



Toohey Forest
**Environmental
Education
Centre**

Learning Goals:

- **Investigate** how ecosystems change as a result of fire
- **Examine** factors that affect population sizes such as the destruction of habitats through fire
- **Record, analyse** and **compare** abiotic and biotic data from two terrestrial (land based) ecosystems
- **Use** a range of sampling techniques and equipment (probes and data loggers) to record information
- **Identify** and sketch a variety of flora species
- **Discuss** adaptations that plants use to survive

Inspiring Science Beyond the Classroom

Time	Activity
9.30 – 9.40 (10 mins)	Introduction to program and facilities
9.40 – 10.10 (30 mins)	Examine plant adaptations – Students are provided with knowledge and examples of ecosystems within Toohey Forest and how certain plants have adapted to fire regimes
10.10 – 10.30 (20 mins)	Fire-stick farming – Students are introduced to terminology and traditional equipment. Students observe how adaptations (e.g..Banksia) to fire allow for germination and propagation
10.30 – 11.00 (30 mins)	First Break
11.00 – 11.30 (30 mins)	Plant Identification: Samples of local native plants identified using booklet – enables students to identify plants in the field and discuss adaptations to ecosystems
11.30 – 12.30 (1 hour)	Terrestrial Equipment Use: 2 sites (wet/dry): adaptations; flora classification (using field guides); recording of abiotic data (e.g. temperature, humidity, light, soil moisture)
12.30 – 1.00 (30 mins)	Second Break
1.00 – 2.00 (1 hour)	Wet and Dry Quadrat – Abundance of plant types (data collection) and comparison between
2.00 – 2.25 (25 mins)	Conclusion: Identifying and justifying decisions linked to hazard reduction burns within Toohey Forest
2.25 – 2.30 (5 mins)	Farewell and Departure

Students will need:

- Covered footwear, Sun safe clothing and hat
- Sunscreen and insect repellent already applied
- Water Bottle
- Morning Tea and Lunch

Field booklet, Clipboard, Pencil
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Litter Free Lunch

We encourage students and staff to pack a litter free lunch. A litter free lunch contains no throwaway packaging. Everything in it can either be re-used, composted or recycled. Therefore food is brought in re-usable containers rather than disposable plastic wrap. Drinks are brought in refillable plastic bottles. Pre-packaged foods are discouraged.



**Queensland
Government**