

Education

Building Disaster Resilience in Young People



North West Bushfire Patrol

Teachers' Guide Years 4 and up

Building Disaster Resilience in Young People



Department of Fire and Emergency Services

Department of Biodiversity, Conservation and Attractions

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About North West Bushfire Patrol

North West Bushfire Patrol focuses on bushfire education within the Kimberley region. The program is WA Curriculum-linked and serves as a teaching resource from Year 4 upwards. The resource considers the Kimberley region's varied population, and all lessons are suitable to be used in both town and community schools.

The intended outcome of *North West Bushfire Patrol* is to raise students' awareness of bushfire and its consequences, whilst further developing a range of skills to help them respond to bushfire when it occurs.

Human risk from disaster is on the rise globally and children are amongst the most vulnerable to disasters.¹ The impact of disasters such as bushfire can be substantially reduced if the community is well prepared and equipped with the knowledge and skills of how to respond when a disaster occurs.

The Kimberley region is a vast area and the range of emergency services varies between larger towns and more remote regions. Volunteer organisations play a vital role in providing services to towns and communities throughout the Kimberley region. There is value in knowing your local area and what emergency services and volunteer organisations are available as this will influence how you teach certain parts of the program.

Adding 'disaster' to your schools' resilience education program

Children and young people are recognised as a vulnerable group in a world in which we are experiencing a global increase in disasters². The 2021 Children's Climate Risk Index (CCRI)³ indicates that almost every child on Earth is exposed to at least one climate and environmental hazard, such as bushfires, heatwaves, cyclones, severe storms, earthquake and or tsunami.

North West Bushfire Patrol is a Disaster Resilience Education (DRE)⁴ program aiming to provide opportunities for children and young people to identify and solve problems with respect to their own bushfire preparedness, at school and at home. A national survey⁵ of children and young people in 2020 found that those surveyed felt they had learnt more about earthquakes in school than the natural hazards that present the most risk to them, that is, bushfire and flood. Children and young people surveyed wanted to know more about the

¹ UNESCO & UNICEF. 2014. *Towards a Learning Culture of Safety and Resilience: Technical guidance for integrating disaster risk reduction in the school curriculum*. New York: UNESCO

² UNESCO & UNICEF, 2014. *Towards a Learning Culture of Safety and Resilience: Technical guidance for integrating disaster risk reduction in the school curriculum*. New York: UNESCO

³ UNICEF, 2021. [The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index.](#)

⁴ Australian Institute for Disaster Resilience (AIDR, 2021). *Disaster Resilience Education for Young People Handbook* https://knowledge.aidr.org.au/media/8874/aidr-handbook_dreyp_2021.pdf

⁵ Australian Institute for Disaster Resilience (AIDR, 2020). *Our World Our Say: National survey of children and young people on climate change and disaster risk.*

actions they could take to be better prepared for bushfire and flood; and to be able to look after themselves, others and animals.

Bushfire education traditionally fits the Human and Social Science (HASS) curriculum in Year 5 Geography, with alerts and warnings covered in Year 6 in Science as a Human Endeavour. However, bushfire education is relevant to students across all years of schooling as part of your school's resilience education program within Health and Physical Education (HPE) and additionally within those areas focusing on 'place' and 'civics and citizenship' within the HASS curriculum.

From early childhood to adolescence, children learn about safe and unsafe behaviours and who can help them in an emergency; what strategies they can implement to keep themselves safe in different situations, and, put new skills into practice. They examine how to respond when peers are encouraging them to take unnecessary risks; and, collaborate with their classmates to come up with strategies they can use in emergencies or when they feel unsafe.

All these things form part of bushfire education and are included in Disaster Resilience Education (DRE) programs such as *North West Bushfire Patrol*.

Links between home, school and community

Research into children and young people's experience of bushfire across Australia shows that the impacts of a bushfire disaster can be significantly reduced if communities are well prepared and equipped with the knowledge and skills to respond before and when a bushfire occurs.

'This isn't just for young people, but I think they need to know the fire plans. Because there were a lot of people who did not have a fire plan and were just panicking.'

(NSW Children & Young People's Experience of Disaster Report, 2020)

The NSW *Children & Young People's Experience of Disaster* report (2020)⁶ found that young people want to be involved in bushfire planning and want to know that their parents, carers, school are well prepared and can remain calm in a bushfire emergency.

