

Bring the Biological Sciences curriculum alive in your school this spring with Claws on the Line.



Claws on the Line 2023

We are looking for Year 5-6 teachers to participate in our burrowing crayfish incursions on 11-13 September this year! This is a wonderful opportunity for Year 5-6 students to learn with working zoologists, bringing the cryptic world of the Central North Burrowing Crayfish to life.

What are we offering?

The citizen science-inspired project called **Claws on the Line** aims to educate students about the Central North Burrowing Crayfish, and collect vital information about where it is found and the size of its population. This small freshwater crayfish is found only in the Devonport–Latrobe area, and is a nationally listed threatened species. Dr Clare Hawkins and Dr Alastair Richardson are both zoologists with a deep understanding of the animals and the science behind threatened species conservation.

- **Claws Incursions (limited to 6 schools only):** Clare and Alastair, with the aid of other professional scientists and a university student scientist or two, will deliver a 2 hour incursion in your school grounds for 1-2 classes of Year 5-6 students. This will include a 15 minute whole group presentation about the crayfish's life cycle, habitat and threats. Then the group will be split three ways for 3 x 20 minute rotation activities, before a whole group conclusion and farewell. A detailed run sheet of activities is provided on the next page. We only have space for six local schools to participate, so please register your interest as soon as possible. Dates: Monday, Tuesday and Wednesday 11th, 12th & 13th September. Times: 9.30-11.30 am & 12.45-2.45 pm (some flexibility). Schools will be booked in on a first-come basis, and we will then have a waiting list in case of withdrawals. Email hello@naturetrackers.com.au to register your interest.
- **Art Competition:** Open to all students. Create a Central North Burrowing Crayfish inspired artwork and help to let people know what might be living beneath their feet. The competition is open to all art forms (painting, drawing, sculpture, song, poetry...), and the aim is for students to use their imagination and creativity. The entry deadline will be 8th October, with a judging and prize-giving afternoon at the Kelcey Tier 'Extinction Matters' **BioBlitz** on Friday 20th October. Make an unforgettable day of it – book your students for the BioBlitz, to get out into nature and build on what they've learnt during the incursion.

Claws Incursions - Curriculum Links:

Year 5/ Science understanding/ Biological sciences

Living things have structural features and adaptations that help them to survive in their environment

Year 6/ Science understanding/ Biological sciences

The growth and survival of living things are affected by physical conditions of their environment

Year 5-6/ Science as a human endeavour/ Use and influence of science

Scientific knowledge is used to solve problems and inform personal and community decisions



Claws Incursions - Activities:

Activity 1: **Where's which crayfish?** | Presenter: Dr Alastair Richardson

Location: Inside with a large floor space. *Duration:* 20-25 mins

Purpose: Explore maps and biological science concepts of habitat.

Materials: Open area, ideally uneven ground. *We'll bring:* fabric 'map layers', coloured stickers.

Alastair will lead this activity. Students will be challenged to identify different habitats on simple maps provided by Alastair, made up of physical layers representing soils, water, vegetation, topography (a gentle introduction to the mapping layer principle of digitised maps). Which habitat is suitable for which sort of crayfish? Small teams of students will make observations that will be recorded and discussed.

Activity 2: **Give me a home among the mud please** | Presenter: Dr Clare Hawkins

Location: Preferably outside, with access to water; will be messy work. *Duration:* 20-25 mins

Purpose: Familiarise students with the appearance and function of burrowing crayfish distinctive mud chimneys so they understand the importance of looking after their habitat.

Materials: Tap, water bucket, outdoor tables. *We'll bring:* clay, plastic work trays, cleaning rushes.

Clare will use modelling clay or naturally found clay and task students with creating a crayfish mud chimney. Students can also make other shapes and sizes which animals might use as homes. We'll discuss a simple experiment placing a mud home in a natural setting in the school grounds (or at home) and students make predictions about what, if any, animals will colonise them over time (1 day, 1 week, 1 month...).

Activity 3: **Crayfish Creations** | Presenter: Experienced university science student

Location: Inside with a large floor space. *Duration:* 20-25 mins

Purpose: Consolidate information from the presentation about body parts of the freshwater burrowing crayfish by building a temporary sculpture/ representation of a crayfish using loose parts.

Materials: Dustpan/s & brush/es. *We'll bring:* large pile of loose parts objects (caps, sticks, tiles, etc.)

The University of Tasmanian student will recap the main body parts of the crayfish using a diagram and explain the basic functions of these structures in the life of a crayfish. Students will collect materials from a central pile and work in pairs or individually to create a crayfish sculpture on the ground. Students will present their creation to the group and discuss structural adaptations. If time allows, students will modify one or more body parts and explain how that will help the crayfish in a new environment.

Before you register for a Claws incursion...

Although we will provide most of the planning and materials required for the incursion, we will need support from the participating teachers. Teachers must be prepared to organise a teacher or aide to accompany each of the rotation activities (three adults). These people will be ultimately responsible for behaviour management and student issues. Teachers will also need to work closely with us to plan the locations for the activities prior to the day.

Who we are

The Bookend Trust is an environmental science education organisation that has been providing school and community led initiatives in Tasmania for over ten years. These have included BioBlitzes, the Wedge-tailed Eagle monitoring project *Where? Where? Wedgie!* and Expedition Class adventure learning projects. Our partners include the Tasmanian Department of Education, the Tasmanian Community Fund and several private sponsors. With this support we are currently able to run the project at no cost to the school.

