

On 8th of October 2024 at 16:00 Venue: AMAP Lab - Room 201



welcomes



**Marcin CHURSKI**

Mammal Research Institute  
Polish Academy of Science

## Adaptations of trees to mammalian herbivory and fire: implications for the structure and functioning of temperate zone ecosystems

There are few places in Europe where one can experience old-growth temperate forest. One of the largest and oldest is Białowieża Forest, at the border between Poland and Belarus. It is known from its large trees, European bison and large predators - wolf and lynx. Together with my colleagues I try to understand how herbivores and fire structure temperate forests, how plants respond to these factors and these responses are mediated by resource availability. Typical European tree species show remarkable responses to both fire and herbivory. While large mammalian herbivores, such as European bison, are rare or absent in most areas of Central Europe, some of the dominant European tree species exhibit adaptations to their regime of disturbance. We revealed the existence of important differences in their life histories and the presence of contrasting strategies (tolerance vs. avoidance by fast growth) towards plant consumers of the temperate zone. Interestingly, temperate open ecosystems respond in similar ways to fire and large mammalian herbivores with African savannas, triggering new perspectives about the factors responsible for their emergence and further for their conservation.



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BotAnique et Modelisation de  
l'Architecture des Plantes et des végétations