

GEODIVERSITY

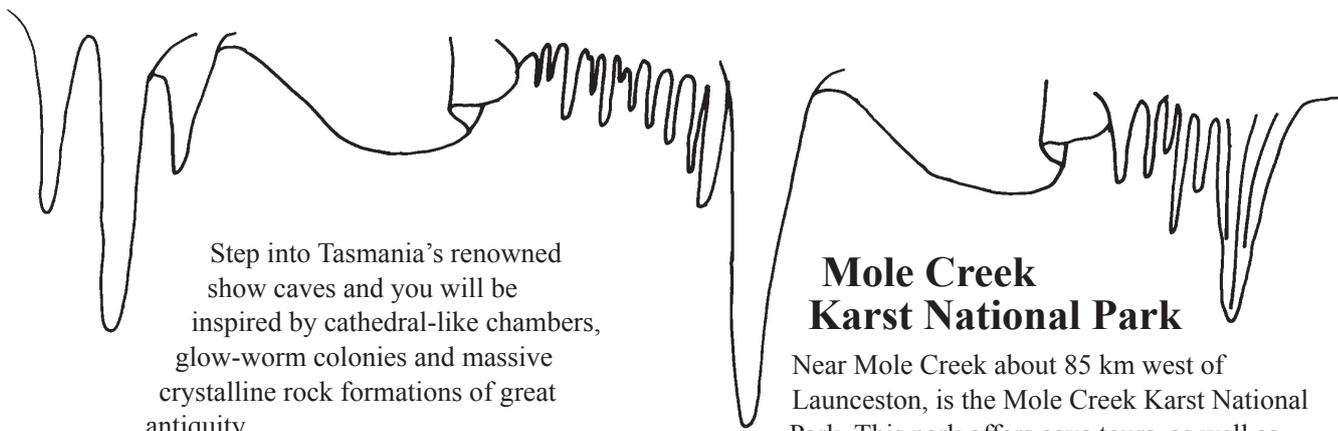
Cave Reserves

A remarkable world of fascinating caverns



Parks and Wildlife Service Tasmania

DEPARTMENT of TOURISM, PARKS
HERITAGE and the ARTS



Step into Tasmania's renowned show caves and you will be inspired by cathedral-like chambers, glow-worm colonies and massive crystalline rock formations of great antiquity.

Some of the world's finest caves are found right here in Tasmania. Come and see them.

Gunns Plains Cave

The Gunns Plains Cave Reserve is 30 km south of Ulverstone, in northwest Tasmania. This ten hectare area was one of the earliest cave reserves in Tasmania, being proclaimed a State Reserve in 1918.

The cave was formed by an underground river which still flows through some sections, and contains freshwater crayfish, fish and eels. Platypus sleep and nest in sandy banks along the river. Lofty chambers contain many formations including magnificent calcite shawls.

How to get there

Follow the Bass Highway to Ulverstone, and then take the Gunns Plains Road (B17) south to Gunns Plains. Continue on for four km to the Reserve. The trip takes approximately 90 minutes from Burnie, and 1 hour 15 minutes from Devonport or Launceston.

Cave tours

A local guide runs tours of the cave. The tour times are from 10 am – 4 pm on the hour, seven days a week except Christmas Day. An entrance fee is charged for the cave tour.

Facilities

The Reserve overlooks the beautiful Leven Valley farmland and has toilets, a wood barbecue and a shelter hut. A shop at Gunns Plains sells food and petrol.

For further information contact Gunns Plains cave guide, phone (03) 6429 1388 or (03) 6429 1326 (ah).

Mole Creek Karst National Park

Near Mole Creek about 85 km west of Launceston, is the Mole Creek Karst National Park. This park offers cave tours, as well as areas of natural bushland with picnic facilities and nature trails.

Marakoopa (from the Aboriginal word meaning 'handsome') is a cave of large caverns and extensive areas of flowstone formations. This cave also offers the best glow-worm display of any 'show cave' in Australia. A large underground stream, fed from a series of sinkholes in the Western Tiers is also a feature of the cave. Marakoopa is part of the Tasmanian Wilderness World Heritage Area.

King Solomon Cave was probably named for its profusion of light-reflecting calcite crystals, conjuring up images of the legendary King Solomon's mines.

How to get there

Marakoopa Cave — Travel to Mole Creek on road B12. Continue through Mole Creek for a further ten km to sign C170 indicating Marakoopa Cave. From the sign it is a further four km to the cave. The trip takes about 90 minutes from either Launceston or Burnie.

