

## Details

### SEA Lab prices for school groups are:

Year 5 to Year 10	\$5.00
Year 11 to Year 13	\$7.00
ONE adult per ten children	FREE
Additional adults	\$10.80

These prices include admission to both the Laboratory AND the Aquarium.

### Programmes

The lists on the previous pages are a guide to the learning experiences that we can provide. Programmes can also be developed specifically for your topic. If you have a particular practical that you would like to perform during your visit to SEA Lab please call and discuss it with our educator.

### Pre-booking:

Bookings are essential and we recommend that you book in with our Educator as early as possible to ensure your preferred date, topic and species is available.

There is a limit of 40 students in a visiting school group due to laboratory limitations of equipment and access.

### Charitable Status:

Southern Encounter Aquarium & Kiwi House is operated as a not-for-profit organisation by the Orana Wildlife Trust, a registered charitable trust which also runs Orana Wildlife Park. When you visit, you are supporting our aims of conservation, education and recreation.



*S.E.A. Lab - Living learning!*

P.O. Box 5130  
Papanui  
Christchurch  
New Zealand

Telephone: (03) 377 3474

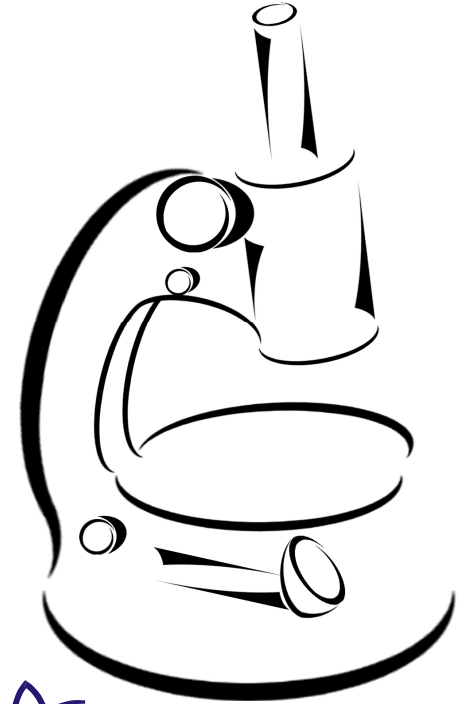
Fax: (03) 377 9196

Email: [educ@southernencounter.co.nz](mailto:educ@southernencounter.co.nz)

[www.southernencounter.co.nz](http://www.southernencounter.co.nz)

# SEA Lab

***"Living learning!"***



# SEA Lab

*SEA Lab* is located beneath the Aquarium in a custom made facility to support our LEOTC Education Programme.

Our Biology teacher provides lessons and practical sessions that integrate with Science, Biology and Technology curricula and expand on students classroom learning. Time is split evenly between Aquarium observation and Laboratory activity.

Binocular microscopes, computers, data-logging equipment with a broad range of biological sensors, audio-visual presentation equipment, a huge collection of animals and the life support systems to maintain them make this a unique opportunity for student investigations!

*SEA Lab Junior* is tailored to meet the needs of upper primary and lower secondary students visiting the Aquarium with a specific Science or Technology focus.

*SEA Lab Senior* is designed to support teachers of secondary Science and Biology with extended Laboratory experiences. Initial examination of the various animals on display leads students into further investigations.

Both programmes are 3 hours long, though extended programmes can be provided on request, or may be necessary for some topics.

As new education programmes are constantly being developed it is an excellent idea to check our website for updates:

[www.southernencounter.co.nz](http://www.southernencounter.co.nz)

# SEA Lab Junior

**Suggested Level:** Year 5-10  
**Curriculum Integration:** Science  
Technology

## Junior Science Programmes

### Courageous Coral

Students explore the variety and diversity of coral species and the life that thrives around them (with corresponding native examples) and examine a large collection of preserved corals.

### Outside and In

Though strikingly different on the outside, most animals have many common structures within.

### Phantastic Phyla

Investigate live specimens to determine what makes them similar or different. Then apply these ideas to classify a wider range of organisms in the Aquarium

### Tooth to Tail

Life in the world's waters requires some special adaptations, even just to breathe. Examine a variety of these animals and explore the concepts that help them survive.

## Junior Technology Programmes

### Mighty Materials

Aquarium construction and maintenance has very specific requirements. Investigate the properties of the different materials and how they relate to their use. Introduces aspects of biotechnology in the life support systems of the Aquarium.

### Tools of the Trade

From studying animals in the wild to keeping them alive in captivity we rely on a huge range of technology. See what we use and why!

# SEA Lab Senior

**Suggested Level:** Year 11-13  
**Curriculum Integration:** Science  
Biology

## Senior Biology Programmes

### Classification

Identify the characteristics of live specimens to determine their phyla and use this information to classify other animals in the Aquarium.

### Small Animal Studies

Use sophisticated data-logging equipment to monitor animals responses, short or long term, and record data for subsequent analysis.

### Physical Factors

A large collection of specialised aquatic sampling equipment and real time sensors allow students to manipulate and investigate environmental gradients.

### Form and Function

How does the shape and structure of aquatic animals relate to their behaviour and environment? Though dissection and observation of live specimens students can investigate and compare such features as Gas Exchange, Support and Movement, Reproduction and Development.

## Senior Science Programmes

### Adaptations

Observation and examination of live organisms to identify structural, physiological and behavioural adaptations.

### Micro Organisms

In the Aquarium EVERY animals very life depends on their continued presence.