

Parkland tree conservation in the 21st century. Westonbirt Arboretum and potential schemes in Kagoshima.

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With more leisure time available to enjoy, and people of all ages displaying a greater interest in tree conservation issues in recent times, an increase in the number of parks set aside for recreational and conservational uses has come about. As the general public has been more vocal about supporting such places, those in power both in Japan and Britain have sought to invest in these sites. With global warming also becoming a highly political issue, the need for an increased greening of urban environments, as well as greater protection for established parks in more rural settings has been seized upon by political parties in both countries as a way of securing votes. The tree as provider of shade and means of reducing pollution in the city is well documented in places like London with its famous plane trees lining the streets. In Japan, 'green belts' of tree lined strips of park next to important carriageways have been preserved despite the demand for more building space in land hungry urban environments such as Tokyo and Osaka. These large metropolises, as well as many smaller communities in Japan and England, have sought to expand their green credentials as focus on the positive ecological aspects of tree conservation has caught the public imagination more and more this century.

Sites such as botanical gardens, stately home parklands, and accessible forest recreation parks have become increasingly popular as tourist destinations. This is certainly the case in regional England where arboretums are seeing a rise in visitor numbers. In Japan too, in peripheral cities such as

Kagoshima in Southern Kyushu, the number of visitors to heavily wooded recreational parklands is increasing.

In both countries the focus of developing planned sites as conservation areas has a long history as this paper will briefly outline. In recent times, there has been a conscious effort to expand the roles of some of these sites. A greater understanding of conservation issues through education programmes has been sought, while at the same time developing the sites as tourist attractions. This has been achieved, particularly in England, through a wide variety of popular events throughout the calendar year with the benefit of greater revenue for the parks which in turn is used to further enhance the parklands and secure their long term viability for future generations to appreciate. This short introductory paper will look in particular how England's national arboretum at Westonbirt in Gloucestershire is pursuing these aims, and how similar programmes might be suitable for parklands in Kagoshima Prefecture in order to increase local tourism and assure tree conservation issues develop an even higher profile as the 21st century progresses.

A Brief History of Parklands in England and Japan

An arboretum is a place where woody plants are cultivated for a number of specific purposes including, educational, recreational and scientific aspects. The term first came to light in the public domain in England in a copy of 'The Gardener's' magazine in 1833. It is possible to trace the early history of many arboreta in England back to the middle of the nineteenth century when a number of altruistic businessmen and landowners set out to develop parkland that would be of value to the general public. Although the eighteenth century had seen many great landscape artists such as Humphrey Repton creating private park and pleasure grounds, it wasn't

until the middle of the nineteenth century that a conscious effort to design green public spaces came about. By the late 1830s there were a number of men like Joseph Strutt of Derby who were keen to give the general public a free 'pleasure ground'. His ideas, which included providing land where all people could take exercise, breathe in fresh air and be instructed educationally in aspects of nature, were at the time cutting edge. Derby Arboretum, given to the local populace in 1840, pre-dates most others. Joseph Strutt had originally intended to create a botanical garden, with many of the exhibits in huge greenhouses which needed to be heated. However, the running costs would have been prohibitive and he was persuaded after seeking advice from John Loudon, later author of 'Arboretum Britannicum', that he should instead create an arboretum with the emphasis on 'pleasure grounds and public walks.' The park was to include trees and shrubs from around the world, labeled in order to educate the public.

It was at this time that Westonbirt, situated in rural Gloucestershire and now the national arboretum in England was undergoing its tentative beginnings. Robert Stayner Holford (1808-1892) had taken over the Westonbirt estate from his father and was to become the original creator of the arboretum. He was especially interested in the aesthetics of the place rather than the science involved in its creation, and in the 1840s he 'cut' four rides through the woods on his estate to enable access on horseback. By the next decade he had decided upon a major landscaping scheme and individual tree planting was underway. In 1860, a large area of the present arboretum was finally completed with a great number of native and non-native specimens. Twenty years on from then, under the watchful eye of his son George Holford, who had taken over the running of the estate, the family at Westonbirt could finally describe the whole project as 'nearing completion'. Its heyday as a privately owned arboretum would have been in the last part

of the nineteenth and early part of the twentieth centuries. However, as the Holford family fortunes dwindled and the line died out, the plight of the arboretum mirrored the family's decline. Through the World Wars, a lack of money to provide for its upkeep meant the arboretum gradually fell into a fairly dilapidated state. By 1956, the new owner of the estate had had enough and was more than happy to pass on the 240 hectare site to the Forestry Commission. This watershed moment would herald a new lease of life for the arboretum.

