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## *Surface Water Analysis for Microplastics in the Olifants- and Sabie River, Kruger National Park, South Africa*

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*Where: NWU- University of Potchefstroom, South Africa, Unit for Environmental Science*

*Supervisor: Carina Verster*

*Time: 03/09/18 – 05/11/18*

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I completed my internship at the department of Environmental Sciences at the University of Potchefstroom (NWU) in South Africa. The department works with all kinds of environmental challenges, microplastic pollution being one of them.

Over the course of 10 weeks, I worked with the analysis of surface waters of two major rivers for microplastic particles and fibers. Microplastics are an emerging issue that have only recently drawn attention. Most published studies focussed on microplastic pollution in marine environments, which is why my internship focussed on pollution in freshwaters. The internship comprised field-, as well as laboratory work. The field work was conducted in the Kruger National Park, one of Africa's biggest game reserves, sampling the surface waters of the Sabie- and Olifants river. The samples were then brought back to the university laboratories and dried. I treated them with different acids to remove the organic content, put them through density separation and subsequently counted the plastics by size and colour. I did not manage to finish all samples given how much time the whole process takes, but most of them were done by the time my internship was over.

During my internship I gained insight on how laboratory work can look like, as well as all the regulations that come with it. The field work was incredibly interesting since I got see much of South Africa's flora and fauna, which is very different from the Swedish one, as well as seeing how sampling for microplastics works.