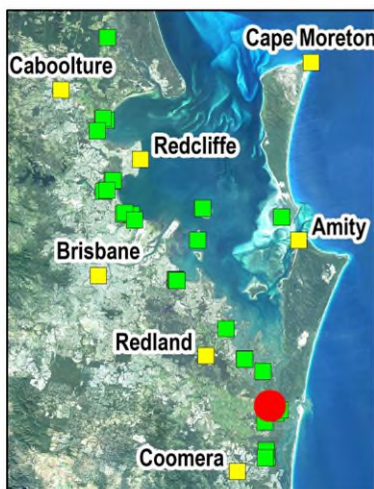
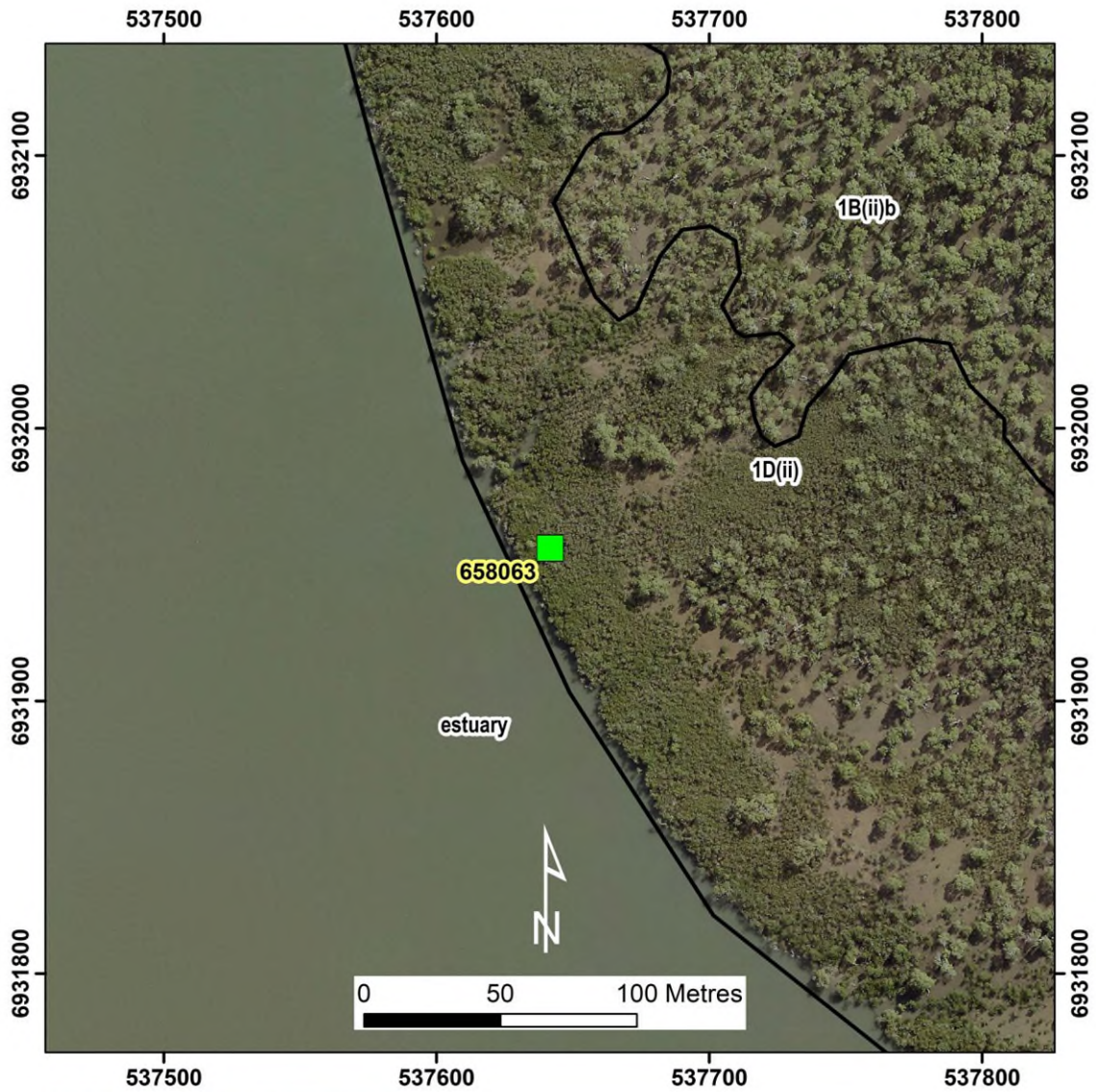


