.



Lidong (with the hat) together with his supervisors (Wim Cornelis, Greet Ruysschaert, Tommy D'Hose) and the external examiner (Lars J. Munkholm). Photo: Jingquan Shi.

☞ Upcoming Meetings and Events

-- 2021 --

June 2021

Iberian Congress on Soils and Sustainable Development, June 17 – 18, 2021, Online. Webpage: <https://www.cisds2020.com/>

8th World Congress on Conservation Agriculture, June 21–25, 2021 Online and in Witzwil/Bern, Switzerland. Webpage: <https://8wcca.org/>

Soils Conference 2021, 'Soils, investing in our future', June 27– July 2, 2021 in Cairns, Queensland, Australia. Webpage: <https://www.soilscienceaustralia.org.au/2021-joint-conference/>

July 2021

First IUSS Conference on Sodic Soil Reclamation, July 30 – August 1, 2021 in Changchun, China. Webpage: <http://ssr.csp.escience.cn/>

August 2021

Eurosoil 2021. August 23–27, 2021, Online. Webpage: <http://eurosoil2020.com/>

September 2021

2nd workshop working group on Conservation Tillage [WG-CST]. September 7 – 8, 2021 in Osijek, Croatia. More info: **see attached flyer**

☞☞☞

International workshop "Soil Conservation and Environmental Protection". September 6 – 8, 2021 in Imola, Italy. Webpage: <http://www.soilconservation.eu/conferences.html>

RAMIRAN 2021 "Managing Organic Resources in a Changing Environment". September 20 – 23, Cambridge, UK. Webpage: <https://www.ramiran2020.org/>

20th International and 9th Americas Conference organised by the International Society for Terrain-Vehicle Systems, September 20-23. Online. Webpage: <https://conference.istvs.org/>

III International and XV National Congress of Serbian Society of Soil Science "Soils Future Under Global Challenges". September 21 – 24, 2021, in Sokobanja, Serbia. Webpage: <https://congress.sdpz.rs/>

October 2021

3rd Annual Congress on Plant Science & Biosecurity, October, 7–9, 2021 in Osaka, Japan. Webpage: <https://plantbiology-biotechnology.com/>

Global Symposium on Salt-Affected Soils, October 27 – 29, 2021, in Tashkent, Uzbekistan. **NEW DATE** Webpage: <http://www.fao.org/global-soil-partnership/resources/events/detail/en/c/1264612/>

November 2021

2021 ASA, CSSA, SSSA International Annual Meeting "A Creative Economy For Sustainable Development". November 7 – 10, 2021, in Utah, USA. Webpage: <https://www.acsmeetings.org>

1st International Joint Congress on Sustainable Management of Cultural Landscapes in the context of the European Green Deal, November 10-14, in Santo Stefano di Camastra, Italy. **NEW DATE** Webpage: <https://www.ecocycles.net/ESSC-EURECYS-Congress/>

December 2021

World Soil Day – Halt soil salinization, Boost soil productivity. December 5, 2021, in Rome, Italy. Webpage: <http://www.fao.org/world-soil-day/en/>

-- 2022 --

March 2022

International Soil Classification Congress, March 25 – April 8, 2022, México. **NEW DATE**. Webpage: <http://iscc2020.org/>

May 2022

Global Symposium on Soil Fertility. May 2-5, 2022, in Rome, Italy. Webpage: <http://www.fao.org/global-soil-partnership/resources/events/detail/en/c/1309843/>

XXIII Latin-American Congress of Soil Sciences (XXII CLACS). May 22, 2022, in Florianópolis. Brasil. Webpage: <https://www.slcs.org.mx/>

⌘⌘⌘

22nd ISTRO International Conference on Agriculture: the role of soil and tillage research and innovation in the transition to digital agriculture, May 22-26, 2022, in Dublin, Ireland.

⌘⌘⌘

Global Conference on Sandy Soils – Properties and Management. May 30th to June 3rd, 2022, in Madison, USA. Webpage: <https://sandysoils.org/>

July 2022

22nd World Congress of Soil Science – Crossing boundaries, changing society. July 31st to August 5th, 2022, in Glasgow, UK. Webpage: <https://22wcss.org/>

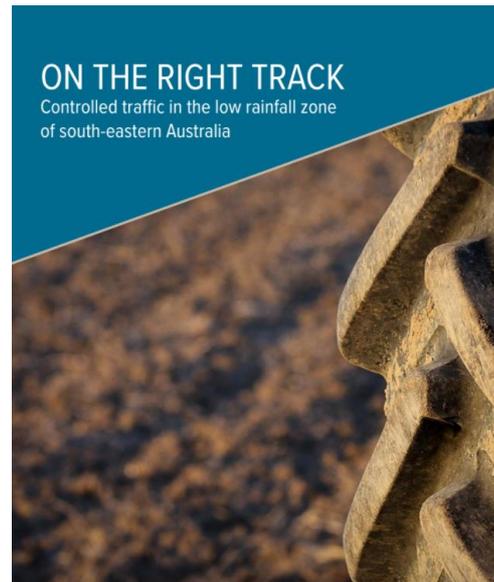
October 2022

10th International Symposium on Forest Soils. October 17-22, 2022, in Hangzhou, China. Webpage: <http://isfs2021.csp.escience.cn/dct/page/1>

