between burned and unburned ground is clearly evident when looking down the canyon. The mallees (which survived as rootstock) are exceptions. Their strong root system has enabled them to shoot vigorously since the fire.

Thomas Carter Lookout to Shothole Canyon

At 311m above sea level, the lookout is one of the highest points on the Cape. Facing north one looks along the watershed. The far wall of Shothole Canyon appears as a low cliff in the near distance. On a clear day, one can see Exmouth Gulf to the east and the towers of the United States Navy VLF transmitter aerial to the north.

From the lookout, the path runs down the eastern side of a small ridge. Near marker 6 it crosses the head of a gully beside a small sinkhole formed by water percolating, and dissolving the limestone vertically. Between markers 6 and 7 there is an interesting outcrop of conglomerate formed by the cementing together of old limestone rocks by younger limestone deposited out of solution.

The track continues alongside gullies until it crosses a creek near marker 10 (note the much denser vegetation where a little extra moisture is available to the creek bed). From here it crosses gently undulating country to the edge of Shothole Canyon.

The rocky ground with little or no soil and the numerous crevices and solution tubes which rapidly drain what little rainfall might occur, indicates the hardiness of the vegetation.

Most of the country on this section was burned in a 1977 wildfire and the numerous charred stakes bear witness to this. The trees mostly survived and rapidly sprouted new leaves. Some of the shrubs were able to send up new shoots from rootstock which survived, but most of the vegetation is still in the early stages of recovery. For comparison one area which was not burned is the section approaching the edge of the canyon. This section is characterised by large, obviously old shrubs, large clumps of spinifex (both absent on the burned areas) and fewer small shrubs (which characterise the burned areas).

VEGETATION

Very shallow lime rich soils, rapid drainage through the limestone, high summer temperatures, and eratic low rainfall all combine to make growing conditions very severe in the Range. The advantages of deeper soils and a little extra moisture are clearly evident along creek beds (e.g. Marker 10 and in the Canyons).

Generally trees are sparse and small. The dominant vegetation type consists of scattered shrubs growing amongst spinifex. However, following fires it takes many years for the spinifex to grow large enough to play a dominant role again. In the meantime, numerous small shrubs (which may otherwise be fairly scarce) grow prolifically. An example is *Indigophora monophylla*, a small shrub with grey oval leaves and purple pea flowers which is common on all the burned areas along the trail.

Most of the trees are Eucalypts, the two common ones being *E. terminalis* (a bloodwood with flaky bark and urn-shaped fruits) and *E. patellaris* (with fibrous bark and top-shaped fruits). Both grow along the bottoms of the canyons and on top of the range. In the canyons there is also a mallee, E. *foecunda* (common in the Shothole carpark). The Eucalypts near the turnoff from Charles Knife Road are Coolabahs, *E. coolabah!* (Other species also called Coolabahs are in fact not this species but are species with the same common name and found elsewhere in Australia).

Two non-Eucalypt trees found along the trail are a Kurrajong *Brachychiton australe*, a deciduous tree with large bright green lobed leaves (e.g. near Markers 3 and 16) and a wild fig, *Ficus platypoda* which usually has a shrubby appearance and often grows on cliff edges (e.g. between Markers 6 and 7 on the edge of a gully.

Many of the shrubs are legumes. Common *Acacias* include *A. pyrifolia* with large elliptic phyllodes ("leaves") each armed with a sharp tip, common on top of the range, and *A. tetragonophylla* with numerous small sharp phyllodes in clusters, common on the canyon slopes. Cassias with large petalled flowers include *C. oligophylla* with few large leaflets, *C. pruinosa* with small silver leaflets and *C. glutinosa* with small bright green leaflets and tacky resin on the twigs. All the acacias and cassias have yellow flowers.

One of the interesting features of the flora is the occurrence of plants belonging to genera common in the south west but otherwise absent from the north west. Examples are the Toucan flower, *Brachysema macrocarpum*, a leafless plant with tufts of flat, strap-like stems and maroon pea flowers follwed by large pods. Another is *Hibbertia spicata* (which usually grows south to Geraldton), a low shrub with narrow leaves and yellow flowers. Both grow near the edge of the canyon on very rocky ground. (The Mallee, *E. foecunda* is another link with the South West).

