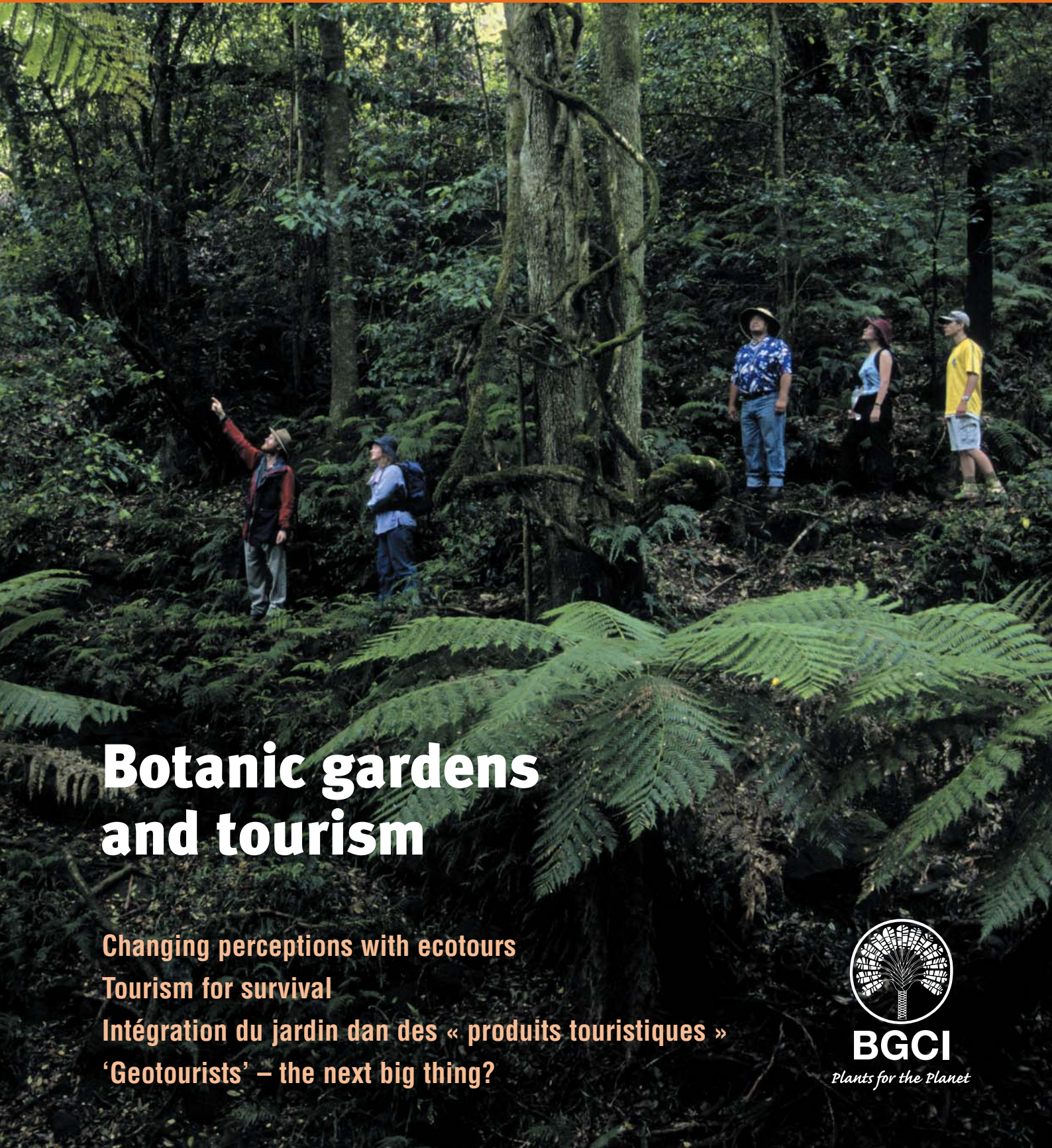


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roots

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April 2004



Botanic gardens and tourism

Changing perceptions with ecotours

Tourism for survival

Intégration du jardin dan des « produits touristiques »

'Geotourists' – the next big thing?



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Forthcoming Issues

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Botanic Gardens and Zoos – Synergies for the Future.
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Tourism in botanic gardens

An environmental and economic necessity



Above: Children visiting Wuhan Botanical Garden (Photo: Bian Tan, BGCI)

Editorial - English

Welcome to the new look *Roots*. Regular readers will no doubt notice that the education news section is missing. It's not an oversight on our part; education news will now be carried in *Cuttings*, BGCI's new quarterly publication. Communication, education and public awareness lie at the heart of the Global Strategy for Plant Conservation and botanic gardens have a pivotal role in this process. Through *Roots* we aim to enhance the ability of educators to implement the Strategy through sharing first class knowledge and experience about plant-based education.

In this issue of *Roots* we turn the spotlight on tourism in botanic gardens. As Professor Benfield

Editorial - Français

Bienvenue à la nouvelle version de *Roots*. Nos lecteurs vont sans aucun doute remarquer qu'il manque la section des Nouvelles sur l'éducation dans les jardins botaniques. Ce n'est pas une omission de notre part, les Nouvelles sur l'éducation seront désormais éditées dans *Cuttings*, une nouvelle publication trimestrielle du BGCI. La communication, l'éducation, et la prise de conscience du public sont au cœur de la Stratégie Globale pour la Protection et la Conservation des Plantes, et les jardins botaniques ont un rôle pivot dans ce processus. *ROOTS* garde pour objectif d'aider les éducateurs à mettre en œuvre cette Stratégie à travers le partage des connaissances et des expériences de première classe relatives à l'éducation sur le végétal.

Dans ce numéro de *Roots*, le focus est mis sur le tourisme dans les jardins botaniques. Comme le professeur Benfield le souligne dans son article, « le tourisme est la plus grosse industrie du monde, avec plus de 700 millions de touristes internationaux en 2002 » - ce chiffre ne comprend pas les touristes nationaux. Les jardins botaniques, avec leurs sites magnifiques et leurs ressources uniques sont d'excellentes attractions touristiques. La plupart des gens partent en vacances pour se détendre et prendre l'air. Y a-t-il de meilleurs endroits que les jardins botaniques pour cela ? Néanmoins, attirer les

Editorial - Español

Bienvenidos a la nueva imagen de *Roots*. Los lectores habituales percibirán que la sección de noticias de educación ha desaparecido. No es un olvido; estas noticias se leerán en *Cuttings*, la nueva publicación trimestral de la BGCI. La comunicación, la educación y la concienciación pública están en el corazón de la Estrategia Global para la Conservación de las Plantas y los jardines botánicos tienen un papel crucial en este proceso. *Roots* quiere incrementar la capacidad de los educadores para aplicar la Estrategia, compartiendo el mejor conocimiento y experiencia sobre la educación basada en las plantas.

En este número enfocamos el tema del turismo en los jardines botánicos. Como el Professor Benfield subraya en el primer artículo, 'el turismo es la industria más grande del mundo, con más de 700 millones de turistas en 2002', -una cifra que no incluye el turismo nacional. Los jardines botánicos con sus lugares magníficos y sus recursos son excelentes atracciones turísticas. La mayoría de la gente va de vacaciones para 'olvidarse de todo' y ¿qué mejor lugar para hacerlo que un jardín botánico? Para atraer a los turistas, los jardines botánicos tienen que afrontar el desafío de elegir el tipo de turismo que quieren estimular, y el lenguaje y la imagen apropiada que necesitan para comunicar su mensaje. Es un tema recurrente de este número que, con la

remarks in his lead article, 'Tourism is the world's largest industry, with over 700 million international tourism arrivals in the world in 2002' – a figure that does not include national tourism. Botanic gardens, with their magnificent sites and unique resources, are excellent tourist attractions. Most people go on holiday to 'get away from it all' and what better place to do this than in a botanic garden? To bring in the tourists, however, gardens are facing the challenge of choosing the 'type' of tourism they want to encourage and the appropriate language and images they need to get their message across. It is a recurrent theme in this issue that, with increased global awareness of environmental issues, gardens have the opportunity to align themselves with sustainable nature-based tourism.

Rusty Worsman from Mount Tomah Botanic Garden, Australia, describes how the Mount Tomah Ecotour was developed in consultation with tourism groups. During the ecotour, the natural and cultural environments are interpreted as well as the sustainable management of the area. The aim is to fundamentally change attitudes and behaviour. In the UK, the Eden Project has been a phenomenal success, attracting hundreds of thousands of tourists to its Cornish site. Sue Minter, Horticultural Director, explains how Eden has specifically targeted garden tourists and used innovative interpretation to demonstrate the importance of sustainable living.

There may be economic, as well as ideological imperatives to take the sustainability route. John Leach, Director of the Andromeda Botanic Gardens in Barbados, explains how tapping into the tourist economy and mass tourism was the only viable option if the gardens were to survive. Cruise ships bring over 25,000 people to the island each year, providing the gardens with an income, raising their profile and securing their future. The gardens also see this as an opportunity to raise awareness about issues specific to people living on small tropical islands. Romaric Pierrel, Curator, and Rémi Saxe, Head of Education, for the Nancy Conservatory and Botanical Gardens in France, share their experience of attempting to make

touristes, implique pour les jardins de relever le défi du choix du 'type' de tourisme qu'ils veulent promouvoir et du choix du langage et des images nécessaires pour faire passer leur message. Dans ce numéro, le thème récurrent est qu'avec la prise de conscience croissante des problèmes environnementaux, les jardins ont l'opportunité de se mettre en lisse pour le tourisme nature et durable.

Rusty Worsman du Mount Tomah Botanic Garden, Australie, décrit comment le « Mount Tomah Ecotour » a été monté en consultation avec des groupes de tourisme. L'« ecotour » fait une interprétation de l'environnement naturel et culturel ainsi que de la gestion durable de la région. Son objectif est de changer fondamentalement les attitudes et les comportements. Au Royaume-Uni le Projet Eden a été un succès phénoménal, attirant des centaines de milliers de touristes sur le site de Cornish. Sue Minter, Directrice de l'Horticulture, explique comment Eden a spécifiquement ciblé les touristes-jardins et comment une interprétation innovante les amène à voir l'importance d'un mode de vie durable.

Il peut y avoir des impératifs économiques tout autant que des raisons idéologiques à prendre cette voie. John Leach, Directeur d'Andromeda Botanic Gardens aux Barbades, explique que le seul moyen de survivre pour les jardins a été de se brancher sur l'économie du tourisme. Des bateaux de croisière amènent plus de 25 000 personnes chaque année, qui apportent aux jardins des ressources financières augmentent leur image, et sécurisent leur avenir. Les jardins voient également cela comme une opportunité pour faire prendre conscience des problèmes spécifiques des peuples vivant dans les petites îles tropicales. Romaric Pierrel, conservateur, et Rémi Saxe, directeur de l'animation du Conservatoire et des Jardins Botaniques de Nancy, en France, nous font part de leur expérience pour rendre le jardin botanique du Montet plus accueillant pour les touristes. En s'associant avec un restaurateur-confiseur, ils ont créé un tour d'une journée à Nancy, incluant une visite au jardin botanique. Pour une dépense initiale relativement faible,

creciente conciencia global de los temas medioambientales, los jardines tienen la oportunidad de alinearse con el turismo verde.

Rusty Worsman del Jardín Botánico Mount Tomah, Australia, describe cómo el Ecotour Mount Tomah se desarrolló con la participación de agentes turísticos. El ecotour interpreta el medioambiente natural y cultural, así como el manejo sostenible de la zona. Su objetivo es el cambio de actitudes y conductas. En el Reino Unido el Proyecto Eden ha sido un gran éxito, atrayendo cientos de miles de turistas a Cornualles. Sue Minter, Director de Horticultura, explica cómo el Proyecto Eden se ha dedicado específicamente a los turistas de jardines y ha usado interpretaciones innovadoras para demostrar la importancia de la vida sostenible.

Puede haber imperativos económicos así como ideológicos para seguir la ruta de la sostenibilidad. John Leach, Director del Jardín Botánico de Andromeda en Barbados, explica que la conexión con la economía del turismo es la única opción viable si los jardines quieren sobrevivir. Cerca de unas 25,000 personas llegan en crucero a las islas anualmente, y proporcionan al Jardín unos ingresos que elevan su categoría y aseguran su futuro. Los jardines tienen también la oportunidad de despertar la conciencia acerca de temas específicos sobre los medios de vida en las pequeñas islas tropicales. Romaric Pierrel, Conservador, y Rémi Saxe, Jefe de Educación, en el Jardín Botánico y Conservatoire de Nancy, en Francia, comparten su experiencia de intentar hacer los Jardines Botánicos de Montet más apetecibles para los turistas. En equipo con un confitero y un restaurante han organizado una jornada en Nancy que incluye una visita al Jardín. Con un relativo bajo coste, se ha incrementado el número de visitantes y sus ingresos.

El potencial financiero del aumento de los visitantes es evidente. Pero el turismo como la moda es volátil y, al cambiar, se modifican los destinos. No debemos olvidar que el turismo de masas distorsiona e incluso puede destruir los medios locales, naturales y culturales que encuentra.

the Montet Botanical Gardens more tourist-friendly. By teaming up with a restaurant owner and confectioner they created a one-day visit to Nancy that included a visit to the Botanic Garden. From a relatively low outlay they have managed to increase their visitor numbers and their income.

