**Session Proposal**

# Session Title

# Life, agriculture, and productive systems in arctic and other cold regions

# Session Organizers

# Name 1: Giuseppe Corti - CREA – Council for Agricultural Research and Economics, Centre of Agriculture and Environment, Firenze, Italy. *g.corti@staff.univpm.it – primary contact person*

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# Session Description

Soils from cold regions are peculiar because of their physical properties induced by the harsh climatic conditions to which they are submitted. Soil properties like gelic or cryic soil temperature represent a challenge for human settlements, agriculture, and any other material-gathering or subsistence system. In fact, processes such as cryoturbation and waterlogging are frequent in these soils because of the presence of a permafrost at a shallow depth.In some case, these environments are protected as natural parks because of the presence of unique vegetation, fauna and habitats. Nonetheless, virtuous examples of cohabitation (with the meaning ‘the state or fact of living or existing at the same time or in the same place’) and respectful use of the environment and the soil exist in many places, even remote or at a small scale, of the World.In other cases, these environments present so peculiar characteristics that it took scientists more than 70 years to decide if they could effectively be considered ‘soils’. These discussions led to the creation of a new soil order in the various classifications and to refining the definition of ‘soil’. Currently, as temperatures rise and glaciers retreat, more land is being exposed allowing incipient development of plant life. Undoubtedly, what these changes imply for the global carbon cycle represents a contemporary enigma and a new challenge for scientists who must clarify the role of these type**s** of soil in the life of the planet.
With this session we want to recollect scientists who worked on the human difficulties to adapt to cold environments and hostile soils, **including effort to modify soils for farming,** being the**m** affected or not by permafrost.

# Format

Oral presentations, panel discussions, workshops (what the fate for these lands?)

# Proposed Speakers

Speaker 1: David Weindorf – Georgia Southern University, USA. dweindorf@georgiasouthern.edu

Professor Weindorf is a expert of arctiv environment and has spent a lot of time in those environments.