ICELANDIC AGRICULTURAL SCIENCES • 29/2016

CONTENTS

Editorial 2

Short Communication
HRAFNHILDUR AEVARSDÓTTIR, ANNA GUDRÚN THORHALLSDÓTTIR, HREFNA SIGURJÓNSDÓTTIR
Foraging behaviour and plant selection in a herd of Icelandic goats 3

SANDRA M. GRANQUIST AND ERLINGUR HAUKSSON
Diet of harbour seals in a salmon estuary in North-West Iceland 7

BRYNJA DAVIDSDOTTIR, TOMAS GRETAR GUNNARSSON, GUDMUNDUR HALLDORSSON AND BJARNI D. SIGURDSSON
Avian abundance and communities in areas revegetated with exotic versus native plant species 21

MATTHÍAS EYDAL AND KARL SKÍRNISSON
Strongyloides stercoralis found in imported dogs, household dogs and kennel dogs in Iceland 39

BJARNI D. SIGURDSSON, NIKI I. W. LEBLANS, STEVEN DAUWE, ELÍN GUÐMUNDSDÓTTIR, PER GUNDERSEN, GUNNHILDUR E. GUNNARSDÓTTIR, MARTIN HOLMSTRUP, KRASSIMIRA ILIEVA-MAKULEC, THOMAS KÄTTERER, BRYNDÍS MARTEINSDÓTTIR, MARJA MALJANEN, EDDA S. ODDSDÓTTIR, IVIKA OSTONEN, JOSEP PEÑUELAS, CHRISTOPHER POEPLAU, ANDREAS RICHTER, PÁLL SIGURÐSSON, PETER VAN BODEGOM, HÅKAN WALLANDER, JAMES WEEDON, IVAN JANSSENS
Geothermal ecosystems as natural climate change experiments: The ForHot research site in Iceland as a case study 53

Editorial

This autumn, October and November 2016, was one of the warmest since records started in Reykjavík and by far the warmest in Akureyri, and the whole year has so far been mild in Iceland. It will thus be one of the warmest years recorded, lining up with recent years. The warmer climate is already having an effect on Icelandic nature with longer growing seasons, increasing and more stable yields, and vegetation migrating to higher elevations and onto sparsely vegetated areas, a development that is definatly positive. However, milder climate and increased productivity also favour invasive species and pests that can cause changes in managed ecosystems. Further, Icelandic agriculture is responsible for the emission of large amounts of greenhouse gases (GHGs) and at the same time it is almost inevitable that the demand for more and healthy food production will increase in the future, both locally and globally. How this can be tackled, together with a substantial decrease in GHGs release, is a major challenge.

In this issue two articles touch upon or deal directly with the issue of global warming. One article compares the bird population on native heathland, land reclaimed with heathland vegetation, and reclamation using the exotic Nootka lupine, which is considered an invasive species in Iceland. The lupine stands have the highest productivity and provide habitat for the largest number of birds. However, the restored heathlands have provided better habitat for waders which internationally suffer from decreasing populations, whereas the lupine stands have harboured far more common species globally. This shows how fragile the ecosystem is and how land reclamation changes the habitat for both flora and fauna. The other article reports on a large research project on how geothermal soil temperature gradients in Iceland influence terrestrial ecosystems. Although geothermal warming differs from the expected climate change this project will certainly help us to understand what to expect in the future. This project is ongoing and has already led to a number of publications, with many more expected.

The other articles in this issue are a short communication on the foraging behaviour and plant selection in a herd of Icelandic goats, and research articles on the diet of harbour seals in a salmon estuary in North-West Iceland, and on the parasite *Strongyloides stercoralis* found in imported dogs, household dogs and kennel dogs in Iceland.

All these articles bring new and important knowledge about natural and managed northern ecosystems, both to the Icelandic research society and also to other international scientists working on such issues elsewhere.

Thorsteinn Gudmundsson