



IA2 Data Collection Options

Teachers can select which parameters best align with their classroom practicals. All parameters are available for collection if desired. Sixteen circular plots (10 m diameter) are established in each of the three habitat types (woodland, wetland, and grassland), with flexibility to reduce this number if required.

Parameter/Variable	Method	Example Research Questions	✓ / ✗
Habitat: Woodland Wetland Grassland	Survey plot locations	Does species diversity differ across the three habitat types?	Required
Microclimate: Temperature (°C) Humidity (%)	Temperature and humidity meter	Is there a correlation between microclimate and light?	
Ground Cover: Grass (%) Bare Ground (%) Leaf Litter (%)	Estimate from 1m x 1m quadrat	Is there a correlation between leaf litter coverage and tree density?	
Soil & Light: pH Moisture (%) Light (lux)	Soil meter	Does light influence recruitment of trees?	
Vegetation Structure: No of Eucalypt – Ironbark No of Eucalypt – Other No of Acacia No of Soap Tree No of Quinine Tree No of other trees Total no of trees (density) No of species (diversity) No of saplings (recruitment) Tallest tree DBH (cm) Tallest tree height (m) Percent canopy cover (%)	Identification from handout guide DBH tape Laser rangefinder 1. Eyeball estimate 2. Desktop analysis (extension activity)	Does soil moisture influence tree diversity? Is there a correlation between invertebrate diversity and tree density? Is there a difference between the two different methods of estimating canopy coverage?	
Species Diversity: No of Herbivores No of Carnivores No of Detritivores Total no of species Simpson's Diversity Index Shannon's Diversity Index (extension activity)	Identification of pre-prepared invertebrate samples	Does detritivore abundance correlate with leaf litter? Does the number of herbivores correlate with canopy cover? Is there a difference between the two different methods of calculating diversity indices?	