



Modelling grass growth to optimize grazing in Luxembourg

EIP-Project (2020-2024)

financed by:



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Agriculture,
de la Viticulture et du
Développement rural

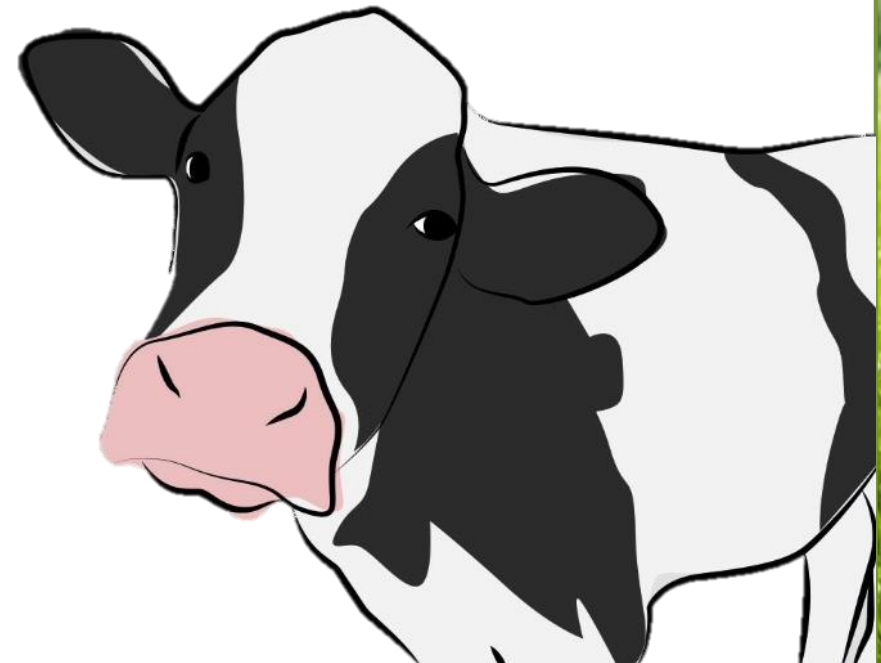
project partners:



