

Itinerary: Land cover transformations: Invasive weeds



Learning Goals:

- **Explain** the geographical processes that result in particular physical features (e.g. forests) that shape the identity of places at the local level.
- **Interpret** land use maps to identify where changing land cover has had an impact on the biophysical environment in the local area.
- **Explain** geographical processes that have contributed to land cover change in a local area, including anthropogenic process and natural processes.
- **Use** a conceptual model to identify a local land challenge.
- **Conduct** a field study to collect primary data for investigating a land management challenge on a local scale.

Inspiring Science beyond the classroom

Time	Activity
9.00–9.15 (15 mins)	Introduction to staff and facilities
9.15–9.30 (15 minutes)	Lesson goals, key terms and outline activities
9.30–10.10 (40 minutes)	Plant Identification: <i>Samples of local native plants and weeds, identified using a plant identification booklet</i>
10.10–10.35 (25 mins)	First Break
10.35–12.55 (2 hours 20 mins)	Equipment Use: <i>Review of quadrats and group task requirements</i> Quadrat Studies — <i>collect and record biotic and abiotic data (temperature, light, pH, soil composition and moisture etc), forest condition scores.</i>
12.55–1.20 (25 mins)	Lunch
1.20- 2.20 (40 mins)	Data Analysis & Conclusion: <i>Share/collate data and calculation of Simpson's Diversity Index, comparison of sites in terms of biodiversity and health, human impacts and long-term sustainability of biodiversity, invasion triangle</i>
2.20-2.30 (10 mins)	Farewell and Depart

Students will need:

- Long pants – light weight in summer
- Covered footwear
- Sun safe clothing and hat
- Sunscreen and insect repellent already applied
- Water Bottle
- Morning Tea and Lunch
- Field booklet, Clipboard, Pencil

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.