The financial potential of increased visitor numbers is there for all to see. But tourism, like fashion, is at the mercy of shifts in trends and tastes and when they change tourists move on to different destinations. Moreover it must not be forgotten that mass tourism frequently distorts and sometimes even destroys the local, natural and cultural environments it encounters.

A trend that looks as though it is here to stay, however, is the growing global interest in environmental issues. Abel Atiti, Education Officer at the National Museums of Kenya, Nairobi Botanical Garden, describes how the gardens have capitalised on this interest by developing guided tours for national and international tourists. These tours raise awareness about illegal trade in Kenyan wild plants, especially succulents. So, by emphasising that international trade in succulents requires a permit, the garden aims to encourage the participation of tourists in plant conservation efforts.

The question of what botanic gardens can do to attract tourists interested in the environment is addressed in the article by Sarah Kneebone, BGCI's Education Officer. The article 'Attracting 'green' tourists to your garden' identifies a range of success factors for implementing a sustainable tourism policy in a botanic garden. Botanic gardens have a unique opportunity to position themselves in the sustainable nature-based tourism market, working with tourists, the tourism industry and local communities to convey messages of conservation and sustainability. This type of tourism also offers possibilities for gardens to boost their income. It's not often that something makes economic and environmental sense at the same time and botanic gardens should make sure they exploit this!

ils ont ainsi réussi à augmenter leur nombre de visiteurs et leur recette. L'apport financier par l'augmentation du nombre de visiteurs est une évidence pour tous. Mais le tourisme, comme la mode, est à la merci des changements des tendances et des goûts, et quand ils changent les touristes s'en vont vers d'autres destinations. De surcroît il ne faut pas oublier que le tourisme de masse perturbe fréquemment et parfois même détruit l'environnement local naturel et culturel qu'il rencontre.

Une tendance qui semble se maintenir, pourtant, c'est l'intérêt général grandissant pour les problèmes d'environnement. Abel Atiti, animateur au Musée National du Kenya, Jardin Botanique de Nairobi, décrit comment les jardins se sont basés sur ce sujet pour développer des tours guidés pour les touristes nationaux et internationaux. Ces tours montrent du doigt le marché illégal des plantes du Kenya, en particulier des plantes succulentes. Ainsi en soulignant que le commerce international des plantes succulentes requiert un permis, le jardin cherche à encourager la participation des touristes à l'effort de protection des plantes.

La question de savoir ce que les jardins botaniques peuvent faire pour attirer les touristes intéressés à l'environnement est abordée dans l'article de Sarah Kneebone, chargée de l'Éducation au BGCI. L'article « Attirer les touristes 'verts' dans votre jardin » détermine un certain nombre de facteurs de succès pour mettre en œuvre dans un jardin une politique durable vis à vis du tourisme. Les jardins botaniques ont une opportunité unique pour se positionner sur le marché du tourisme-nature et durable, en travaillant avec les touristes, l'industrie du tourisme et les communautés locales pour faire passer les messages de protection et de gestion durable. Ce type de tourisme offre aussi aux jardins la possibilité de relancer leur revenu. Il n'est pas si fréquent que quelque chose soit valable à la fois économiquement et environnementalement, alors les jardins botaniques doivent s'assurer de bien exploiter cela!



Sin embargo, una tendencia creciente es el interés global por los aspectos medioambientales. Abel Atiti, Director de Educación de los Museos Nacionales de Kenia, Nairobi Botanical Garden, relata cómo los jardines lo han capitalizado desarrollando tours guiados para turistas nacionales e internacionales. Estos tours aumentan la conciencia acerca del comercio de plantas silvestres en Kenia, sobre todo las suculentas. Así, enfatizando que el comercio internacional requiere permisos legales, el jardín logra estimular la participación de los turistas en la conservación de las plantas.

La cuestión de cómo los jardines pueden atraer a turistas interesados en el medioambiente es abordado en el artículo de Sarah Kneebone, Directora de Educación de BGCI, 'Atrayendo turistas 'verdes' para tu jardín'. Identifica una clase de factores de éxito para desarrollar una política de turismo sostenible en un jardín. Los jardines botánicos tienen una oportunidad única para posicionarse en el mercado del turismo sostenible basado en la Naturaleza, trabajando con los turistas, la industria turística y las comunidades locales para vehicular mensajes de conservación y sostenibilidad. Este tipo de turismo ofrece posibilidades a los jardines para fomentar sus ingresos. No es frecuente que coincidan al mismo tiempo sentido económico y medioambiental y los jardines botánicos deben explotarlo!

‘Geotourists’

The next big thing for botanic gardens?

Tourism today

It has been popular over the last four or five years for tourism officials to blithely proclaim with some degree of certainty that tourism is the world's largest industry. These officials point out that there were over 700 million international tourism arrivals in the world in 2002 worth around 501 billion Euros (\$ 474 billion) or that \$1.3 billion is spent every day on tourism. What has surely been understated over the last two years or so is the remarkable resilience of this industry to weather external influences and still post remarkable gains. For example, over the last two years, tourism has had to contend with terrorism (in such places as geographically divergent as the United States, Bali, Mumbai and Riyadh), war, SARS (not only in Asia but in such an unlikely place as Canada) and economic recession throughout the developed world. Although 2002 was certainly not an easy year, international tourism held up fairly well. According to data collected by the World Tourism Organization, the number of international tourist arrivals grew by 2.7% in 2002 after a decrease of 0.5% in 2001. The 700 million mark was exceeded. Moreover, in those cases where international incidents of any nature dampen international tourism, domestic travel tends to increase and compensate for the loss. It seems that little will stop people traveling. What then are the motivators behind this demand to get away? Many studies have sought to isolate just what

Summary Tourism is the world's largest industry with over 700 million international tourism arrivals in the world in 2002 and worth approximately 501 billion Euros (\$ 474 billion). In spite of a series of dramatic world events that adversely affected tourism growth since 2000, people have continued to travel. It is clear that the desire to travel for tourism purposes can only be delayed, not stopped. One factor that appears to motivate tourists, even in times when travel in general is repressed, due to political or economic constraints, is the desire for educational travel experiences. Tourists are becoming more educated and in turn demand more education. As a result, botanic gardens have a unique opportunity to communicate their mission of conservation, education and sustainability to these educational travel seekers while increasing income. A recently released study of a current and potential consumer market in the United States, and of possible application to Europe, is what US researchers have called *Geotourists*. This study aims to identify and predict the garden tourist of the future, thus suggesting the market for botanic gardens.

motivates people to travel. Stress relief, hedonism, bonding with family and thrill seeking have all been attributed as causal factors, but the one item that correlates most closely with propensity to travel is education. It seems the more educated a person, the more that person travels and, in turn, the more of an educational experience they demand from their travels.

There is a certain irony in this trend. The ability and propensity to travel in the twenty first century is, in large part, both a part of and a result of the trend toward globalization in the latter half of the twentieth century. The advent of

free (or at least freer) trade, the transferability of employment in a global economy and increased consumption has meant a developed world with increased wealth and ability to consume travel destinations. In the process, environmental degradation has become a major concern and the drive toward sustainability is well underway.

It is the conjecture of this article that there is a strong, natural, and compelling link between education, tourism and gardens. In subsequent articles in this issue the reader will see programs from gardens putting this link into practice.

As the reader takes in all the articles and examples he or she might come to conclude, as I have, that one of the primary missions of botanic gardens today should be to educate, and thus sensitize, the public toward the preservation of plant species. This part of our world heritage is increasingly under threat due to globalization, and tourists as a major factor in the globalization trend are quite possibly the primary agents to fulfill this preservation mission. In this way perhaps a loftier goal of seeing biological species as having an inherent worth may be attained.

The importance of tourists to gardens and gardens to tourists

In the early nineties the journal *Organic Gardening* claimed that gardening was the most popular outdoor activity in America with some 78 million participants. In 1999 one-fifth of US residents, nearly 40 million Americans, went on a garden tour, visited a botanic garden or participated in some form of gardening related activity. This is more than visited Disneyworld and Disneyland combined! Botanic gardens are significant tourism attractions in

themselves - in the United States, Chicago, Brooklyn and the New York Botanical Garden all boast visitation exceeding or close to a quarter of a million visitors per year while Kew Gardens, with almost one million visitors, is the twelfth most popular tourism destination in the United Kingdom.

Educational travel

The learning aspect of travel has been documented by the Travel Industry of America. They found that about one-fifth of U.S. travelers — 30.2 million adults — have taken an educational trip to learn or improve a skill, sport or hobby in the past three years. Eighteen percent of travelers in the past year said that taking such a trip was the main purpose of their travel.

The value of a good education

The link between a tourist population who demand participation and education is apparent in the data on education levels throughout a person's lifespan. In the United States today 80% of the population has a high school education, up from 55% in 1970. In 2002 over 29% of the population had a higher or post-

secondary degree of some kind, up from 15% in 1970. However, what is most remarkable is the rise of adult or lifelong learning. As the National Centre for Educational Statistics in the United States notes, lifelong learning can provide benefits for individuals and for society as a whole. Lifelong learning activities are formal activities including basic skills training, apprenticeships, work-related courses, personal interest courses, English as a Second Language (ESL) classes, and college or university credential programs. Participation in adult education increased to 47% in 2001 from 34% in 1991. Most importantly to the world of gardens, work-related courses and personal interest courses were the most popular forms of adult education in 2001.

Many educational professionals have concluded that the twentieth century industrial model of education for the young, work for the middle aged and leisure for the retired has been replaced in the post-industrial age with work, education and leisure being pursued by all three age groups. Seen in this way, gardens are unique in their ability to meet all the needs of this population - education, leisure and workplace.

Participation in Adult Education

Table 8-1 Percentage of population age 16 and above participating in adult education activities, by type of activity: 1991, 1995, 1999, and 2001

Type of activity	1991	1995	1999	2001
Age 16 and above				
Overall participation	34.2	41.8	45.9	47.4
College or university credential programs	-	8.9	11.7	7.3
Work-related courses	-	21.6	22.7	29.7
Personal interest courses	-	19.1	21.2	21.3
Other activities	-	2.9	4.4	3.8
Age 16-24				
Overall participation	37.7	47.0	50.7	53.2
College or university credential programs	-	12.6	13.6	12.7
Work-related courses	-	16.7	14.8	22.3
Personal interest courses	-	19.8	23.0	27.6
Other activities	-	8.7	13.9	13.0
Age 25 and above				
Overall participation	33.7	41.1	45.3	46.6
College or university credential programs	-	8.4	11.4	6.5
Work-related courses	-	22.3	23.8	30.7
Personal interest courses	-	19.1	20.9	20.5
Other activities	-	2.1	3.1	2.6

Source: http://nces.ed.gov/programs/coe/2003/section1/tables/t08_1.asp

The call of the wild

It is rather unclear what role the natural biological nature of gardens and their conservation mission play in attracting tourists. It may be instructive to look at the link between the mission of zoos and aquaria, similar biologically based tourist attractions that presumably would have similar challenges. The mission of the American Zoo and Aquarium Association (AZA) states that “AZA zoos and aquaria are places where people connect with animals. The AZA is therefore dedicated to excellence in animal care and welfare, conservation, education, and research that collectively inspire respect for animals and nature”. A key component in the fulfillment of this mission is strengthening and promoting conservation education programs for the public and the professional development for its members. The result of this commitment to conservation education in zoos and aquaria as living classrooms is that zoos and aquaria teach more than 12 million people each year, and dedicate \$52 million annually to education programs. More than nine million students visit and enjoy onsite education programs at zoos and aquaria each year - over three and a half million receive them free of charge. Teachers are educated as well. Annually, almost 85,000 teachers profit from training workshops, special membership opportunities and free or discounted teaching materials. Virtually every group imaginable is reached through zoo and aquarium education efforts. Nine million people take advantage of onsite programs for families, seniors, pre-schoolers and countless others. Perhaps most pointedly, the public trusts the conservation message of zoos and

aquaria. In a recent poll carried out by the Pew Charitable Trust (an independent non-profit organization providing fact-based research and practical solutions – www.pewtrusts.com), the public ranked zoos and aquaria among the most powerful and trusted sources on the environment today. It is this kind of trust in a garden’s mission that gardens should surely wish to emulate.

Types of tourists: the importance of geotourists

While it is a simple matter for gardens to find out who their current visitors are by means of entry or exit surveys, it is another matter to reach out to members of the general public not currently visiting the garden in order to fulfill a mission of education for a sustainable future. Unfortunately, mass marketing would probably be wasted, not to mention prohibitively expensive. Therefore, some method of isolating or segmenting these tourists who demand education but with an environmental ethic would be desirable. In 2002 The Travel Industry Association of America (TIA) and National Geographic Traveler released results of the first, large-scale study of the current and potential American consumer market for what they called *geotourism* (www.tia.org/pubs/GeotourismPhaseFinal.PDF). This study claims there are 55 million Americans that can be classified as sustainable or ‘Geotourists’ and, most importantly, examines their travel habits and attitudes. It also identifies the travel habits of nearly 100 million traveling Americans who appear to be moving in the direction of geotourism.

