



Unearthing Science in Regional & Remote NSW



Go outside, get hands-on and explore your local ecosystems while conducting real scientific investigations with the budding scientists in your classroom.

What do your students do?

Your students will get hands-on field experience with scientists from the University of Sydney. Experts will visit your school, bring free science kits and help your students design and conduct a bespoke environmental or agricultural scientific investigation using your school's local ecosystems.

We can provide assistance at every step of the Working Scientifically process:

- Understanding abiotic and biotic factors in the context of your local ecosystem.
- Designing scientific investigations that are safe, valid and reliable.
- Provide specialised tools and instruments to make accurate observations.
- Fieldwork skills and surveying techniques.
- Chemical analysis for environmental or agricultural samples.
- Accounting for safety and risks while conducting fieldwork and lab work.
- Analysing data to identify trends and draw conclusions.

Who can register?

Unearthing Science is free for students in regional and remote areas of New South Wales and aimed at **Stage 4-5** students.

Our workshops are flexible and adaptable. We work with you to design investigations that are relevant to your local environment and suit the needs of your curriculum.

Register now!

To register, fill out our [online form](#) or visit our website and click "Register your Interest".

Website:

<http://sydney.edu.au/science/industry-and-community/community-engagement/unearthing-science.html>

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What we can do!

We work with you to design an investigation specifically for your local environment.

Below are some examples of investigations we have conducted at schools previously. Many of these activities can be adapted to fit your school, but we welcome new ideas and scientific questions. If you have your own investigation idea to discover more about your school's unique local ecosystem, please let us know! We would love to design an investigation with you for your school.

Waterway sampling

How healthy are your local rivers and creeks?

Use real freshwater surveying techniques to sample abiotic and biotic factors to understand the health of your local waterways.

Previous students have:

- Assessed salinity, dissolved oxygen, pH and nutrient levels in water using professional multiparameter meters.
- Sampled for macro-invertebrate biodiversity and used species presence to evaluate water health
- Taxonomically identified macroinvertebrates with expert entomologists using microscopes



Soil quality analysis

Uncover the hidden world beneath your feet!

Compare the quality of soils in different environments. How does agricultural soil differ from urban soils? How are we impacting the unique ecosystems in our soils?

Previous students have:

- Determined the physical qualities of soil using hands-on field surveying techniques
- Measured the abiotic factors of soil using chemical analyses
- Surveyed the diversity of soil fauna and flora



Biodiversity surveying

Discover the incredible diversity in your local ecosystems!

Learn about the amazing creatures in your backyard. How can we sample the biodiversity of our local environments reliably and accurately to help protect our native animals?

Previous students have:

- Surveyed local ecosystems for habitats and shelters suitable for native animals with expert ecologists.
- Quantified the diversity of birds, mammals and invertebrates using quadrats and timed walks.
- Learned how to accurately identify native Australian animals using scat, tracks, sounds and microscopy.

