



Two greens used in each hole, 1 summer, 1 winter and originally of different grasses



A mowing challenge, to say the least

# Turning Japanese: Part 2

Laurence Pithie MG continues his insight into managing golf courses in Japan.

Following the 'bubble burst' in 1991/92, a number of foreign banks stepped into buying the assets and then forming golf management companies during the late 90s. Most courses in Japan are proprietary owned and only a handful remain as original private equity clubs. Two banks or investment companies in particular, currently own or operate around 200 courses, spread throughout the length of Japan. There are many smaller groups although the majority are of single ownership. Today, the majority are operationally sound, but cannot repay the debt, at least in the short term. It is a few of the golf courses operated by the management companies Pacific Golf Management (PGM) and Accordia Golf, that I had the opportunity and pleasure of visiting. Both companies have extensive office facilities in Tokyo, the former occupying the 33rd floor of Atago Green Hills Tower with magnificent views over the city. Just recently, PGM were floated on the Japanese Stock Market and their market value exceeded 'city' expectations as they continue to expand.

Most of Japan's courses are situated in central and western Honshu. Although the soil type varies, the main types are clay, shale and basaltic rock. Rainfall is plentiful and Japan has an abundance of fresh water, thanks also to its lakes and rivers. Drinking water is also of good quality. Irrigation is generally only a three month requirement from July to September, but recent summers have been hot and dry. The typhoon season with tropical storms is a late summer, early fall occurrence and considerable damage can occur. One course in Hokkaido lost 4,000 trees last year during one such storm.

Grass type is mainly the native Zoysia, a warm season grass that is the dominant species throughout most of Japan. Bermuda Grass is favoured in the more sub-tropical Okinawa, whereas Kentucky Blue (Smooth Stalk Meadow Grass) is grown in Hokkaido to the north, as the desired cool season grass. Virtually all courses now have bent grass greens - Penncross being by far the most prominent. Hollow coring is usually carried out once or twice per year and top dressing is carried out every few weeks except after the coring operation - this is largely for thatch control and to ensure ample root development. The two main types of Zoysia are the finer leaved Korai, used on tees, collars and fairways and the broader leaved Noshiha, used in the semi-roughs and surrounds, which is slightly more cold, tolerant. Zoysia is less aggressive than Bermuda and requires less nutrient and water. It has a lignin content within the leaf structure, therefore sharpness of cylinder reels is essential for maintaining a clean cut. Semi-roughs are mown at 35 to 40 mm and there are no deep rough areas, only woodland, bamboo and other forms of vegetation.

The topography of many Japanese courses is extremely undulating and mowing steep banks and slopes is a considerable challenge. Far more areas are mown in Japan than would be tolerated in the UK regarding Risk Assessment and safety. A ride-on rotary mower with a very low centre of gravity and produced in Japan called a Baroness GM1600, is an essential item of equipment on many courses. Having seen some of the slopes and banks regularly mown, the word 'kamikaze' springs to mind.



LP & some greenkeeping staff, finishing their shift at 4pm on a Saturday

The growing season is six months long, mainly May to October. For the remainder of the year, Zoysia lies dormant and the Bent has minimal growth. The high temperature and humidity during late summer is the stress period for both turf and the Course Manager known as the Greenkeeper or Keeper, pronounced 'kee-pah'. Fairways are mown on alternate days and semi-rough about every four days during peak season. Low grade agricultural fertiliser is locally produced and readily available in Japan and it is widely used on fairways, surrounds and roughs on the older courses. Newer courses and these operated by PGM and Accordia tend to favour the coated or controlled release products that are mainly imported from the USA. A mix of granular and foliar feed products are used on the greens, similar to that in Europe.

Chemicals are mostly produced in Japan with pre-emergent control of weeds being probably the chief requirement. Bugs such as beetles, cutworms and to a lesser degree mole crickets all require varying degrees of control. Fungal diseases such as Brown Patch, Pythium, Dollar Spot and Anthracnose are the most common but all can be controlled with the appropriate pesticide. A particular problem is the Pine Tree Nematode, which leads to the death of these trees. This is becoming more of a problem on many courses since mono stands of pine trees on golf courses are fairly common.

Top dressings are generally sand only and most of this is available in Japan although not always of high quality. Some is imported from China in barges but the cost can be quite high. In general, costs are much the same as in the UK in spite of transportation problems to many parts of the country.

