

PlantLink Researcher in the spotlight

Veiko Lehsten

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Veiko Lehsten is a modeller in the Department of Earth and Ecosystem Sciences at Lund University. He is a member of PlantLink's Modelling and informatics focus group and has recently [published](#) on the link between climate and potato late blight development in Nordic conditions.



-What is currently on top of your research agenda?

There are a number of directions that I am working on currently. All of them are involving linking climate to other phenomena. They range from plant pathogen phytophthora modelling, via modelling of tree migration, modelling of wildfires to modelling the decrease in arctic peatlands linked to climate change.

-Tell us about your latest publication?

In my latest publication (still in revision) I am analysing how well we can predict the change of species range (plants and birds) in the future using simulated climate data sets. The results are that the uncertainty introduced into the predictions by different modelling approaches are way larger than the uncertainties ranging from different climate change scenarios. Given that these types of models are advocated to make decisions on which species are in need of protection in the future it questions the current standard practice and highlights that we need substantial model improvement to rely on the results.

-What led you into your particular field of research?

When I came to Lund, I was hired to run a particular biogeochemical model to simulate carbon exchange and vegetation. After a while I realised that there are a number of phenomena out there which are very likely to be explained at least partially by climate or weather but the researchers working on them are not used to (or have the tools) to analyse this. This made me start to contact researchers asking for collaborations doing this linkage.

-What are the implications of your research for the society?

I am currently in a project where we try to use weather forecasts to limit the use of fungicides on late blight. If we succeed there will be lower amounts used which is better for the environment, drinking water, consumer and also for the farmer who saves money and has less negative effects from the fungicide application on their health.

-Finally, let's say you got unlimited research funds; where would your research be five years from now?

I think the decrease of Nordic peatlands is a largely underestimated problem which should be approached very soon since it will strongly change the carbon and water exchange in these areas as well as leading to a strong decrease in habitat for breeding birds and other organisms inhabiting the area currently.