Adults (at school and at home) can provide opportunities for children and young people to be involved and encouraged to contribute to bushfire planning from as young as six years old. Meaningful activities can include participating in bushfire drills where children and young people take an active role, for example, putting together an emergency kit and/or their own personal 'grab bag'. When given the chance to contribute to bushfire planning and executing the plan, children and young people are less likely to be anxious and more likely to be prepared for a bushfire emergency.

⁶ Office of the Advocate for Children & Young People (NSW, 2020). *Children & Young People's Experience of Disaster*.

North West Bushfire Patrol provides a link between your school's bushfire risk management plan, your students' own family bushfire survival plans and uses a whole of school / community approach to help build disaster resilience across all years of schooling. It provides opportunities for schools to link into community initiatives such as Bushfire Ready; connect with their local government, community groups and their local fire and emergency services.

Children and young people's experience with fire

Each of your students will have different experiences with fire. Some may be confident in lighting fires for cooking and heating purposes when camping or at home; and others will have little to no fire knowledge or skills. It helps to find out if any of your students have experienced the impact of bushfire as they could find this topic distressing.

Children and young people with a fascination for fire

Some children and young people are fascinated by fire and either light unsafe fires or endanger themselves by getting close to fire. The DFES Juvenile & Family Fire Awareness (JAFFA) Program is available to support these children (aged 6-16) and their families.

The program is delivered in the family home by JAFFA-trained firefighters. JAFFA includes an interview with the parent(s) and child, as well as a personalised education session that helps the young person understand the consequences of playing with fire. JAFFA receives referrals from schools, parents/carers, WA Police and Juvenile Justice. Contact JAFFA on 9395 9488; email jaffa@dfes.wa.gov.au or visit www.dfes.wa.gov.au/jaffa to find out more.

North West Bushfire Patrol Learning Outcomes

This program reflects an inquiry approach where students are directing their learning and applying it to their own location.

The key outcomes include:

- Identifying safe and unsafe behaviour with fire
- Understanding that fire is a tool for responsible adults who hold the knowledge and skills to use it
- Identifying unsafe fire times and risk
- Developing personal behaviours and strategies for staying safe when there is a bushfire
- Understanding how to respond to a bushfire
- Understanding the impact of deliberately lit bushfires

Modules

North West Bushfire Patrol contains five modules:

| | |
|---------------|----------------------------|
| Module One: | Understanding bushfire |
| Module Two: | Factors affecting bushfire |
| Module Three: | Impacts of bushfire |
| Module Four: | Fire Land Management |
| Module Five: | Responding to bushfire |

Each module is structured as illustrated below:



Module: Title of Module
Subtitle

About this lesson

- Overview of the lesson

Background information

- Information needed to teach the lesson or complete activities
- May include links to online content, including images and video

Key messages

- Key messages featured in the module

Learning outcomes

- Student learning outcomes

Things you will need

- What you will need to gather or organise for students to complete all of the module

Activity #:

- Each module contains a number of activities

Extension:

- Opportunities for students to apply the information further or extend their knowledge and understanding

In the community:

- Opportunities for students to engage with their school community, home or local community and demonstrate what they have learned

Adapting *North West Bushfire Patrol* for high school students

This resource was initially developed for students in Years 5 – 6 but can easily be adapted to suit students from Year 4 up to Year 12.

The activities listed below address key DFES messages and include understanding bushfire risk; bushfire behaviour; the Australian Fire Danger Rating System; bushfire alerts and warnings; where to find information (emergency.wa.gov.au); understanding your school bushfire plan and making and practising a home bushfire survival plan.

Module One, Activity Three: Bushfire Prone Areas

Students are able to identify if an area is bushfire prone and recognise areas of their community that are at risk of bushfire.

Module Two, Activity Two: Spot Bushfire Days

Students are able to determine bushfire weather and times when it is safe to have a fire.

Module Two, Activity Three: Australian Fire Danger Rating System

Students are able to locate the current Australian Fire Danger Rating for their local area and understand its purpose.

Module Five, Activity Two: Bushfire Warnings

Students understand where to find information during a bushfire and know how to respond to a bushfire in order to keep safe.

Bushfire Preparation

Use the My Bushfire Plan website (www.mybushfireplan.wa.gov.au) or App and encourage your students to develop a My Bushfire Plan with their families (best option) or on their own (good option). They can share their plans with one another (better option).

