

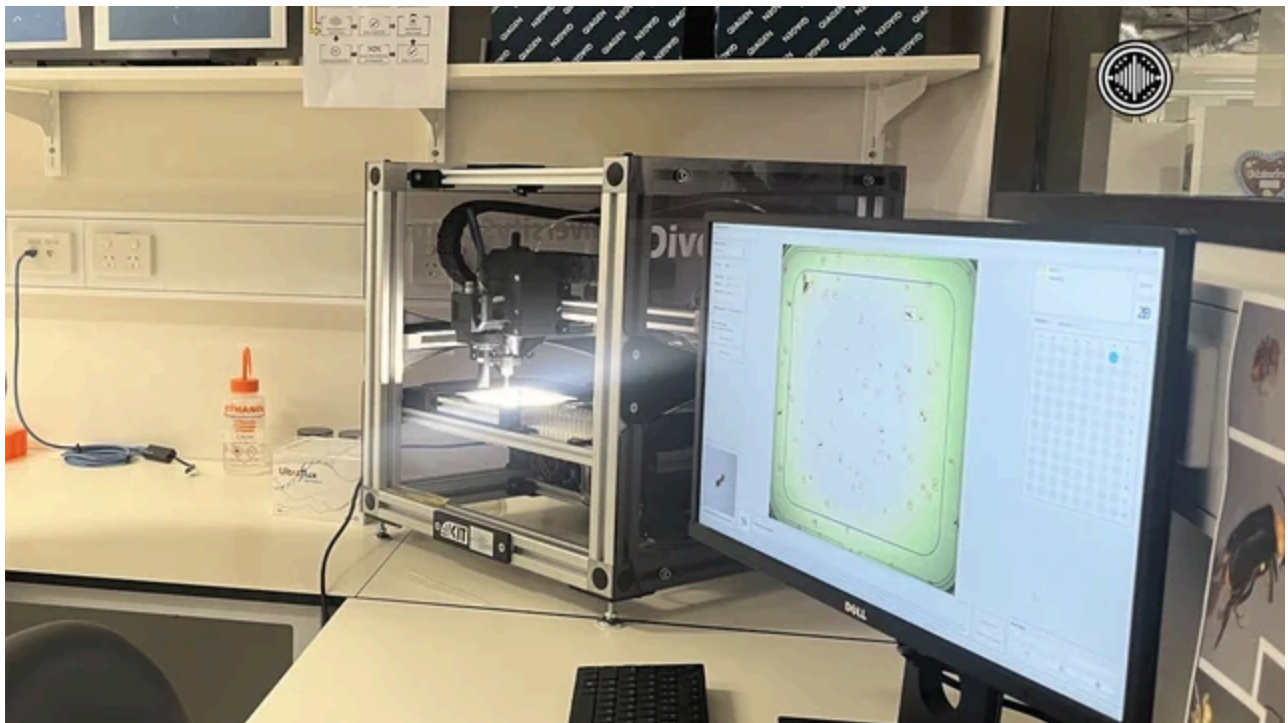
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Australia Launches Genomic Tool to Track Biodiversity

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Australia has introduced a national biodiversity tracking system that uses genomic data to better understand and protect native species and ecosystems.

Australia has taken a major step forward in environmental science by launching a new national platform that uses genomic data to monitor biodiversity. The **Biodiversity Genomics Explorer** is designed to help scientists, policymakers, and conservationists better understand how species and ecosystems are changing over time.

The platform uses **DNA sequencing technology** to identify and track native plants, animals, fungi, and other organisms across the continent. By analyzing genetic material found in the

environment such as soil, water, or even animal droppings researchers can discover which species are present in a particular area without needing to physically observe or capture them.

This innovative tool was developed through a partnership involving the **Australian Government's National Collaborative Research Infrastructure Strategy**, research organizations, and universities. It brings together years of research and vast amounts of genetic data to create an interactive, easy-to-use online resource that supports conservation and land management.

The goal of the Biodiversity Genomics Explorer is to give decision-makers accurate and up-to-date information to guide their work in protecting Australia's unique and often endangered wildlife. Australia is home to a wide range of species found nowhere else in the world, many of which are under increasing threat due to climate change, habitat destruction, and invasive species.

By offering access to real-time data and detailed species maps, the platform helps experts detect early signs of environmental stress and take action before it's too late. It also allows users to view how genetic diversity is spread across the landscape, an important factor in ensuring the long-term survival of species.

Importantly, the tool also supports efforts to involve Indigenous communities in conservation work. By incorporating Indigenous knowledge and enabling shared access to biodiversity data, the project encourages a more inclusive approach to environmental stewardship.

According to the scientists behind the project, this type of genomics-driven monitoring is the future of conservation. It provides a clearer picture of the health of ecosystems and offers a powerful way to measure the impact of environmental policies and practices.

The launch of the Biodiversity Genomics Explorer marks a major advancement in Australia's ability to respond to the growing challenges facing its natural environment. As biodiversity continues to decline worldwide, tools like this will be essential for protecting species and ensuring ecosystems remain resilient for generations to come.