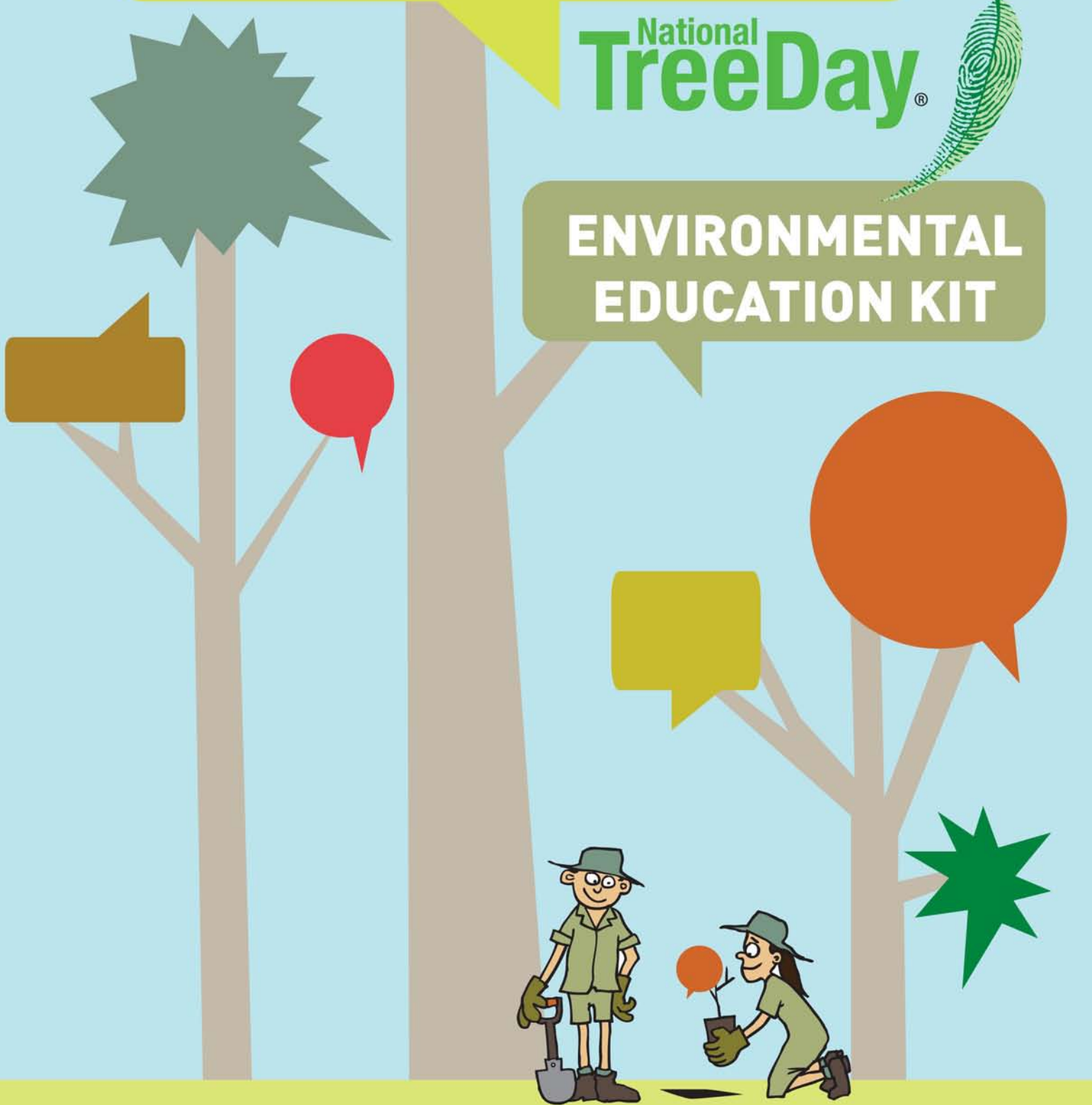


get growing!

