

Project Knuckles 2004

Project Knuckles 2004 was the first in depth herpetofaunal study of the Knuckles Mountain Range. The local reptile diversity was discovered to be one of the highest in the country, making it a globally important site for herpetology.

The relict agamid Leaf nose lizard (*Ceratophora tennentii*), found only in the Knuckles, was a key target species, alongside the Pygmy lizard (*Cophotis ceylanica*) and the Crestless lizard (*Calotes liocephalus*). Also studied, were the Great Forest Gecko (*Cyrotodactylus frenatus*) and Four-toe snakeskink (*Chalcidoseps thwaitesii*) – endemic to the Knuckles range and thought to be endangered. Prior to Project Knuckles 2004 very little was known of the natural history of any of the above, save the *C. ceylanica* – which was thought to be extinct in the Knuckles, prior to our study. We discovered three specimens, still drastically few, but nonetheless disproving this claim.

Many new species of reptile were discovered, including geckos, skinks, nessia - a type of fossorial skink genus endemic to the island - and one new Uropeltis snake as well as numerous new amphibians. They await formal description whilst their DNA and alpha taxonomy await analysis in order to examine the phylogenetic relationships amongst their taxa and to confirm that they are new species.

The canopy study of the Knuckles range was the first of its kind. Supported and trained by the Global Canopy Programme, three team members used adapted arboroculturalist methods in order to gain access to the canopy of up to 30 metres. Local honey collectors were also employed to climb the trees freely without a harness. Their agility in the environment meant that they could obtain more specimens than the students.

Some prehistoric archeological sites were also discovered during our work. These are currently being investigated by the Sri Lankan government.

We collaborated with the Forestry and Wildlife departments and the Sri Lankan Universities of Rajarata, Peradeniya and Sri Jayawardenepura. We taught herpetological techniques to these organisations in order to encourage and safe-guard the continuation of long term studies in the region, by promoting inter-organisational collaboration.

The various findings of the expedition are to be published in local and international journals, as well as roughly 30 research papers. They are to be co-authored by the team and various experts from around the world. Work continues towards safeguarding the future of the Knuckles Mountain Range. More is to come in the near future.