🌀 New Books

On The Right Track. Controlled traffic in the low rainfall zone of south-eastern Australia

Editors: R. Mitchell, N. Wilhelm, P. Fisher, J. Tullberg, C. Bluett, D. Pearl, N. Dimos, C. Benjamin



This publication presents the findings of that project's extensive body of research and development work across four main soil types found in the low rainfall zone (LRZ), Victoria and South Australia. Among the key results discussed in this book is the evidence that farm machinery traffic can, and does, cause yield-limiting soil compaction

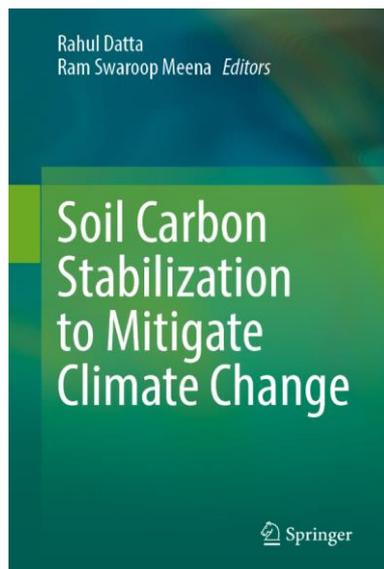
The project has also demonstrated other benefits from CTF adoption, including some energy and fuel savings, protection of investment in soil amelioration and reduced loss of available. For growers who do not wish to adopt CTF, soil compaction can be significantly reduced, and therefore potential yield losses avoided or minimised, by keeping axle weights as low as possible, using low pressure tyres on the heaviest equipment, and minimising machinery use when soils are wet and their strength reduced.

More information on this book:

<https://www.actfa.net/>

Soil Carbon Stabilization to Mitigate Climate Change

Editors: R. Datta, R.S. Meena



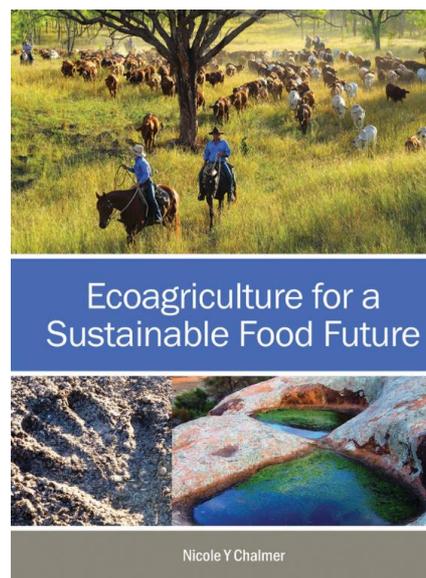
This book brings together all aspects of soil carbon sequestration and stabilization, with a special focus on diversity of microorganisms and management practices of soil in agricultural systems. It discusses the role of ecosystem functioning, recent and future prospects, soil microbial ecological studies, rhizosphere microflora, and organic matter in soil carbon stabilization. It also explores carbon transformation in soil, biological management and its genetics, microbial transformation of soil carbon, plant growth promoting rhizobacteria (PGPRs), and their role in sustainable agriculture. The book offers a spectrum of ideas of new technological inventions and fundamentals of soil sustainability. It will be suitable for teachers, researchers, and policymakers, undergraduate and graduate students of soil science, soil microbiology, agronomy, ecology, and environmental sciences

More information on this book:

<https://www.springer.com/gp/book/9789813367647#aboutBook>

Ecoagriculture for a Sustainable Food Future

Editors: Nicole Chalmer



Ecoagriculture for a Sustainable Food Future describes the ecological history of food production systems in Australia, showing how Aboriginal food systems collapsed when European farming methods were imposed on bushlands. The industrialised agricultural systems that are now prevalent across the world require constant input of finite resources, and continue to cause destructive environmental change.

This book explores the damage that has arisen from farming systems unsuited to their environment, and presents compelling evidence that producing food is an ecological process that needs to be rethought in order to ensure resilient food production into the future.

More information on this book:

<https://www.publish.csiro.au/book/7963/>

ISTRO INFO is the newsletter of the **International Soil Tillage Research Organisation**. (www.istro.org).

All information contained in this newsletter are © ISTRO and may not be distributed without written permission of the Secretary General, Dr. Blair McKenzie (b.mckenzie@dundee.ac.uk) or the Assistant Secretary General, Prof. Lars J. Munkholm (lars.munkholm@agro.au.dk).

For more information, please contact: Prof. Lars J. Munkholm, Assistant Secretary General, ISTRO, Aarhus University, Agroecology, P.O. Box 50, DK-8830 Tjele, Denmark.