Fraser Island — some 123 kilometres long, 165,280 hectares in area, and 244 metres above sea level at its highest point — lies off the Queensland coast, approximately adjacent to the coastal strip between Bundaberg and Maryborough (see map at the end of this worksheet). It is the largest sand island in the world.

What’s so special about Fraser Island?
The island is very beautiful. Some suggest, for example, that the Lake McKenzie beach is one of the ten most beautiful beaches in the world. The island is also largely untouched by the negative aspects of human settlement. Its special features include:

- long surf beaches and rocky headlands
- around 40 freshwater lakes, some of which are perched lakes (i.e. they sit on an impermeable rock layer lying above the water table). The highest of the perched lakes, Lake Bowarrady, is 120 m above sea level. Some of the island’s lakes are home to a previously undiscovered species of sunfish.
- many streams and creeks, the largest of which (Eli Creek) pours some 120 million litres of fresh water into the sea each day
- coloured sands cliffs, some 35 kilometres in length, featuring 70 differently coloured sands
- vast sandblows (i.e. tracts of sand moved by the wind and not stabilised by vegetation), and lofty sand dunes
- salt pans, lagoons, mangrove forests and wetlands
• over 25 species of mammals including goannas, echidnas and dingoes. The dingoes are thought to be the purest strain of the species in Australia.

• offshore seagrass beds to support colonies of dugong

• thick rainforests some of which are so dense sunlight does not penetrate the canopy. Some forest trees are 70 metres or so tall.

• over 230 species of birds, making it one of the most varied bird communities in Australia. Included is the ground parrot, one of Australia’s rarest birds.

• items of special cultural interest including Indigenous sites and a number of wrecked ships, including the Maheno.

Past uses

Fraser Island once had a sand mining industry (to extract minerals from its tracts of black sand). This was stopped in 1976 following a federal government inquiry. There was also a timber industry, which was disbanded in December 1991 by the Queensland Government following a separate inquiry.

Now the island is mostly national park (the Great Sandy National Park), and is one of Australia’s eleven World Heritage listed sites. The island was added to the list in December 1992.

The challenge for the Queensland Government is to manage the balance between protecting the island’s environment and encouraging tourists to appreciate it. To this end it has set up the Fraser Island Recreation Area, which is subject to the government’s Recreation Management Act (1988) and managed by the Queensland Department of Environment, National Parks and Wildlife Service. The intent in future recreational planning for the island is to continue to preserve this balance between tourism and environmental protection.

So, what’s being done?

Fraser Island attracts a range of tourists — day trippers; holiday makers staying either at the Kingfisher Bay Resort, at government-run or private campsites, or at camps they set up on selected beaches; and people who come to fish.

Kingfisher Bay Resort and Village

This development — which includes a hotel, self-contained villas, wilderness lodges and shopping and entertainment facilities — has won a string of tourism awards, and the highest level of accreditation as an ecotourism facility. Its staff includes rangers and a director of environmental management.

An environmental impact statement was prepared before the proposed facility was approved for construction. The report provided a careful analysis of the proposed design, construction methods and ultimate operations, looking at how these processes might impact on the environment. This allowed actions to be taken to adjust any proposed activities for which negative impacts might be identified.

Ecotourism features of the facility include:

• a design that blends (both in terms of surrounding terrain and the colours of the bush) with the surrounding landscape

• building heights kept below the tree line

• use of organic waste as mulch, with any building waste removed from the island

• all imported landfill free of diseases and organisms that might damage the island’s flora and/or fauna

• only native species planted as part of the landscaping to reduce the need for too much watering

• energy-saving features used in resort’s cooling and lighting systems

• programs in place to monitor fire risks, weed infestations and sewage disposal

• interpretive island walks, and educational sessions (with rangers and Indigenous personnel).
Dingoes
In the past, many tourists have fed the dingoes that roam Fraser Island. This encouraged the animals to lose their natural fear of humans, and to hang around human settlements (as they are natural scavengers).