The term geotourism was defined as “tourism that sustains or enhances the geographical character of the place being visited - its environment, culture, aesthetics, heritage, and the well-being of its residents”. Obviously the values and products most closely associated with gardens - environment, culture aesthetics, heritage and well-being are directly related to geotourism.

The study surveyed a representative sample of 8,000 U.S. households and identified eight traveler segments or ‘profiles’ from the 154 million Americans who have taken at least one trip in the past three years. The top



three segments that have the strongest correlation with a ‘Geotourist’ ethic were called:

- Geo-Savvys (16.3 million adult travelers),
- Urban Sophisticates (21.2 million)
- Good Citizens (17.6 million)

These three segments represent over 55 million American travelers, more than one-third of the total traveler market. It is worth looking at these tourists a little more closely for it will be of interest to gardens that all of these segments have a desire for more educational elements and active involvement in their travel experiences. Geo-Savvys and Urban Sophisticates:

- Show a distinct preference for culturally and socially-related travel.
- Intellectual curiosity as reflected in their well-above average tendencies to participate in a number of educationally and culturally-oriented activities in their local communities.
- More highly developed social consciences, engaging in pro-environment behaviors at home and actively support environmental and cultural organizations more than the other segments.
- Geo-Savvys are distinguished by their well-above average interest in environmentally-oriented travel.
- Urban Sophisticates are more oriented to large city destinations and the cultural opportunities they provide.
- Good Citizens are older, with about half of them 55 years of age or older. They also show strong involvement in a variety of community activities, as well as heightened levels of cultural and environmental awareness and sensitivity, but these tendencies are less obvious in their travel behaviors.

Above: ‘Gardens can play an important role in sensitizing tourists towards the preservation of plant species.’ View of the Rio de Janeiro Botanic Garden. (Photo: Richard Benfield)



Left: Sign interpreting the economic importance of plants. (Photo: Richard Benfield)



Above: Studies suggest that providing an educational experience will attract tourists. Visitors at the Rio de Janeiro Botanic Garden, Brazil. (Photo: Richard Benfield)

The Geotourism study also identified three other segments of the tourism base as having good potential as Geotourism markets. They represent approximately 38% of all U.S. adult travelers (58 million) and are termed:

- the Traditionals (16.1 million adult travelers), older and not as inclined to travel as many of the other segments
- the Wishful Thinkers (22.3 million) are at the other end of the age spectrum, dominated by members of Generation X and Y,
- The Apathetics (19.9 million).

Traditionals and Apathetics, are conservative in their travel choices, looking for predictability, and high levels of cleanliness, safety and security. Wishful Thinkers want to travel more than they do now and be very busy and active when they do. They are looking to be entertained and to have fun when they travel.

The marriage of governments, tourism and botanic gardens

This article began by suggesting that there was a new era beginning in travel and tourism, of a more education-seeking, active, multi-generational tourist. The tourism industry has responded to this realization by reaching out to the other two stakeholders in tourism – government and industry – to coordinate the tourists' needs with the supply of appropriate products. On October 7, 2003, the World Travel & Tourism Council (WTTC) revealed its 'Blueprint for New Tourism', which issues a call to action for both government and the industry to make several long-term commitments to ensure the prosperity of travel and tourism. The Blueprint contains a new vision for tourism and strategies to guide its development. WTTC's latest projection for the industry is that a quarter of a billion people will work in tourism worldwide by the end of the decade, catering to

over 1 billion international arrivals. Of the worldwide arrivals by 2020, 1 billion will be intraregional and 0.4 billion will be long-haul travelers. The total tourist arrivals by region shows that by 2020 the top three receiving regions will be Europe (717 million tourists), East Asia and the Pacific (397 million) and Americas (282 million), followed by Africa, the Middle East and South Asia. To meet this challenge the tourism industry is committed to sustainable growth into the future. In order to meet the challenges ahead and achieve the vision, the Blueprint establishes three fundamental conditions:

- Governments must recognize tourism as a top priority
- Business must balance economics with people, culture and environment
- All parties must share the pursuit of long-term growth and prosperity

To meet these conditions one of the requirements is for governments to plan for sustainable tourism growth, in keeping with cultures and character. New tourism focuses on benefits not only for people who travel, but also for people in the communities they visit, and for their respective natural, social and cultural environments – a focus for which botanic gardens are uniquely placed to respond with their products of education, conservation and sheer intrinsic beauty and enjoyment.

Résumé

Le tourisme est l'industrie la plus importante du monde, avec plus de 700 millions de touristes internationaux reçus dans le monde en 2002 et environ 501 milliards d'euros de recettes (474 milliards \$). Malgré une série d'évènements dramatiques au niveau mondial qui ont affecté le développement du tourisme depuis 2000, les gens n'ont pas arrêté de voyager. Il est clair que le désir de voyager pour le tourisme ne peut pas être arrêté, mais seulement reporté. L'éducation est l'un des motifs qui ressort et qui permet d'expliquer l'envie de voyager. Les touristes sont de plus en plus éduqués et demandent, à leur tour, plus d'éducation. C'est pourquoi les jardins botaniques ont une chance unique d'assurer leurs missions de

conservation, d'éducation et de développement durable auprès de ce public potentiellement réceptif, tout en augmentant leurs recettes. Une étude parue récemment sur un marché actuel et potentiel de consommateurs aux Etats Unis et sur son application possible en Europe, désigne ces « Géotouristes », comme ils sont nommés par les chercheurs US. Cette étude semble annoncer et décrire les touristes de jardins du futur, et suggérer ainsi un marché potentiel pour les jardins botaniques

Resumen

El turismo es la industria más grande del mundo, con más de 700 millones de llegadas de turistas en el año 2002 y con percepciones de aproximadamente 501 billones de Euros (\$474 billones de dólares). A pesar de los dramáticos eventos mundiales que han repercutido en el incremento del turismo desde el año 2000, la gente continúa viajando. Es claro que el propósito del turismo de viajar, puede solo posponerse más no detenerse. Una variable que se vislumbra como motor de esta latente demanda es la educación.

Los turistas tienen cada vez mayor nivel de educación por lo que demandan también más educación. Como resultado, los Jardines Botánicos tienen una oportunidad única para impactar con su misión de conservación, educación y sustentabilidad para esta latente audiencia receptiva, incrementando asimismo sus ingresos. Un estudio reciente sobre el actual mercado de consumo de los jardines botánicos en Estados Unidos, y de posible aplicación en Europa, es lo que los investigadores norteamericanos llaman geoturistas. Este estudio pretende identificar y predecir el turista del futuro, por lo que brinda ciertas sugerencias para el mercado de los Jardines Botánicos

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L'intégration du Jardin Botanique du Montet dans des « produits touristiques »

Les Conservatoire et Jardins Botaniques de Nancy (France) regroupent deux jardins botaniques (Le Jardin d'Altitude du Haut Chitelet et le Jardin Botanique du Montet). Ces deux jardins ont des implantations géographiques très différentes.

Le Jardin d'Altitude du Haut Chitelet

Ce jardin alpin se trouve dans le massif vosgien à une altitude de 1 228 mètres. Les caractéristiques climatiques (forte pluviométrie et important enneigement) sont idéales pour la culture de plantes de hautes montagnes. Ce jardin regroupe:

- des rocailles sur une surface de 1,5 hectare et plus de 2 000 espèces illustrent la diversité des plantes alpines originaires des principales régions montagneuses du monde (Alpes, Caucase, Montagnes Rocheuses, Himalaya, ...),
- des milieux naturels protégés dont une hêtraie d'altitude et une tourbière,
- une collection spécifique réservée à la flore sauvage vosgienne avec un étiquetage spécifique (mettant en valeur les noms communs) permet d'identifier facilement cette collection au sein du jardin alpin.

Situé en bordure de la principale route touristique du massif vosgien (la "Route des Crêtes"), le jardin bénéficie d'une importante fréquentation touristique pendant ses 4 mois

Résumé Les Conservatoire et Jardins Botaniques de Nancy (France) regroupent deux jardins botaniques dont les implantations géographiques sont très différentes.

Situé en bordure d'une route touristique très fréquentée (la « Routes des crêtes » dans le massif vosgien), le jardin alpin du Haut Chitelet accueille plus de 15 000 personnes par an sans démarche spécifique pour attirer les visiteurs.

Le Jardin Botanique du Montet, lui, est implanté dans l'agglomération nancéienne au cœur d'un domaine universitaire. Trop éloigné du centre ville de Nancy, ce jardin bien que très riche en collections végétales a du mal à faire venir les touristes.

Cet article analyse les raisons qui ont poussé les responsables des Conservatoire et Jardins Botanique de Nancy à modifier et à améliorer l'accueil du public touriste au Jardin du Montet, en particulier en proposant des circuits touristiques spécifiques en relation avec des restaurateurs et des confiseurs locaux.

d'ouverture au public (juin-septembre). En effet, cette belle région montagneuse de l'Est de la France attire un grand nombre de visiteurs français et étrangers (hollandais, allemands et anglais).

Sans mettre en oeuvre des démarches spécifiques pour attirer les visiteurs,

notre jardin est toutefois visité chaque année par plus de 15 000 personnes, constitués à 90 % par des touristes.

Le Jardin Botanique du Montet

Notre second jardin botanique est situé dans l'agglomération de Nancy, au cœur d'un campus universitaire. Créé en



Au dessus:
Dépliants du
Jardin
Botanique du
Montet et du
Jardin d'Altitude
du Haut Chitelet

EAU, SOURCE DE LA GOURMANDISE

Programme d'une journée à NANCY

10^h00 Visite guidée des Serres tropicales du Jardin Botanique du Montet. Vous vous dépaysez en explorant les forêts tropicales ou les déserts, à la recherche du cocoyam, des figes de barbarie, des orchidées ou des plantes carnivores...

12^h00 Embarquement à bord de "La Bergamote". Bateau promenade amarré au Port Sainte-Catherine.

12^h15 Départ pour une croisière sur le canal de la Marne au Rhin en direction de Lunéville-devant-Nancy pour y découvrir la nature en milieu urbain avec passage à écluse. Déjeuner à bord, menu à définir.

14^h45 Retour au Port Sainte-Catherine.

15^h00 Découverte du laboratoire La Confiserie Chocolaterie Alain Baitt ou les petits secrets de la fabrication des Macarons, des Bergamotes de Nancy, des Bonas de Stanislas vous seront dévoilés. Une large dégustation suivra cette journée.

Conditions :
Groupe de 20 personnes minimum.
30,50 € par personne.

Renseignements et Réservations :
Tél : 03 83 29 31 39
Fax : 03 83 20 15 80
Port : 06 08 22 70 16
10, rue de la République
54220 Malzeville

Droit: Dépliant
'Eau, Source de
la Gourmandise'

D'une part, d'après une étude du Comité Régional du Tourisme de Lorraine, il apparaît que les groupes où les touristes individuels ne s'arrêtent qu'une seule journée à Nancy, consacrant cette journée au centre historique de Nancy, ils peuvent y apprécier la Place Stanislas (inscrite au patrimoine mondial de l'UNESCO), deux musées, la vieille ville et les rues commerçantes.

D'autre part, notre jardin se trouve éloigné du centre ville et un parcours en bus de 30 minutes est nécessaire pour le rejoindre.

Vers des "Produits Touristiques" intègres

Les résultats modestes de nos premières démarches nous ont incités à changer de stratégie. Se basant sur la pertinence et la réussite des "Journées à thèmes", nous nous sommes associés avec deux autres acteurs touristiques (un restaurateur et un confiseur) pour organiser une journée de visite à Nancy, intitulée "Eau, Source de la Gourmandise".

La journée commence par la visite guidée du Jardin Botanique du Montet. A midi, le rendez-vous est donné sur un bateau croisière pour le déjeuner. L'après midi se poursuit chez un confiseur-chocolatier pour découvrir les spécialités nancéiennes (bergamote et macaron).

1970, il est l'héritier du jardin historique de Nancy, construit sous le règne du roi Stanislas au XVIIIème siècle.

Niché dans un vallon de 27 hectares, il regroupe dans le parc:

- des collections botaniques (collection historique, alpinum, arboretum, collection systématique, collection médicinale),
- des collections ornementales (dahlias, iris, roseraie, bambou, pinetum, ...),
- des collections patrimoniales (créations horticoles des anciens pépiniéristes lorrains, plantes menacées du Nord-Est de la France, verger conservatoire des anciennes variétés fruitières).

Des serres tropicales, d'une surface de 2 500 m² offrent un dépaysement complet et invitent le visiteur à un véritable parcours d'exploration: nénuphars géants d'Amazonie, plantes utilitaires, mangroves, plantes myrmécophiles, plantes succulentes.

Ce jardin est riche de plus de 12 000 espèces en culture et offre une bonne illustration de la richesse du monde végétal.

Si, sans grand effort, le Jardin d'Altitude du Haut Chitelet bénéficie d'une importante fréquentation touristique estivale, la situation est différente pour le site nancéen.

Ces deux principales raisons nous excluent des circuits touristiques habituels au départ du centre ville, haut lieu de fréquentation.

