Why Biodiversity Science needs Semantics

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Abstract—Biodiversity science investigates biological diversity on all levels and scales. There is strong evidence that biodiversity is declining at unprecedented rates and that this will have dire consequences for humankind. Consequently, there is a strong need for science to support political decision making in this area. Thus key questions of biodiversity science are: What is out there? Why is it there? Does it matter (to us)? How can we save it?

In this talk, we argue that computer science in general and semantics in particular are essential to answering these questions and that biodiversity science needs more involvement by computer scientists. We will take a look at a number of projects on biodiversity and will investigate the role of computer science in them and how semantics can help.