

Before dinosaurs

Suitable for Y4-10

Ideally an Outdoor programme

Aotearoa/New Zealand has the oldest life on planet Earth. It is a living museum of life, which in other parts of the world, have long gone extinct! Why has Aotearoa ended up with such ancient life forms when our country's landscape is not that old? We will be exploring our ancient connections, and going back in time to see what life was like in our country's pre-history. Take a walk through the dinosaur forest behind the bay, like you've never done before! What would it have looked like to the first Māori to see the forest? How big were our moa, or the eagle that ate them? Using interactive games, we can understand how extinction occurs, and discuss how we can prevent future extinction from happening.

This programme is about: Identifying endemic, native and introduced plants and animals. The concept of very large time-scales. Continents floating across the earth's surface. Bending and tilting of the Earth's crust, the land and sea changing shape and plants and animals rafting on floating rocks. Life constantly changes to fit the conditions and environmental pressures.

After Dark

Any age/level Y1-10

A late night for younger students

The Mistletoe nightlife may not be quite the same as the night-life in downtown Auckland! Using red-filtered torches, come on a night-time adventure to see bioluminescence, both on land and in the sea! Try out some night vision equipment. We will check out the best glowworm spots and learn a bit about these beautiful displays. Then we can head down to the jetty to see the famous phosphorescence in the water. What causes it? Why is it sometimes brighter than at other times? We can attempt to try and catch some to look at under the microscope. We can place a light trap in the water and see what is attracted. N.B. windy conditions, and a full moon decrease the chances of seeing phosphorescence. A chance also (if it is clear), to use a telescope to look at the stars. What other animals come out at night? We can set up an infrared trail camera and tracking tunnels to record what goes on during the night, which can be viewed in the morning.

This programme is about: Bioluminescence why and how it happens. The nocturnal lifestyle, what comes to life at night and why. Stars.