Nos premières démarches

Pour profiter de la venue des touristes à Nancy, nous avons souhaité nous faire connaître en présentant notre jardin (documentation dans les hôtels), en participant à des salons, à des foires commerciales (en France et en Belgique) et en nous associant à différentes démarches menées par les Comités du Tourisme (départementaux et régionaux) en faveur de la destination "Lorraine" et "Nancéienne". Malgré ces premières démarches, la fréquentation du Jardin Botanique du Montet par les touristes restait faible.

Nous avons alors consacré nos efforts vers l'accueil de groupes, en faisant la promotion de notre établissement lors des salons consacrés aux voyages organisés (Comités d'Entreprises, Amicales, Associations, ...) et aux autocaristes.

Ces expériences nous ont permis de découvrir que l'attractivité de notre jardin n'était pas suffisante pour faire venir des groupes (concurrence importante et proposition de journées "clé en mains"). Aussi, un important travail de mailings (sur plusieurs années) était indispensable pour assurer le suivi et la relance de la clientèle.

Pour promouvoir ce produit, nous avons réalisé un document (format A 4) que nous diffusons deux fois par an, en 5 000 exemplaires. Etant regroupés à trois, nous pouvons partager les frais de conception, d'impression et de diffusion de ces imprimés.

Le bilan est très positif, car tous les ans nous augmentons le nombre de groupes accueillis. En 2003: 25 groupes, représentant plus de 1 000 visiteurs sont venus du Grand Est de la France, mais aussi de Suisse et de Belgique. Ce "produit touristique" nous a permis de conquérir le marché des groupes, avec un investissement inférieur aux recettes.

Limites et perspectives

Intégrer le Jardin Botanique du Montet dans un "produit touristique" est une démarche nouvelle qui nécessite quelques adaptations, en particulier de la part du service en charge de l'accueil des groupes et des visites guidées, et cela pour plusieurs raisons:

- beaucoup de groupes se déplacent les week-ends (disponibilité et adaptation de l'emploi du temps des guides),
- mai et juin sont les deux mois les plus demandés et les plus attrayants, une période de l'année déjà fortement sollicitée par les scolaires (chevauchement des publics),



- l'importance des groupes (minimum 50 personnes) nécessite la mise à disposition de deux guides,
- nous devons être flexibles et répondre à un maximum de demandes par rapport aux autres partenaires.

Malgré ces inconvénients, cette opération est une réussite et nous développons actuellement une autre journée avec d'autres partenaires, intitulée "Croisière Sous Les Cotes". Au-delà de la visite de nos collections végétales, le public découvrira le savoir faire des viticulteurs locaux.

Pour l'avenir, l'attractivité du Jardin Botanique du Montet reposera en grande partie sur la nouvelle politique d'accueil qui sera prochainement mise en oeuvre.

Cette démarche ambitieuse et globale comprend:

- la construction d'un pavillon d'accueil, regroupant une boutique, une salle de conférences et les commodités indispensables à l'accueil du public,
- de nouvelles modalités d'accès (horaires),
- une campagne de communication et de promotion,
- un calendrier événementiel,
- un renforcement des activités culturelles et éducatives.

C'est dans ce futur contexte que devrait se développer la fréquentation touristique du Jardin, sachant que chaque visite reste une occasion de rappeler l'importance et l'urgence des missions des jardins botaniques en ce qui concerne la connaissance et la conservation de la biodiversité végétale.

Summary

The Nancy Conservatory and Botanic Garden, France, represents two botanic gardens in very different geographical locations.

Situated on a busy tourist route, the Haut Chitelet's Alpine Garden receives more than 15,000 visitors per year. The Montet Botanic Garden, meanwhile, is situated in the suburbs of Nancy, in the heart of the University campus. Despite its very rich plant collection, the garden has difficulty in attracting tourists due to its distance from the city centre,

This article explores the reasons behind the managers' decision to reassess and improve their strategy for attracting tourists to the Montet Botanic Garden. It also looks in particular at the implementation of a specific tour conducted in collaboration with local restaurateurs and confectioners.

Resumen

Los jardines botánicos de Nancy (Francia), incluyen dos jardines botánicos en los cuales los escenarios geográficos son muy diferentes.

El jardín alpino del Haut Chitelet se ubica en la proximidad de una ruta turística muy frecuentada (la "ruta de las cimas" en la montaña de los Vosgos).

Más de 15 000 personas lo visitan anualmente, sin que exista una iniciativa específica para atraer a los turistas.

El jardín botánico del Montet, se encuentra incierto en el ambiente urbano de Nancy en el corazón de un campus universitario. Este jardín está bastante lejos del centro de la ciudad y a pesar de ofrecer una gran cantidad de colecciones de plantas no atrae una gran cantidad de turistas.

Este artículo analiza las razones que se proponen a los responsables de los jardines botánicos de Nancy para modificar y mejorar la acogida del público turístico al Jardín del Montet. Se recomienda en particular implementar circuitos turísticos específicos que estén relacionados con restaurantes y confiterías locales.

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Gauche:
L'Alpinum du
Jardin
Botanique du
Montet

Ci-dessous:
La serre aride

Gauche: Serres
et pivoinies au
jardin



A win-win situation?

Sustainable tourism and botanic gardens



Above: A bird's eye view of the Eden Project

Summary Garden visiting increased greatly in the UK in the 1990's driven by the traditional passion of the British for plants and augmented by television programmes. The National Trust, English Heritage, National Gardens Scheme and Royal Horticultural Society's shows and gardens all received increased numbers of visitors and by 2001 garden tourism was the only area of tourism to be increasing year-on-year.

Major botanic gardens were funded through the new National Lottery as projects for the Millennium, the most successful being the Eden Project in Cornwall. Special European Union funding for deprived regions was important for Eden and for the Alnwick Garden in Northumberland, both of which stand as engines for economic growth in these regions.

Botanic gardens can benefit by spotting time-limited or regional funding opportunities and generating new audiences by innovative marketing, interpretation and live performance programmes. By using new methods of evaluation, botanic gardens can demonstrate to governments their value as displays for sustainable living.

In the UK it is vital that any consideration of the role of botanic gardens and tourism is seen within the context of the huge expansion of interest in 'garden visiting' which has taken place largely in the last 10 to 15 years. This interest has been driven in part by promotion of gardening and garden design on television and needs to be seen in a wider context before looking at the specific issues for botanic gardens.

'Owners' of gardens from various sectors have responded more or less opportunistically to this explosion of interest. The National Trust (a non governmental organisation founded in 1895 to acquire and care for Britain's countryside, coastlines and important buildings and gardens) knew from the early 1990's that its gardens attracted the most visitors. This sat rather uneasily with its preservation of landscapes and stately homes which tended to absorb its financial resources. Surveys in 2003 confirmed that over 60% of its visitors join the organisation 'for its gardens' rather than for its stately homes and that these members are the 'frequent returners' who drive secondary spend (e.g. in the shops and cafes). English Heritage (a public body responsible for protecting and promoting the historic environment) used this initial research by the National Trust to increase visitor numbers and the profile of its own gardens by launching the 'Contemporary Heritage Gardens' programme in the 1990's.

They launched design competitions for prominent young designers to augment an historic property with a 'contemporary' garden of style and relevance to the property. The nine gardens realised at sites in the UK were highly successful. In similar vein, Westonbirt Arboretum in Gloucestershire launched a yearly 'Festival of the Garden', inspired by the annual festival of contemporary garden design at Chaumont-sur-Loire in France founded in 1992. This has also been very successful.

Meanwhile, the 'Yellow Book' of private gardens open to the public under the charitable National Gardens Scheme (NGS), has grown from year to year and contributes millions of pounds to charitable causes. This occurred alongside the 'regionalisation' of the Royal Horticultural Society's (RHS) shows programme throughout the 1990's, making the Society far less London-based. Together the NGS and the RHS serve a truly countrywide interest in horticulture and gardening. For the RHS, this has greatly increased its capacity as an educational charity, training and informing gardeners in the science and practice of horticulture with a recent increase in emphasis on sustainability.

However, the real quantum leap in garden tourism has occurred due to two political developments which have worked in parallel. The first was the decision of the British government in 1995 to launch a National Lottery with two beneficiary schemes of particular relevance to gardens (the Heritage Lottery Fund and the Millennium Commission's Landmark Projects).



Left: Children explore the Spice Boat, an interactive exhibit at the Eden Project

The second was the European Union's (EU) Objective One programme for investment into 'deprived regions'.

Three significant new ventures have been the Eden Project in Cornwall, the garden at Alnwick in Northumberland and the National Botanic Garden of Wales, near Carmarthen, the first and last being Millennium Commission funded. All these projects demonstrate important lessons for botanic gardens.

The not-so-hidden agenda of the Millennium Commission (MC) in the UK was regional regeneration; this is the key to the success of both Eden and Alnwick, which are probably best seen as regional regeneration projects as much as gardens. By combining MC investment with EU Objective One money and regional development investment from the UK government, Eden is now a huge engine for economic regeneration in Cornwall where the traditional industries of

quarrying, mining and fishing are in decline. In its first year an estimated £150 million was generated for other businesses in Cornwall, which translates to a potential £10 billion in a decade. Expansion plans this year (with further funding from the same sources) include the construction of 'The Tree House', an education resource centre. This will be an exhibit in its own right (demonstrating the way plants and photosynthesis drive the planet) and also will house public and schools' education programmes, visiting exhibitions and IT access. Thus this 'garden in Cornwall' is supporting the region's economy and simultaneously providing education about the value of plants and positive futures for the planet to between 1.2 and 1.8 million people a year.

Alnwick is driven by the charismatic Duchess of Northumberland. Like Eden it is also a regional regeneration project using European funding and

Left: Display of vegetable diversity



Above:
A sculptural
installation at
the Eden Project

has been a beacon for investment in tourism in the North-East of England. It has a huge water staircase feature, a rose garden and a marketing campaign aimed at families with children. New features planned include a poisonous plants garden, linked with its identity as the film location for Hogwarts School from the best-selling Harry Potter novels.

The National Botanic Garden of Wales, by contrast, has not attracted the visitor numbers it predicted and depends upon for fulfilment of its business plan, perhaps because of its relatively remote location. As I write its future is still uncertain.

So what can botanic gardens learn from these trends and developments? First and foremost, managers need to be opportunistic in locating time-limited sources of funding. When funding is attached to specific regions, gardens do not need to be in competition. Indeed it increases the opportunity for complementarity between gardens in their programmes - and nowadays partnership in projects is often the name of the game.

Secondly, gardens must adopt realistic business plans which have a good balance between sources of funding and income from visitor numbers. It is not enough to depend on the



'wow' factor of splendid conservatories. This has worked for Eden but not for the National Botanic Garden of Wales.

Thirdly, gardens must address how to access new audiences. At Eden we have a far higher representation of non-traditional botanic garden visitors. This is partly because many are general holiday-makers and partly because we attract them deliberately with a 'funky' style of interpretation and use of the creative arts in a live performance programme. Younger people are targeted by the 'Eden

Sessions' of music every August. At Alnwick there is a big drive to encourage children - the fact that this has sometimes upset the traditional horticultural establishment probably means they are on the right track! Eden has paid great attention to providing for the less-abled and socially-excluded (through collaboration with the Sensory Trust, www.sensorytrust.org.uk), although we still have a way to go in attracting an ethnically diverse visitor base.

Fourth, it is worth remembering that botanic gardens already have a good track record as tourism sites. The world-wide network of botanic gardens is already connected to local tour guides. They display the country's flora and many have education programmes. Developing better links with government to get acknowledgement (and hopefully funding) for this is a positive step to take. At Eden, for example, we have a joint contract from the government with the Royal Botanic Gardens, Kew, to advise on best practice for encouraging the public about novel products derived from plants, which may then drive the commercial markets for them. It is as if governments have suddenly woken up to the fact that botanic gardens can deliver the public interface they need over a variety of issues related to horticulture, agriculture, sustainability and the Convention on Biological Diversity.

In the UK this awareness has partly been driven by the awful experience of the Foot and Mouth disease outbreak in 2001. The resulting closure of whole parts of the regional economy showed that tourism in rural areas is as big and as valuable an industry as agriculture and significantly raised its profile. In other parts of the world tourism is important for different reasons; the important consideration is to demonstrate that your garden is crucial to your country's tourism strategy. In this context, statistics can be very important. In the UK, independent consultants working for the Tourist Boards showed that gardens began to outstrip other attractions from 1990 and in 2001 were the only sector increasing in visitor numbers (Béréziat, 2003) Having this sort of independent corroboration is very important.

Fifth, botanic gardens need to wise-up about selling the effectiveness of their education programmes as generators of change towards a more sustainable lifestyle. This is one-step further than what education programmes have traditionally tried to achieve, from awareness per se to actual change in behaviour. At Eden we evaluate exhibits and public and school education programmes using the usual techniques (questionnaires, focus groups etc) but also using the latest techniques from the Centre for Innovative Learning in the USA such as 'Personal Meaning Mapping'. This technique (usable by volunteers) captures the visitor's mindset before a visit and measures the incidence of key words against the mindset/words used after a visit, thus enabling a quantitative estimation of change. It actively demonstrates learning and shows a percentage shift in understanding (typically, at Eden, of 20% to 37%). The technique is also widely used by science and discovery centres, museums and galleries, so it can be used to compare learning in botanic gardens with learning in other cultural institutions. At Eden this programme, run by Andy Jasper, is placed in the Marketing (rather than the Education) Department, showing that Eden is as committed to marketing learning and change as to marketing itself as a venue.

