



## Comparative Crocodilian Cognition and Communication – A window into extinct minds

**Stephan A. Reber, PhD**  
**Cognitive Science,**  
**Lund University, Sweden**

Comparative cognition and communication research focuses primarily on mammals and birds, mainly primates and corvids. These two lineages shared a common ancestor 300 million years ago and vastly differ in brain structure and life history. In order to understand the evolutionary origins of capacities found in both lineages, we will profit from intermediate model organisms, the crocodilians. They are the closest living relatives of birds and have a very avian-like brain structure. With mammals they share the vocal anatomy and they face similar ecological challenges as mammalian apex predators. Studying cognition and communication in crocodilians will help us to identify the neurological substrates and the selective forces which gave rise to the capacities found in birds and mammals. I will talk about my previous work on vocal cues to size in alligatorids and about our ongoing dinosaur cognition project. In the latter, we compare basic cognitive capacities of American alligators and several species of palaeognaths to reconstruct the minds of extinct dinosaurs



**Friday January 24<sup>th</sup> at 10.15**  
**Seminar room at Zoophysiology (1131-127)**