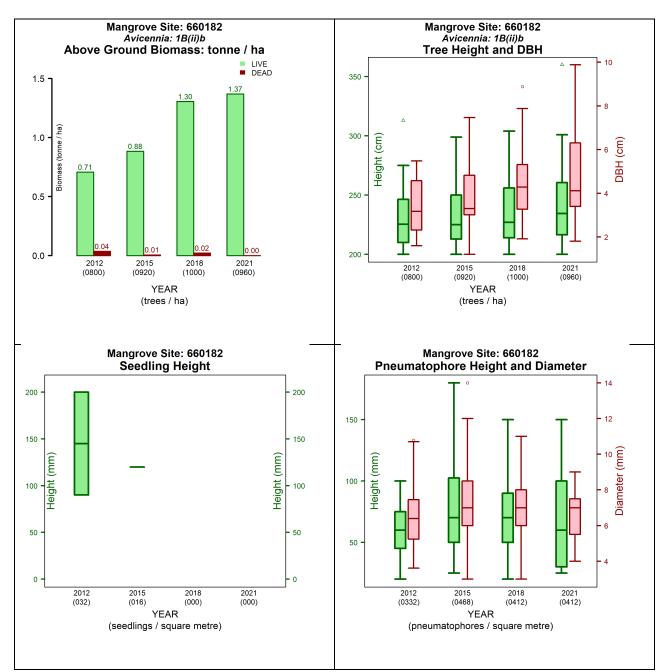


Coomera

Tripcony Bight (site ID = 660182) Tall Shrubland





- Above ground biomass and density temporal assessment
- Tree height, diameter at breast height (DBH) and stem density temporal assessment
- Pneumatophores height, diameter, and density temporal assessment
- Seedling height and density temporal assessment.

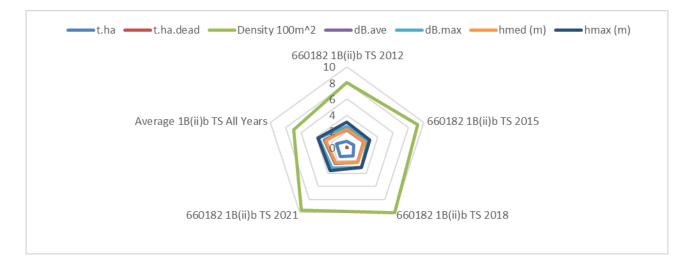


Figure 2. Structural changes over the years for Site 660182 in comparison to average of all sites of vegetation community type 1B(ii)b by structural formations. The graph indices: t.ha is the live biomass (tonnes) in a hectare; t.ha.dead is the dead biomass (tonnes) in a hectare; Density 100m^2 is the number of trees in 100m square; dB.ave is the average diameter at breast height in centimetres; dB.maxis the maximum diameter at breast height in centimetres; hmed (m) is the median tree height (meters); hmax (m) is the maximum tree height (meters).

Date	28.08.2012	26.08.2015	22.06.2018	20.07.2021
E Spp.				
T1 Spp.				
T1 Med Canopy Height				
T1 Range low				
T1 Range High				
T1 Crown Cover				
T1 Stem Count				
T2 Spp.				
T2 Med Canopy Height				
T2 Range low				
T2 Range high				
T2 Crown Cover				
T2 stem count				
S1 Spp.	Avicennia marina subsp. australasica	Avicennia marina subsp. australasica	Avicennia marina subsp. australasica	Avicennia marina subsp. australasica
S1 Med Canopy Height	2	2.1	2.1	2.5
S1 Range low	1.5	1.5	2	2
S1 Range high	3.2	3.5	3.5	3.5
S1 Crown Cover	35	41	37	40
S1 stem count	40	46	48	47
S2 Spp.			Avicennia marina subsp. australasica;	Avicennia marina subsp. australasica;

Table 1. Queensland Biodiversity Ecological Information System (QBEIS) temporal assessment for site 660182

S2 Med Canopy Height S2 Range low S2 Range high S2 Crown Cover			Rhizophora stylosa 1.5 1 2 7	Rhizophora stylosa 1.5 1 2 9
S2 stem count			49	48, 14
G Spp.	Avicennia marina subsp. australasica; Ceriops australis; Rhizophora stylosa; Triglochin striata	Avicennia marina subsp. australasica; Rhizophora stylosa; Aegiceras corniculatum	Avicennia marina subsp. australasica; Rhizophora stylosa; Ceriops australis	Avicennia marina subsp. australasica; Rhizophora stylosa; Ceriops australis; Aegiceras corniculatum
G Med Canopy Height	0.4	0.4	0.6	0.8
G Range low	0.2	0.4	0.4	0.2
G Range high	0.5	0.8	1	1
G Cover	2	4	10	11
Individual Covers	1; 1; 1; +	2; 1; 1	5; 5; +	5; 6; +; +

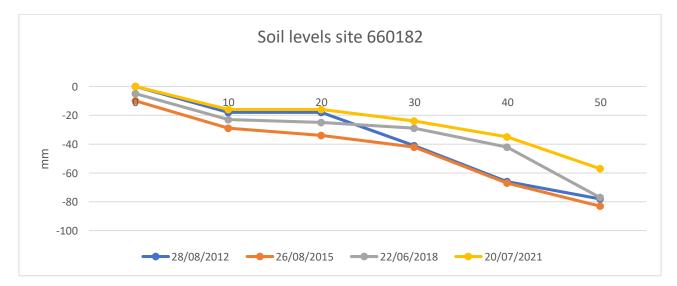


Figure 3. Soil surface elevation measurements (mm) are taken across the QBEIS sites using dumpy level.

Summary

1. S1 has been very stable over the periods, S2 in 2018 includes *Avicennia marina* subsp. *australasica*; *Rhizophora stylosa* and the ground layer species composition fluctuated over the years

2. S1 and S2 shrub heights are stable while the stem count is increasing over time. Ground cover increased in height and cover.

3. Mean tree heights, range and mean DBH has increased. Densities increased by 25% leading to an increase of 78% in above ground biomass in the site.

4. Reduction (from 0.07% in 2012 to 0.04% in 2018) of the proportion of dead to live biomass within the site.

5. Pneumatophore mean height and girth has increased over the years.

6. Seedlings have been reduced in size and density with no seedlings recorded in 2018 in the quadrats but are present during all years across the site.

7. Soil max range level reduced by 40mm to 118mm with erosion and accretion of up to 10mm.

8. Soil levels over the whole period have accreted.



Figure 4. Photograph of Site 660182 *Avicennia marina* subsp. *australasica* community type 1B(ii)b Tall Shrubland.