Finally, it is important that botanic gardens demonstrate their own sustainability, so that visiting tourists see how waste is recycled on site (Eden has a 'waste neutral' strategy and we are building a waste neutral exhibit), how renewable energy is employed (Eden's 'Tree House' will have a photovoltaic roof) and how purchasing choices by visitors can contribute to sustainable futures in plant-based commodities, so enlisting the tourist as consumer to generate change.

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Résumé

En Grande Bretagne, dans les années 90, les visites de jardins botaniques ont fortement augmenté, poussées par la passion traditionnelle des Britanniques pour les plantes, à laquelle s'ajoutait la sortie de programmes télévisuels. Les manifestations et jardins du National Trust, English Heritage, National Gardens Scheme, Royal Horticultural Society ont tous accueilli des nombres croissants de visiteurs et en 2001, le tourisme des jardins était le seul domaine du tourisme à avoir augmenté d'une année sur l'autre.

Des jardins botaniques importants ont été financés grâce à la nouvelle Loterie Nationale, comme des projets pour le « Millenium », le plus réussi étant le Projet Eden. Les financements spéciaux de l'Union européenne pour les régions défavorisées ont été importants pour le Projet Eden et pour le jardin Alnwick dans le Northumberland, tous deux étant des moteurs de développement économique dans ces régions.

Les jardins botaniques peuvent être avantagés s'ils identifient les possibilités de financements ponctuels ou régionaux et s'ils attirent de nouveaux publics grâce à des programmes innovants de marketing, d'interprétation ou de spectacles vivants. En utilisant de nouvelles méthodes d'évaluation, les jardins botaniques peuvent démontrer aux pouvoirs publics leur valeur comme vitrines du développement durable.

Resumen

A partir de 1990 se ha registrado un incremento de visitantes en los jardines del Reino Unido debido a la pasión de los británicos por la plantas y al aumento de programas de televisión. Los programas y jardines del Fideicomiso Nacional (National Trust), del Patrimonio Inglés (English Heritage), de los Jardines Nacionales (National Garden Scheme) y de la Real Sociedad de Horticultura (Royal Horticultural Society) aumentaron considerablemente y para 2001 el turismo de los jardines era el único rubro del turismo que aumentaba año con año.

Grandes jardines botánicos se establecieron auspiciados por la Lotería Nacional (National Lottery) como proyectos del Milenio, como el Proyecto Edén, el más exitoso. Dicho proyecto al igual que Alnwick Garden en Northumberland consideraron fundamental el apoyo a regiones con ciertas privaciones el cual ha sido aportado por la Unión Especial Europea (Special European Union), ambos jardines promueven así el crecimiento económico de sus regiones.

Los Jardines Botánicos pueden beneficiarse reconociendo oportunidades de financiamiento por tiempo limitado o regional y generar nuevas audiencias a través de mercadotecnia innovadora, programas de interpretación y representaciones en vivo. Utilizando nuevos métodos de evaluación, los jardines botánicos pueden demostrar a los gobiernos su valor para promover una forma de vida más sustentable.

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Below: One of Eden's impressive 'Biomes'



Changing perceptions through ecotours

Summary Mount Tomah Botanic Garden is the cool climate garden of the Botanic Gardens Trust (previously called the Royal Botanic Gardens Sydney). It is located 100 kilometres west of Sydney in the Blue Mountains at an altitude of 1000 metres. The Garden displays a representation of mainly Gondwanan flora. In 1994 a spectacular 186 hectare property adjoining the Garden was purchased primarily to access water. The property contains a stunning array of Australian flora in a rugged Blue Mountains landscape.

The Mount Tomah ecotour concept has been developed in consultation with tourism groups and the University of Western Sydney. Ecotourism involves interpretation of natural and cultural environments and ecologically sustainable management of the natural area being visited. Ultimately it is hoped that people on these tours will have an experience which changes their outlook or behaviour in some way. The concept of ecotourism complements the mission of the Trust: "To inspire the appreciation and conservation of plants".

Imagine walking into a forest with tree ferns towering ten or more metres above your head. It is cool despite the summer heat, as the canopy begrudgingly allows sun to filter through to the forest floor. As you walk along the track a lyrebird whistles evocatively down the valley. This is the Mount Tomah ecotour....

Right: Ecotour groups are led through a variety of habitats



The Mount Tomah ecotour is a new experience to expand the educational opportunities for visitors to Mount Tomah Botanic Garden. The ecotour is a four kilometre guided tour through the diverse ecosystems of the 186 hectare conservation area. This is

surrounded by the National Parks that are part of Greater Blue Mountains World Heritage Area (encompassing over 1 million ha.). An important aim of the Mount Tomah ecotour is to fulfil the Botanic Gardens Trust 's commitment to work with the community to increase

the knowledge and appreciation of plants and their critical role in the sustainability of our natural and urban environments, and to manage our open spaces as inspirational places for recreation, cultural events and celebration.

Natural areas managed by botanic gardens present a perfect opportunity to provide a broader educational focus, to present a range of ecosystems for the study of ecology (White, 1996). This article highlights the philosophy for establishing the Mount Tomah ecotour, the processes involved in the development and management of the ecotour and key lessons learnt along the way.

Why ecotourism?

The tourism industry's growth brings with it a need to protect the environment to ensure its future success - as a large part of the industry exists chiefly because of the attractiveness and quality of the environment (Stabler 1997). The Blue Mountains region supports an extensive tourist industry and is famous for its adventure and nature-based activities such as canyoning, climbing, bush walking and mountain biking. Nature based tourism often relies more on the 'wow' of the nature without any interpretation. Ecotourism is distinct from other forms of nature based tourism in that it involves interpretation of natural and cultural environments and ecologically



Left: View along Mount Tomah ecotour trail

sustainable management of the natural area being visited. It supports conservation and brings benefits to the local community (Beeton 1998).

The definition of ecotourism differs throughout the world, however it is generally considered to be environmentally and socially responsible travel that minimises negative impacts and promotes conservation (Stemm *et.al.*, 2003). Ecotourism represents only a small segment of the tourist industry, but it is well recognised that the philosophy and principles of ecotourism need to be practiced by the broader industry. This is the most appropriate form of tourism for meeting the Mount Tomah Garden's conservation objectives.

Where to start?

Visitors to Mount Tomah Botanic Garden were surveyed to assess their interest in participating in an ecotour. The ecotour product needed to be defined: what should be offered? What would be the tour options? How long should it be? Who was our target market? Links were made with the local tourism industry to understand the local market and assist in

promotion. The trail was constructed by selecting the most appropriate route to minimise environmental impact. The track width was limited to one person to reduce the need for vegetation clearance and enhance the wilderness experience of the tour. Research was conducted to develop the most effective interpretation for the tour, such as sourcing local history and talking to the local community. Promotional material including a brochure and website was then designed and produced. (<http://www.bluemts.com.au/MountTomah/ecotourism.htm>)

Local networks

The Mount Tomah ecotour concept has been developed in consultation with tourism groups and the University of Western Sydney - Hawkesbury. An important network was created between ecotourism operators in the Blue Mountains and members of C.A.S.T. (Community Alliance for Sustainable Tourism) who represent different segments of the industry including accommodation, tours, Blue Mountains City Council and tourism centres. This network provides the opportunity to keep up-to-date with

trends in the industry, local issues and, most importantly, to provide a cohesive voice to strengthen the ecotourism philosophy in an area which has predominantly nature-based tourism. This is even more relevant now the local area is World Heritage listed.

Interesting partnerships have developed in the process of delivering the ecotourism product. From the initial stages a strong link with the University of Western Sydney – Hawkesbury was formed with the Tourism Faculty in the School of Environment and Agriculture. Students and staff specialising in 'Environmental Management and Tourism' have provided support in several ways including track development, research, marketing, interpretation and more recent projects in management planning. Working with the ecotour has enabled students to obtain training and a range of experiences within the industry.

Interpretation

During the ecotour visitors have the opportunity to experience the spectacular environment, with interpretation provided by their education officer guide.



Above: Tourists
marvel at the
Gondwanan flora

The many points of interest include:

- The fact that Mount Tomah has approximately 500 species of plants due to the geomorphological changes across the site from basalt to shale and then sandstone. The temperate rainforest section of the walk is a similar environment to that in which the endangered Wollemi Pine (*Wollemia nobilis*) was found growing in 1994. Visitors at the beginning of each tour are given the chance for an intimate encounter with an uncaged *Wollemia*.
- The reasons for listing the Greater Blue Mountains as a World Heritage Area.
- How to identify plants used by the Darug, the local indigenous people, for food and tool making.
- How the land was used since occupation by Europeans.

The presentation is delivered in an enjoyable, friendly and engaging manner and pitched at the appropriate level so all visitors leave with not only interesting information but also an understanding of the intrinsic value of conservation and the role they can play. This is easy to present in such a spectacular setting. Over four hours the tour passes

through such diverse habitats as rainforest, woodland and heath. Interpretation is flexible according to what is seen. For example on occasions large black cockatoos fly overhead, providing us with an opportunity to stop and discuss the importance of hollows in old trees for their nesting. This links directly with regional land management issues of tree clearing and fire management.

Management issues

Visitor effect is monitored to minimise negative impacts. Groups are limited to a maximum of 12 people, as recommended in current industry research. Track management includes erosion monitoring, measuring leaf litter, resting the track during the off-season, water quality assessment and using other indicators to identify environmental impacts (Hammitt & Cole, 1998). The initial carrying capacity of the ecotour, with the current track construction, is estimated at 1,000 people per annum. This represents a maximum of three groups per week. To date this has not been exceeded, with approximately three hundred visitors since the tour was launched in 1998.

The Botanic Gardens Trust, Sydney is committed to environmental responsibility in all operations and programs as well as within the ecotourism program. The everyday running of the tour adheres strictly to the philosophy and principles of ecotourism. For example, materials used on the tour are recycled or composted in the Garden's worm farm, high standards of safety are ensured with an appropriate clothing and equipment list given to visitors prior to their visit, materials and staff are locally sourced where possible and guides communicate to visitors the need to 'tread lightly on the landscape'.

Conclusion

Experience has indicated that the term 'ecotour' might inhibit people from joining the tour as they may not have an understanding of the concept of 'ecotourism'. Recent comments at the Conference on Ecotourism in Australia indicated that there is a need to raise the awareness of the general concept of ecotourism. Currently we are exploring marketing the Mount Tomah ecotour using the title 'Wilderness and Wildflowers'. The benefit of ecotour accreditation is also being investigated through the Ecotourism Association of Australia and Green Globe. This would include raising the profile of green tourism and environmental best practice. Ultimately the whole of Mount Tomah Botanic Garden, as a major tourist attraction in the Blue Mountains, may obtain ecotourism accreditation.

In offering these tours the Mount Tomah Botanic Garden envisage that visitors to this area will have an experience that changes their outlook in regard to the environment, encouraging them to take responsibility for their actions and assist in the conservation of all environments.

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de Western Sydney. L'écotourisme implique l'interprétation de l'environnement naturel et culturel et la gestion écologiquement durable des aires naturelles visitées. En fin de compte, les concepteurs espèrent que les participants à ces tours auront vécu une expérience qui change réellement leur regard et leurs habitudes. Le concept d'écotourisme complète la mission du Trust qui est: « Favoriser la compréhension des plantes et de leur conservation ».

Resumen

El Jardín Botánico Mount Tomah es el jardín de clima templado del fideicomiso de jardines botánicos de Sidney (Botanic Gardens Trust). Se localiza a 100 km al oeste de Sidney en las Montañas Azules a una altitud

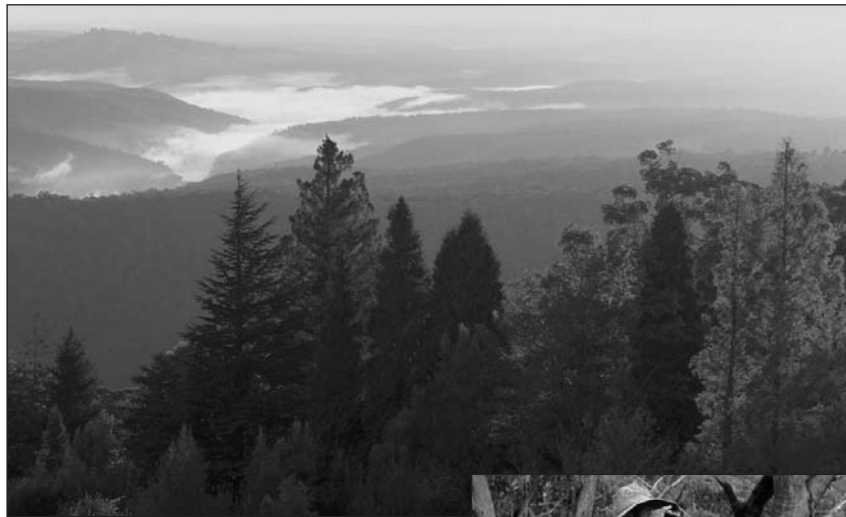
de 1000 m. El jardín tiene representada principalmente la flora de Gondwana. En 1994, se adquirió una espectacular propiedad de 186 hectáreas adjuntas al jardín botánico con el fin de tener acceso al agua. La propiedad tiene un arreglo asombroso de la flora australiana en el rugoso paisaje de esta Montañas.

