



student information

Kingfisher Bay Resort – Fraser Island

QUEENSLAND: Kingfisher Bay Resort on World Heritage-listed Fraser Island is a fully-integrated, large-scale ecotourism resort owned by Queensland company Kingfisher Bay Resort and Village Pty Ltd.

Situated in the wilderness of the world's largest sand island, the resort is just a 45-minute, barge trip from River Heads on the Fraser Coast, which in turn is a 40-minute flight from Brisbane (to Hervey Bay airport).

Opening in 1992, KBRV set benchmarks in ecotourism, which have been used by ecotourism ventures worldwide. To this day the resort continues to support research projects on Fraser Island by visiting academics and its own staff of rangers.

There is no other ecotourism resort of its size in Australia within a World Heritage area. The resort was created to provide a nature based-tourism experience and was built to complement its environment and not impose upon it.

The resort's architectural design, infrastructure and activities were developed to minimise any adverse effects to the natural environment, conserve energy and minimise waste. Resort buildings are below the tree line.

An energy efficiency program incorporates building design, low energy bulbs and room key shut-off systems and saves an estimated 855,000 kW hours of electricity per year.

Paper, glass, aluminium, tin and plastics are recycled. An on-site worm farm turns sewage sludge, waste paper and kitchen preparation scraps, which would otherwise have to be removed from the island, into compost for the herb gardens, which supply the resort's kitchen.

Other waste minimisation measures, environmentally responsible purchasing and green product programs add to the environmental program.

The resort supports the local community by recruiting locally and, where possible, purchasing local goods and services and sponsoring local events and charities.

Kingfisher Bay's dedication to environmental tourism has been recognised by the awarding of 32 Australian and international awards for environmentally sensitive development, architecture, and environmental tourism.

The resort and all of the Fraser Island tours it operates have been awarded Advanced National Ecotourism Accreditation by the Ecotourism Association of Australia.



student information

The diversity of accommodation, including a 152-room hotel; more than 100 self-contained two and three bedroom villas; and a 174-bed Wilderness Lodge, gives the resort a variety of budget preferences and appeal to a very wide range of guests of all ages, from couples to families and from groups to singles.

Resort facilities include:

- Interpretive Ranger-guided 4WD coach tours, walks and whale watching marine tours;
- Three restaurants: buffet, bistro and a la carte;
- Conference and secretariat facilities for up to 300 people;
- Shopping village with general store, resort wear and souvenirs;
- Four swimming pools and tennis courts;
- Water sports and 4WD Hire; and
- Kingfisher Natural Therapy salon.

Kingfisher Bay overlooks the calm waters of the Great Sandy Strait and provides a world-class base from which to explore Fraser Island or enjoy boating, fishing, swimming and walking in the resort's pristine surrounds.

The island stretches for 123 kilometres and features beautiful fresh-water lakes, lush rainforests, spectacular cliffs of coloured sands, rare ferns, sandblows, beaches which disappear beyond the horizon, shipwrecks, wildflowers and abundant animal and bird life.

Kingfisher Bay has 22 interpretive rangers, the largest privately-operated ranger team in Australia. Rangers provide information and an environmental ethic on guided walks and on 4WD coach tours to explore Fraser Island's significant natural and geological features and history, as well as on marine cruises.

The resort's own grounds and surrounds are used for ranger-guided walks. The resort's landscaping mirrors native vegetation and in so doing helps protect the island's gene pool.

Raised timber walkways protect dunal systems and walking trails with interpretive signage and written field guides help guests explore at their leisure.

Rare Acid Frogs, Bats and Sugar Gliders can be spotted at night around the resort lakes.



student information

Ranger-guided bird walks help guests discover some of the 354 species of birds recorded on the island. The bountiful plant life provides bush tucker (bush food) and natural medicines. A freshwater creek, which runs into the ocean close to the resort, has an excellent mangrove colony. Dolphins, Dugong, Humpback and Minke Whales, Turtles, Rays and other marine life frequent the island waters.

Activities such as bush tucker talks and tastes, Australian wine tasting combined with catch and release-based fishing clinics, guided walks and marine and coach tours give guests a unique Australian experience and a chance to learn about the environment.

