

Internship project: Quicksan on the implementation of cyclic water management in human-managed wetlands

Wetlands are very productive ecosystems that can harbour great amounts and a wide diversity of species. One of the main drivers of wetland structure is the water level. Natural water level fluctuations reset the vegetation succession, thereby rejuvenating the wetland and increasing biodiversity and productivity. In the Netherlands, the amplitude of these fluctuations is often not enough to cause large scale rejuvenation. In turn, the wetland ends up in a state where biodiversity and landscape heterogeneity are declining.

In the Oostvaardersplassen, managers are implementing a human-induced water level drawdown to rejuvenate the system and restart vegetation succession. In this project you will use a Quicksan approach, to broaden the scale of implementing such a drawdown to ecosystems across the whole of the Netherlands. We are especially interested in other locations that could profit from such a type of approach, if there are certain requirements that such a location should match (e.g. scale, connectivity, productivity) and if there can be lessons learned from other locations that have implemented a large-scale water level drawdown.

You will perform literature research, using both scientific and 'grey' literature, to get a better understanding of implementing a water level drawdown and discovering locations that might also perform such a measure. In addition, we would like you to help organize a workshop where we bring experts together to discuss this topic and thereby develop new ideas. This will be done in collaboration with experts from the state forestry management (Staatsbosbeheer).

If you are interested in this project or want more information, please contact Kerstin Bouma, PhD candidate at the Aquatic Ecology group from the Netherlands Institute of Ecology (NIOO-KNAW) - k.bouma@nioo.knaw.nl

- Type of work: Literature study & Organising a workshop
- Level: MSc/BSc internship
- Duration: 4 months (starting in March)
- Location: NIOO-KNAW – Wageningen
- Dutch language skills are preferred



Rejuvenating former lake system in the Oostvaardersplassen.