El concepto de ecotur de Mount Tomah se desarrolló con asesoría de grupos de turismo de la Universidad de Occidente de Sidney (University of Western Sydney). El ecoturismo involucra la interpretación de ambientes tanto naturales como culturales así como del manejo ecológicamente sustentable del área natural visitada. Se espera que la gente que participa en estos ecotours pueda eventualmente experimentar cambios en su percepción del ambiente y en sus hábitos. El concepto de ecoturismo complementa la misión del fideicomiso: "Inspirar el aprecio y la conservación de plantas".

Above: Sunset over the Blue Mountains

Left: The Mount Tomah ecotour offers magnificent views

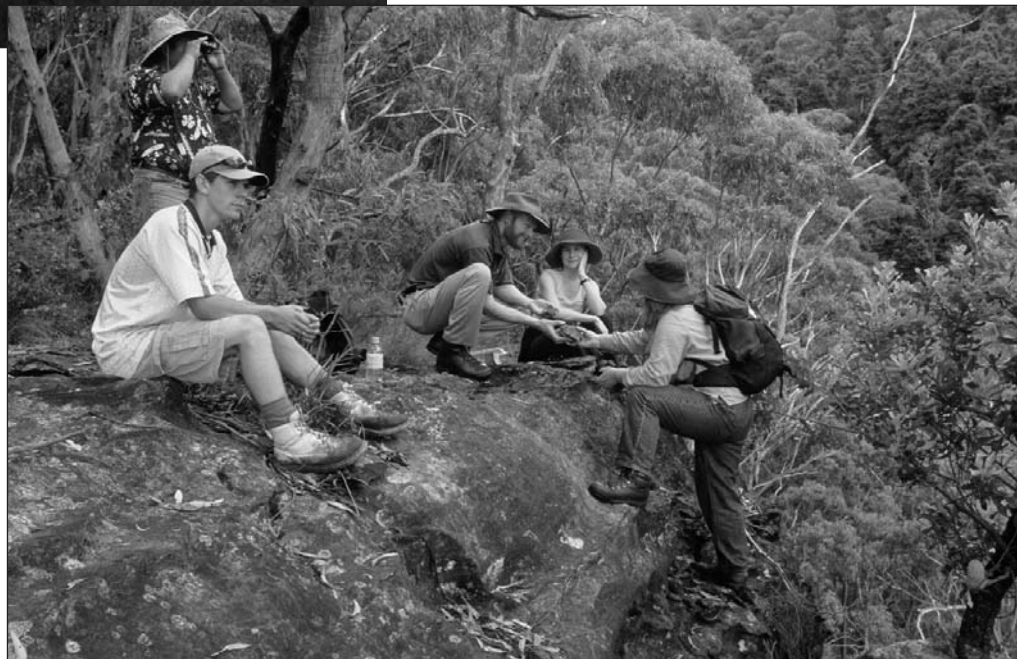
Below: An ecotour party takes a well-earned rest



Résumé

Le jardin botanique du Mont Tomah est le jardin de climat froid du Botanic Gardens Trust de Sydney. Il est situé à 100 km à l'ouest de Sydney, dans les Blues Moutains, à une altitude de 1000 mètres. Le jardin présente surtout la flore du Gondwana. En 1994, une remarquable propriété de 186 hectares attenante au jardin a été acquise essentiellement pour disposer de ressources en eau. La propriété abrite une formidable collection de plantes australiennes poussant dans un paysage accidenté des Blue Moutains.

Le principe de l'écotour du Mont Tomah a été élaboré en consultant des agences de tourisme et de l'Université



Tourism for survival

Summary Being located on an island with a small local population we quickly realized that the only way to satisfy our mission and be financially self-sustaining would be to adapt Andromeda Botanic Gardens to the needs of the tourism market as a first-rate visitor destination. This would have to be without compromising the other aspects of our mission: education, research and conservation.

By 1998 Andromeda Botanic Gardens had developed a strong image as a serious botanical institute and was recognized both locally and internationally as a centre for tropical horticultural knowledge and training. However, the garden was in bad shape financially, admissions were down and it became dependent primarily on the good will of wealthy visitors to the island to keep it open. Running costs had not been covered in years and expenditure on the garden was primarily based on available funds rather than on need. Wear and tear was degrading the infrastructure.

A change of direction and management charted a new course towards self sustainability. This article describes this course and explains how tourism has enabled the garden to survive. It also highlights how effective tourism can be in educating people about important issues concerning botanic gardens and people living on small tropical islands.

Andromeda Botanic Gardens is located on an island with a small local population. For this reason, we quickly realised that the only way to satisfy the mission of the gardens and to be financially self-sustaining would be to adapt the gardens to the needs of the tourism market and become a first-rate visitor destination. This move would have to be made without compromising the other aspects of the

gardens' mission, namely education, research and conservation.

In many ways this may seem to be a conflict of interest. Can we truly classify ourselves as a serious botanical institution or are we really a fancy visitor attraction? Can we accommodate the required number of visitors per year to allow for financial viability without destroying the

collections we are conserving? Who are we really educating; locals or tourists? Are we disseminating information about sustainable development, bio-diversity issues or gardening, or are we just being entertaining without any real focus or goal? Maybe we are we just trying to keep alive the legacy of a very important Barbadian.

Shortly after taking control of the property, the Barbados National Trust wisely pursued a mutually beneficial relationship with the Biology Department of the University of the West Indies. This allowed access to grants to fund a Chair in Tropical Horticulture at the University, who would then take the position of Director of Education and Research at Andromeda Botanic Gardens. This position is currently held by Dr Jeff Atherton, who has years of experience in horticultural research. The new education department at Andromeda developed a series of improvements for interpretation at the garden – plant labels were produced and a set of comprehensive guide sheets developed to help interpret the collections. Visitors were interviewed at random to determine what interested them and to find out their reaction to the interpretation. Modifications were carried out annually based on these findings. Gardening and basic horticulture courses offered to the public were always over subscribed and a weekly newspaper column on gardening was initiated with the local

press. Conservation research was also carried out, including a comprehensive study on the grasses of Barbados, research on the biology and propagation of three rare and endangered local plants and studies on Heliconia species held in the Heliconia Conservation Germplasm Collection.

By 1998 Andromeda had developed a strong image as a serious botanical institute and was recognized both locally and internationally as a centre for tropical horticultural knowledge and training. However, after ten years of focusing primarily on the botanical side of our mandate it became very clear that we were not achieving our goal of reaching financial self-sustainability - in fact we were operating under an increasing deficit. Admissions were down and we became dependent



Left: Carnival Conquest, one of the many cruise ships taking tourists to Barbados (Photo: Carnival Cruise lines)

primarily on the good will of wealthy visitors to the island to keep the garden open, with assistance from donations to the Barbados National Trust. By this time, running costs had not been covered in years and expenditure on the garden was based on available funds rather than on need. Wear and tear was degrading the infrastructure. This set off a chain reaction; the garden was slipping aesthetically, labels and signs couldn't be replaced, visitor numbers were

falling and it became increasingly difficult to find corporate sponsorship for educational activities. Success with our education, research and conservation programs was not enough to help us pay the bills and keep the facility open to the public. This prompted a change in thinking.

Self-sustainability became our priority. Andromeda's image as a centre for horticultural knowledge and expertise, allowed us to develop a successful horticultural property management and consultancy service. The funds generated helped to subsidise the garden's running costs and allowed us some time to address visitation issues, marketing and ultimately the garden's ability to become self-sustainable.

We found that more than 95% of all visitors were tourists and 80% of these were from the cruise ships. Passengers were primarily American and British sailing out of the USA and were only on the island for one day. Visits would be limited to 45-60 minutes and peak times would be early morning and evenings (i.e. twice daily). It became evident that shorter trips were more attractive (rather than longer full day tours) and sold best. Most of the visitors that chose garden tours had an active interest in gardening and plants but had a relatively short attention span due to the heat and humidity.

Following discussions with the cruise ship tour operators it was clear that the garden had to be upgraded; the interpretative guide sheets were adjusted to follow a shorter and easier path through the garden, and we needed to sell ourselves more aggressively. We increased our entrance fee from \$12 to \$15 Barbados, at the same time offering discounted rates to registered tour companies. We redesigned a path through the garden specifically for tour company traffic, using a specially created interpretation sheet or a guide.

Far left: Visitors learn about issues important to botanic gardens and people living on small islands

Middle left: Guided tour in progress

Left: School groups using the botanic gardens

The history of Andromeda Botanic Gardens

Andromeda Botanic Gardens were founded around 1954 by the late Iris Bannochie. Situated on a hillside overlooking the rugged east coast of Barbados, the gardens were created on eight acres of land that had been in her family since 1740. The garden's collections were built through Iris Bannochie's inexhaustible reserves of energy and enthusiasm, fuelled by her travels around the world collecting plants, and through donations and trading of exotic specimens with gardening friends and enthusiasts. From 1964 on she became the undisputed leader of horticulture in Barbados. She became president of the Barbados Orchid Society and Horticulture Society, Deputy Chair of the Parks and Beaches Commission, Chair of the National Conservation Commission and a founding member of the Barbados National Trust. During this time the garden expanded and developed an international reputation.

In 1988 Iris Bannochie died and left Andromeda to the Barbados National Trust under strict stipulations from her estate. In accordance with the 'Bannochie will' Andromeda adopted a new mission and became known as Andromeda Botanic Gardens. The aims of this mission include:

- To maintain and improve Andromeda Botanic Gardens in the spirit with which Iris Bannochie created them.
- To educate and train horticulturists and gardeners in the art, science and craft of ornamental horticulture; to educate the public about the value of plants and gardens to their lives; to show visitors both the beauty and importance of tropical plants and gardens.
- To further the research in tropical horticulture and the conservation of regional tropical flora.



We opted for more practical and interesting stories and tips, like alternative uses for some of the plants, their ecological and historical significance, and issues such as the conservation of biological diversity and sustainable development.

This proved successful - once again Andromeda was receiving great reviews from visitors. Weekly reports back to the tour operators from the cruise ship representatives identified Andromeda as a top rate attraction that was 'attractive, entertaining, and informative, with good facilities'. One tour company, new to Andromeda, subsequently structured a tour using Barbadians trained by our staff to interpret the collections effectively. Visitors were delighted with this new approach. We started receiving requests for personalised tours for garden enthusiasts, and, although we run 10 per year, we are still over-subscribed.

Visitor numbers are once again on the increase and for the first time in 10 years we are seeing an improvement in our financial position. In addition, the Research and Education Department has accepted a post graduate student, a seconded secondary school teacher from the Ministry of Education, to study the educational potential of the garden for school children and teachers. An internet web site is also under construction (<http://andromeda.cavehill.uwi.edu>)

In our circumstances there are few options, we have to rely on tourism to survive. Over the years the Government and people of Barbados have recognized that we are an important component of the national tourism plan. To survive a fluctuating tourism market we have to keep responding to the ever changing and increasing demands of tour operators and the tourist industry, but this lends us the opportunity to keep the gardens open and secure for future generations. One important aspect of this relationship with mass tourism is that we have access to a captive audience of 25,000 people a year, who pay to be given the opportunity to learn about issues important to botanic gardens and people living on small tropical islands. We believe this can be a very effective means to educate people,

particularly if a balance is established between the delivery of important information and being creative and entertaining.

Our long-term goal is to reach 40,000 people per annum. This would allow us to become self-reliant, with a financial buffer to cover unexpected decreases in visitor numbers and allow continued growth and development through reinvestment in the physical infrastructure. In achieving this goal we must be careful not to place excessive stress on a garden already stretched with 25,000 visitors per year. We are currently facing the challenge of attracting visitors in off peak hours and the low season, possibly by directing more emphasis towards the land-based tourism industry rather than the cruise ships. If we can secure this, then the future for Andromeda looks good; we will have achieved our mission and Iris Bannochie's dream.

Résumé

Situés sur une île avec une population locale peu importante, nous avons rapidement réalisé que la seule façon d'assurer notre mission et d'être financièrement autonomes serait d'adapter Andromeda aux demandes du marché du tourisme, comme une destination de voyage de 1er choix. Tout cela devrait être mené sans compromettre les autres aspects de notre mission, c'est à dire l'éducation, la recherche et la conservation.

En 1998, Andromeda avait déjà acquis une bonne réputation d'institut botanique sérieux, reconnu localement et internationalement comme un centre de recherche et de formation pour l'horticulture tropicale. Cependant, le jardin était financièrement mal en point, les entrées étaient en baisse et sa survie dépendait du bon vouloir de riches visiteurs de l'île. Les frais de fonctionnement n'étaient pas couverts depuis plusieurs années et les investissements dépendaient principalement des fonds disponibles plutôt que des besoins du jardin. L'usage commençait à laisser ses marques sur l'infrastructure.