Access to the caves is possible from the northwest coast, by back roads via Sheffield or Wilmot.

King Solomon Cave — Follow the Bass Highway to Deloraine, and then take the Mole Creek Road (B12) via Mole Creek for a further 16 km following the signs.

Cave Tours: Guides conduct tours through both caves.

Tour times

Marakoopa Cave

There are two unique tours available at Marakoopa Cave.

Underground Rivers and Glow-worms. Visit the lower chamber to be dazzled by sparkling crystals and reflective pools of stalactites. Take time to listen to the music of underground creeks and soak up the silence of abandoned river passages. This easy tour caters for all age groups and levels of fitness. Times for Marakoopa Cave-Underground Rivers & Glow-worm are: 10.00am, 12.00pm, 2.00pm, and 4.00pm.

Cathedral, Gardens, and Glow-worms. The magnificent cavern known as the 'Great Cathedral' is a highlight not to be missed. The 'Gardens' feature delicate formations and beautiful colours. Medium fitness levels are required to ascend the stairway to the 'Great Cathedral'. Times for Marakoopa Cave -Great Cathedral, Gardens & Glow-worms are: 11.00am, 1.00pm and 3.00pm.

King Solomon Cave

Richly packed with lavish colours and formations, this small but compact cave offers an unforgettable journey. This caters for all age groups and levels of fitness. Tour times are: 10.30am, 11.30am, 12.30pm, 2.30pm, 3.30pm and 4.30pm.

All tours are approximately 45 minutes in duration.

Further information is available at Mole Creek Caves Office Telephone (03) 6363 5182, Fax: (03) 6363 5124, email: mccaves@parks.tas.gov.au

Both caves are open seven days a week except Christmas Day. Fees are charged for the cave tours, which leave from the cave entrances.

Facilities

Both reserves have shelter huts, toilets, picnic areas with electric barbecues and nature trails. Food and petrol may be bought in the nearby township of Mole Creek, where accommodation is also available.

For further information contact the Senior Ranger, Mole Creek, phone: (03) 6363 5182.

Newdegate Cave and Thermal Pool

Newdegate Cave is a tourist cave in the Hastings Caves State Reserve. Situated 125 km south of Hobart, the reserve contains lush vegetation, including many rainforest species typical of Tasmania's high rainfall areas.

Named after Sir Francis Newdegate, the Governor of Tasmania from 1917-1920, Newdegate Cave is the only tourist cave in Tasmania which occurs in dolomite, rather than limestone.

Near the cave is the Thermal Pool, a swimming pool continuously filled with the warm (28°C) waters from a natural thermal spring.

How to get there

Follow the Huon Highway (A6) to Hastings. Turn off at the Hastings Cave Road (C635). The trip takes 90 minutes from Hobart. Newdegate Cave carpark is about five km past the Thermal Pool. Allow ten minutes to walk to the cave entrance. The reserve is open 7 days per week including Christmas Day.

Cave tours

Information Officers conduct tours through the cave.

Tour times are: 11.15am, 1.15pm, 2.15pm, 3.15pm and 4.15pm* each day, with an extra tour at 10.15am and 12.15pm at peak periods (* there are no 4.15pm tours from April to November inclusive).

A fee is charged for cave tours.

Facilities

The reserve is well-equipped for visitors. There are toilets at the cave carpark, and a nature walk leads to the cave. The Thermal Pool has excellent facilities with toilets, changing rooms with showers, picnic tables, a food van during summer, and a shelter hut containing electric barbecues, powerpoints and open fireplaces with wood provided. A charge is made for entry to the pool.

A special feature of the area is the short wheelchair-accessible Sensory Trail, which begins near the Thermal Pool. An audio cassette, which describes some of the features of the area, is available for hire at the information office.

Although camping in the Reserve is not allowed, there is a Youth Hostel at Lune River and campgrounds at Cockle Creek, south of Dover.

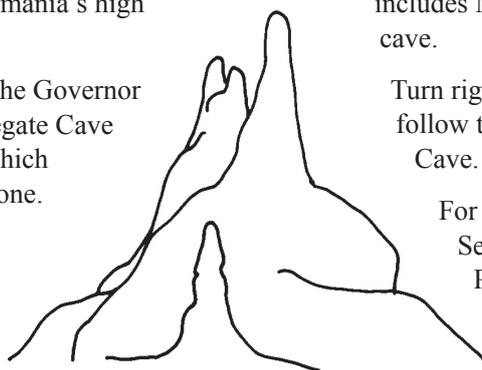
For further information contact the Senior Ranger, Hastings Caves, phone (03) 6298 1577 or (03) 6298 3209.

