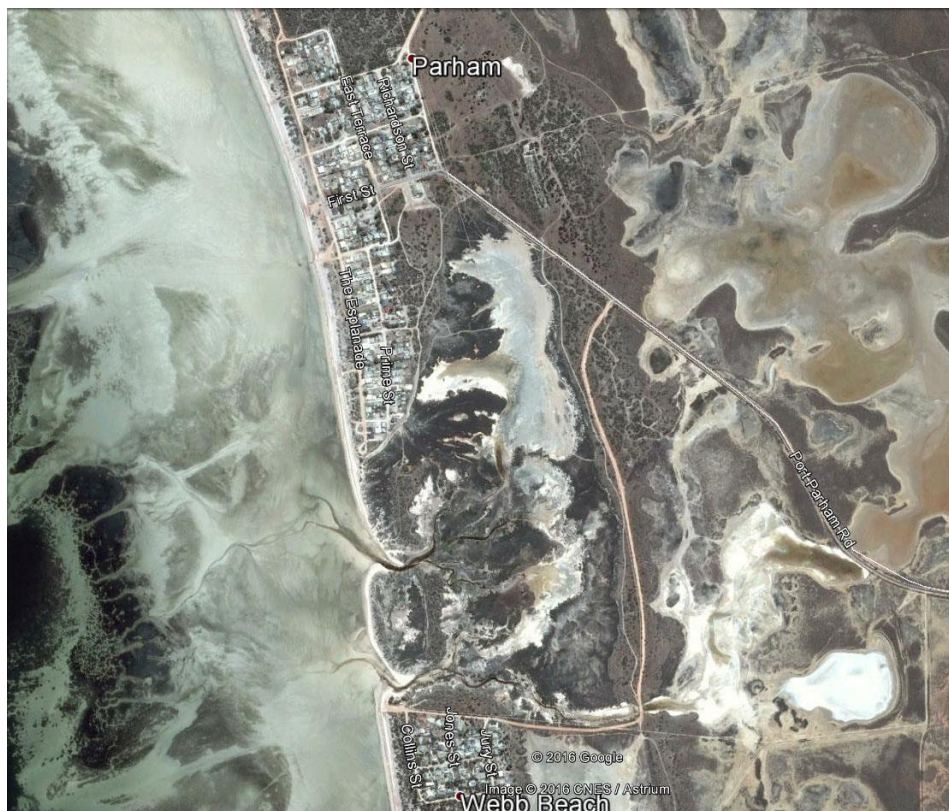


Ongoing achievements by the COOTS Group

Many in the Society I suspect have certainly heard of the COOTS Group and some of the places where we do our conservation work, but may be unaware of the work that such a small group can achieve, so it has been decided to put a few articles together that gives some insight into the work that we do, and some of the challenges that we always face. COOTS as an actual conservation group began back in 1995 soon after we tapered off the major project at "Potters Scrub" in the Coorong National Park.

Prior to this, the Society, had no conservation group at all, but did do quite a lot of plantings in several areas. I was involved in a number of those earlier projects, which probably gave me a good insight into why we needed an active conservation group.

I would like to give an overview of each project starting first of all with the project Port Parham.



Firstly, Port Parham for those who have never heard of it, is a small fishing and crabbing town situated right on the coast of Gulf St. Vincent. It is about forty miles in a northerly direction from the heart of Adelaide and consists of around seventy or so shacks which are in varying states of condition, from the very modern to almost derelict.

Looking at the map above, you note the small town surrounded by salt flats with pockets of vegetation and tracks made by off road vehicles almost everywhere.

What is important for this article, are the outflows to the south of the actual town, closer to Webb Beach. The one closest to Parham is Baker's Creek, where we have our mangroves.

It all seems such an unlikely place to do revegetation work.

Port Parham beach has been an SGAP (now Australian Plants Society) project since 1996 instigated and introduced to me by local residents and APS members Dean and Barbara Reid.

The first year was a very disheartening one for those who participated, because the entire planting in a proposed camping area north of the town was destroyed by a massive king tide that covered all the young seedlings with a metre of seawater. We had planted about 300 plants and not one

survived. I might also add that quite a lot of the established vegetation succumbed to the salty environment as well.