The Forestry Commission officials were anxious to acquire Westonbirt and its fine collection of trees as a place for research and education. The original idea of a landscaped park designed for visual pleasure was still vitally important, but the additional emphasis on scientific research and public education meant the arboretum entered a new phase of its life. In this sense it became a modern park where the wonderful collection of trees, one of the most important in the world, could be used as 'a place to relax and recharge. A place to learn and a resource for science', the modern goals of the Forestry Commission merging seamlessly with the ideas outlined by Joseph Strutt over a hundred years earlier in his hopes for the first arboretum in England at Derby.

Today there are over 3000 types of trees in the collection with native species like oak, beech and cherry vying for attention with popular non-native varieties such as magnolia and maple. Since first opening its doors to the paying public in 1961, the arboretum has developed along many lines. By 1982, a collection of Japanese maples had been planted and over the years this section has grown in popularity, helping to increase visitor numbers year on year. Today thousands of visitors come to relax and learn in the surroundings and there seems to be continued efforts made by those in charge to further develop the park in terms of its popularity as a genuine

tourist attraction, based of course around the continued efforts to ensure tree conservation so that future generations will still be able to enjoy all aspects of the arboretum's appeal.

There is plenty of tradition behind many parks and gardens in Japan too. Numerous temples, shrines and castles had ornamental gardens laid out from early times, but perhaps the first true botanical garden as such was the medicinal garden Miyakuen created in 1638, and moved to its present position in Edo (Modern day Tokyo) in 1684. This was an exception however, and it was not until the Meiji era that most of today's well-known botanical gardens were laid out. Thanks in the main to generous subsidies from the Ministry of Construction and the Ministry of Agriculture, many were also built from the 1960s onwards by local municipalities during the economic boom years in post war Japan. There are now 137 institutions belonging to the Association of Japanese Botanical Gardens (AJBG) and it is thanks to their efforts that tree and plant conservation continues to be well supported across the country.

Despite these efforts however, almost a quarter of their species are heavily threatened and of 7,000 species, over 500 remain critically endangered (Miura 2002) . One way in which tree species can be further protected is through the development of more "experimental forests". These projects are often linked to botanical gardens, but provide larger tracts of forest where research and education can take place. One such example is the Takakuma Experimental Forest in Kagoshima which is run under the auspices of Kagoshima University in connection with the Ibusuki Experimental Botanical Gardens site at a location in the south west of the prefecture. Its 3400 hectare site includes research and education facilities for students of all ages, and annual activities are staged here throughout the year to help bring children into closer contact with forests and educate them

on the value of trees. While as Zorn points out

"A shift in the importance of forest functions from the original function of wood production to the increasingly important environmental, recreational and protection functions has been seen" (199:47) , it is only the first step and true tree protection parklands such as arboreta are still relatively rare in the public domain in Japan as a whole. One of the only really true arboreta to be built in the 20th century was the Kobe Municipal Arboretum, first laid out in 1940. Known in Japanese as the Shinrin Shokubutsuen (森林植物園) it covers an area of 142 hectares and contains over 1200 kinds of trees and shrubs.

Future development at Westonbirt and possible applications for parklands in Kagoshima.

Since the early 1980s in particular, a number of schemes have been set up at Westonbirt in order to increase visitor numbers while at the same time ensuring the education based goals of the arboretum are maintained. With a specialized education department opening up in 1982, larger events were organized to give learning based opportunities to the general public throughout the calendar year. Based around the seasons and with thought to the aesthetic element, two of the most successful events in recent years have been the 'Festival of the Tree' in August, and the 'Illuminated Trail' in December.