Kids have fun learning about the environment with the Junior Eco Ranger program. Morning, afternoon and evening activities include bush tucker walks, spotlighting for animals, canoeing, campfires, sand sculpture and the exploration of various eco systems within the resort surrounds.

Environmental Value Of Kingfisher Bay Resort:

KBRV lies within the World Heritage area of Fraser Island, which obtained World Heritage listing in 1992.

Stretching for 123 kilometres along the south-eastern coast of Queensland, Fraser Island (184,000 hectares) is the largest sand island in the world, and was inscribed on the World Heritage List in recognition of its outstanding natural universal values as an

- *Outstanding example representing significant ongoing ecological and biological processes.*
- *Example of superlative natural phenomena.*

The significant environmental values of the island are as follows:

- It has the longest and most complete age sequence of coastal dune systems in the world and they are still evolving.
- The array of freshwater dune lakes is exceptional in terms of number, diversity and age.
- It has half of the world's perched lakes and the world's largest perched lake.
- Vegetation types grow in sand range from coastal heath to subtropical rainforests.
- Rainforests grow on sand dunes at the world's highest elevation of more than 200m.



student information

- It has wallum heaths of particular evolutionary and ecological significance.
- 354 species of birds have been recorded.
- The dingoes are the purest strain remaining in eastern Australia.
- Frog species have adapted to survive in a difficult environment - such as Acid Frogs.
- There is evidence of Aboriginal occupation for at least 5,000 years.
- It contains sites of archaeological, social and spiritual significance.

Wetland of International Importance:

The resort also bounds the Great Sandy Strait, listed as internationally-significant wetlands by the Convention on Wetlands of International Importance (Ramsar Convention).

The significant environmental values include:

- Rare patterned fens.
- Mangrove colonies.
- Sea-grass beds.
- Up to 40,000 migratory shorebirds.
- Rare, vulnerable or endangered species, including dugong, turtles, the Illidge's Ant-blue Butterfly and Eastern C as well as the opportunity to mix and make friends urlews.

Resort site:

The 65-hectare resort site features wallum forest, melaleuca swamp, freshwater lakes and heath land. There is evidence of Aboriginal use with middens and scarred trees.

How operation is compatible with the site:

KBRV's primary focus is to give guests the chance to experience this very special island and waterways from the comfort of a world-class resort, to learn about and enjoy its special features and to appreciate and care for its fragile environment without impacting on it. KBRV's motto is: Take only photos and leave only footprints.

The special environmental values of the KBRV site and the sites visited by KBRV Ranger-guided tours on Fraser Island are one and the same. KBRV is part of the World



student information

Heritage area and is not a resort based outside a National Park that uses the park as a destination - KBRV is part of the destination.

Preservation of both KBRV's site and the island is instrumental to the sustainability of the resort's operation and continuation of the enjoyment of its guests.

Careful planning and implementation of conservation methods ensure the resort is not detrimental to the site. The resort maintains its position at the cutting edge of environmental management through facility design, energy saving and waste-management techniques, impact-minimisation mechanisms and scientific monitoring of impacts, e.g., the water quality in the resort's lake system.

All garbage is removed from the island. Paper, glass, aluminium, tin and plastics are recycled. An on-site worm farm turns sewage sludge, waste paper and kitchen preparation scraps into compost for an herb garden that supplies the resort chefs.

The resort was designed and built to integrate with this superb natural environment by building on piles above the ground, not to impose upon it by carving a building platform out of the sand dunes.

The distinctive Queensland-style buildings are low-impact as they are below the tree line and limited to two levels. Where possible, buildings are designed and built around major trees.

The resort melds with its natural bush surrounds and the Queensland-style wooden buildings with open verandahs have curved tin roofs to complement the rolling sand dunes. The colours - greens, burgundy and golden browns - are those of the surrounding vegetation. The main swimming pool was modelled on one of Fraser Island's most beautiful spots, Lake McKenzie.

