



Year 7 – 10 Program details

Bushfire

Fire has been a natural part of the environment in SW WA for millions of years. This excursion enables students to investigate a range of fire related topics. How prepared are buildings to bushfire? What is a prescribed burn and how does it make the bush safer? What is in a Parks and Wildlife fire truck? How does the forest recover after a fire? You can create your own excursion for a single class up to a whole year level by choosing from these activities:

Bushfire in the landscape

What is the difference between prescribed burn, mosaic burn and bushfire? Students will explore different types of fires and their impacts on plants and animals.

Science, HASS, Priorities - Sust
Duration – 1 Hour 40 minutes

Burn history fieldwork

Examine different field sites to observe how the forest is responding to a fire. Also take measurements to compare sites.

Science, HASS, Priorities - Sust
Duration – 1 Hour 40 minutes

Building assessment

How prepared are building to bushfire? Students will analyse Centre buildings to rate their fire safety, then consider modifications to improve their resilience to fire.

HASS
Duration – 50 minutes

Fire truck observation

Get up close and personal to a Parks and Wildlife fire truck! What equipment is needed by fire fighters and how does it work? Safety is important so what protection is available to the fire crews?

HASS
Duration – 50 minutes

Management strategies

Fire Danger Ratings, Warnings and Alerts and early detection are all strategies employed to minimise the harm resulting from Bushfires. Students engage in problem solving tasks utilising these strategies in simulated situations. Prescribed burning will be assessed through the eyes of a range of stakeholders to explore the consequences of this key mitigation strategy.

HASS
Duration – 50 minutes



Nearer to Nature Schools

Plan your response

Got what it takes to plan the response to a fire? Students learn the basics of how to respond to a bushfire and the equipment Parks and Wildlife has access to. Students then work in groups to plan how they would respond to a hypothetical fire

HASS

Duration – 50 minutes

The Forest and its Animals

Plants need animals, animals need plants. But do they need humans? On this excursion students will explore through hands on activities and field visits the biodiversity of our forests, its inhabitants' relationships and how humans are impacting and managing the forests. You can create your own excursion for a single class or up to a whole year level by choosing from these activities:

Biodiversity in the bush

What is in our forests? At several locations in the forest students will observe and record the diversity of life in the environment. Students will then group the diversity based on similar features and use provided keys to identify their findings.

Science, HASS, Priorities - Sust

Duration – 1 Hour 40 minutes

“My Habitat Rules” - habitats and animal relationships

Does a piece of jarrah forest have the resources necessary to support a reintroduced population of one of our threatened species? Students explore the forest as habitat by looking into food webs, shelter requirements, vulnerability to predators to decide which threatened species should be re-introduced to this area. They also consider how the population may be managed to deal with impacts of fire, introduced species or climate change.

Science, Priorities - Sust

Duration – 1 Hour 40 minutes

Changing times - changing forests?

Consequences of human-induced change is discussed, and we explore what actions students can take to reduce impacts on the forest.

Science, HASS, Priorities - Sust

Duration – 50 minutes

Management strategies

Our wildlife is under threat! So how is Parks and Wildlife managing the threats to our unique native animals. Students will learn about our unique wildlife conservation program – Western Shield. How do we monitor fauna populations? What strategies are we employing to limit the threat posed by introduced predators?

Science, HASS, Priorities - Sust

Duration – 1 Hour 40 minutes



Nearer to Nature Schools

Plant survival techniques

On a forest walk students will discover the range of strategies plants utilise to survive in our harsh environment. Strategies include – symbiotic relationships, leaf modifications, hidden and protected growth points, leaf coatings

Science

Duration – 50 minutes

Animal evidence

When in the forest you won't always see animals but they leave their "evidence" behind. Using keys students will unlock evidence to determine a range of forest dwellers.

Science

Duration – 50 minutes

Exploring our river and wetland ecosystems

The wetlands and rivers of the Swan Coastal Plain have been significantly affected by human-induced change; yet these ecosystems are still an important part of the biodiversity of the region. This excursion enables students to undertake a range of field tasks to assess the living and non-living components of these ecosystems with either a Biology or Geography focus. Students explore key concepts related to ecosystem structure and function such as feeding relationships and energy flow, ecosystem services and challenges to sustainability. You can create your own excursion by choosing from these activities:

Plants, animals and human uses

The site survey gives students an overview of the ecosystem being studied and is an excellent introduction to the site. Students record observations on a range of ecosystem components such as plant life, animal activity, water appearance, condition of banks, drains and pipes, and human activity and impact. Each component is scored according to students' perception and an initial indication of the quality of the environment is obtained. This is used to focus students thinking on the questions they will seek to answer from the following field work.

Science, HASS, Priorities - Sust

Duration – 1 Hour

Water quality testing

In small groups students will collect water samples according to standard protocols and conduct water quality tests using field equipment. Parameters measured include: temperature, pH, Electrical Conductivity (salinity), Turbidity (clarity) and the nutrients Phosphate and Nitrate. Students' results will be compared to Australian guidelines to assess the health of the waterbody.

Science, HASS, Priorities - Sust

Duration – 1 Hour





Nearer to Nature Schools

Macroinvertebrate sampling

Wetland invertebrates can give an indication of the health of the ecosystem through their species diversity and abundance and through the presence / absence of sensitive species. Students sort and analyse a sample to classify and record the organisms. This can lead to a discussion of feeding relationships and the food web of the wetland.

Science, HASS, Priorities - Sust
Duration – 1 Hour

Map interpretation and field Sketch

A topographic map or aerial photograph of the site is used for students to label features on the ground. They then complete a field sketch of the site with notes on the various components (such as land use) to summarise information about the site.

HASS
Duration – 30 minutes

Human Impacts

Human impacts can be positive or negative. Students observe what impacts humans have had on this site and consider their consequences for the ecosystem. We look at how positive impacts can be enhanced to ensure the site is cared for into the future.

Science, HASS, Priorities - Sust
Duration – 30 minutes

Management Strategies

A walk around the site to look at the various management strategies that are in place and a discussion to consider their effectiveness. Students also consider what else may be needed in future for the sustainability of this ecosystem.

HASS, Priorities - Sust
Duration – 30 minutes