National
TreeDay®



**ENVIRONMENTAL
EDUCATION KIT**



National Tree Day is organised by Planet Ark in partnership with Toyota Prius



Proud sponsor

The 'Get Growing!': Environmental Education Kit has been produced by Planet Ark in partnership with the Australian Association for Environmental Education as an education and learning resource for teachers and students participating in Schools Tree Day and National Tree Day. *

This resource has been designed to increase the environmental, educational and community development outcomes of mass plantings of locally indigenous plant species and bush regeneration in benefiting Australian ecosystems, thereby satisfying the Aim of the National Tree Day project.**



Planet Ark Project Manager, 'Get Growing!' Environmental Education Kit:

Melissa Allen

B.Bus

Principal Author:

Sydney Smith

B.A., MEd., MACE

Vice President AAEE***

Environmental Consultant: NTDEAC****

Co-Author:

Jillian Cupitt

B.Ed.

Planet Ark Editorial Team:

Karen Billington

Anne-Marie Byrne

Michelle Cook

Sandy Holmes

Caroline Jones

'Get Growing!' Logo Concept and Design:

Spatchurst

Illustrations and Layout:

Mike Foxall www.centralwestcreative.com

All illustrations in this resource are ©Mike Foxall / Central West Creative 2008

Published by:

Planet Ark, Sydney, Australia 2008

'Get Growing!' Environmental Education Kit

Copyright © Planet Ark 2008

Planet Ark welcome the use of these resources within the restraints imposed by the Copyright Act 1968 (Cth). Provided acknowledgement is made of the source, Australian Government and non-Government school staff are permitted to copy this material freely for the purpose of teaching students in schools or communicating with parents and others in the community. Detailed requests for use not specifically permitted by the Copyright Act 1968 (Cth) should be submitted to Planet Ark via: admin@planetark.org

* National Tree Day 2008 is organised by Planet Ark in partnership with Toyota and the AMP Foundation.

** For more information on the Vision, Aim and Objectives of National Tree Day, please go to: treeday.planetark.org.

*** The Australian Association for Environmental Education (AAEE) is the premier, national, professional association for those who identify themselves as working in the fields of environment or sustainability education.

**** The National Tree Day Environmental Advisory Committee was set up to provide technical and specialist advice to enhance the environmental and social outcomes of the National Tree Day project. Member organisations include: Trees For Life, the Australian Association of Bush Regenerators, Greening Australia, Landcare Australia, the Australian Local Government Association and Education for Sustainability. For more information on the NTDEAC, please go to treeday.planetark.org.

get growing!





WHO IS PLANET ARK?

Planet Ark is a wholly Australian not-for-profit organisation. Set up in June of 1991, Planet Ark aims to work with people and business to help them reduce their day-to-day impact on the environment - at home, at work and in the community.

Our strength lies in the councils, companies, schools, media outlets and individuals who support our push to bring about real and positive environmental change. Much of our work is carried out at the local level via partnerships with these groups. We are a great example of what can be achieved when environmentalists, business and the community work together for the environment.

Each year Planet Ark encourages Australians to grow native trees, shrubs and grasses for planting in July on National Tree Day and Schools Tree Day - Australia's largest community tree planting events.

These events were created to help address important environmental issues such as the loss of habitat for native wildlife, local provenance, salinity, erosion and long term carbon offsetting. Trees also provide much needed shade and beauty! For more information on National Tree Day, Schools Tree Day and the Aim and Objectives of the National Tree Day project, please visit treeday.planetark.org.

In addition to National Tree Day, Planet Ark runs a variety of campaigns including 'National Recycling Week' and 'Cartridges 4 Planet Ark' as well as the National Recycling Hotline (1300 733 712) and RecyclingNearYou.com.au information services. Further information on any of our projects can be found at www.planetark.org.

WHY HAVE WE CREATED THIS RESOURCE?