Mosquito Island (site ID = 658063) Closed Shrubland



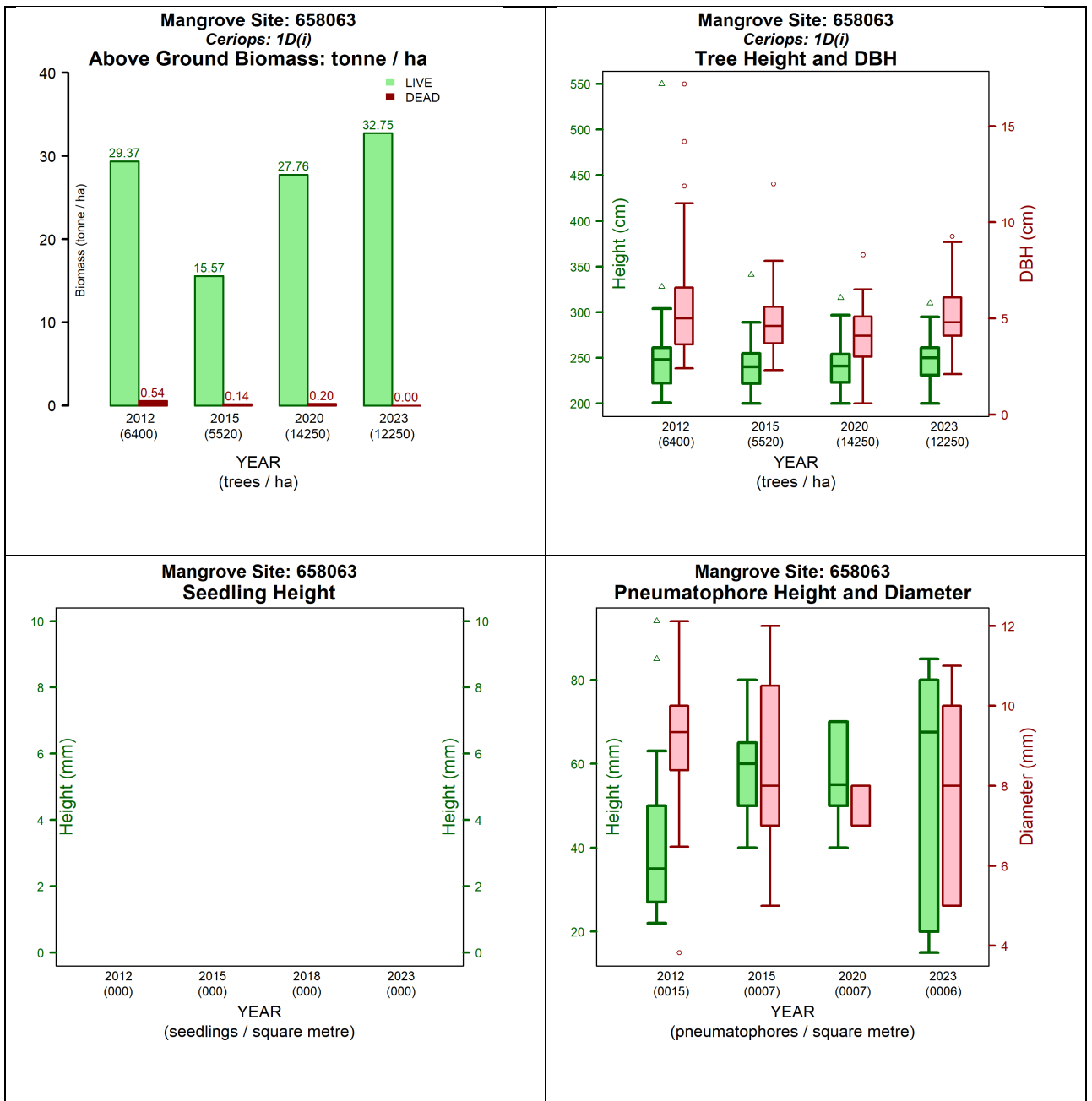


Figure 1. Measurements at site 658063 between 2012 and 2023 (left to right and top to bottom):