Un changement de direction et de gestion a dessiné un nouveau chemin vers l'autonomie. Cet article décrit ce

chemin et explique comment le tourisme a permis au jardin de survivre. Il souligne également combien le tourisme peut être efficace pour éduquer les gens sur des questions importantes concernant les jardins botaniques et sur les populations de petites îles tropicales.

Resumen

Al estar ubicados en una pequeña isla y con una reducida población local, nos percatamos de que la única manera de satisfacer nuestra misión y autosostenernos financieramente, era adaptar Andromeda a las necesidades del mercado del turismo promocionándola como destino primordial. Esto sin comprometer los otros aspectos de nuestra misión tales como educación, investigación y conservación.

En 1998 Andromeda desarrolló una fuerte imagen como un instituto botánico serio y reconocido tanto local como internacionalmente como centro de desarrollo y capacitación de horticultura tropical. Sin embargo, el aspecto financiero del jardín era malo, las admisiones eran bajas y su existencia dependía de la buena voluntad de algunos donadores. Los costos anuales no se cubrían y por años los gastos del jardín se cubrían más por los fondos disponibles que por lo realmente necesario. El uso y desperdicio estaban "cobrando aduana" sobre la infraestructura.

El cambio de dirección y manejo proyectó un nuevo camino hacia la autosustentabilidad. El artículo describe este camino y explica cómo el turismo ha permitido al jardín botánico sobrevivir. También destaca qué tan efectivo puede ser el turismo para educar a la gente sobre importantes aspectos relacionados con los jardines botánicos y los habitantes de pequeñas islas tropicales.

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Encounters with Kenyan succulents

Introduction

Succulents are represented in about 30 families of plants. Kenya alone has about 350 different types of succulents, of which 170 are displayed at the Succulent Garden. Also known as 'fleshy xerophytes', succulents grow mainly in dry areas. As a result, they have developed a number of strategies that allow them to survive environments where water is generally in short supply. All succulents have a thick layer of flesh or cuticle covering the upper-most layer of the plant tissue to minimize water loss. They have adapted to store as much water as possible in their roots, stems or leaves.

Local communities in Kenya have used succulents in various ways. A number of *Euphorbia* species are widely used for timber, hedging and marking boundaries. The sap or latex from several aloe species has known medicinal uses and, from some succulents, it has been used as an ingredient of arrow poison for hunting. Various succulents are also used as food and as decorative plants. Some communities have regarded those with strange shapes as magical plants. One such succulent is the *Adenia globosa*, the centerpiece of the Succulent Garden. This relative of the passion fruit has a swollen stem ('water tank') in which it stores water.

Nonetheless, many uses of plants by local people are dying out as Western lifestyle encroaches on Kenyan towns

Summary The National Museums of Kenya (NMK) Nairobi Botanic Garden has a number of plant displays now accessible to the public and schools. These have been developed on different landscape themes at its Museum Hill site. One such theme is the rock garden on which several species of succulents are thriving. The Succulent Garden, as it is best described, lies adjacent to the popular Snake Park and aquarium displays at NMK. It is thus the most frequently visited plant display of the Nairobi Botanic Garden. Consequently, it was the focus of recent guided tours that were implemented during the months of June to August last year. The Succulent Garden provides a rare opportunity for visitors to encounter some of the plants that have developed survival strategies of storing and minimizing water loss. This article describes how, through guided tours, information on local uses of succulents was communicated to tourists with a view of inspiring them to participate in plant conservation.

and villages. Sharing some of these uses through interpretation and education programmes at the NMK Nairobi Garden may help promote indigenous uses of succulents and other plants. This was one of the aims of the guided tours we conducted at the Succulent Garden last year.

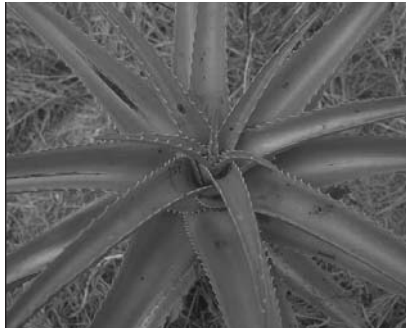
Sharing some local uses of succulents with tourists

With assistance of NMK volunteer guides, I was able to conduct a number of guided tours for both local and international visitors at the Succulent Garden. In order to achieve this, I first trained volunteer guides on how to conduct interpretive walks with



a focus on succulents. Guided tours at the Garden were flexible and responsive to the needs of tourists, as no prior bookings were required. They were only offered to interested tourists who did not expect a formal, academic atmosphere. To capture their attention, guided tours were made entertaining, interesting and

Above: Visitors enjoying the succulent garden



relevant to their needs. Use of technical language was avoided as much as possible when interpreting succulents. Visitors were connected to the succulents through a number of stories regarding their uses. Notably, interactions with local visitors enabled us to gather more information on the uses of succulents. Questions were used to provoke them into thinking of solutions to conservation problems facing plants in general and succulents in particular.

Through a thematic approach, uses and characteristics of succulents were shared with the visitors during the guided tours. Here are some of the themes that were focused on.

- **You can make beer here!**
This theme was used to address the importance of a number of aloe species in traditional beer making. The process of making honey-beer using leaf extracts from specific aloes was presented.
- **This plant can poison you**
At the heart of this theme was the tallest and largest succulent (*Euphorbia candelabrum*) at the Garden. Like most members of the *Euphorbia* family, this tree possesses a poisonous latex or milk that is dangerous to open wounds and eyes. A drop in the eye is known to cause blindness.
- **It smells like a rat!**
This theme seemed to attract a lot of curiosity from the tourists. It was used to introduce one of the tallest aloe (the Rat Aloe) growing at the Garden. The leaves of this rare aloe (*Aloe ballyi*) contain poisonous chemicals that smell of rat. It is one of the few poisonous aloes in Kenya.
- **An aloe with many uses**
One of the aloes (*Aloe secundiflora*) growing at the Garden is currently being over-exploited due to its many uses. It has a reputation as the 'Aloe vera' of Kenya. By relating it to the famous *Aloe vera*, uses of this particular aloe were made meaningful and relevant to the

tourists. While the many uses of *Aloe secundiflora* were acclaimed, the danger of it becoming extinct in the wild was also emphasised. This aloe is used as food in some communities in times of famine. In incidences of a lack of appetite, the sap from cut leaves is sucked. Some people use its stewed roots to treat tuberculosis, eye inflammation, headaches and malaria. It is also widely used to treat poultry diseases and pests.

Stories on local uses of succulents presented thematically as outlined above seemed to inspire visitors to want to find out more on the importance of succulents.

Communicating principles of international trade in plants

Guided tours provided a useful forum to sensitize tourists on illegal trade in wild plants. They were used to communicate the principles and practices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) as they relate to botanic gardens. Tourists were informed that international trade in succulents requires a permit. The three CITES appendices (I, II, III) were introduced and explained. In this way, we played a role in creating awareness of CITES and also underscored the essential function of botanic gardens in the conservation of the world's flora.

Wild plants in Kenya are increasingly threatened by overgrazing in rangelands, commercial over-exploitation and habitat destruction. Through interpretation and education programmes (guided tours) at the NMK Nairobi Botanic Garden, it is hoped that tourists will be inspired to participate in international plant conservation efforts and initiatives.

Résumé

Le Jardin Botanique de Nairobi du Muséum National du Kenya (NMK) dispose maintenant d'un grand nombre de parterres qui sont accessibles au public et aux scolaires. Ils sont aménagés suivant différents thèmes paysagers sur le site du Muséum Hill. L'un de ces parterres est un jardin de

rocaïlle où prospèrent plusieurs espèces de plantes succulentes. Ce jardin de succulentes jouxte les populaires parc aux serpents et aquariums du NMK. C'est donc le parterre le plus visité du Jardin Botanique de Nairobi. Par conséquent, il a été l'objet de nouvelles visites guidées qui ont été organisées du mois de juin au mois d'août l'année dernière. Ce jardin de succulentes fournit aux touristes l'opportunité de découvrir quelques-unes des plantes qui ont développé des stratégies pour stocker l'eau et réduire les pertes hydriques. Dans ce court article, je montre comment, au travers d'une visite guidée, des informations sur les utilisations locales des plantes succulentes sont communiquées aux touristes dans le but de les faire participer eux-même à la conservation des espèces végétales.

Resumen

Los Museos Nacionales de Kenya (NMK) y el Jardín Botánico de Nairobi tienen diversas colecciones de plantas accesibles al público y a las escuelas. En el Museo Hill se muestran diferentes temáticas y tipos de paisaje. Un tema es el jardín rocoso donde se muestran diversas especies de suculentas. Próximo al parque popular de las serpientes y el acuario, ambos en los NMK, se encuentra El Jardín de las Plantas Suculentas, la colección más visitada del Jardín Botánico de Nairobi. Por esta razón, en esta colección se centraron las visitas guiadas entre junio y agosto del año pasado. El jardín de suculentas proporciona una rara oportunidad a los turistas para encontrarse con plantas que han desarrollado estrategias para almacenar y evitar la pérdida de agua. En este breve artículo nuestro cómo a través de las visitas guiadas comunicamos a los turistas la información de los usos locales de especies de suculentas con el fin de motivarlos para participar en la conservación de las plantas.

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Attracting ‘green’ tourists to your garden

As global awareness of ‘green’ issues, such as sustainability, grows, so do demands by the public for holidays and excursions that adhere to the principles of sustainable development and environmental tourism. Consider the following statistics:

- 80% of UK holiday makers say that it is important that their holiday does not damage the environment (MORI 2000)
- 80% of German tourists stated that quality environmental conditions were important in selecting a destination
- In the USA, domestic and international travellers made 287 million recreation visits to National Park Service sites in 1998. Travel to these areas generated direct and indirect economic impact for local communities of \$14.2 billion and supported almost 300,000 tourist-related jobs during 1996

(Stevens 2002)

Summary As global awareness of ‘green’ issues, such as sustainability, grows, so do demands by the public for holidays and excursions that adhere to the principles of sustainable development and environmental tourism. For example, 80% of UK holiday makers say that it is important that their holiday does not damage the environment and 80% of German tourists stated that quality environmental conditions were important in selecting a destination. In the USA domestic and international travellers made 287 million recreation visits to National Park Service sites in 1998 which generated economic benefits for local communities of \$14.2 billion and supported almost 300,000 tourist-related jobs (Stevens 2002).

This article examines a range of success factors for the implementation of a sustainable tourism policy within a botanic garden. As we have seen in other articles in this issue, tourists are an important element of visitors for botanic gardens. The potential for all botanic garden to become visitor destinations is huge. We welcome your views and thoughts on this and in particular how you see the implementation of sustainable tourism in your garden.



Botanic gardens are uniquely placed to offer the kind of experiences that more ‘environmentally aware’ visitors desire. The question is, how can gardens attract them? For ideas and inspiration take a look at the following table which identifies a range of success factors for the implementation of a sustainable tourism policy, based on research carried out on sustainable tourism in National Parks in the U.K.

Left: Botanic gardens offer opportunities for sustainable nature based tourism. (Photo: Lucy Sutherland)

Sustainable Tourism in Botanic Gardens – a checklist

The main elements and related activities which need to be carried out to ensure your garden will embrace the ethics of sustainable tourism are given in the table below.

Elements	Aims	Activities
1. Resource Management	Protect, maintain and enhance local environmental quality	<ul style="list-style-type: none"> • Prepare a visitor management plan and vision statement • Take action to protect sensitive sites – both within the garden and at any other projects in the locality with which the gardens is involved • Record visitor numbers and behaviour; how long do they spend in the garden, which areas do they visit, what do they do e.g. interact with guides, or use the gift shop • Monitor sensitive sites within your gardens and externally – are they affected by your visitors? If so, how can you minimise visitor impact? • Assess the environmental impact of any proposed developments and visitor use, from new toilets to a new access road • Understand the relationships between visitors and the resource, how do they regard the gardens, what do they learn from their visit, why do they come?
2. Marketing	Influence scale, nature and type of tourism in response to environmental and local factors	<ul style="list-style-type: none"> • Avoid promotion of sensitive and fragile sites • Involve local tourism operators • Involve environmental agencies • Extend the season to spread impact and benefit where appropriate, so that the numbers of visitors is as even as possible throughout the year • Monitor impact of marketing – how do visitors know about your garden? Where do they find out about it from – leaflets, posters or a website? • Develop partnerships and packages to promote appropriate tourism products, taking into account scale, volume, character and location
3. Education	Increase awareness about sustainability. Influence visitor behaviour to reduce negative impact on the environment. Influence tour operators to incorporate sustainable practices in their operations.	<ul style="list-style-type: none"> • Promote sustainable messages to visitors – e.g. through interpretation, guided tours and education programmes • Raise awareness of conservation issues • Emphasise special character of area through imaginative interpretation • Run training courses for tour operators
4. Transport	Reduce the use and impact of cars and encourage alternative forms of transport	<ul style="list-style-type: none"> • Promote and encourage the use of public transport to and from the site • Improve services to meet the needs of visitors as well as residents • Understand consumer traffic patterns • Encourage alternative forms of travel within the area
5. Community	Involve local people in shaping tourism policy and decisions	<ul style="list-style-type: none"> • Encourage and support community tourism forums/groups • Support community based environmental initiatives • Involve the community in drawing up visitor management plans • Engage community councils • Involve locally elected members
6. Local benefit	Increase local economic contribution from tourism	<ul style="list-style-type: none"> • Promote local purchasing initiatives • Set up networks of local producers • Assist local businesses to get more from tourism • Use locally sourced products and food in the visitor centre, shop and cafes • Involve local crafts people, artists and designers in all aspects of marketing
7. Tourism industry	Reduce the environmental impact of the local tourism industry and maximise the benefit to local operators	<ul style="list-style-type: none"> • Encourage adoption of environmental good practice • Introduce environmental award scheme for other local businesses to become involved in • Provide environmental advice, training and business development • Raise enterprises' awareness of their local environment • Stimulate local supply chains • Develop local package to promote environmental or sustainable travel / activities / holidays within the area

Original source; Stevens, 2002. Adapted to include elements relevant to botanic gardens.