Hotel guests are encouraged to walk rather than drive around the property. The landscape is protected by features such as raised boardwalks, and properly-graded walking trails that have interpretive signs describing environmental features.

Only plant species endemic to Fraser Island are used in landscaping. During construction major plants were moved and held in the resort nursery where cuttings and seeds were raised from existing species. More than 150,000 plants were raised in the resort's nursery and with the help of the Forestry Department. These were placed on the resort site when construction was completed.

The resort site has about 160 varieties of plants. Examples of these are planted in the nursery area that provides ongoing landscaping needs and also acts as a plant interpretive centre creating an ongoing educational addition to the resort's other nature activities.



student information

Aboriginal sites on the resort include middens and scarred trees and these form part of cultural-heritage, guided walks where guests are told about flora providing bush tucker and medicines, which were used by Aborigines.

Nature-based activities have been developed around the resort and the island's natural and cultural features.

Activities include: bird watching, nature study, photography, themed 4WD tours, e.g., cultural-heritage tours, marine studies, mangrove interpretation, art, bush tucker, astronomy, spotlighting walks, whale watching and dolphin watching.

Activity-based recreation also has low environmental impact and includes: bush walking, swimming, sailing, canoeing, beach volleyball and orienteering.

There is a range of daily 4WD off-road coach tours to places of significant interest on the island.

By putting people in a comfortable air-conditioned coach with an interpretive ranger KBRV is minimising impact on the environment as well as delivering interpretive components to the tours.

For example, 28 people on a bus could save 14 independent vehicles moving about the island. Rubbish, pollution and erosion are contained.

KBRV's operation and activities were endorsed as compatible with the resort site and Fraser Island when KBRV achieved eight advanced level accreditations for the resort and its ecotours under the National Ecotourism Accreditation Program.

They are for:

- Kingfisher Bay Resort - hotel and villas.
- Whale Watch Tours (KBRV was the first whale watch tour to be accredited).
- Full-day ranger-guided, 4WD coach tours of Fraser Island.
- Cool Dingo Tour (for 18-35s accommodated in shared lodge accommodation).

Environmental Protection:

- Promote environmental protection actions and behaviour through educational and interpretive activities with rangers.
- Contribute directly to the care and protection of sites visited by working with Department of Environment and Heritage to:
 - Minimize impact on sensitive areas, eg. rotational system for walking tracks.
 - Monitor conditions of roads, tracks and sites used on Fraser Island.



student information

- Support environmental initiatives, such as promoting to guests and the media the banning of the use of water-soluble sunscreen on Fraser Island.
- Remove rubbish and collect that of others while on Fraser Island tours.
- Minimise or avoid the use of any substances or products likely to damage the air, water, earth, flora and fauna, or detrimentally affect the values of Fraser Island.
- Minimise impact of operations on places visited and routes to those places by, for instance, matching bus with group size to minimise the size of 4WD vehicles; maintaining buses and using good driving practice to avoid pollution and erosion.

Biological Conservation:

- Promote activities and actions to maintain biological diversity of the resort and the island.
- Promote a catch-and-release fishing program with fishing clinics for guests demonstrating safe release methods.
- Carry out regular research to monitor, record and identify the numbers of frogs, birds and small mammals near the waterways.
- Control the growth of non-indigenous plants to protect the Fraser Island gene pool.
- Preserve natural settings within the resort site by confining guests to walking tracks, board walks and designated use areas.
- Manage fire risk to protect flora and fauna and people's lives by financially supporting the KBRV Rural Fire Brigade unit.

Maintenance of Water Quality and Water Conservation:

- Maintain the quality of water within the resort's lakes and waterways by regular monitoring to ensure they remain free of pollutants and non-indigenous plant species.
- Maintain the quality of potable water delivered from ground water bores for human use.
- Isolate all possible pollutant sources to minimize the risk of contaminating the water table, creeks, lakes and the sea.



student information

- Promote water conservation through strategies such as watering only new plantings and laundering guests' towels on request instead of automatically on a daily basis - conservation credit scheme and rewarding them for this.