Lycée Technique
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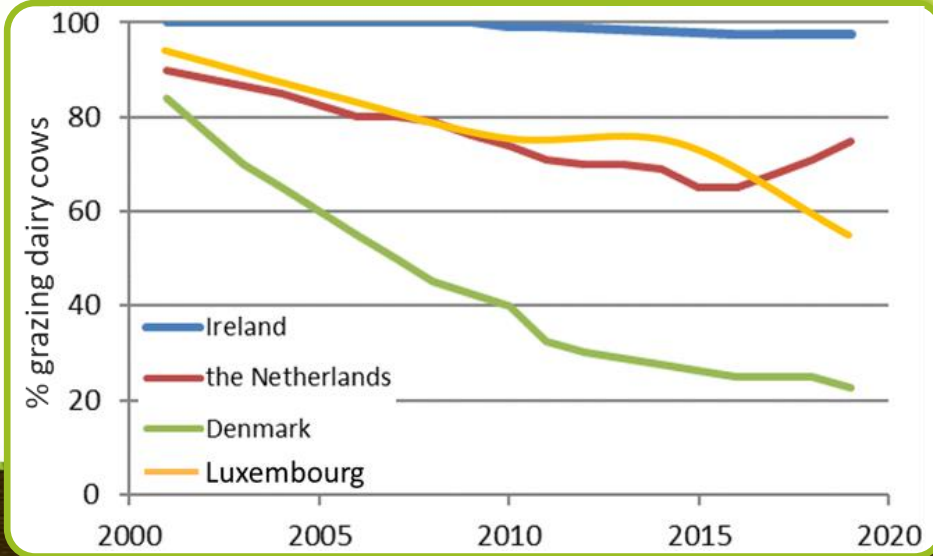
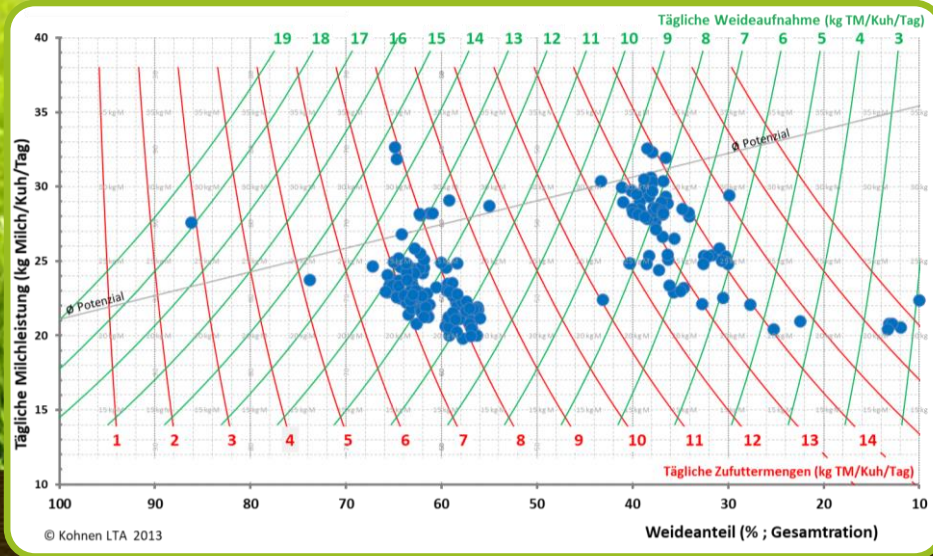
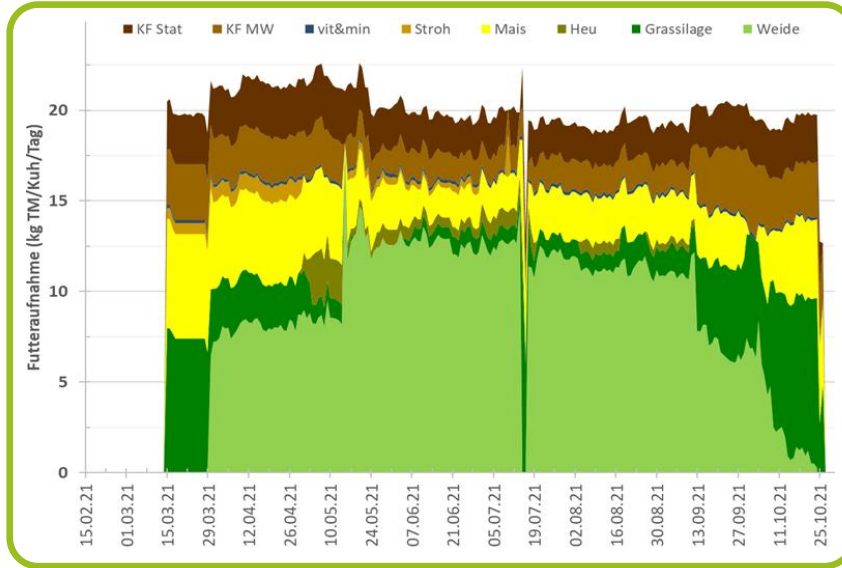
Wissenswertes zu Wiesen und Weiden



