**Trek through Organ Pipes National Park with**

**Prior to visiting the Organ Pipes National Park:**

Please look up this webpage to download the trekker app. The teacher and students will need to access the App on their devices before the excursion to the park.

https://www.trekker.online

Please look up this webpage for information on how a teacher may run a trek, while keeping an eye on where their students are.

https://www.trekker.online/2019/06/competing.html

Parks Victoria require all groups to let them know they’re coming. Please complete a Group Activity Statement downloadable from <http://parkweb.vic.gov.au/learn> and email to: groupactivities@parks.vic.gov.au at least four weeks prior to arrival. This will assist them to alert you to any park closures, storm damage or management activities such as planned burning or pest animal programs that may affect your visit.

**Lesson prior to visit:**

**Learning Intentions:**

* Students learn to care for their local wilderness area.
* Students learn about their local geology, flora and fauna.
* Students become aware of the safety behaviour required before entering a national park.

**Success Criteria:**

* Students understand the need for safety behaviours in the park.
* Students can name, describe and recognise several of the species living in the park.
* Students recognise the ancient lava flow in the Organ Pipes National Park.

Please talk to students about the park, it has trails between the beautiful rock formations and away from the flora and fauna that need protection from trampling. Ask them to keep to the paths for their own safety and the safety of the wilderness around them.

Ask the students to choose a few of the species out of the following lists to research before visiting the park. Some species are hard to find in the park and others not so easy.

According to the Friends of the Organ Pipes and earthwatch.org.au these are the native animals you may find in the park. Those that are indented have been identified as non-native animals:

* Brush-tailed possums – *trichosurus vulpecula*
* Ring-tailed possums - *pseudocheirus pereginus*
* Eastern grey kangaroos – *Macropus giganteus*
* Swamp wallabies – *wallabia bicolor*
* Echidnas - *Tachyglossidae*
* Sugar gliders – *petarurus breviceps*
* Platypus – *ornithorhynchus anatinus*
* Microbats (7 species) one of which is - *tadarida australis*
* Blue wrens - *Malurus cyaneus*
* White-faced heron – *egretta novaehollandiae*
* Eastern pobblebonk frog - *limnodynastes dumerilii*
* Striped marsh frog – *limnodynastes peronii*
* Ewing’s tree frog – *litoria ewing*
* Willie wagtail – *rhipidura leucophrys*
* Yellow-faced honeyeater – *lichenostomus chrysops*
* Australian magpie – *cracticus tibicen*
* Black-faced cuckoo-shrike – *coracina novaehollandiae*
	+ Common blackbird – *turdus merula*
	+ Common starling *– sturnus vulgaris*
* Garden skinks – *lampropholis guichenoti & lampropholis delicate*
* Masked lapwing – *vanellus miles*
* Magpie lark – *grallina cyanoleuca*
* Rainbow bee-eater – *merops ornatus*
* Rufus whistler – *pachycephala rufiventris*
* Black shouldered kites *– elanus axillaris*
	+ Feral Rabbits - *Oryctolagus cuniculus*
	+ Feral Foxes - *Vulpes vulpes*
	+ Feral cats - *Felis catus*

According to the Friends of the Organ Pipes, natureshare.org.au and earthwatch.org.au these are the plants you may find in the park. Those that are indented have been identified as weeds:

* Silver banksia – *banksia marginata*
* Ribwort plantain – *plantago lanceolate*
* Blackthorn – *bursaria spinose subsp. spinosa*
* Hickory wattle a.k.a. lightwood – *acacia implexa*
* Yellow box – *eucalyptus melliodora*
* Nodding saltbush – *einadia nutans*
* Stinkwort – *dittrichia graveolens*
* Melbourne yellow gum – *eucalyptus leucoxylon subsp. connata*
* Ruby saltbush – *enchylaena tomentosa var. tometosa*
* Rough fireweed – *senecio hispidulus*
	+ Soursob – *oxalis pes-caprae*
* Large kangaroo apple – *solanum laciniatum*
* River bottlebrush – *callistemon sieberi*
	+ Red-ink weed – *phytolacca octandra*
* Fragrant saltbush – *rhagodia parabolica*
	+ Dandelion weed – *taraxacum officinale*
* Kangaroo grass – *themeda triandra*
* Silky blue-grass – *dichanthium sericeum*
* Drooping sheoak – *allocasuarina verticillate*
* White cypress pine – *callitris glaucophylla*
	+ Kidney-weed – *dichondra repens*
* Wedge leaf hop bush – *dodonaea viscosa*

Ask students to choose one of the geological areas in the park to look up and share information about. (In *italics* is the teacher’s information to share with the class or not.)