Energy Conservation:

- Use environmentally-responsible energy sources and minimize energy use by employing energy-efficient products and procedures.
- Incorporate building design, low-energy bulbs and room-key-shutoff systems in an energy-efficient program - saving an estimated 855 000 kW hours of electricity a year.

Minimization and Treatment of Liquid and Solid Waste:

- Dispose of all waste through safe and responsible methods. Separate and recycle paper, glass, aluminium, tin and plastics.
- Minimise waste production through reducing resource use, environmentally responsible purchasing, recycling, reusing materials and, for example, resort bathrooms have refillable soap and shampoo dispensers, which eliminate amenities packaging.
- Enhance management of sewage by an on-site worm farm that turns sewage sludge, waste paper and kitchen preparation scraps into compost for the kitchen herb gardens.

INTERPRETATION:

Environmental Education

- Provide an enjoyable and educational nature-based experience for guests.
- Advise guests of appropriate environmental-protection behaviour on arrival at the resort and on tour, with educational information, i.e. how dingoes should be treated.
- Provide factual, updated island information as the basis for interpretive programs.
- Continually improve the quality of interpretation provided by staff through education programs and by using visiting lecturers.

The environmental message to preserve the island and its special flora and fauna is imparted to guests through:



student information

- Staff knowledge - orientation for all staff encompasses KBRV's environmental features as well as a general knowledge of the flora and fauna around the resort.
- An environmental message to care for Fraser Island given to guests on arrival.
- Ranger education during walks, tours, evening lectures and slide shows.
- In-house television messages on environmental education regarding Fraser Island.
- Production of a series of nature notes and a comprehensive, commercial CD ROM on the flora, fauna, geological aspects and natural and cultural history of Fraser Island.
- Publication of a bird watching field guide of Fraser Island for guests' information.
- Environmental messages and information sheets placed in every room.
- Information displays, e.g. on the flora and fauna in season and being 'Dingo Smart'.

The interpretive activities conducted by the resort rangers aim to educate in an entertaining fashion and promote an environmental ethic through:

- Free guided walks covering a wide variety of subjects such as bird watching, bush tucker, mangroves, Aboriginal culture, marine environment and flora and fauna of Fraser Island.
- Guided 4WD coach tours to explore Fraser Island with the interpretation of its natural and cultural values.
- Cruises to search for marine life, including dolphin, dugong, turtles and the migrating humpback whales from August to October.
- Junior Eco Ranger programs teach children the need to care for the environment. Activities include: spotlighting for Bats, Sugar Gliders, and Frogs; learning about mangrove colonies and intertidal zones; playing environmentally-themed games; leaf identification; campfire songs and the telling of Aboriginal legends.
- Environmental education programs for students and study groups, which provide the opportunity to learn about the ecological and biological aspects of Fraser Island.
- Specific environmentally-related programs covering a broad range of natural and cultural heritage topics hosted by specialist guest presenters, e.g., tours to discover native bush foods and medicines or to study mangrove colonies.



student information

RESEARCH:

KBRV Directors see the preservation of both KBRV's site and Fraser Island as instrumental to the sustainability of the resort's operation and continuation of the enjoyment of its guests. KBRV monitors and minimises any impacts of its activities by sponsoring research of Fraser Island and the natural environment of the resort.

To benefit from the continued conservation of Fraser Island, KBRV's interpretive ecotourism practices and environmental research in general, KBRV formed a collaborative partnership with the University of the Sunshine Coast (USC) to establish a Fraser Island Research and Education Centre.

This has been recognised as *an outstanding example of collaborative research* by the Organisation for Economic Co-operation and Development (OECD) in a Peer Review Report which engaged twelve regions across ten OECD countries in 2005. The report was published in 2006.

"As a result of this initiative, the research capacity at University of the Sunshine Coast has been greatly enhanced and the eco-tourism offerings through Kingfisher Bay Resort have been strengthened," the OECD Peer Review Report said.

"The significant level of private sector support for this facility from the Kingfisher Bay Resort, as well as the interaction between the university and the Resort in identification of relevant research and education projects, makes this facility a model of collaboration," the OECD report said.