Schools Tree Day engages almost 2000 schools and 200,000 students across the country each year. In 2007, these school sites succeeded in planting 340,000 native trees, shrubs and grasses to beautify their schools, engage with their communities, learn about their local environment, and plant a better future for Australia.

Whilst providing a great opportunity to get involved in enhancing and protecting the local environment, Schools Tree Day also provides a valuable educational process to support curricula and learning in schools. The 'Get Growing!' Environmental Education Kit is a teaching and learning resource that offers activities which support a selection of state, territory and national syllabuses and curriculum frameworks in order to help our kids get the most out of their Schools Tree Day experience, and to help students develop into environmental custodians who will look after our planet into the future.

It is important to note that even though the events are called National Tree Day and Schools Tree Day, Planet Ark has always encouraged the planting of a biodiverse mix of native plant species. The planting of native trees, shrubs and grasses is actively encouraged in enhancing, rehabilitating and protecting local environments. Activities and learning strategies will therefore refer to the growing, planting and ongoing care of all these plant communities throughout this resource.

HOW TO USE THIS RESOURCE

This resource has been designed to fit naturally into the educational requirements of each Australian educational system. Within each unit, activities are broken up to address a number of focus questions, with specific activities developed to cater to the different stages of understanding across the primary school community, within each focus question.

Stage 1 = Kindergarten/Prep to Year 2

Stage 2 = Year 3 and 4

Stage 3 = Year 5 and 6

These activities can be mixed and matched as suitable for each individual class. Ideally however, activities for the relevant stage will be worked through in order of unit and focus question. All Activity and Information Sheets referred to in each unit are located in order at the back of the unit itself.

CURRICULUM & SYLLABUS LINKS – BY STATE AND TERRITORY

The links outlined are neither exhaustive nor finite and should be regarded as examples of a much wider variety of opportunities to implement curriculum associated with National Tree Day and Schools Tree Day. Key Learning Areas and syllabuses relating to Physical Education, Design and Technology and even Education for Sustainability (where it exists) are all additional areas of curriculum which this resource can support.

National, state and territory curriculum statements and policies are constantly changing and those outlined below are current at the time of publication.

NEW SOUTH WALES

HSIE

ENS1.5 Compares and contrasts natural and built features in their local area and the ways in which people interact with these features.

ENS2.5 Describes places in the local area and other parts of Australia and explains their significance

Stage 1: Get involved in class discussions about special events and cultural celebrations.

Do things that show care for their...environment.

Show an understanding of the relationship between environments and people and what they can do to protect the environment.

Stage 2: Investigate the various ways to care for the local environment and what they can do at home and school to help protect the environment.

Stage 3: Investigate an educational issue of local, national and global significance and examine its impact on people and their world.

SCIENCE

LTS1.3 Identifies and describes ways in which living things grow and change.

LTS2.3 Identifies and describes the structure and function of living things and ways in which living things interact with other living things and their environment.

Early Stage 1: Talk about needs and wants of animals. Talk about how they can look after their environment.

Stage 1: Observe and record the changes in a living thing such as a deciduous tree over a season or the growth of seeds to sprout.

Talk about how living things depend on their environment.

Observe animal life (e.g. ants, silkworms).

Stage 2: Observe and report on a local environment (e.g. a park, beach, wetland).

Describe how plants and animals rely on each other in a 'mini environment' (e.g. a park, playground, lake).

Stage 3: Use a water testing device to test water quality in a local waterway and study the water cycle.

VICTORIA

CIVICS AND CITIZENSHIP

Having the knowledge, skills and behaviours to participate in society to take responsible action in relation to other citizens and the environment at a local and broader level. (Level 2) Becoming aware of the local community.

SCIENCE

Stage 3

Students identify and describe the structural features of living things, including plants and animals. They identify how these features operate together to form systems which support living things to survive in their environments. They distinguish between biotic and abiotic factors in their environment and describe interactions that occur between them. They describe natural physical and biological conditions, and human influences in the environment, which affect the survival of living things.