(Treefest 2011 at Westonbirt Arboretum)

The 'Festival of the Tree' which changed name in 2011 to 'Treefest' is an event designed for all ages, but caters strongly for families, staged as it is during the school summer holidays in late august. It runs for 3 days and includes events such as tree trail demonstrations, craft making and traditional woodworking skills, as well as hands on learning sessions and guided walks. Families are also able to use camping facilities within the attractive grounds of the arboretum, and there is live music and poetry during the evenings in the setting of the woods. This event which continues to grow and diversify each year seems to be very popular and obviously takes into account the format of more traditional summer music festivals which have a strong legacy in Britain. By combining elements of the traditional music festival (camping, music and art related events) along with the key elements of the arboretum itself (trees, nature talks, guided walks and wood related skills) the organizers of Treefest seem to have created an event that will both stimulate learning and aesthetic appreciation of the woodland environment for a new generation.

The 'Illuminated Trail' events run through the xmas season at Westonbirt and provide access to the tree trails at a time of year that otherwise would not normally attract a large number of visitors due to inclement weather and the shorter winter daylight hours. Over 1000 spotlights illuminate trails along which the visitors can see some of the tallest, oldest and rarest trees in Britain. This is part of the 'Old Arboretum' and includes the first trees planted in 1829 by Robert Holford. With many types of food stalls and festive activities to attract visitors, the illuminated trail idea has been a big success in recent years, bringing in extra revenue and helping to consolidate the year round calendar of events at the arboretum.



(Illuminated trail at Westonbirt Arboretum)

In terms of these ideas being transferable to a Japanese setting, particularly in Kagoshima, there do not seem to be too many insurmountable obstacles. Kagoshima Prefecture already has a number of sites that could feasibly hold similar events, both in semi-urban and rural environments. Within Kagoshima City, Kenkounomori, the public parkland for health and recreation is well designed for either a festival type event or illuminated night viewing within some of the more easily accessible areas. The park contains several open spaces where camping is possible in limited numbers,

a pre-requisite for the first type of festival, and with a strong tradition of evening based events in Japan such as summer festivals and illuminated concerts in temple grounds, it seems likely that an illuminated forest event would draw large crowds.

Kenkounomori park also has a fine array of native tree species around which events connected to wood based crafts could be organized. There are already a number of small wood craft fairs taking place in the city annually, especially in late autumn and the spring, when the temperature is more ideally suited to outdoor daytime activities than the scorching hot summer months. With a little imagination already existing small fairs could be combined and moved to a more appropriate parkland setting. If guided walks, craft demonstrations and lectures were included, an annual tree festival akin to that held at Westonbirt might help to increase understanding of the natural environment and spread the message of the importance of tree conservation. The goal of getting this message across, which is not always easy in urban environments such as Kagoshima, would be well worth pursuing.

One more possible site for an illuminated trail would be the very popular Shiroyama park site in central Kagoshima City. With its majestic old trees and its deep historical significance, physically it would be a very atmospheric place for such a concept. Its easily accessible location would again surely entice many visitors. Other possible sites in more rural parts of Kagoshima might include the botanical gardens or flower park in Ibusuki or one of the easily accessible forest areas close to Kirishima. However, perhaps the most obvious choice would be the island of Yakushima.

With its World Heritage status and the current implementation of four separate nature protection systems in place, it seems like the ideal venue to host annual events based around tree conservation that could combine

educational programmes with other activities appealing to visitors wanting to spend a short time in the awe inspiring surroundings of the great cedar forests. Yakushima already boasts some excellent learning facilities such as the Yakushima Environmental Culture Village in the port town of Miyanoura, and the ideally located Yakushima Museum just outside of the small town of Anbo, on the route up to the great cedar forests. There are also a number of sites that could cater for camping, craft based activities and music. Expert local craftsmen in many aspects of woodworking are renowned, and conservation experts from those at university institutions to locals with lifetimes of specific woodland understanding could be easily contacted to give informal learning sessions. In the past, Yakushima has provided guided walks and educational programmes initiated by various government and non-government sponsored groups. They have promoted large scale events such as the Kagoshima International Conference on World Natural Heritage, so the infrastructure needed to organize annual festivals with tree conservation as their main underlying theme is already in place to a large extent.