Short for time? If you have only time for one or two lessons, these are the most important messages:

- A small fire can become a big fire very quickly. Call 000 for fire so the fire can be extinguished quickly, understanding that in the Kimberley there may be some delay before responders arrive due.
- Bushfire plans save lives. Have a bushfire plan. Download the My Bushfire Plan App and work with your household/family put together and practise your bushfire plan. Include in your plan where you will go if there is a bushfire in your area.
- Know where to find accurate information about a bushfire. The accurate source for emergency alerts and warnings is Emergency WA (emergency.wa.gov.au). Emergency WA also includes information on Bushfire Danger Ratings, Total Fire Bans, planned burns and information about floods, cyclones and having hazards.
- Leave early. Do not wait for an emergency warning or a text to tell you when to leave.

School and home bushfire plans

If your school is in or near a designated bushfire prone area, bushfires are a real risk to you, your students, your school buildings and grounds; as well as homes and infrastructure within your local community, including your students' homes. But you don't have to live close to the bush at risk. Burning embers can travel up to 5km or more ahead of a fire front, each one capable of starting a spot fire.

Many government schools at risk of bushfire are included on the Department of Education's Bushfire Zone Register and are required to have a Stand-alone Bushfire Emergency Plan. As over 90% of Western Australia is at risk of bushfires, a quick look at the DFES [Map of Bush Fire Prone Areas](#) is a good visual to show children and young people to help them understand their school, home, or local community risk⁷.

Having school and home bushfire plans are our greatest defence for students to stay safe in a bushfire emergency. It's a good idea to organise a whole-of-school bushfire drill when students are doing these modules. This helps cement the need to understand bushfire risk and the things we can do to keep ourselves safe. It's also an opportunity to link what students have learned at school and transfer this knowledge to the home environment by developing a bushfire plan at home.

A home bushfire plan can be created in under 15 minutes using the [My Bushfire Plan](#) website or companion App. The App provides one place to prepare, store, print and update a bushfire survival plan anytime, from any device. Plans can be digitally shared with the whole family.

Module Five (Responding to Bushfire) asks students to complete the **My Family's Bushfire Survival Plan worksheet** as a homework task. This is a particularly important component of the learning program as a bushfire plan will give families the best chance of surviving a bushfire. It is important to highlight that leaving early is always the safest option.

It is recognised that this activity may be difficult for some students where parents or guardians are unwilling or unable to participate. Instead encourage students to talk with classmates to decide the following:

- When will they know to leave their home?
- Where will they go?
- Which way will they go?

If a student's family is unwilling to engage in this activity, students can still be encouraged to create their own *My Bushfire Plan* on their own.

⁷ Over 400 government schools in bushfire prone areas are on the Department of Education's Bushfire Zone Register. A DFES Bushfire Risk Management Liaison Officer provides advice to government schools on bushfire plan development. It is not the role of career firefighters to aid in bushfire planning. Non-government schools may need to employ a fire engineer (or other expert) to assist them with their bushfire plans.

Enriching the program (inviting guests and other options):

Inviting guests into the classroom is a great opportunity for students to ask questions of an expert. Students can gain a better understanding about local bushfire risks in their community; cultural and planned burning practices; environmental risks to plants, animals and the places they love; risks to homes, other buildings and infrastructure; and are able to share their own bushfire knowledge, skills and plans.

When inviting guests, communicate clearly with them before they visit to ensure they understand what you require and what they can expect. It may even be helpful to provide them with a list of students' questions if possible.

Guests can include:

- Local fire brigade (Career or Volunteer Fire and Rescue Service, Bushfire Brigade or Volunteer Fire and Emergency Service, Volunteer Fire and Rescue Brigades). Visit <http://www.dfes.wa.gov.au/contactus> to find links to DFES Offices and Fire and Rescue Service Stations⁸.
 - The purpose of a firefighter visit is to reinforce the key messages of North West Bushfire Patrol. The visit is also an opportunity for students to learn more about community helpers and find out what they do.
 - A firefighter visit is designed to be delivered to one class at a time. The effectiveness of the presentation relies on students being able to interact with the firefighter and is not suitable for a large audience.
 - The main role of most of the firefighters that come to your class is to fight fires. Whilst they may have some experience in working with young children, they will need your help to make sure their session goes well.
 - To ensure that all students benefit from this presentation, teachers are asked to take responsibility for their students' behaviour. There is a possibility the firefighters are on duty and could be called away to an emergency during the presentation.
 - The firefighters might bring a fire truck and arrange for your students to look through the fire truck and see a firefighter in their breathing equipment. This may not be possible nor suitable for all lessons.
- Local Aboriginal or Torres Strait Islander Elders to provide information about the seasons and traditional burning practices, as well as the importance of preserving and respecting Country.
- Your local Aboriginal Ranger Group
 - May be able to talk to students about fire management and their role fighting fires
 - May be able to show students some of the equipment they use.
- A representative from the DFES Kimberley or Kununurra offices.

