It's geo-logical

by Rob Buehrig

ABOUT *Melaleuca arenaria* it is written: 'Presumed extinct and unknown in cultivation. There seems little hope that this species will be rediscovered.'

The plant was collected only once, in 1922 by botanist Charles Gardner. Seventy years later at Dwellingup I decided that this was the plant with which I could test a theory - the practicality of applying geology in prospecting for rare and endangered plants.

Gardner wandered Western Australia for decades, discovering and gathering information on its plants.

The man has been described as erratic, excitable, energetic, enigmatic, fortuitous and more. His character, style, energy and abilities are legend.

Many of Gardner's plant locations, however, are vague and sometimes even misleading. Nevertheless, he took pride in correctly describing a discovered plant's habitat.

This means his soil descriptions are accurate and this led me to believe that the key to unlocking Gardner's *M. arenaria* location was geology.

The advantage of using geology is threefold, and is like looking for a book in a library, once we know the subject and recognize its cover.

First, by subject, we know it is on this shelf, not that one.

Second, since we have the cover programmed in our mind's eye, it is more easily recognised and plucked from the shelf.

Third, using a computer to re-index, we can quickly shift from the subject to a specific book, then to all books on the subject.

Gardner described the soil habitat of *M. arenaria* as 'yellow sandy gravelly soil.'

He also named the plant '*arenaria*,' which means 'pertaining to or growing in sand.'

Reading the reference key on the Geological Survey Map of Corrigin, we find:'... reworked Cainozoic sandplain - yellow and white sand containing locally abundant limonite pebbles'.

Checking the map for the occurrence of the formation near Gardner's original *M. arenaria* location, we see it in a large nature reserve nearby.

Without stepping from the office, we have laid out the strategy.

The field stage of my search for *M. arenaria*, was on a three-day field trip in the Narrogin District.

It was a Friday and the Corrigin Water Reserve gate, behind which I wanted to find some plants, was locked.

My subconscious mind must have prearranged that I be only 55 kilometres from Gardner's footsteps trodden 70 years ago.

I made a dash for my spot on the map and was delighted. There, surrounding me in abundance as I stepped from my car, was *Melaleuca arenaria*.

The geologic approach is simple, cheap and has great potential as a time saver when searching for rare and endangered plants.

In addition, the method gives a double thrill to the chase. First, by revealing a plant's secrets in the office and second, when it is discovered, where expected, in the field.

Note: Using the geology method, another population of M. arenaria *was found on a recent trip to the Narrogin District.*

Snr. technical officer Rob Buehrig shows us the location of Melaleuca arenaria. Photo by Barbara Giles.

Vermin proofing of Thomson Lake NR

CALM's Perth District has just completed more than nine kilometres of vermin-proof fencing around Thomson Lake Nature Reserve.

Thomson Lake is part of a chain of wetlands in the Beeliar Regional Park and the fence is being

Cockburn, have supplied finance and materials to help with the project.

Perth district reserves officer Rod Martyn said that the reserve was an important breeding site and refuge for water birds and one of the few pristine freshwater wetlands in the

some 300 hectares of woodland and open forest and supports a diverse range of flora and fauna.

Construction of the vermin-proof fence was coordinated by Perth District at Wanneroo and included construction teams from Dwellingup.