- 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 658063 in comparison to average of all sites of vegetation community type 1D(i) by structural formations. The graph indices: t.1000m² is the live biomass (tonnes) in a 1000m square; t.ha.dead is the dead biomass (tonnes) in a hectare; Density 10m² is the number of trees in 10m square; dB.ave is the average diameter at breast height in centimetres; dB.max is the maximum diameter at breast height in centimetres; hmed (m) is the median tree height (meters); hmax (m) is the maximum tree height (meters).

Table 1. Queensland Biodiversity Ecological Information System (QBEIS) temporal assessment for site 658063.

Date	14.08.2012	11.08.2015	18.03.2020	25.09.2023
E Spp.	<i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Avicennia marina</i> subsp. <i>australasica</i>
T1 Spp.				
T1 Med Canopy Height	5	5.5	5.5	6
T1 Range low	5	5	5	5.5
T1 Range High	6	6	6	6
T1 Crown Cover	5	5	5	5
T1 Stem Count	1	1	1	1
T2 Spp.				
T2 Med Canopy Height				
T2 Range low				
T2 Range high				
T2 Crown Cover				
T2 stem count				
S1 Spp.	<i>Ceriops australis</i> ; <i>Bruguiera gymnorhiza</i>	<i>Ceriops australis</i> ; <i>Bruguiera gymnorhiza</i> ; <i>Dead tree</i>	<i>Ceriops australis</i> ; <i>Bruguiera gymnorhiza</i> ; <i>Dead tree</i>	<i>Ceriops australis</i> ; <i>Bruguiera gymnorhiza</i> ; <i>Dead tree</i>
S1 Med Canopy Height	2.5	2.5	2.5	2.5
S1 Range low	2	2	2	2

S1 Range high	3	3	3	3.5
S1 Crown Cover	85	85	86	92
S1 stem count	88	78; +; 9	78; +; 9	73;1;12
S2 Spp.	<i>Aegiceras corniculatum</i> ; <i>Rhizophora stylosa</i> ; <i>Excoecaria agallocha</i>	<i>Aegiceras corniculatum</i> ; <i>Rhizophora stylosa</i> ; <i>Excoecaria agallocha</i>	<i>Aegiceras corniculatum</i> ; <i>Rhizophora stylosa</i> ; <i>Excoecaria agallocha</i>	<i>Aegiceras corniculatum</i> ; <i>Rhizophora stylosa</i> ;
S2 Med Canopy Height	1.2	1.3	1.3	1.3
S2 Range low	1	1	1	1
S2 Range high	1.5	1.5	1.5	1.5
S2 Crown Cover	3	3	3	3
S2 stem count	2; 1; +	2; 1; +	2; 1; +	2; 1
G Spp.				
G Med Canopy Height				
G Range low				
G Range high				
G Cover				
Individual Covers				

Summary

1. Emergent layer of *Avicennia marina* subsp. *australasica*, S1 with *Ceriops australis*; *Bruguiera gymnorhiza* and over the years some dead trees; S2 layer with *Aegiceras corniculatum*; *Rhizophora stylosa*; *Excoecaria agallocha* and no ground cover recorded
2. E1 trees have increased (0.5m) in height; S1 and S2 are mainly stable.
3. Mean tree heights and mean DBH have increase slightly over the years. Densities have doubled over the years leading to an increase of about 11%% in above ground biomass in the site.
4. Fluctuation (from 1.8% in 2012, 0.9% in 2015 to 0.7% in 2020) of the proportion of dead biomass within the site.
5. Pneumatophore mean height has increased while girth has decreased and an overall reduction in density.
6. No seedlings have been recorded over the years.
7. No level is taken in this site.
8. The original site location from 1997 has eroded and is now in the sea. Therefore, this site was re-established about 50m from the original site on the 14.08.2021. Over the last 13 years the western side of the island is eroding, and the site is currently almost on the edge of the water. In five years, when this site is revisited, its location may need to be shifted again.



Figure 4. Photograph of Site 658063 *Ceriops australis* community type 1D(i) Closed Shrubland.