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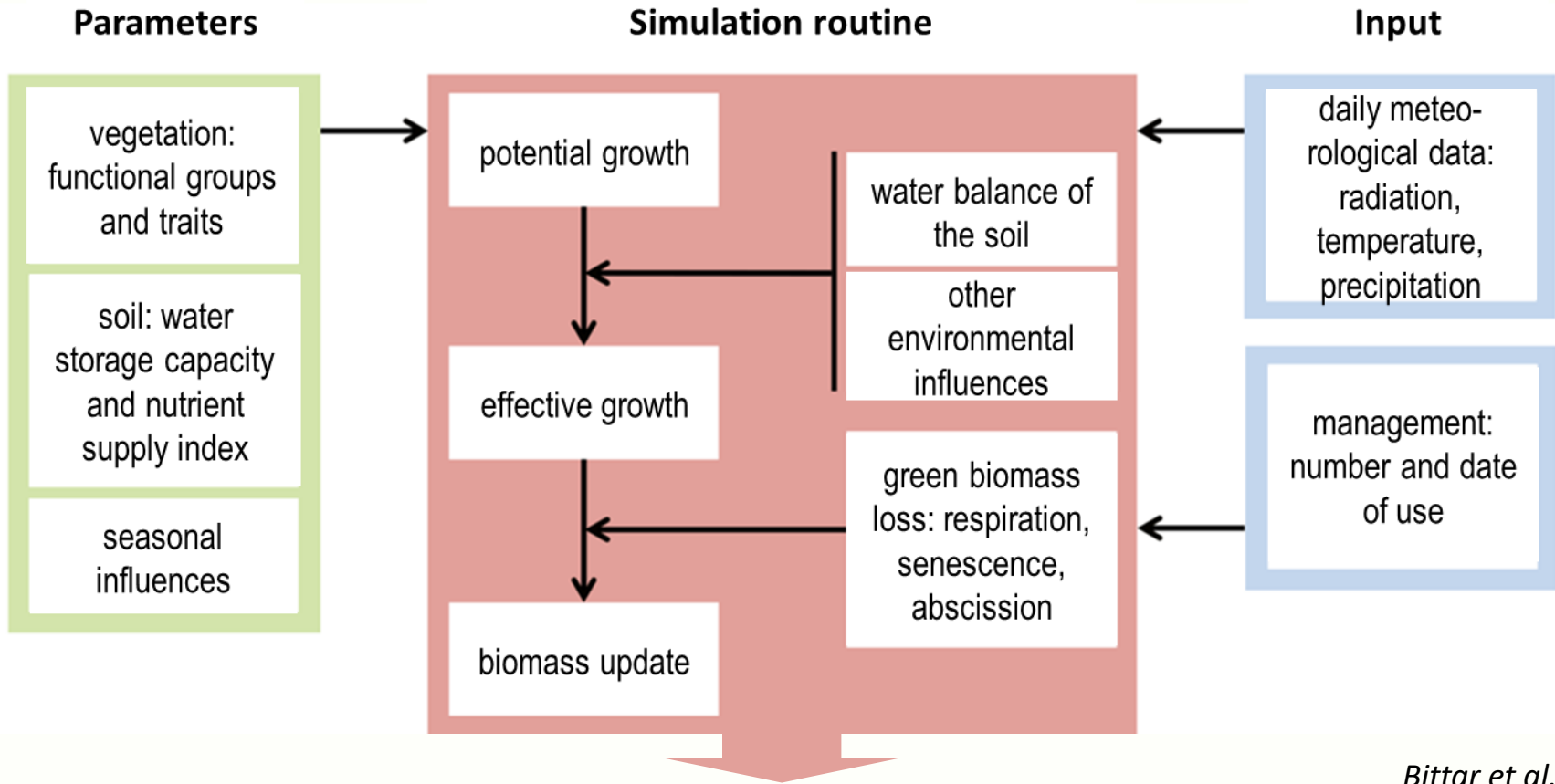


The current situation in Luxembourg



Modelling the future

Modelling grass growth by adapting existing models

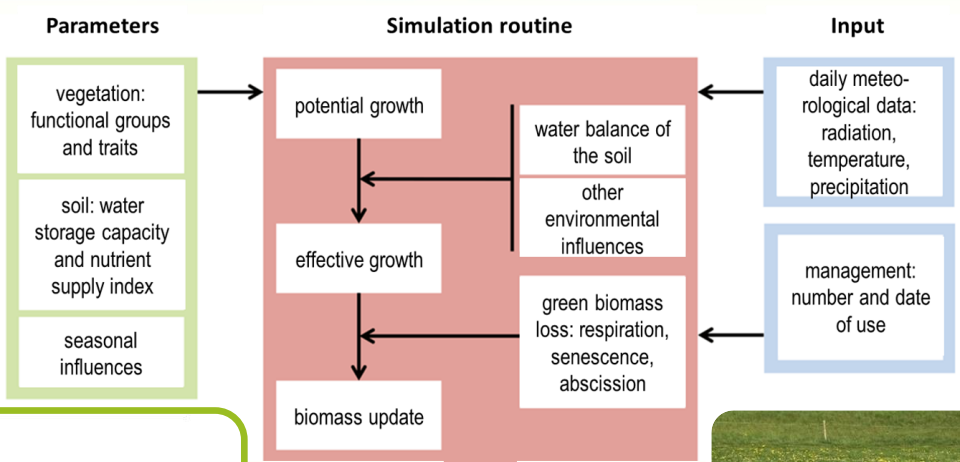
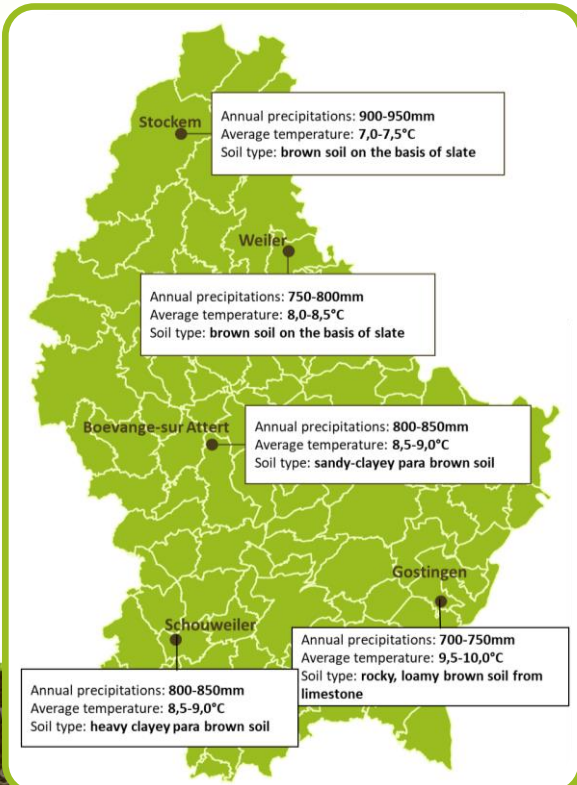