Although Grevilleas are most prolific and diverse in the South West, there are a number of species in the north-west including two known only from the North-West Cape area. One of these, the Cape Range Grevillea, *G. variifolia* with brilliant crimson flowers grows along the route, e.g. near Marker 18.

FURTHER INFORMATION

National park rangers are always glad to help make your park visit more enjoyable and informative. Do not hesitate to contact them if you require any information or assistance.

Department of Conservation and Land Management
Nimitz Street, Exmouth. Ph: (099) 491428
(Post to P.O. Box 55, Exmouth, 6707).

Department of Conservation and Land Management
50 Hayman Road, Como. Ph: (09) 3670333
1986

CAPE RANGE NATIONAL PARK

CHARLES KNIFE — SHOTHOLE WALK TRAIL

Shothole Canyon

Cape Range is a massive, rugged limestone range originally formed below the sea. No doubt you have been impressed by the roadside scenery. We hope that by using this walking trail you will experience the grandeur of scale, the struggle for life and the beauty of the area from a different perspective. For a brief time, you can become part of it.

For Safety — Before you set out, please read the route description and precautions inside this leaflet.

Department of Conservation and Land Management, W.A.

PRECAUTIONS

Cape Range is waterless and rugged. Temperatures may be deceptively high, especially in the canyons. We advise you not to undertake the walk in summer and for your own safety, please take the following precautions:-

WARNING — It is dangerous to walk along cliff edges. Undercutting by erosion can lead to weak sections which may give way under your weight.

* Water — there is no water along the trail. Take plenty with you.
* Shoes — You will need good walking shoes or boots.
* Sinkholes — Take great care if you stop to examine sinkholes, many are deep with vertical walls. Please do not enter any to explore.
* Steep slopes — the path up the side of Shothole Canyon is steep and the gravelly surface may be slippery. Take particular care on this section.
* Let somebody know — When you set out tell someone where you are going and when you expect to return. Do not deviate from your route.

GENERAL INFORMATION

The Location:

The walking trail connects the Shothole Canyon picnic area with the Thomas Carter lookout, (about 1 km north of the Charles Knife Picnic area). The total distance is about 5 km of which about 4 km traverses the top of the range from the Thomas Carter lookout to the edge of Shothole Canyon.

Options:

It is not a circular route. Unless you arrange to be dropped at one end and picked up at the other end by vehicle, you will have to retrace your steps. If you are short of time, you may wish to use only part of the track, e.g. from the Shothole carpark or the Thomas Carter lookout to the lip of Shothole Canyon and back again.