Organ Pipes

*The geomorphological and geological features in the Park are of State significance. The basalt 'organ pipes', formed about a million years ago when a massive lava flow spread over the plains from nearby volcanic hills (probably those located around 6kms to the north). It filled an ancient creek bed and cooled very slowly to form a crust. Vertical cracks developed, and as the lava continued to harden the cracks lengthened until the basaltic mass was divided into columns.*

Rosette Rock

*Rosette Rock, 500m upstream of the Organ Pipes was formed by radial cooling of a pocket of lava, probably within a cave. Rosette Rock was formed earlier than the Organ Pipes, and resembles the spoke of a wheel.*

Tessellated Pavement

*The Tessellated Pavement is 250m upstream of Rosette Rock and is another columnar basalt formation. It similar to the Organ Pipes formation, however can be viewed from the top, or their horizontal surface, rather than viewing them vertically.*

Scoria cone (the meeting area near the carpark)

*The carpark area is on the remains of a weathered scoria cone. 800,000 million years ago this volcanic cone exploded molten rock producing scoria, which are brown rocks filled with air pockets.*

Jackson’s Creek

*The Park clearly shows the process of valley incision by Jacksons Creek, which originates from the Macedon Ranges (Wombat Forest) and later joins up with the Deep Creek and Maribyrnong River and then flows out into Port Phillip Bay.*

*The Maribyrnong Valley is the only natural corridor link from the City of Melbourne to the forested foothills of Mt Macedon to the north-west.*

**Learning during visit**

**Learning intentions:**

Students will learn how to detect living things in parks and begin to determine those occurring naturally and those that are invaders. They will investigate how living things interact with their environment. They will be introduced to the rock formations in the park and determine in which ways they are similar and different to each other. They will use critical thinking skills to answer questions and complete tasks on the trek.

**Success criteria:**

Students can…

* ... use their senses to explore the environment.
* ... interact with their devices as a problem solving and learning experience.
* ... find either naturally occurring and/or invasive plants or animals.
* ... develop their knowledge of their own locality and region and how places are connected.
* ... determine whether formations are displaying a vertical, horizontal or radial surface.

On the day your class is visiting the park, make sure you have the challenge code ready. Students will need to type in the code and ask for permission to join the challenge. It would probably be easiest to do this before you get to the park as it may take a few minutes to accept the new trekkers to your challenge. (It could even be done in the days before you leave, they can’t begin the trek until the time you have set anyway.)

Once they have begun, you can look on the Challenge page to see how they are progressing through the trek, as well as the last time they were detected online.

There is a photo sharing function within Trekker. The students can share their photos with you throughout the trek, if you like, it is asked of them to take pictures of flora, fauna and formations to gain points for the Challenge.

There are some videos attached to the trek, one with a ranger talking about the park and another with Melbourne University students talking about the microbat protection and conservation project within the park. The students may choose to view them during their trek, it could enhance their experience of the park.

I hope you and your students have a fun day experiencing the outdoors using the Trekker App.

**After the Trek**

Yourself and your students are welcome to create treks and challenges of your own. Each new trek receives 30 complimentary tickets that allow people to play the trek. More Trekker tickets can be purchased online.

It is a great way to create interactive lessons for your students. They can answer questions and solve problems while moving about the school, or other places of interest, and send you photos of what they have been up to.

It might help to look over this webpage before creating treks.

<https://www.trekker.online/2019/06/creating.html>

**Bibliography**

<https://natureshare.org.au/collections/organ_pipes_np_flora>

<http://friendsoforganpipes.org.au/guide/fauna.htm>

https://www.parks.vic.gov.au/places-to-see/parks/organ-pipes-national-park

https://www.climatewatch.org.au/uploads/trail/field\_guide/586ef95994cf707228000008/CWOrganPipesSpeciesGuide.pdf