

Barcoding Fauna Bavarica – Capturing Central European Animal Diversity

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Abstract — The Barcoding Fauna Bavarica (BFB) is an All Species Barcoding campaign ran by the Zoologische Staatssammlung in Munich and the Canadian Centre for DNA Barcoding (www.faanabavarica.de). Core funding comes from the Bavarian Ministry for Science, Research and the Arts and from Genome Canada through the Ontario Genomics Institute. The initial funding period is from 2009–2013. Bavaria has the highest biodiversity of all German states, with at least 35000 animal species reported, representing a significant portion of the central European species diversity. Ecoregions include high altitude biomes, foothill areas and forested lowlands. The Zoologische Staatssammlung (ZSM) is one of the largest German natural history research institutions. It holds the world's largest collection of Lepidoptera and Germany's largest Hymenoptera collection. Since mid-2009, the BFB project has contributed DNA barcode records from 7208 specimens representing 3000 species and is therefore, after less than one year, one of the most comprehensive sources for local DNA barcode data. The focus groups for the initial phase were Lepidoptera (1820 species barcoded), bees (316 species), ants (39 species) and aquatic insects (322 species). Work on these focal groups will continue during 2010, with the goal to complete 80% of the Bavarian focal group species by the end of the year. New focal groups are Diptera, Mollusca, all Vertebrata and terrestrial Coleoptera, targeting 2000 species in 2010. Most tissue samples come from specimens in the ZSM collection, and where this was not feasible from freshly collected and identified specimens. This rapid progress reflects the strong involvement of taxonomists throughout the process, which is one of our key missions. We have implemented a system which co-ordinates vouchers stored in our main collection, with tissues as well as DNA samples in our DNA bank.

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