



## BLUMENBACH LECTURE

VORTRAGSREIHE DES  
JOHANN-FRIEDRICH-BLUMENBACH-INSTITUTS  
FÜR ZOOLOGIE UND ANTHROPOLOGIE

### Trophic Rewilding as a Key Restoration Approach: Insights from and for Macro- and Paleoecology

**Prof. Jens-Christian Svenning**  
**Department of Biology, Aarhus University, Denmark**

The biodiversity and climate crises call for actions to recover nature. ‘Trophic rewilding’ is a strategy that uses species introductions to restore top-down trophic interactions for self-regulating, biodiverse ecosystems.

In my talk, I will discuss trophic rewilding with special attention to insights from macro- and paleoecological studies. Prior to human-driven defaunation, the functional diversity and abundance of megafauna, notably large herbivores, were high. This resulted in high rates of vegetation biomass consumption, seed dispersal, and a high vegetation diversity, the latter known as an important driver of overall biodiversity.

Research on current restoration and rewilding projects shows that ecosystem functions and biodiversity can recover where megafauna is restored and reintroduced. Conservation and restoration should therefore focus more on increasing megafauna densities and diversity. At the same time, there is also a need to revise and further study the functioning of paleo-ecosystems, as potential reference states for current-day conservation.



**GWDG**  
**Burckhardtweg 4, 37077 Göttingen**  
**Hörsaal und Foyer**

**Mittwoch**  
**20. November 2024**  
**17:15 Uhr**

Host: Dept. of Conservation Biology