Staffing levels are higher than in the UK but lower than pre 1992. A typical 18-hole course will have around 12 to 14 full time staff plus a couple of part time workers, often women to help with the mowing and general landscaping work. Prior to the downturn, it would not be uncommon for clubs to employ over 20 full time staff per course. Salary levels are similar to those in the UK although living costs are higher. As a result there is a shortage of labour since there is considerable competition from manufacturing, commerce and other areas of the service industry, all with greater financial rewards. Most, if not all staff, are salaried although one of the management companies had introduced hourly paid staff. There is no formal turfgrass education in Japan, other than that provided by the vendors or occasionally held seminars. Few have attended college in the US and there is only a limited sharing of knowledge and information. Agronomic skills are in short supply and there are no Greenkeepers Associations. Only a handful of outsiders or 'Gaijins' are employed, usually either American or Australian since language is a major challenge.

Overall, budget costs are much higher than in the UK and generally vary from £350,000 to £475,000 for labour and operational costs. This of course is a reduction on pre-1992 costs!

The maintenance buildings and compounds I visited were quite generous in size albeit getting old, but that would tie-in with the down-turn in 1992 and the limited investment since then. Equipment also tended to be old but in recent years the level of new equipment mirrored the growth in golf and the overcoming of past debt problems. Both Toro and Jacobsen have a significant presence in Japan although there was a lot of ride-on equipment and trucks that were produced locally. Environmental considerations were generally some years behind that of the UK and Europe and legislation tended to follow that of the US but many years later. A common sight was the amount of trash and junk lying around the compounds or drives and there seemed little control on the storage of fuel. With regards to irrigation, Rainbird and Toro appeared to have cornered the market.

Some of the stranger aspects of Japanese courses include the use of two greens. This dates back to the earlier days when summer greens were composed of Korai and winter greens of Bent. Both greens would be of equal size, about 350 sq m and each with standard bunkering. Since the knowledge of maintaining Bent grass greens through the hot and humid summers improved, there was no need for this practice to continue. All newer courses have one green as normal. Another peculiar aspect is that some courses have lights mounted on 40 foot high poles, thus allowing play to continue on the closing holes during darkness. Moving daylight hours as in Europe may be a cheaper option but this is Japan. Another course visited had a magnetic cart track whereby the golf cart could be remotely controlled. It was a strange sight to see a small cart with four bags of clubs being controlled by a female caddy holding a remote control unit some 20 meters away. All the caddies were also covered up from head to toe to prevent the risk of sunburn. Their job was also to repair divot marks and hand out and clean clubs to each of the four players during the round. Playing 18 holes at a private club is also different in Japan. It is



Excessive and steep faced bunkering with labour and cost implications

quite common to play nine holes then come in for lunch before tackling the back nine, although early bird and twilight play is on the increase with uninterrupted stops. At many of the more private clubs, a shower then communal bath would be the norm before ending the day with dinner and sake.



Light tower on a closing hole to guide the golfers home

Any significant new constructions such as additional holes or a cart barn for example, would require the land to be blessed by two Shinto priests in an hour long ceremony. Sake would be poured over piles of sand placed on each corner of the site to be constructed and representatives of the contractors and clients would attend this ritual. Japan after all is a mix of commercialism and spiritualism.

The main challenges facing the Greenkeepers in Japan, are probably managing the Bent Grass greens through the summer stress period. Mowing can be a challenge on some courses but a common problem appeared to be with tree management. There appeared to be too many closely planted pine trees that restricted air movement and caused various shade problems. Spending around 15k on this and landscaping work around the clubhouses was common on the courses visited. The Japanese have a love of trees and most courses I visited had a mix of flowering cherries, red acers and the

inevitable azaleas, which are a native species. Like many US designed courses, bunker maintenance and upkeep was another considerable challenge and would certainly require a large labour input to maintain sand on some steep bunker faces. Within the golf industry there is a resistance to change and productivity levels are probably lower than those in the UK. Honouring traditions and employment loyalty have mixed benefits and overall there is probably a suspicion of change. Japan was a country closed off to the rest of the world during the Shogun empire for over 250 years. In summary, the courses I visited were of a standard between those in the UK and in the US albeit, with at least double the staffing levels and budgets to match. However, the costs of most products are somewhat higher and with many being imported.

It is a fascinating country to visit and the hospitality that my wife and I received throughout our visit was second to none. Golf is played worldwide and it is interesting to see how others manage their golf courses and overcome the challenges faced. My visit to eight courses and these subsequent articles would not be possible without the assistance of Mike Heacock, Simon Doyle and Scott Kusumoto. Their help and information was greatly appreciated. Sayo-nara.