⁸ Career fire stations serve most of the Perth metropolitan area including Mandurah and Rockingham and the regional centres of Geraldton, Kalgoorlie, Bunbury and Albany. Firefighters visit all Year 3 classes to deliver our Home Fire Safety program. Bushfire education visits are additional to their workload and visits may be limited.

- Local government representative (Community Emergency Services Manager, Fire Control Manager or Ranger)
- Parks and Wildlife volunteers to discuss impact of bushfire on native animals and habitats. (Visit the [Department of Biodiversity, Conservation and Attractions](#) to contact your local Parks and Wildlife office).
- Staff and family members who can share their own bushfire experiences and bushfire plans.
- Students from other schools who can share their stories with your students.

Other ways to further enrich the program include:

- A whole of school bushfire drill
 - Students could run the bushfire drill
 - Students could complete a critical analysis of the schools' bushfire plan and drill; suggesting improvements and presenting their ideas to staff
- Extension activities where students plan their own investigation and present their findings to an audience.
- Hosting an event where students can communicate what they have learned with their families, other students and broader school community, as well as guests who have formed part of their learning journey.



FOR A SAFER STATE

Parent/Carer Information Sheet – FAMILY BUSHFIRE PLAN

Dear Parent/Carer

We are learning about bushfires in Western Australia, using a Department of Fire and Emergency Services (DFES) resource, *North West Bushfire Patrol*. Students have been asked to:

- **Complete a bushfire plan with their families (15 minutes).**

If you already have a bushfire plan, please go through it with them. If you can, test or practise some, or all of the plan together.

How to make a bushfire plan

To get started, visit mybushfireplan.wa.gov.au or download the **My Bushfire Plan** App.

- The best plan is one that everyone in your household knows and has practised.
- Practising your bushfire plan helps reinforce the messages learnt in class, as well as increase each of your family members' safety before and during the bushfire season.

Where to find accurate bushfire information

- You can find Bushfire Alerts and Warnings, Australian Fire Danger Ratings, and information about Total Fire Bans at Emergency WA emergency.wa.gov.au.

Kind regards

'73% of children and young people in Australia* want to know how to plan and prepare for bushfire' (*73% of Australian children and young people surveyed, *Our World Our Say Youth Climate & Disaster Report*, World Vision, 2020)

Additional Resources and Useful Weblinks

| | |
|--|--|
| Department of Fire and Emergency Services (DFES) | www.dfes.wa.gov.au |
| DFES Alerts and Warnings | www.emergency.wa.gov.au |
| DFES Australian Fire Danger Warnings (Emergency WA) | |
| DFES Bushfire Publications | www.dfes.wa.gov.au/safetyinformation/fire/bushfire/Pages/publications.aspx |
| Emergency Alert | www.emergencyalert.gov.au/ |
| Bureau of Meteorology (BOM) | www.bom.gov.au |
| BOM Forecast Areas Map | www.bom.gov.au/wa/forecasts/map.shtml?ref=hdr |
| BOM National Weather Warnings | www.bom.gov.au/australia/warnings/index.shtml |
| Department of Biodiversity, Conservation and Attractions (DBCA) | www.dpaw.wa.gov.au/management/fire |
| Triple Zero Challenge | www.kids.triplezero.gov.au |
| Disaster Resilience Education for Young People (Australian Disaster Resilience Handbook Collection) – Australian Institute for Disaster Resilience (AIDR) (2021) | https://knowledge.aidr.org.au/collections/handbook-collection/ |