Junee Cave State Reserve, near Maydena

Situated just outside the township of Maydena, on the edge of the Southwest National Park, is Junee Cave. A short nature trail leads to the entrance of the cave where Junee River rises to the surface. Interpretive signs describe the Junee cave system, which includes Niggly Cave, Australia's deepest cave.

Turn right at the Maydena store and follow the signs, for five km, to Junee Cave.

For further information contact the Senior Ranger, Southwest National Park, phone (03) 6288 1283.



Cave fauna

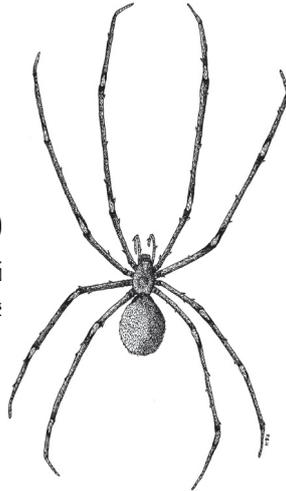
Caves are not the most inviting of places to live. Animals need special adaptations to cope with total darkness, low temperatures, damp conditions and the scarcity of food. Cave fauna is usually divided into three groups.

Trogloxenes

Derived from the Greek, meaning 'cave guest', these animals do not live exclusively in caves. For example, cave crickets emerge from caves to seek food. Bats are also troglloxenes but they rarely occur in Tasmanian caves.

Troglophiles (cave loving)

These animals can live either in caves or in sheltered places on the surface. The largest of these is the Tasmanian cave spider, which may have a leg span of up to 14 cm, and a web up to one m across. It also occurs in dark, damp places throughout Tasmania.



The most spectacular troglophile is probably the Tasmanian glow-worm which may be observed in colonies above underground streams.

Glow-worms are gnat larvae, which attract flying insects to their sticky threads using their luminous abdomens. Colonies may be seen in Marakoopa Cave.

Troglobites (cave living)

These animals have become so dependant on life underground that they can no longer live on the surface. They may show loss of pigment and eyes, and development of longer legs and antennae. Since they are restricted to caves, they are unable to move from area to area and so each karst area often has its own troglobitic species, which occur nowhere else.

There are many species of troglobitic cave beetles. Some are confined to a single karst area such as the Ida Bay cave beetle. This beetle has very reduced eyes whilst the blind cave beetle, which also occurs in Ida Bay caves, has lost virtually all trace of its eyes.

Types of caves

There are many types of caves, including rock shelters, sea caves and lava caves. However, in Tasmania, the greatest development of caves has taken place in limestone and dolomite.

These carbonate rocks were formed between about 430 and 600 million years ago, when the areas were

under the sea. Countless tiny animal shells, algae and other sediments settled on the ocean floor and were compacted into rock. Later large parts of the sea floor were uplifted to form part of the land surface. Limestone (calcium carbonate) and dolomite (calcium magnesium carbonate) are soluble in ground water, which contains carbon dioxide and is therefore weakly acidic. If thick deposits of these types of rock are in an area which receives sufficient rainfall, then conditions are suitable for cave formation.

1. In the initial stages of cave formation, water percolates down through cracks and fissures in the limestone, slowly dissolving the rock and producing interconnected tubes and cavities.

. An underground stream or lake may later develop as smaller cavities join, causing more erosion and roof collapse through undermining. Large surface openings often form at this stage.

As soon as air-filled cavities occur, the development of cave formations begins within a year. As the groundwater containing the dissolved limestone emerges from crevices into the cave, the limestone is redeposited as the crystalline mineral, calcite. The calcite deposits (speleothems) occur in a number of forms depending on the method of accumulation.

Dripstones: Water dripping from the ceiling may leave calcite deposits on both the roof and the floor. Hollow **straw stalactites** are formed when a ring is deposited around the drop. If this hollow blocks the water then flows down the outside of the straw it forms a **stalactite**. Sometimes water dripping from a stalactite may deposit a mound on the floor forming a **stalagmite**. Eventually, a stalactite and stalagmite may join to form a **column**.

