Vegetation changes on two islands in Lake Hjälmaren 1882 - 2017

MSc project in plant ecology

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Collaboration with County Administration Board, Västmanland

As the water level of Lake Hjälmaren was lowered by 1.5 m in 1882-86 a large number of islands were created. From ca 40 such islands there are complete lists of plant species from 1886, 1892, 1903, 1927 and 1985 (Rydin and Borgegård 1988a,b, 1991). Some of the islands are nature reserves, and for two of these the County Administration Board (länsstyrelsen) needs a follow-up as part of their monitoring programme. The islands are < 1 ha in area.

This gives an opportunity to add to the previous studies and discuss floristic changes over 130 yr. In addition these two islands were more thoroughly studied in 1968 (Öberg 1969), adding information that do not exist for the other islands. This includes detailed maps of all tree individuals and quantification of species composition in transects across the island.

In the plant ecology literature there are a large number of theories and models for succession and tree dynamics and an initial part of the project would be to screen the literature for predictions that could be tested with these unique data.

Requirements

- Good floristic competence
- Methodological competence corresponding to the MSc course in Ecological Methods
- Driving license
- Will probably require that the candidate can handle a small boat
- Decent competence in Swedish (some of the background is in Swedish)


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