Comfortable walking times (in one direction) are:-

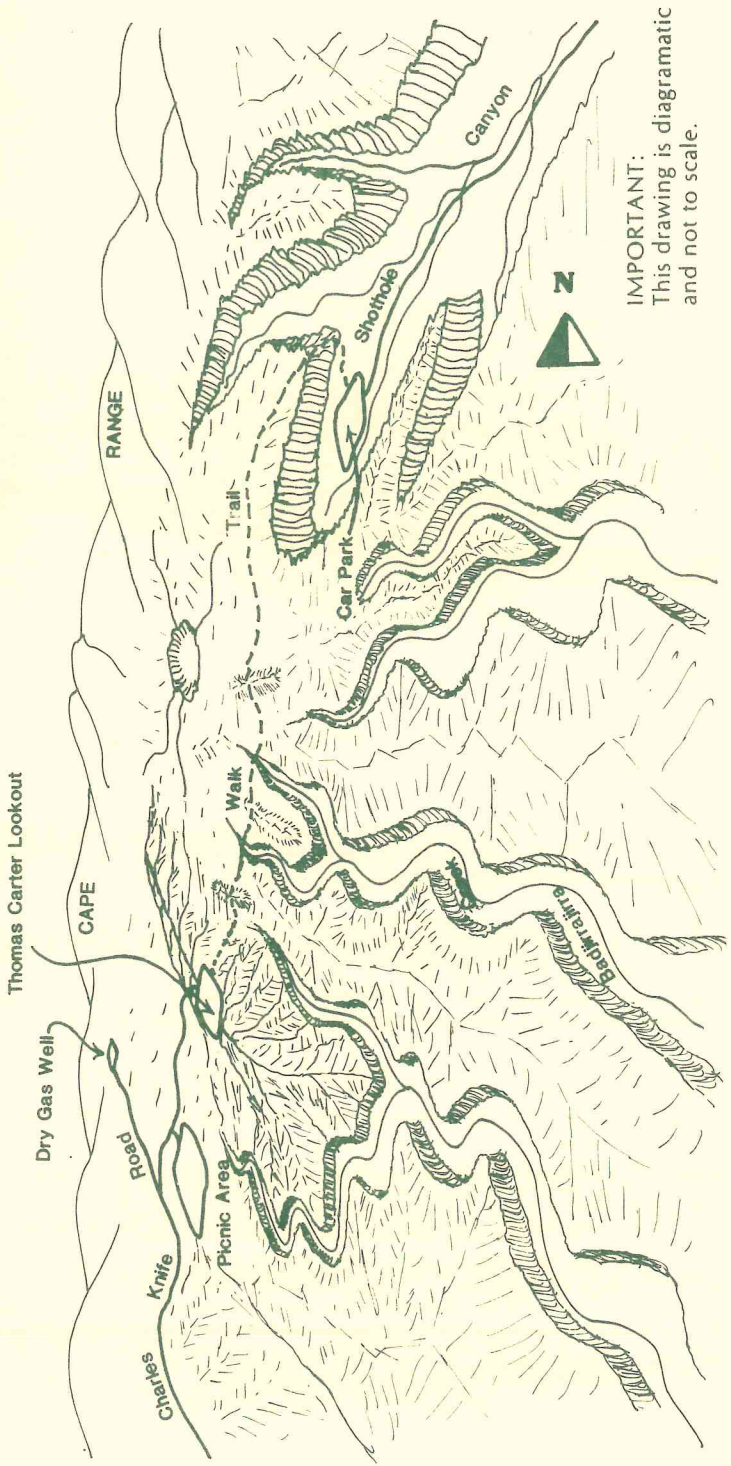
Shothole carpark to the lip of the Canyon ..... 30 minutes

Thomas Carter lookout to the lip of Shothole Canyon ..... 1½ hours

These times allow for some sightseeing and rest stops.

Markers:

The path from Shothole carpark to the lip of the canyon follows a ridge and is well defined. From the lip of the canyon to the Thomas Carter lookout, the trail is marked by white posts at varying intervals. Each post is visible from the previous one and each one is numbered consecutively from the Thomas Carter Lookout. Follow the numbers and do not stray from the trail.



PLACE NAMES

Shothole Canyon is so named because explosive "shots" were fired in it during seismic survey work in search for oil. The present car park was constructed as a drill pad for the first exploratory oil well to be drilled in the Range. The well, over 2,500 metres deep, was dry.

Charles Knife surveyed the road now bearing his name. The road was built so that oil drilling rigs could be transported onto the Range. Three wells were sunk and the head of one can be seen at the end of the road. The oil exploration took place in the 1950's.

Thomas Carter (1863-1931) was a pioneer pastoralist and noted ornithologist. He published several papers on birds of the North West Cape and he discovered two new species here. They were the Rufous-crowned Emu wren and the Spinifex bird. The latter, *Eremiornis carteri* is named after him.

WISE USE

Please think of others. In particular please

— Do not throw stones over cliff edges, you may hit someome below you.

— Do not leave any litter along the trail. No one will thank you and someone else will have to pick it up Enjoy the wildflowers and leave them for others to enjoy. And finally, ENJOY YOURSELF.

POINTS OF INTEREST

Shothole Carpark to the Lip of the Canyon

You will climb about 120 m (nearly 400 ft) by following the track along a ridge. The path was once a goat pad. Feral goats are still common but because they are introduced and harmful to the vegetation, efforts are being made to eradicate them from the National Park and their numbers have been greatly reduced.

From vantage points along the trail, or from the lip of the Canyon, you will be able to study the effects of erosion. The principle process in the formation of the canyons has been water erosion. Although the climate is now very dry, torrential downpours associated with cyclones still continue the process. Wind erosion also plays a significant role and results in interesting effects where it eats into softer layers undercutting harder layers above Eventually large blocks of the harder material break off and tumble down.

You will also have the opportunity to study interesting features of the vegetation, for instance note the difference in the vegetation structure associated with the creek along the canyon bottom, the slopes and the flat ground beyond the canyon lip. In November 1977, a wildfire burned much of this area. Because of the arid conditions regeneration is very slow. The difference