

## Second Circular

### Ny-Ålesund Terrestrial Ecology Flagship Workshop

**8–10 October 201, Longyearbyen, Svalbard**

The Ny-Ålesund Terrestrial Flagship is one of four NySMAC flagship programs. The aims for the flagship are to coordinate and integrate international and national ecosystem-based research on tundra, fresh water and soil in and around Ny-Ålesund, to assess their sensitivity and resilience to environmental changes.

The aim of this workshop is to further develop the collaboration and cooperation between groups, identify knowledge gaps, and write joint research manuscript and proposal.

#### Venue

The dates for the workshop is 8-10 October, with start 8 October at 15:00 and end 10th Oct at 12:00. Hence participants can arrive in LYB on the 8<sup>th</sup> and leave on the 10<sup>th</sup>. Meeting room will be Møysalen at UNIS.

#### Registration

We ask interested scientists to [register](#). Please also indicate if you want us to book a hotel for you. If there are more than 40 interested, we will prioritize persons to have each research group, topic, institute or site represented.

#### Support

We have funds to support approximately 40 scientists with hotel and meals in Longyearbyen. Please indicate in the registration if you want us to book the hotel for you.

The flagship has received support from Svalbard Science Forum to organize two workshops where the first workshop was organized 13-16 August 2018 in Ny-Ålesund.

If you cannot make it to the second workshop, please do register as a member of the terrestrial ecosystem flagship to keep receiving news. This can be done on the [Ny-Ålesund Terrestrial Ecology Flagship webpage](#).

At the first workshop we identified the theme for a common paper aiming to: 1) Describe the system, 2) identify the most important ecosystem components and interactions that can be a platform for further research, 3) identify the main gaps in current work and 4) recommend future studies that will contribute to missing knowledge.

The manuscript will further focus on (i) an overall integration of processes and fluxes, (ii) studying the sensitivity and resilience of the terrestrial biome in Ny-Ålesund to climate change, and (iii) consider different levels of ecosystem organization by taking levels of space and time into account. The common manuscript, which will be a major topic on the workshop, will have an integrated ecosystem approach with an overview of identified trophic links within and between ecosystems and relevant parameters.

The flagship have identified six working groups formed around specific themes:

- WG 1: Animal adaptations (Åshild Pedersen and Maarten Loonen)

- WG 2: Vegetation dynamics (Masaki Uchida and Angela Augusti)
- WG 3: Soil processes and communities (Mette Svenning and Stefano Ventura)
- WG 4: Carbon and Nutrient fluxes (Angela Augusti and Masaki Uchida)
- WG 5: Freshwater systems (Elie Verleyen, Dirk Menedoht, Josef Elster)
- WG 6: Sensitivity of ecosystems and integration (Maarten Loonen and Elie Verleyen)

The data obtained within the six working groups will be integrated and used to (i) make links to other flagship programs, and (ii) discuss possibilities for collaborations with terrestrial research projects outside Ny Ålesund, such as the terrestrial ecosystems in Longyearbyen where Josef Elster, and Hornsund where Alfred Stach (both project partners) are conducting research.

The results from the workshops should be highly relevant for SIOS, as an integrative platform for Svalbard research and a data portal. The studies on annual variability, gradual change and ecosystem resilience will generate new knowledge that is relevant for management and conservation efforts of the terrestrial ecosystem in Svalbard. As a long term perspective, the Ny-Ålesund Terrestrial Flagship should develop further into a relevant entity of research groups to take a leading role for coordinating terrestrial field work in Ny-Ålesund for initiatives like SIOS and INTERACT. The flagship should enhance cooperation and data sharing and work towards the development of new and integrated project proposals to the EU.



Ny-Ålesund Science  
Managers Committee



university of  
 groningen