

# Icelandic Agricultural Sciences



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Institute for Experimental Pathology in Reykjavik  
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## Editorial

The 2023 IAS issue includes seven contributions, and as usual on diverse topics of applied life sciences that are relevant under boreal, alpine, arctic or subarctic conditions which defines the scope of our journal.

The first publication is on the effect of proximity to aluminium smelters on accumulation of fluoride in Icelandic sheep and horses. Among remarkable results are pathological changes compatible with fluorosis in the tooth enamel of sheep in connection with an accidental burst of emissions from nearby aluminium smelter.

The second publication is on parasites of five vagrant Polar bears (*Ursus maritimus*) swimming to Iceland. The results report for first time certain nematode and acanthocephalan infections in free-living polar bears.

In the third contribution, a short communication, on estimating the effects of grazing exclusion on the seed bank in Icelandic rangelands, the authors concluded that grazing exclusion may not be an efficient short-term strategy to strengthen soil seed banks.

The fourth article, a study on the effect of summer temperature on the distribution of the lepidopteran species *Ceramia pisi* in Iceland. The results show that increased summer temperature is the primary cause of the distribution range shift of *C. pisi* in Iceland, and this has facilitated increased population density of the species, in combination with increased availability of food resources due to host shift over to *Nootka lupin*.

The fifth article is on the effects of pelleting hay upon feed intake, digestibility, growth rate and energy retention of lambs. Pelleting increased ad libitum feed intake significantly but affected digestibility negatively, but the overall effect of pelleting on growth rate was positive.

Finally, the issue contains two forestry related articles. The former on biomass model for Sitka spruce in Iceland providing improved estimate for both aboveground biomass and stem volume compared to previous models. The latter on individual-tree growth models for lodgepole pine in Iceland. The model provides a tool for improved management optimization for lodgepole pine plantations.

Björn Thorsteinsson  
Editor in Chief