

Protecting Australia's Biodiversity



Native Species

There is a growing acknowledgement that we are facing an extinction crisis around the world. In Australia, extinction rates are higher for some native animals than anywhere else in the world, and this is expected to increase over the next several decades. Monitoring is critical for assessing threats and evaluating management interventions for threatened native species, yet monitoring is often rarely undertaken because it's considered costly, time-consuming and lacks sensitivity.

How can EnviroDNA help?

At EnviroDNA we care about all our native species. We want future generations to experience these wonderful and often elusive creatures in their natural environment. Our Species Detection services can assist with rapid, sensitive and cost-effective monitoring of native species, enabling more effective management outcomes.

How we used eDNA in the non-invasive detection of the elusive southern brush-tailed rock-wallaby

The southern brush-tailed rock-wallaby is listed as critically endangered in Victoria, with only a single small population found at Little River Gorge in far east Gippsland. This is some of the most rugged country in Victoria, and presents unique challenges for monitoring and management of this marsupial population. Foxes are the number one threat and ongoing fox baiting programs are undertaken by the State Government to prevent the southern brush-tailed rock-wallaby from going extinct.

We worked with the State Government in Victoria (Department of Environment, Land, Water and Planning) to monitor this population by undertaking eDNA analyses of scats left by rock wallabies in the region. Scats were picked up by staff during baiting and camera trap surveys and sent to us for analyses. These eDNA based analyses enabled us to identify individual rock wallabies from a single scat, and provided information on the genetic health of the population without having to undertake expensive and invasive live-trapping surveys.

This eDNA approach can be applied to any animal scat, and is particularly useful for monitoring marsupial populations non-invasively.







