

Indooroopilly Golf Club Natural History - Version 2

Introduction to the Trees

Version 2 of our Natural History includes a much greater number of trees observed up to February 2021. We now have a list of 203 species, of which 9 are Conifers and the balance are Flowering Trees. The Palms are excluded from this group, as they are described with the Cycads and other Tropical species in a separate group.

A very long list of trees is very challenging for most of us to comprehend or to find a particular species. Therefore we have divided the list into **five historical periods**, each of which reflects the years when they first occurred naturally or were planted at IGC. The three later periods correspond to discrete stages in the development of our golf facility, based on their locations in the landscape and their estimated size and/or age.

Considering the trees in this way gives us an understanding of how the landscape has developed over time. Links are also provided from the common names in each separate period list, to photographic images, for most of the trees.

Many of our trees also have spectacular flowering periods that help to define our unique landscape character. We have chosen 62 of the most prominent trees to include in the **Flowering Calendar**, where we show the flowering months and colours for each.

The Ancient Trees

The earliest historical period is that of the **Ancient Trees**, represented by eighteen mature species that pre-date 1964, when IGC took over the site and commenced planning for golf. These include three very old cultural species (Bunya Pine, Camphor Laurel and Mango) and the remaining fifteen are all locally native species. **Figure 1** below illustrates one of our most prominent Ancient Trees.



Figure 1 Ancient Moreton Bay Fig - an iconic specimen behind the Blue 1 green.

There are three major types (Regional Ecosystems) of pre-clearing vegetation at IGC: (1) the Tidal Forest with mangroves and saltmarsh species (RE 12.1.3); (2) the Open Forests of the Riparian Zone and Floodplains (RE 12.3.3); and (3) the Open Forests on the slopes and low hills above the flood zone (RE 12.11.5).

While the mangroves have existed in tidal areas for millions of years, due to the environmental conditions and periodic flooding, there are no ancient trees observed here and the ancient trees are restricted to the Open Forests above the tidal influence. The mangroves are discussed below in the section on Brisbane River Trees.

A Note on Terminology Queensland scientists use a system of pre-clearing vegetation classification based on what are termed **(Bio)Regional Ecosystems** - described by three numbers. The first number refers to the location of the Bioregion within Queensland. For us, this is **Bioregion 12 - Southeast Queensland**. The second number refers to the **Land Zone**, basically the physical nature of the site including underlying geology, soils and topography. The third number describes the **dominant vegetation type** by the tallest stratum - for example, trees in forests. This is the system used in the below discussion.

The Ancient Native Trees in the Riparian Zone and Floodplains include the Black She-oak, Brush Ironbark, Deciduous Fig, Gum-topped Box, Queensland Blue Gum, and White fig.

Those on the slopes and low hills above the floodplain include the Brushbox, Grey Gum, Moreton Bay Fig, Narrow-leaved Ironbark, Red Kamala, Small-leaved Fig, Spotted Gum, Tallowwood and White Mahogany. All of these are illustrated by photographs linked from their common names in the list.

The Brisbane River Trees

The eleven species of **Brisbane River Trees** make up the second historical period, based on our observations of remnant mangrove and adjacent riparian vegetation as well as historical reports. We can also observe the same species growing along the riverbank on nearby sites, including the Meiers Road reserve, St Lucia Golf Course, University of Queensland and State Government properties.

IGC has nearly a three-kilometre-long magnificent frontage to the Brisbane River. We adjoin the Thomas Park Bougainvillea Gardens on the upstream side and the Sir John Chandler Park at the downstream boundary. Our frontage is partly adjacent to the Indooroopilly Island Conservation Park, a habitat for one of Brisbane's largest Flying Fox colonies.

The banks of the Brisbane River are subject to the erosive impacts of flooding (such as 1974 and 2011) and on-going erosion by the wash from leisure craft, particularly during high tides. The presence of mangroves in the area between mean sea level and mean high water springs serves to stabilise and protect the banks from such impacts. Trees include the dominant Grey Mangrove, common River Mangrove, occasional Milky Mangrove and rarely, the Red Mangrove.

There are also some uncommon species of low-growing salt marsh plants above the mean high-tide level. Above highest astronomical tide (the highest tides experienced annually), the vegetation changes to terrestrial species.

The seven riparian terrestrial species include the Black Tea-tree, Broad-leaved Apple, Brush Ironbark, Cottonwood, Macaranga, Queensland Blue Gum and Soapwood. This group includes some trees dating to pre-1964, but also many younger specimens (see **Figure 2** below), that reflect the continuing regeneration of vegetation along the River.



Figure 2 A view of IGC illustrating the tidal and riparian Trees along the riverbank in the foreground and hoop pines in the background.

There is a further group of species, understood to frequently occur in a riparian habitat, that have been planted elsewhere on the site. These do not currently grow along the riverbanks at IGC, but are included in a supplementary list, as they will be valuable for planting in any future riparian rehabilitation project.

The Arboretum Period Trees

The third historical period, dubbed the **Arboretum Period Trees**, is named after the Arboretum Committee formed at the time (Wendy Eckert, pers. com.). This period comprises the earliest (1964 -1976) tree plantings by IGC staff and volunteers. These were installed to help better define the fairway doglegs and to protect golfers from stray balls on Al Howard's 18-hole course! An air photo dated December 1976, mounted on a wall in the Men's Locker Room and partly (cropped) included below as **Figure 3**, gives a good indication of the extent of this tree planting.