Curriculum Links

| HEALTH AND PHYSICAL EDUCATION: Personal, social and community health | | | |
|---|--------------------------------|---|---|
| Year | Strand | Content Descriptors | Module |
| Year 4 | Being healthy, safe and active | <ul style="list-style-type: none"> Personal behaviours and strategies to remain safe in uncomfortable or unsafe situations Strategies to ensure safety and wellbeing at home and at school | Understanding Bushfire Factors Affecting Bushfire Behaviour |
| Year 5 | Being healthy, safe and active | <ul style="list-style-type: none"> Reliable sources of information that inform health, safety and wellbeing | Understanding Bushfire Factors Affecting Bushfire Behaviour |
| Year 6 | Being healthy, safe and active | <ul style="list-style-type: none"> Criteria that can be applied to sources of information to assess their credibility Situations in which emotions can influence decision-making: in peer group, with friends, with family. | |
| Year 7 | Being healthy, safe and active | <ul style="list-style-type: none"> Help-seeking strategies that young people can use in a variety of situations Strategies to make informed choices to promote safety. | |
| Year 8 | Being healthy, safe and active | <ul style="list-style-type: none"> Skills and strategies to promote physical and mental health safety and wellbeing in various environments. | |
| Year 9 | Being healthy, safe and active | <ul style="list-style-type: none"> Skills to deal with challenging or unsafe situations Actions and strategies to enhance safety – responding to emergency situations | |

| SCIENCE: Science Understanding | | | |
|---------------------------------------|--------------------------|---|--|
| Year | Strand | Content Descriptors | Module |
| Year 4 | Earth and space sciences | <ul style="list-style-type: none"> • Earth's surface changes over time as a result of natural processes and human activity | Impacts of Bushfires Fire Land Management |
| | Biological Sciences | <ul style="list-style-type: none"> • Living things depend on each other and the environment to survive | Impacts of Bushfires Fire Land Management |
| Year 5 | Biological Sciences | <ul style="list-style-type: none"> • Living things have structural features and adaptations that help them to survive in their environment | Impacts of Bushfires Fire Land Management |
| | Chemical Sciences | <ul style="list-style-type: none"> • Changes to materials can be reversible; or irreversible | Understanding Bushfire Impacts of Bushfires |
| Year 6 | Biological Sciences | <ul style="list-style-type: none"> • The growth and survival of living things are affected by physical conditions of their environment | Impacts of Bushfires Fire Land Management |
| | Earth and Space Sciences | <ul style="list-style-type: none"> • Sudden geological changes and extreme weather events can affect Earth's surface | Impacts of Bushfires Fire Land Management |

Note: Science as Human Endeavour and Science Inquiry Skills are consistent across all lessons

| HUMANITIES AND SOCIAL SCIENCE: Civics and Citizenship | | | |
|--|---|---|--|
| Year | Strand | Content Descriptors | Module |
| Year 4 | Government and Society | <ul style="list-style-type: none"> • The purpose of government and some familiar services provided by local government | Fire Land Management |
| Year 5 | Roles, responsibility and participation | <ul style="list-style-type: none"> • How regulations and laws affect the lives of citizens | Understanding Bushfire Fire Land Management |
| | | <ul style="list-style-type: none"> • Why people work in groups to achieve their aims and functions, and exercise influence, such as volunteers who work in a community group | Understanding Bushfire Impacts of Bushfires Fire Land Management |

HUMANITIES AND SOCIAL SCIENCE: Geography, Knowledge and Understanding

| Year | Strand | Content Descriptors | Module |
|-------------|--|--|--|
| 4 | The Earth's environment can sustain all life | <ul style="list-style-type: none"> The importance of environments to animals and people, and different views on how they can be protected | Impacts of Bushfires Fire Land Management |
| 5 | Factors that shape the environmental characteristics of places | <ul style="list-style-type: none"> The way people alter the environmental characteristics of Australian places | Understanding Bushfire Impacts of Bushfires Fire Land Management |
| | | <ul style="list-style-type: none"> The impact of bushfires on environments and communities and how people can respond | Impacts of Bushfires Fire Land Management |

Note: Humanities and Social Sciences skills are consistent across all lessons

Cross Curriculum Subjects

Mathematics: Measurement and Geometry, Statistics and Probability

English: Creating Literature, Expressing and Developing Ideas, Interacting with Others, Creating Text

General Capabilities

Literacy, Information and communication technology capability, Critical and creative thinking, Personal and social capability, Ethical understanding, Intercultural understanding

Cross Curriculum Priorities

Aboriginal and Torres Strait Islander histories and cultures, Sustainability