Westonbirt, with over 400,000 visitors a year and annually improving figures for its specialized events in particular has been helped in its success in no small measure by the work of its volunteer group FOWA (Friends of Westonbirt Arboretum) . This charity which was set up in 1985 to support the work done by the Forestry Commission now has a membership of over 20,000. In recent years they have implemented plans to build a new education facility on the site, equipped with classrooms and lecture halls, as well as storage facilities for essential equipment needed in the upkeep of the arboretum. They have also raised money for aesthetically pleasing cafe facilities which have had an important bearing on increased visitor numbers. Other future developments such as canopy walkways and tree top trails

seem designed to offer greater opportunities to create a stimulating learning environment within the trees themselves. All these ideas could enhance any of Kagoshima's present parklands and help create a more diverse and exciting tree conservation experience for the prospective visitor.

Recent research has been undertaken by the Centre for Leisure, Tourism and Society at the University of the West of England in Bristol and concerns the economic contribution of Westonbirt Arboretum to the local area. Given its close proximity to the popular Cotswolds region, Westonbirt is ideally located. Data analysis by the team of researchers revealed that Westonbirt contributes around 23 million pounds to the local area per annum with over 8 million coming from tourists and 7 million from local day visitors. More significant though perhaps was the fact that the team revealed areas of under-developed connections with local businesses, community groups and organizations which potentially could help greater sustained development of the arboretum into the future. Such research shows how academic studies can help groups running parklands to understand more clearly the potential of the sites they are overseeing. There are opportunities for similar studies in Kagoshima, particularly with the experience that the local Kagoshima University can offer through its work in its experimental forest sites such as Takakuma and Ibusuki Botanical Gardens. Greater co-operation between academic and local government institutions could help parks like Kenkounomori attract even larger numbers of visitors through furthering understanding of how to plan sustainable and exciting tree conservation events to entice the general public.

Conclusion

It seems appropriate that in 2011, which is "International Year of Forests" with numerous events and conferences being staged around the

globe, that the future direction of local parklands should also be a discussion topic. More and more cities around the world are realizing the benefits of having recreational parks and educationally instructive gardens that attract visitors, both local and from further afield. The local government in the city of London points out how "trees, along with planting and open spaces are considered to be of particular importance to the visual quality, amenity and wildlife of such a densely developed area as the city"(www.treesforcities.org). As a result, there are specific powers available to the authorities to protect trees. This basic standpoint of tree conservation has led to a variety of groups coming together to further this cause. One such group in London is "Trees for Cities" which started in 1993 when a group of young Londoners realized the necessity of acting to increase the number of trees in the city. Similar ideas have passed around the world, mirrored in groups like "Releaf" in California where there is a realization that trees help neighbourhoods by providing places to play, providing cooling shade, rekindling neighbourhood pride and even raising property values.

This short paper has shown how in both urban and rural settings parklands remain attractive environments for people to visit. By remaining true to the original core values of those 19th century men who implemented parklands as sites of learning and aesthetic beauty, groups in this century can further develop the green sites they have inherited and implement a range of events that will attract the general public, increasing revenue and ensure the upkeep and continual upgrading of these vital parklands for future generations. Westonbirt Arboretum has over the past 30 years in particular been at the forefront of this push towards creating innovative woodland-based events that help promote understanding about tree conservation, and in places like Kagoshima, with its immense natural resources in terms of accessible parks and gardens, further development

along similar lines as Westonbirt could create wonderful opportunities for increased interest in natural parklands as well as helping to expand tourism with all the economic benefits that entails.

Bibliography

Websites

<http://www.forestry.gov.uk/westonbirt>

http://www.bne.uwe.ac.uk/celts/project_westonbirt.asp

<http://www.treesforcities.org>

Articles

Miura, Kanenori 2002 *Japanese Botanical Gardens and their contribution to tree conservation* BGC News Online Volume 3 Number 8 June.

Tokumura, Hisae 2003 *Nature Conservation on Yakushima Island: Kagoshima's Prefecture's Efforts* Nature Conservation Division Kagoshima Prefectural Government. pp. 103-110

Zorn, Tobias 1999 *A Forest Political Study on protection forests of Germany, Austria and Japan* Hokkaido University Journal of Faculty of Agriculture 69 (2) 47-128.