Figure 3 A 1976 vertical air photo of the Long Pocket Golf Course, showing early tree planting by volunteers.

The Arboretum Period trees include the largest surviving specimens from a cohort of species, some of which were suggested and donated by the Brisbane City Council. Many of them are unique to this period and have not been subsequently planted. These include Belah, Brown Pine, Bribie Island Pine (see **Figure 4** below) and Firewheel Tree.



Figure 4 A group of Arboretum Period trees on RHS Red 8, including the iconic Bribie Island Pines.

They contribute significantly to our landscape character. Others of them continued to be planted across the site during later times, especially the very tall Kauri and Hoop Pines (see **Figure 5** below).



Figure 5 A majestic avenue of **Arboretum Period** Hoop Pines along the RHS of Blue 6 fairway.

The Landscape Period Trees

Our fourth period, called the **Landscape Period**, began with trees planted during the construction of the second 18-hole course designed by Bob Green (from 1976) and continued during the establishment of the new Ross Watson layout (from 1983-1999). This extensive period of planting resulted in the completion of the existing landscape with four 9-hole loops, centred by the (then) new clubhouse. An undated oblique air photo, donated by Keith Jefferies, is also mounted on a wall in the men's locker room, partly (cropped) included below as **Figure 6**. This photo shows clearly how the early trees have grown and the further plantings made since the Arboretum Period.

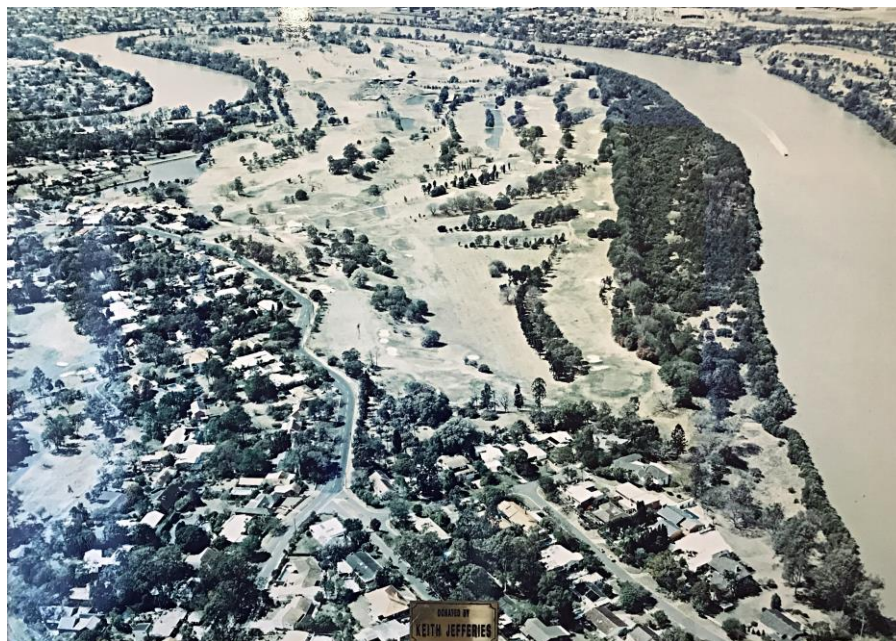


Figure 6 Undated oblique air photo after completion of new clubhouse, showing growth of early plantings and new 36-hole layout.

Many of the iconic species such as Poinciana and Jacaranda were established during this Landscape Period (see **Figure 7** below), that has established the character of our Club.



Figure 7 The iconic Poinciana trees that line the entry road and frame the Poinciana Bar & Restaurant.

The New Millennium Period Trees

The fifth and final period, bringing us up to the present day, is that comprising the **New Millennium Period Trees**. This period includes substantial tree planting (2000-2020) around Ross Watson's design changes to the Red and Gold loops.

Both in-fill and extension planting to the landscape were carried out over the past two decades, many of which were organised and undertaken by Mrs Joan Wilkinson (IGC member) in consultation with Superintendent Charlie Giffard. These trees are actively growing now towards their mature heights and will help to define our landscape in the foreseeable future (see **Figure 8** below).



Figure 8 A panoramic view of Red 5 and 6 from the Red 6 tee-block, showing the New Millennium tree plantings adjacent to the pond on the RHS of Red 6, defining the fairway edge, contrasting with the mature Arboretum Period trees lining the RHS of Red 5 fairway.

During this period, and especially between 2010-2018, more than 100 new tree species were introduced to the site. Their relatively young age means many of them are not yet obvious in the landscape, but will continue to develop and define the character of our future golf courses.

The Flowering Tree Calendar

As stated above, there are 62 different trees included in the **Flowering Tree Calendar**, based on three years' observations. Most of these flowering trees are visually prominent to golfers and help to define our landscape character, lending masses of colour throughout the year.

A table with the months of flowering for each species is provided along with an indication to which Tree Period each of them belongs. Linked images of the trees and their flowers are now provided in the Period lists arranged by common names.

For those who prefer, **Appendix I** includes a master list of flora species/cultivars, arranged alphabetically by botanical name.