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ENVIRONMENTAL IMPACT ASSESSMENTS
HERPETOLOGIGAL SURVEYS

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To Whom It May Concern:

RE: TESTING OF TURTLESKIN SNAKE ARMOR GAITERS

A pair of snake armour gaiters was supplied by Dr. Tom Sutcliffe for testing and accessing their efficiency against the bites of Southern African snakes.

As the highly venomous back-fanged Boomslang (*Dispholidus typus*) and the Vine Snake (*Thelotornis capensis*) very seldom feature in snakebite accidents and when they do, the victim is invariably bitten on a hand or arm, these snakes were not considered for testing and I can safely say that the Turtleskin Snake Armour Gaiters are 100% effective against the bites of these snakes.

The Elapids, including the Mambas (*Dendroaspis sp*.) and the Cobras (*Naja sp*.) have predominantly fast-acting neurotoxic venoms with a few exceptions. They all have short fixed fangs in the front of the mouth and in many instances denim trousers provide a great deal of protection against their bites. The Turtleskin Snake Armour Gaiters were tested on a Rinkhals (*Hemachatus haemechatus*) and after the snake was induced to strike and bite the gaiters several times, its fangs failed to penetrate the gaiters. I can confidently say that the Turtleskin Snake Armour Gaiters are highly effective against the bites of African elapids.

The large Adders, specifically the Puff Adder (*Bitis arietans*), pose a threat to people who spend time outdoors. These snakes are large and extremely well camouflaged. They rely on their cryptic colouration to escape detection and are reluctant to move out of the way of approaching people. The result is often that a person will step onto or close to a Puff Adder and the snake will strike out violently and repeatedly. Puff Adders have enormous hinged fangs in the front of the mouth. When the fangs are not in use, they fold back against the roof of the mouth. When striking, the snake swings the fangs forward and virtually ‘darts’ them into the victim. These snakes have a potent cytotoxic venom and account for the majority of serious snakebite accidents in South Africa.

An extremely large (over 1.2 m) female Puff Adder was used to test the Turtleskin Snake Armour Gaiters. A gaiter was tightly stuffed with newspaper and the snake was induced to strike at the gaiters several times. At no stage did a fang penetrate the gaiters, even though blotches of venom were deposited on the gaiter. In fact, one of the Puff Adder’s teeth broke off and remained on the gaiter but never penetrated. I can safely say that I found the Turtleskin Snake Armour Gaiters to be highly effective against the bite of the Puff Adder and other Southern African adders.

As a regular fly-fisherman I can highly recommend the Turtleskin Snake Armour Gaiters to fly-fishermen as well as all other people who spend a great deal of their leisure time outdoors. These gaiters are also suitable for the hunting and hiking fraternity. There is always the danger that one might step onto or close to a Puff Adder, especially when walking through long grass. The vast majority of snakebite victims are bitten on the foot, ankle or lower leg and the Turtleskin Snake Armour Gaiters, in conjunction with boots that cover the ankle, will provide excellent protection against the bite of any of our snakes.

Should the reader require additional information, please contact me at the above cell number or E-mail address. For more information on snakes and snakebite, you are referred to my book '*A Complete Guide to the Snakes of Southern Africa*' published by Struik Publishers.

Johan Marais

Author of: **A COMPLETE GUIDE TO THE SNAKES OF SOUTHERN AFRICA**
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