



1 PhD Position in Coastal Ecology (TV-L E13, 75%)

The interdisciplinary Graduate School "Gute Küste Niedersachsen – Reallabore für einen ökosystemstärkenden Küstenschutz an der niedersächsischen Küste" funded by the Federal State of Lower Saxony (Ministry for Science and Culture MWK / Niedersächsisches Vorab – VolkswagenStiftung) aims for nature-based solutions for coastal defence in the face of sea level rise. We will focus on the interactions of hydro-, bio-, pedo-, and anthroposphere in the coastal systems of the German North Sea, and we will use an approach integrating empirical studies and modelling as well as coastal engineering and natural science with ecological economics and environmental planning. The project links research groups from Leibniz University Hannover, Carl-von-Ossietzky Oldenburg and TU Braunschweig.

Tasks In our subproject, we aim at (1) collecting data on the distribution, structure, and dynamics of salt marsh vegetation as well as functional traits of specific species relevant for ecosystem services provided by these plants. With the aid of terrestrial and UAV-based laser scanning as well as additional field work, we will (2) compile environmental factors such as terrain morphology, soil properties, and hydrodynamics determining the distribution patterns of salt marsh plants. The data will be (3) integrated in a statistical species distribution and trait distribution models allowing for quantifying the ecosystem services. Our analyses will be closely linked to approaches of the other subprojects/disciplines.

Requirements Applicants for the PhD position must have an above-average MSc or equivalent in Ecology, Environmental Sciences, or Geoecology and a strong background in ecological field methods, vegetation, soil, and statistical data analysis. Expertise in functional plant ecology and programming (in R) is desirable; driving licence is mandatory. Candidates should be team players, fluent in English and German, and are expected to present their studies at international conferences and to publish results in peer-reviewed international journals. The willingness to do interdisciplinary research is a prerequisite for the applications.

Working environment We offer a stimulating research environment within an interdisciplinary, collaborative context. The position (75%) starts at earliest convenience and is limited for a period of three years. The salary is in accordance with the German public service 13 TV-L. TU Braunschweig is an equal opportunity employer and encourages applications from minority groups and women. Preference will be given to disabled applicants with the same qualifications.

Application Please email complete application documents as a single pdf-file including a letter of motivation, CV, copies of relevant degrees, and contact details of two referees as soon as possible to boris.schroeder@tu-bs.de. Review will start on January 30th 2020 and will continue until the position is filled. For informal enquiries please contact Prof. Dr. Boris Schröder-Esselbach (boris.schroeder@tu-bs.de).

Contact Prof. Dr. Boris Schröder-Esselbach
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