In April 2001, dingoes on the island killed a young boy. More recently, a German tourist was attacked. Following investigations, the Queensland Government released its dingo management strategy in November 2001, and has prepared a ‘Dingo Smart’ brochure for tourists. Any dingoes acting suspiciously or known to be a problem are now culled.

Now, anyone caught feeding, or trying to encourage a dingo’s attention, receives an on-the-spot fine of $225 (up to a maximum fine of $3000).

Camping facilities
There are six government-owned camps — at Central Station, Lake Boomanjin, Lake Mackenzie, Dundubara, Waddy Point and Wathumba — and two that are privately owned. People can also camp on a restricted number of beach areas, but not within 50 metres of a creek, stream or lake. Beach camping areas are temporarily closed, sometimes to allow vegetation to regrow or to halt erosion.

All campers must obtain permits and pay camping fees (used to further develop the island’s recreational facilities). The camping permit must be displayed on the tent.

Campers are encouraged to bring their own cooking facilities (gas or fuel stoves), although there are gas barbeques at some grounds. Open campfires are allowed only in the communal fire rings provided; users must bring their own firewood (sawmill timber, not bush timber, to reduce the risk of introducing foreign organisms). All bush timber on the island, even dead trees or fallen branches, are protected. Open fires must be extinguished with water, not sand.

There are no rubbish bins in the camping grounds, as all rubbish must be taken off the island. Fish intestines and scales etc. must be buried away from the camping grounds, and at least half a metre lower than the high tide mark.

No cats or dogs are allowed.

4-wheel drive vehicles
Visitors to Fraser Island must collect an Information Pack before leaving the mainland. The pack includes safety information (e.g. re dingoes), maps, a vehicle service permit (if travelling in a vehicle) and a camping permit (if camping). The vehicle permit has to be displayed on the vehicle (which must also be a registered vehicle).

Miscellaneous
Visitors to Eli Creek are asked to use the boardwalks when walking along the creek’s banks, and to keep to marked tracks near beaches wherever possible to reduce the risk of erosion.

People cannot use motor boats or jet skis on the lakes because of the risk of bank erosion and water pollution.

To prevent pollution and the growth of algae, tourists must not use soap, detergent, toothpaste or sunscreen lotions in the lakes and streams.
Use this worksheet and information provided in the sources listed in the References to complete the following activities.

1. Use your atlas (and scale) to estimate approximately how far north of Brisbane is the southern tip of Fraser Island.

2. In what direction does Sandy Cape lie from Mackay?

3. Where are most of the lakes on the island located (in general terms)?

4. Draw a mind map to document as many reasons as you can why governments in Australia are committed to protecting the environment of Fraser Island.

5. List, in broad terms, what has been done to date, and what is being done currently, to protect the island’s environment.

6. Describe what might happen to the island’s natural systems if these protective measures were not put in place. List the consequences in order of seriousness, and justify your ranking.

7. Imagine that you visited Fraser Island with your family, staying at a government-run camping site for three days. You travelled there in a 4-wheel drive vehicle. You are surprised, but secretly pleased, at the number of restrictions placed on your visit. Write a diary entry in your workbook to record your observations, and the way you feel.

8. What do you understand by the term ‘sustainable development’? Expand your definition in your workbook to show that you understand what this statement means: ‘The sustainable development of tourism on Fraser Island’.

9. If government authorities are so committed to preserving Fraser Island’s environment, why do you think tourism of any sort would be permitted there? What benefits might flow on from tourists visiting the island? Write two or three paragraphs in your workbook.

10. (a) Do you think that the actions already taken, and the policies put in place to protect the environment of Fraser Island, are effective? Explain your view in your workbook.

(b) Given that the number of tourists visiting Fraser Island is increasing by about 5 per cent each year, do you think these actions and policies will be sufficient to achieve a sustainable tourism industry? Suggest what other controls might be necessary to ensure the environment of the island is not damaged.

References: SOSE Alive 3, chapters 6 and 7 • SOSE Alive Geography 2, chapters 6–8. Photographs © Peter Storer
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