

# TapioTrack Satellite Tracker

Saul, Daniel

Radio tracking has long been a successful method of tracking wildlife however it is expensive in terms of manpower and travel costs, requiring a researcher to be present in the field. GSM network trackers solve this to some extent. Unfortunately, wild animals are rarely obliging enough to live in locations with ample GSM coverage leaving the only remaining solution as satellites. Whilst this method is starting to become more widely used, there are barriers to researchers and improvements to be made. Demand existed for a new system to accurately and remotely track the Congo Clawless Otter in a study in Gabon in late 2014. TapioTrack itself is a small, lightweight piece of hardware utilising the latest technologies to provide accurate and useful information about the movements and behaviour of the animal it might be attached to, with GPS and an Inertial Measurement Unit. Data is logged on-board and transmitted via satellite to the web backend where it is analysed and made available to the device owner in real-time. The device can also be completely configured from this web interface. If desired, maps, graphs and locations can be made public and shared via social media such as Twitter and Facebook. This can help groups to raise awareness for their cause. The integration of social media and the ability to make data public brings up many more alternate uses for TapioTrack. Expeditions, charity events and races are but a few, allowing loved ones to watch and share progress live online.