Output: grass-growth model

*Bittar et al.,
 Agrarforschung Schweiz,
 2018*

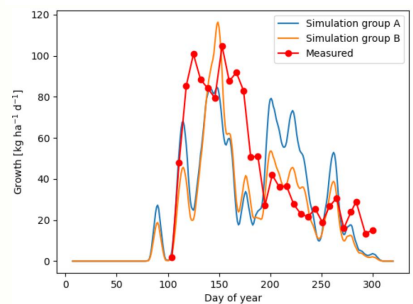
Modelling grass growth in Luxembourg

defining
5 grass growth regions
= 5 pilot farms

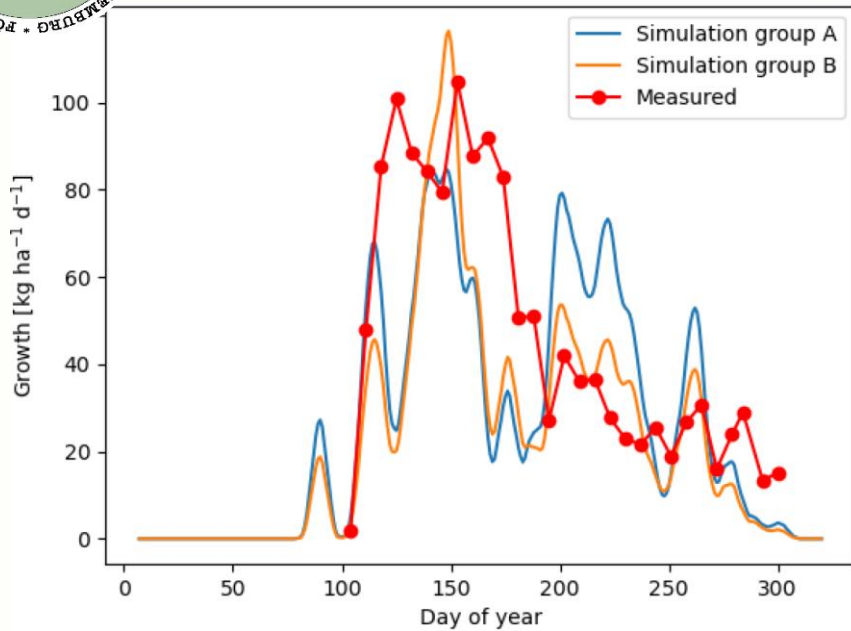


collecting grass growth parameters on a weekly basis

first results



First results



further adjustments needed:

- of parameters
 - water storage capacity
 - definition of the functional groups
 - ...
- of input data
 - meteorological data
 - ...

- existing relation between the functional groups
- underestimation of the yields in the beginning of the year => days 0-200
- overestimation of the yields at the end of the year => days 200-300



... next steps...

creation of an additional layer „grass growth“ in collaboration with the national cadastral office => geoportail.lu



many thanks for
your attention