## Project Update: February 2020

The passive sampling in the northern part of the Limpopo Province was a complete success with 88 snakes being recorded during the sampling period. These snakes represented 17 of the 58 different species, and five of the seven families occurring in the study area (For more information on snakes occurring in the study area, see Marais 2011, A Complete Guide to the Snakes of Southern Africa). Additionally, 314 lizards from 12 families were also trapped. In summary, a total of 402 reptiles were trapped following the 55 days of passive trapping. This was the most intensive sampling effort of this nature that has been carried out in the area and, in addition to the primary goals of this study, it has yielded invaluable species occurrence data. Volunteer assistants in the area have gained invaluable experience in the identification of local snake species, in addition to being presented with information on venomous snakes they were previously unaware of that occurred in the area. Additionally, individuals received instruction on the necessary steps to take when encountering potentially venomous snakes. For the GC-MS analyses, the analyte peaks were obtained for the major constituent components of the treatments and compared between different times following application. Results and findings will be prepared as popular summary articles and shared as intended following feedback and acceptance of results, as well as the interpretation thereof by supervisors and collaborators.





Figure 1: Jabulani Dube (right), Luke Verburgt (middle) and Frans Reynecke (right) following trap setup in the northern part of South Africa to assess the efficacy of five potential snake repellents. Figure 2: Drift fence funnel trap deployed in the northern part of South Africa to assess the efficacy of five potential snake repellents. Figure 3: Frans Reynecke checking a drift fence funnel trap deployed in the northern part of South Africa to assess the efficacy of five potential snake repellents.



Figure 4: Puff Adder (*Bitis arietans arietans*) trapped in the northern part of South Africa during a project undertaken to assess the efficacy of five potential snake repellents.



Figure 5: Long-tailed Garter Snake Puff Adder (*Elapsoidea sundevalli longicauda*) trapped in the northern part of South Africa during a project undertaken to assess the efficacy of five potential snake repellents.



Figure 6: Western Yellow-bellied Sand Snake (*Psammophis subtaeniatus*) trapped in the northern part of South Africa during a project undertaken to assess the efficacy of five potential snake repellents.



Figure 7: Horned Adder (*Bitis caudalis*) trapped in the northern part of South Africa during a project undertaken to assess the efficacy of five potential snake repellents.