

Background information

Year 1, unit 7: Changing lands and skies

Types of landscapes

Planet Earth exhibits a great many diverse landscapes incorporating land, sea and sky. These landscapes can be broadly classified into three types.

1. Constructed

This type of landscape includes buildings, playgrounds, undercover areas, canteens, shops, bridges, roads, hotels, museums and theme parks. These are all constructed artefacts. These involve human action to create something that is not naturally found on planet Earth. Ask students to suggest examples of constructed parts of the school landscape.

2. Managed

These are landscapes where the elements that make up the landscape can occur naturally, but human action in some way is, or has been, controlling the growth or appearance of this landscape. Some examples include garden beds, vegetable gardens, potted plants, mown grass areas such as ovals and lawns, trees planted in a row along a road, crop farms and hedges. Find examples the students can see in the school grounds.

3. Natural

These landscapes exist in the natural world. They range from large areas of natural wilderness and landscapes completely untouched by people to areas mostly untouched by people, for example, national parks with walking trails or dirt tracks. There can also be sections of natural landscapes within managed areas. For example, botanic gardens can have sections of natural landscape, often from the original landscape, within their grounds. Other examples include natural bush and tree areas, rainforests, open grasslands, rivers and riverbanks, natural creeks, wetlands and deserts. In the school grounds these may be more difficult to find but perhaps a local example could be given. Google Maps may be useful in showing areas of natural landscape near to the school.

Aboriginal and Torres Strait Islander peoples' beliefs about the land and sky

One of the key organising ideas in the Aboriginal and Torres Strait Islander histories and culture cross-curriculum priority in the Australian Curriculum is that 'Aboriginal and Torres Strait Islander Peoples have unique belief systems and are spiritually connected to the land, sea, sky and waterways.'

See '[Aboriginal and Torres Strait Islander histories and culture](#)', Australian Curriculum website

<http://www.australiancurriculum.edu.au/CrossCurriculumPriorities/Aboriginal-and-Torres-Strait-Islander-histories-and-cultures> (20 March 2013)

Their deep spiritual connection is based on the belief that their ancestors created all the features of the land and sky and are still living in those features. Although Indigenous beliefs and cultural practices vary according to region, all groups share in a common worldview that the land and other natural phenomena possess living souls. The following websites provide authoritative information on Indigenous beliefs to help teachers deliver accurate and supportive understandings to all learners.

'[Indigenous traditions – Australian Aboriginal and Torres Strait Islanders](http://www.abc.net.au/religion/stories/s790117.htm)', ABC website, <http://www.abc.net.au/religion/stories/s790117.htm> (2011)

'[The Dreaming](http://australia.gov.au/about-australia/australian-story/dreaming)', Australian Government website, <http://australia.gov.au/about-australia/australian-story/dreaming> (6 March 2008)

'[Spirituality](http://australianmuseum.net.au/Indigenous-Australia-Spirituality)', Australian Museum website, <http://australianmuseum.net.au/Indigenous-Australia-Spirituality> (24 December 2009)

'[Spirituality](http://www.abc.net.au/missionvoices/spirituality/)', Mission Voices, ABC website, <http://www.abc.net.au/missionvoices/spirituality/> (2013)

Traditional fire management

The following text has been adapted with permission from '[Aboriginal wetland burning in Kakadu](http://www.csiro.au/Outcomes/Environment/Bushfires/KakaduWetlandBurning.aspx)' CSIRO website, <http://www.csiro.au/Outcomes/Environment/Bushfires/KakaduWetlandBurning.aspx> (11 September 2012))

Traditional ecological knowledge can dramatically enhance biodiversity and the cultural values of Australia's natural landscapes. Prior to European settlement, Aboriginal Australians successfully lived with bushfires for tens of thousands of years. As part of the north Australian 'Burning for Biodiversity' project, CSIRO and the Bushfire CRC worked with a family of traditional owners in Kakadu National Park to examine the biodiversity and cultural benefits of Aboriginal fire management as it was reapplied to floodplains of the South Alligator River.

The results show that the reapplication of traditional fire management can dramatically enhance biodiversity and the cultural values of wetlands.

Why burn? Kakadu's wetlands are important hunting grounds for a variety of animals including water birds, goannas, turtles, and file snakes. They also provide a variety of edible water plants. For most of last century, Kakadu's wetlands were home to large herds of feral Asian water buffalo. When buffalo were removed from the Park in the 1980s, the native grass Mudja (*Hymenachne acutigluma*) spread unchecked and has now taken over many wetlands in Kakadu.

Mudja chokes out other wetland plants, reducing the variety of habitats, preventing water birds from feeding, and limiting access for hunting and food gathering by Aboriginal people.

Aboriginal people use fire to control the density of Mudja. It is thought that the water buffalo controlled Mudja in much the same way that Aboriginal fire management did before European settlement. Fire is integral to the hunting and gathering of these resources.

Outcomes of scientifically based burning in Kakadu.

- Transformation of wetlands from a dense monoculture of grass to a mosaic of habitats that is rich in biodiversity.
- Improved cultural values of wetlands for Aboriginal people through increased availability of food resources.
- Demonstrated value of applying traditional ecological knowledge in partnership with western science.
- Transfer of traditional knowledge to younger generations.

There is an excellent video clip explaining the science behind traditional fire management. After watching, you may choose to show all or some of this to your students. '[Aboriginal wetland burning in Kakadu](#)', YouTube (7:35 min)

http://www.youtube.com/watch_popup?feature=player_embedded&v=e1uYBgageT0
(2013)