Flowstones: When a film of groundwater flows over a rock, a thin layer of crystal is deposited. Apart from deposits on cave floors, **shawls** are formed in this way, hanging from cave walls. Other formation types include **pool deposits** (e.g. **poolcrust** and **rimstones**) and **pore deposits** (e.g. cave coral and the erratic **helictite** which grow in all directions, apparently ignoring gravity).

Cave formations occur in a number of colours. There are due to mineral impurities, particularly iron, present in the crystal structure.

Looking after caves

Cave reserves are unique and fragile areas. They provide habitats essential to some wildlife, contain scientifically valuable and archaeological resources, and also offer visitors a special experience. However

with many people visiting the caves, they could be spoiled in a short time. To protect cave reserves, please;

- do not touch the cave formations or smoke underground; The formations are very fragile and can be discoloured by fingerprints and smoke;
- do not take food into the caves;
- feel free to take photos, but the use of tripods is not permitted in tourist caves;
- take any rubbish out with you.

Other caves of interest

The area of Tasmania is less than one percent of the total area of Australia. However, despite its size, Tasmania contains more cave development than any other state, with the deepest and longest caves in the country. Without formal development many of these 'wild' caves would be very rapidly degraded, if access was left open. For this reason access to many undeveloped caves are restricted to trained speleologists.

Exit Cave

With a length of 23 km, Exit is the longest known cave in Australia, and is noted for its immense chambers, sandy stream bank deposits and impressive glow-worm display. The Exit Cave area is now contained within the Southwest National Park. At this time access is restricted to authorised speleological parties.

Kubla Khan

Kubla Khan at Mole Creek is also a long cave (2.2 km), but its fame lies in its incredibly rich formations. The cave is not open to the general public, but its 18 m high stalagmite, known as the Khan, is famous. The Khan is in a huge chamber called Xanadu. This cave also contains a flowstone floor which is 40 m long, and terraced up to a height of 15 m! This is a limited access cave with permits issued only to recognised speleological groups.

Khazad-Dum

The name Khazad-Dum was borrowed from 'The Lord of the Rings'. This cave, in Mt Field National Park, is representative of the deep caves in the Maydena area southwest of Tasmania. At 320 m deep, Khazad-Dum is one of the deepest

potholes in Australia. This cave is too dangerous for inexperienced people to enter.

Entry to limited access caves in Tasmania

Tasmanian caves are very fragile natural areas. In order to protect them a permit is required to enter certain caves. A list of caves for which permits are required is available from the Director, Parks and Wildlife Service, GPO Box 44A, Hobart, Tasmania 7001.

Entry to limited access caves is only available to members of the Australian Speleological Federation.

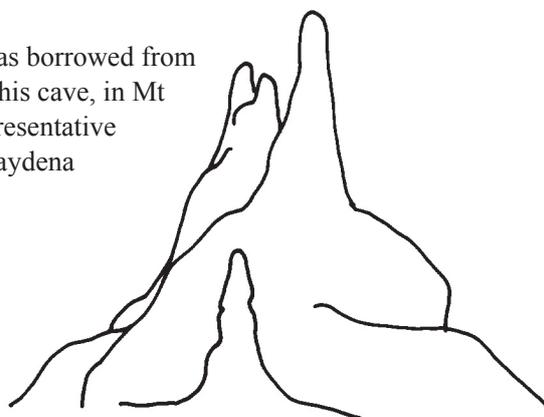
Applications for permits for caves in the north of the State should be made to the Senior Ranger c/ Mole Creek Post Office, Mole Creek 7304, Fax: (03) 6363 5122. For caves in the south, to the Senior Ranger, 24 Main Rd, Huonville, 7109. Fax (03) 6264 8473.

Take care

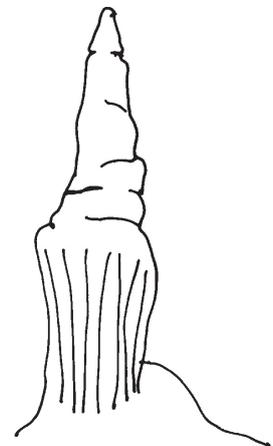
Exploring caves can be extremely dangerous, wet and uncomfortable, and requires the use of ropes and specialised equipment. If you are interested in caving please contact a caving club.

Contact

Biodiversity Conservation Branch: DPIWE
134 Macquarie Street, Hobart, 7000
Phone: (03) 6233 6556
Fax: (03) 6233 3477



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FURTHER INFORMATION

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Internet: www.parks.tas.gov.au
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