At Level 3, students plan, design, conduct and report collaboratively on experiments related to their questions about living and non-living things and events. They select and use simple measuring equipment, use a range of appropriate methods to record observations, and comment on trends. They describe the concept of a fair test and identify the variables associated with an experiment. They develop fair tests to make comparisons and explain how they have controlled experimental variables.

SOSE

Students describe how aspects of places in their local area have changed over time. From direct observation or observation of a variety of media, they describe the human and physical characteristics of their local area and other parts of Victoria. They describe how people use and affect different environments in Victoria.

QUEENSLAND

SOSE

Foundation Level: Time, Continuity and Change: Students can participate by becoming engaged in activities in their social environment.

Contributing to activities in their social environment.

Students make changes to familiar environments.

Students create sequences and timelines about specific Australian changes and continuities.

SCIENCE

Life and living things have great diversity of structure and lifestyle, they interact with each other and with the world in which they live. Students collect information about the ways organisms live in order to develop an understanding of those structures which enable living things to function effectively in their environments. Students specify patterns of interaction within environments. They recognise that these interactions contribute to the dynamics of environments. The key concepts of the Life and Living Strand are:

The characteristics of a living organism and functioning are interrelated.

Evolutionary processes have given rise to diversity of living things which can be grouped according to their characteristics.

Environments are dynamic and have living and non-living components which interact.

WESTERN AUSTRALIA

SCIENCE

Key Ideas: How the earth sustains life.

That the Earth is continually changing.

Outcomes: Information about features of their national and built local environments that affect living things including themselves.

Considers implications for sustainable environments.

Investigates through fieldwork and research the central importance of the Earth's role in sustaining life and how changes impact on life.

Outcome: Describes the characteristics that sustain life on the Earth and the characteristics and their impact over time.

Investigates the features and behaviour of plants and animals through direct and virtual experience.

Outcome: Investigates the features and needs of living things.

Demonstrates an understanding of their interdependence with each other and the physical world.

Examines the ways organisms reproduce, grow and change over generations.

Outcome: Explores how living things have changed over geological time.

Debates the value of species diversity and the ethics of human intervention.

SOSE

Discusses interactions between people and their environments.

Outcome: Uses maps, contextual language and models.

Develops an understanding of the concepts of sustainability, conservation and care of resources and places.

Outcomes: Participates actively in projects.

Understands the importance of caring for local places and natural environments.

Considers sustainability and care of resources and places.

Understands that people cause changes in natural, built and social environments.

TASMANIA

VALUES

Responsibility: Accepting individual and collective responsibility and contributing to suit community development.

Purpose: Relate, participate and care; think, know and understand.

Interactions and the Environment: Understand relationships between people, resources and places.

SCIENCE

S2 Describe obvious events and identify basic cause and effect relationships that occur on the earth and in the sky (e.g. some trees don't have leaves because it is winter).

S3 Explore and describe short and long term patterns of events that occur on the Earth and in the sky (e.g. seasons, soil, erosion, drought, flood, changes in the moon's appearance, movement of sun, tides).

S2 Discuss some of the ways in which they make use of the Earth and take care of it (e.g. plant trees for shade).

S3 Explain some ways in which they can care for their immediate environment and why this is important (e.g. by taking responsibility for the plants and shrubs in an area near the classroom...).

SOUTH AUSTRALIA

SOSE

Key Issues: Develop (students') understandings of the significance of places and resources.

Examine different ways in which places and resources are used to satisfy needs and wants.

Develop an understanding of the concepts of sustainability, conservation and care of resources and places.

Take action consistent with these.

Assess the ways in which values affect behaviours.

Consider sustainability and care of resources and places.

Outcomes: Understand that people cause changes in the natural, built and social environments.

Discuss environmental, conservation or resource issues:

Individually or collaboratively develop strategies to bring about positive change in the local community.

Develop a critical understanding of past and present management and management of land systems.

Analyse current practices.