KBRV has dedicated buildings to the research centre, including a lecture hall, which caters for up to 40 students, laboratory, refrigerator and freezer rooms, office and library catering for 4 researchers.

KBRV also sponsors researchers and graduate students with free accommodation, transport and ranger support, both in the field and with experiments.

The research into Fraser Island examines flora and fauna species and wetlands, impacts of tourism and environmental interpretation and sustainable tourism at KBRV. The results of research are made available to organisations and agencies such as the Environmental Protection Authority. Queensland Parks and Wildlife Service rangers on the island are also included in the research process and informed of findings.



student information

“As far as I am aware, this is the first time a private company has supported the development of a university research station in Australia. Whilst this is a model readily accepted overseas, the business community in Australia does not readily recognise the need to improve the quality of Australian education and innovation. The ongoing support of Kingfisher Bay Resort and Village for researchers and their studies is also unique.

“Kingfisher Bay Resort and Village fully understand the need for independence with University research and do not seek to influence or vet the directions or outcomes. Likewise, the University of the Sunshine Coast, being nationally recognised as an *engaged* university by the OECD, understand their partners needs for industry-relevant research and the need to rapidly *translate* research into interpretative and management outcomes.”

- Associate Professor Ron Neller, Director Fraser Island Research and Education Facility.

The research facility has attracted substantial interest from scientists and researchers in Germany, Finland, Asia and North America. For example researchers from Turku University in Finland have conducted ecological mapping of Fraser Island.

KBRV has also sponsored other Fraser Island research by academics from Griffith University and the University of Southern Queensland, by giving research teams ongoing support with free accommodation, meals, transport and ranger assistance for programs such as:

- A study of values for natural areas and of nature-based tourism and recreation in Queensland.
- Study of perched lakes to monitor natural and visitor impacts.
- Geomorphologic study to date dune formations and study the formation of the coloured sands and the water table.
- The first survey of the bat population of Fraser.
- Study of Fraser Island dingoes and the effects of interaction with humans.
- Fire Ecology study in managing wildlife at risk from fire in World Heritage areas.
- KBRV contributes to a Department of the Environment Humpback-Whale-monitoring program in Hervey Bay through its interpretive rangers reporting sightings on whale watch cruises.

KBRV supports an international move by the University of the Sunshine Coast to tackle global deterioration in protected areas by a global alliance of researchers via a Memorandum of Understanding linking research stations on Fraser Island, Yellowstone National Park and Kruger National Park, relevant Environmental Protection Authorities and ecotourism partners.



student information

Community Support:

KBRV has always been aware of the fact that it is one of the largest employers in the Hervey Bay area and is the largest community on Fraser Island. This desire for local input is integral to the whole KBRV philosophy. The local environment has been the inspiration for the design of the resort.

Support of the local community is likewise seen as being instrumental in the ongoing success of the resort. KBRV supports many community projects including fundraising ventures by charities, non-profit associations, schools, universities and government agencies.

KBRV tries to source all employment locally and only searches further a field if the skills required are not available. KBRV, wherever possible and practicable purchases provisions, operational supplies, spare parts and building materials from local businesses.

KBRV participates in traineeships for local students. For example, an industry-training scheme is in place with the Hervey Bay and Urangan High Schools. Regular intakes of hospitality course students have work experience at the resort. This regularly leads to employment with KBRV.

KBRV supports numerous secondary and tertiary students by providing information and in some cases work experience when undertaking case studies and projects on ecotourism at Kingfisher Bay and on Fraser Island.

KBRV works with local Aboriginal elders to train staff on cultural history. Olga Miller, an elder of the Butchulla people, the original inhabitants of Fraser Island, was an advisor to Kingfisher Bay Resort on indigenous matters for 12 years. Mrs Miller was an Aboriginal historian and author who received the Advance Australia Foundation Award for services to the Aboriginal community in 1996. Mrs Miller died recently and now Aboriginal artist Fiona Foley and other Butchulla elders provide information on indigenous affairs.

KBRV Rural Fire Brigade, established in 1991, assists in cross-island fire fighting as well as with controlled burning exercises across the island and on training exercises and fire fighting.