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">Project title</dt><dd style="" class="elvalname " >COAT s
monitoring activities and therefor aims to develop new efficient
and non-destructive sampling methods. For this purpose we have
during 2012 worked on developing a camera trap for monitoring
distribution and abundance of lemmings and their mustelid
predators. We believe that such camera traps can open entirely
new avenues for research on tundra rodents and their interactions
with biotic (food plants and predators) and the abiotic
environment (snow).</p> <p>Implementation and results</p> <p>In
collaboration with the US company Reconyx we have developed a
motion trigged camera that can be deployed in small portable
metal tunnels in natural tundra habitats. We have presently
solved initial problem motions sensors detected by means of

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laboratory trials at UiT, which showed that sensors were to slow and had too narrow ranges. Also appropriate wide-angle lenses for the camera as well a practical design for the metal tube has been developed. We have purchased a batch of cameras that will be subject field test during the next year.

Published Results/Planned Publications

Henden, J.A., Ims, R.A., Yoccoz, N.G. and Schmidt, N.M. 2012. Understanding long term changes in tundra food webs: the challenge of integrating study designs and models. Presentation on Long-term changes in Arctic Tundra system, Aarhus, Denmark, November 2012.

Communicated Results

The COAT planning project and its design has been presented in several fora during 2012; for the Norwegian Directorate of Nature Research, the board of Varanger Peninsula National Park, the terrestrial ecosystems expert group of the Circumpolar Biodiversity Monitoring Program (CBMP), reindeer herding districts at the Varanger Peninsula.

Interdisciplinary Cooperation

N/A

Budget in accordance to results

The funding from the Fram Centres terrestrial flagship has been decisive for execution of both main activities of the present project.

Could results from the project be subject for any commercial utilization

No

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<!-- grab append -->
<div class="spField"></div></dd><dt class="elconclusions
Editor">Conclusions</dt><dd style="" class="elvalconclusions
Editor" ><table style="width: 511px;" dir="ltr" border="1"
cellspacing="0" cellpadding="7"> <tbody> <tr> <td valign="top"
height="87"> <p>a) Part A of the project has allowed us to
conduct the field campaign necessary for establishing the
spatially extensive monitoring design to be implemented for COAT
Varanger peninsula. Part B of the project has allowed us to
develop a novel non-destructive sampling method for monitoring
small herbivore population dynamics.</p> <p>b) The method for
non-destructively sampling small mammalian herbivores and their
predators by means of a dedicated photo-trap is an innovation of
the project. We expect this trap to open new avenues for
monitoring the dynamics of key-stone tundra herbivores such as
lemming in relation to biotic and abiotic factors.</p> </td>
</tr> </tbody> </table></dd></dl></fieldset></body></html>
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