It is interesting to note however that this was a problem that had been foreseen by the local residents, many of whom were in the Port Parham and Webb Beach Progress Association, and this was expressed to the Mallala Council on many occasions as being a potential problem, so ways were discussed as to how it could be overcome. Finally it was decided to build a sand barrier along the foreshore so that it would act as a form of buffer zone, to protect the fragile coast against such large tides. This action was a good idea except that trail bike riders think that it is a great opportunity to show their skills in flying over this man made sand barrier. This caused a breach in the barrier which allowed the sea to easily penetrate through to the vulnerable area behind. The action of the king tide was so severe that it cut a deep channel through the sand barrier which was metres wide and deep at the point where the riders had been riding.

After that initial setback, we were more determined than ever to replace the lost plants.

The seedlings that we plant in the area are indigenous to the area, because we make sure that all our seed is collected locally, and we do our utmost to keep it that way.

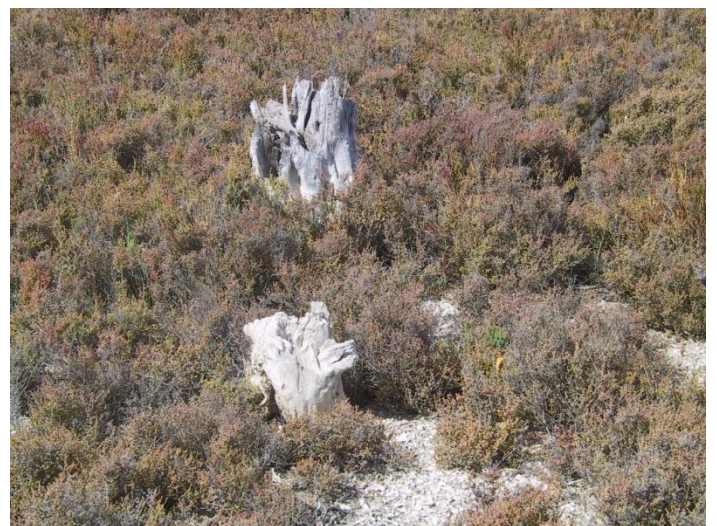
Plantings then took place in many patches around the town in an effort to increase numbers which over many years had been reduced to only a handful in some instances. One of those species was *Eucalyptus gracilis* which had been reduced to only three trees, so it was important to do something about that species.

The mangrove part of the project started quite by chance.

On reflection now, I think it was that king tide that really started it, because I did wonder how this situation would have been prevented in the past, and somebody said that there was a line of mangroves along the coast which would have acted as a barrier to those forces of nature.

Suddenly everything fell into place.

There are very few fish and crustaceans in the area any more, the tides do enormous damage when they are high, there is much erosion now and a lot of the vegetation is under threat from the saline environment. We searched the foreshore, and yes there was evidence that the mangroves did exist in the area because the remains of the trunks are still there in the mud for all to see. A short distance inland, more evidence of mangroves which had been chopped down.



Images of mangrove remains along the foreshore

There had been a forest of mangroves along that section of coast. Where had they gone and why, and were we able to do something about their return to the area?

On the day of our mangrove planting, we found that the local community were very positive. Once they found out what we were doing and why, the interest in the project became one of ownership

and this gave me the feeling that the mangroves may have a good future. There is still to this day a small element of resentment to our involvement in the area, but I am hopeful that it will pass in time.

The mangrove seedlings were planted in two areas. A small stand was planted in the sea-bed floor, in what was a very dense mangrove area. We know this, because the remains of the trees are still visible to this day.

Besides, we have also seen an old photo of Port Parham dated around 1926, and there were vast stands of healthy mangroves growing in the area. The other area where we planted was actually along that Baker's Creek, and it is those mangroves that are still growing well today, while those that we planted in the sea-bed floor were washed away by a massive king tide.



Image shows Don McLean planting seedlings in the mud, and some time later, one of those mangrove seedlings surviving in the ribbon seaweed

We visit the site periodically just to see how the plantings are progressing, and are pleased to announce that everything we have planted is doing very well. The mangroves are getting established, and producing lots of fruit which we note is falling into Baker's Creek, and then becoming lodged in the samphire species and pneumatophores which enables them to get roots down quickly and we are confident that our assistance has enabled the new colony to increase in numbers.



Here is one of the twenty or so mangroves now at around fifteen years of growth. Happy and producing fruit that will now form new trees

We can now visit the site, knowing that what we started in the area will now continue into the future and the environment is now viewed as being important, rather than something that should be exploited. I am personally quite happy to see all that.



The local *Eucalyptus gracilis* growing well in the dunes, also mangroves starting to mature along Baker's Creek

Jeffrey Reid
COOTS Coordinator.