Suggest criteria for strategies to assess and affect possible future practices.

SCIENCE

Outcomes: Identifies information about features of their natural and built environments that affect living things including themselves.

Considers implications for sustainable development.

Describes the characteristics that sustain life on Earth and changes to these characteristics and their impact over time.

Investigates the features and needs of living things.

Demonstrates an understanding of their interdependence with each other and the physical world.

Explains the interrelationships between systems within living things in ecosystems.

Explores their own stages of growth and those of other living things.

Explores how living things have changed over geological time.

Debates the values of species diversity and the ethics of human intervention.

AUSTRALIAN CAPITAL TERRITORY

SCIENCE: THE STUDENT UNDERSTANDS AND APPLIES SCIENTIFIC KNOWLEDGE

Some interactions between living things, and between living things and their environment

Structures of living things and relationships between structure and function.

Categories of living things and relationships between structure and function.

SOCIAL SCIENCES: THE STUDENT ACTS FOR AN ENVIRONMENTALLY SUSTAINABLE FUTURE

Essential content: The concept of habitat and the diversity of living things within a habitat.

Some effects of human action on natural environments (e.g. land clearing, air and water pollution).

How protecting the environment requires that people work together as citizens and consumers and participate in appropriate actions as environmental stewards or in other civic action to effect positive change.

Take responsibility for caring for a local environment (e.g. part of school grounds, class garden, local park).

How people cooperate to care for places in a community (Early Childhood).

INTERDISCIPLINARY

The student contributes to group effectiveness.

NORTHERN TERRITORY

SCIENCE

WS KGP 2.4 Acting Responsibly: Identify how to take care of themselves and other living things in their immediate environment.

WS KGP 2.5 Science in Society: Participate in activities that increase their awareness of science in their daily life.

CC KGP 2.2 Life and Living: Recognise basic features of plants, animals and environment.

CC KGP 3.2 Life and Living: Identify the characteristics and basic needs of plants, animals and environments.

SOSE

Natural Systems

Explore the flows and cycles of natural environments and the forces that shape them.

Examine how natural systems and flows interact.

Env KGP 2.2 Environmental Awareness and Care: Care for their immediate environment.

Env 2.2 Environmental Awareness and Care: Identify issues to do with value and care of places and collaboratively participate in an action project to address local community issues.

Env 1.3 Natural Systems: Explain the ways elements of simple, natural systems are connected and identify themselves as part of a natural system.

THE NATIONAL CURRICULUM STATEMENT ON SCIENCE

(Students) develop an understanding of science concepts and use them to explain and predict events of the physical and biological world.

Students identify obvious features of a variety of plants and animals. They distinguish between non –living things using basic criteria.

Students describe some of the changes that take place as living things grow while realising offspring are similar to their parents.

Students identify ways in which living things depend on the environment and each other.

(Year 5) Students identify structures of living things and describe their relationship between structure and function. They use observable characteristics to sort living things into groups.

Students describe some interactions between living things, and between living things in their environment.

NATIONAL GOALS FOR SCHOOLING IN THE TWENTY FIRST CENTURY (1999)

When students leave school, they should have an understanding of, and concern for, stewardship of the natural environment and the knowledge to contribute to ecologically sustainable development.(1.7)

EDUCATING FOR A SUSTAINABLE FUTURE: A NATIONAL ENVIRONMENTAL EDUCATION STATEMENT FOR AUSTRALIAN SCHOOLS (DEPARTMENT OF ENVIRONMENT, WATER, HERITAGE AND THE ARTS 2005)

The most effective environmental education for sustainability programs develop learning opportunities outside the classroom to support and extend the classroom program. Possibilities include:

- special environmental events, celebrations and projects to complement classroom activities.
- involving students in investigating, maintaining and improving the school and local environment.
- using the community to investigate practical and real life investigations.
- incorporating outside programs and services into school programs to bring learning to life. (p15)
- Goals (p8) Participate as active and involved citizens in building a sustainable future.