Finally - To keep in mind if your sustainability programme is to bear fruit

1. Be aware that development aimed at increasing numbers of visitors can adversely impact the surrounding environment, the very thing that you want people to come and see – particularly due to increased travel from and within the local area.
2. New facilities are sometimes abused by unthinking and inconsiderate visitors. The rule that 'if you can't maintain it, don't build it' is a cardinal principal of tourism development.
3. Economists say that tourism should not be allowed to grow to an extent that the destination area becomes totally dependant on it – this includes botanic gardens. Is your garden totally dependant on tourism or would it survive on donations and visitors from the local community? If not, what are the ways to try and counteract this?

(Adapted from 'Learn about the Issues' Georgia Nature-Based Tourism Association)

As we have seen in other articles in this issue, tourists are an important element of visitors for botanic gardens. The potential for all botanic garden to become visitor destinations is huge. We welcome your views and thoughts on this and in particular how you see the implementation of sustainable tourism in your garden.

References

- ➔ Georgia Nature-Based Tourism Association <http://www.georgia-nature.org/issues/>
- ➔ Stevens, T. 2002. Sustainable tourism in National Parks and protected areas: An overview. Scottish Natural Heritage

Résumé

Alors qu'une prise de conscience globale des questions d'environnement se développe, de même augmente la demande du public pour des vacances ou des excursions qui respectent les principes du développement durable et du tourisme vert. Par exemple, 80% des



Left: Carved hop poles at the beer display in the Eden Project, UK

organisateurs de vacances britanniques disent qu'il est important que leurs vacances ne causent pas de dommages à l'environnement et 80% des touristes allemands déclarent que de bonnes conditions environnementales sont importantes dans le choix d'une destination. Aux Etats Unis, les voyageurs américains ou étrangers ont effectué, en 1998, 287 millions de visites dans des sites gérés par les Services des Parcs Nationaux, ce qui a généré des bénéfices économiques pour les populations locales de 14,2 milliards de dollars et a rémunéré près de 300 000 emplois liés au tourisme (Stevens 2002).

Cet article analyse une série de facteurs favorables à la mise en place d'une politique de tourisme durable au sein des jardins botaniques. Comme nous l'avons vu dans d'autres articles de ce numéro, les touristes constituent une proportion importante des visiteurs des jardins botaniques. Le potentiel pour que tous les jardins botaniques deviennent des destinations de visiteurs est énorme. Nous attendons vos points de vue et suggestions à ce sujet et en particulier comment vous voyez la mise en place d'un tourisme durable dans votre jardin.

Resumen

Tal como la toma de conciencia global sobre aspectos "verdes" y como la sustentabilidad van en aumento, así también la demanda del público que busca vacaciones y excursiones acordes al desarrollo sustentable y al turismo ambiental. Por ejemplo, 80% de los vacacionistas del Reino Unido

piensan que es importante que sus vacaciones no dañen el ambiente; 80% de los turistas alemanes señalan que la calidad de las condiciones ambientales fueron importantes para seleccionar el destino y en Estados Unidos, los viajeros nacionales e internacionales realizaron en 1998, 287 millones de visitas recreativas en sitios del Servicio de Parques Nacionales (National Park Service) las cuales generaron beneficios económicos para las comunidades locales por \$14.2 billones creando alrededor de 300 000 empleos relacionados con el turismo (Stevens 2002).

Este artículo explora una serie de factores de éxito para la implementación de políticas de turismo sustentable en los jardines botánicos. Como se ha observado en otros artículos de este número, los turistas constituyen un elemento importante de los visitantes de los jardines botánicos. El potencial que tienen los jardines para convertirse en destino turístico es enorme. Agradecemos su punto de vista y sus reflexiones acerca de esto y en particular sobre su visión para desarrollar turismo sustentable en su jardín.

Sarah Kneebone is the Education Officer at BGCI

This article has been produced with the kind permission of Professor T. Stevens using his report on sustainable tourism. Stevens & Associates are specialist tourism consultants and can be contacted on info@stevensassoc.co.uk

Resources

Resources

John Pastorelli (2002) Enriching the Experience, an interpretive approach to guiding. Hospitality Press, Australia. ISBN: 1862505225

This book has been written as a practical and comprehensive skills-based resource for guides. It describes techniques and strategies that can be used by guides to assist them in managing a range of elements called for in a tour. Some of the subject areas in the book include:

- Managing tour groups
- Working with stories and themes
- Delivering engaging presentations and captivating audiences
- Increasing perceptive abilities through perception layering and creative thinking techniques.

A variety of interpretive professionals throughout Australia have contributed to the book. Through sharing their knowledge and passion for Australia's heritage, it demonstrates how the personal qualities of guides can bring objects to life.

Lindberg, K., Hawkins, D.E. (1993) Ecotourism A Guide for Planners and Managers Volume 1. The Ecotourism Society, North Bennington, Vermont, USA. ISBN0-9636331-0-4 (Volume 1) 0-9636331-3-9 (Volume 2)

Some botanic garden institutions are considering their potential in ecotourism; however, they are not

Disponible

John Pastorelli (2002) Enrichir l'expérience, une approche interprétative pour les visites guidées. Hospitality Presse, Australia. ISBN : 1862505225

Ce livre a été écrit comme un manuel pratique et complet basé sur les compétences pour les guides et les animateurs. Il décrit des techniques et des stratégies qui peuvent être utilisées par les animateurs pour les aider à gérer un choix d'éléments nécessaires pour bâtir une visite. Quelques-uns des sujets abordés dans ce livre portent sur :

- Gérer une visite avec un groupe
- Travailler avec des histoires et des thèmes
- Faire des présentations attirantes et capter l'attention d'un public
- Augmenter la sensibilité par le biais des couches de perception et des techniques de pensées créatives.

Différents professionnels de l'interprétation provenant de toute l'Australie ont contribué à ce livre. En partageant leur savoir-faire et leur passion pour le patrimoine australien, ils démontrent comment les qualités personnelles du guide peuvent donner vie aux objets.

Lindberg, K., Hawkins, D.E. (1993) Eco tourisme un guide pour les directeurs et les gestionnaires Volume 1. The Ecotourism Society, North Bennington, Vermont, USA. ISBN 0-9636331-0-4 (volume 1) 0-9636331-3-9 (Volume 2)

Recursos

John Pastorelli (2002) Mejorando la experiencia, una aproximación interpretativa a la orientación. Hospitality Publications. Australia. ISBN: 1862505225

Este libro ha sido escrito como una fuente práctica y entendible de información para guías. En el se describen técnicas y estrategias que pueden ser utilizadas por guías y así ayudarlos en situaciones que se presentan en expediciones. Algunos de los temas de libro son:

- Administración de grupos turísticos
- Desarrollo por medio de leyendas y cuentos
- Presentación de atractivas demostraciones para cautivar el público
- Incremento, desarrollo de destrezas perceptivas por medio de técnicas creativas de pensamiento y diferentes niveles de interpretación.

Una variedad de intérpretes profesionales de toda Australia han contribuido en este libro. Compartiendo así conocimientos y pasión por el patrimonio Australiano se demuestra como las cualidades personales de los guías pueden dar vida a los objetos.

Lindberg, K., Hawkins, D.E. (1993) Ecoturismo. Una guía para Planificadores y Administradores Volumen 1. La sociedad Ecoturista, North Bennington, Vermont, USA. ISBN0-9636331-0-4. (Volumen 1) 0-9636331-3-9 (Volumen 2)

always aware of the planning and management processes that are required. Lindberg et al's guide to ecotourism uses examples from around the globe to demonstrate good practice in ecotourism, and highlight ways to implement ecotourism principles in the field. The chapters cover important ecotourism issues such as planning, preparing guidelines, maximising economic benefits, managing visitors, designing low impact facilities, increasing community participation and ensuring community benefits.

Eagles, P., McCool, S. and Haynes, C. (2002) Sustainable Tourism in Protected Areas: Guidelines for Planning and Management. United Nations Environment Programme, The World Conservation Unit (IUCN) and the World Tourism Organization. ISBN: 2831706483

Eagles et al's guidelines aim to assist managers in planning and managing protected areas based on a range of practical case studies and experience. Protected areas, such as national parks and biosphere reserves, play a vital and increasing role in tourism. In addition, these protected areas need tourism to support their park operating budgets.

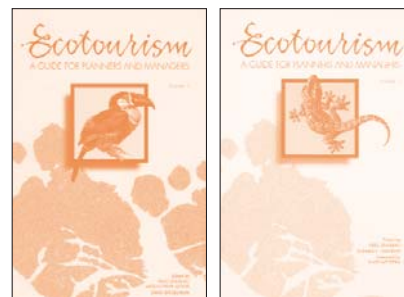
A key challenge for protected areas is ensuring that the tourism is sustainable. It is essential that protected areas are managed effectively for tourism, while ensuring their natural values - the assets that attract tourists - are protected for future generations. To undertake a commitment that tourism follows a sustainable path requires leadership and partnerships at all levels, particularly between the tourism industry and relevant government and non-government agencies. This book describes how this can be done. A number of the principles addressed in this publication can be applied to a botanical institution. Until more relevant botanic gardens resources are published, botanic garden staff will find ecotourism publications focusing on national parks useful.

Howard, P. (2003) Woman and Plants: Gender Relations in Biodiversity Management and Conservation. Zed Books, UK. Tel: 44 (0) 20 7837 4014. ISBN. 1 84277 157 4.

Certains Jardins Botaniques évaluent leur potentiel pour l'écotourisme. Cependant, ils n'ont pas toujours conscience des processus de planification et de gestion que cela nécessite. L'ouvrage de Lindberg et al présente des exemples provenant du monde entier pour montrer les bonnes pratiques de l'écotourisme et surtout les moyens pour mettre en œuvre les principes de l'écotourisme dans ce domaine. Les différents chapitres abordent les problèmes importants de l'écotourisme tels que : la planification, l'élaboration de directives, maximiser les bénéfices économiques, gérer les visiteurs, concevoir des aménagements ayant un faible impact, augmenter la participation du public et assurer le bénéfice des communautés.

Eagles, P., McCool, S. and Haynes, C. (2002) Tourisme soutenable dans les zones protégées: Guide pour la planification et la gestion. Programme des Nations Unies Pour l'Environnement, l'Union Internationale pour la Conservation de la Nature (IUCN) et l'Organisation Mondiale du Tourisme. ISBN : 2831706483

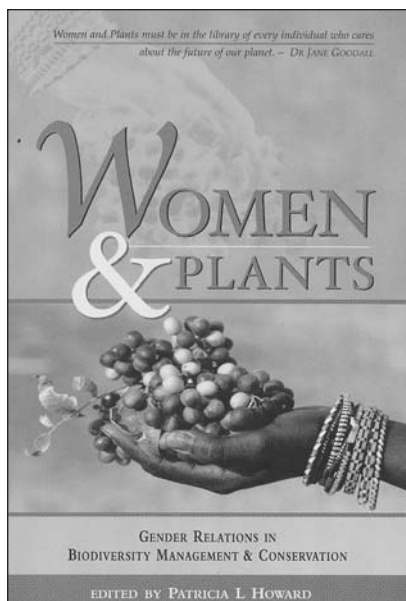
Ce guide rédigé par Eagles et al a pour objectif d'aider les directeurs dans la planification et la gestion des zones protégées en présentant un éventail de cas d'études et d'expériences pratiques. Les zones protégées, comme les parcs nationaux ou les réserves de la biosphère, ont un rôle fondamental, et de plus en plus important, en matière de tourisme. Par ailleurs, ces zones protégées ont besoin du tourisme pour équilibrer leur budget de fonctionnement. Le défi majeur à relever dans ces zones protégées est de s'assurer que le tourisme est soutenable. Il est essentiel que les zones protégées soient efficacement gérées pour le tourisme, tout en préservant leur valeur naturelle - puisque c'est ce qui attire les touristes - pour les générations futures. Garantir que le tourisme suit un chemin soutenable demande une direction forte et des partenariats à tous les niveaux, particulièrement entre l'industrie touristique et les services gouvernementaux et non gouvernementaux adéquats. Ce livre explique comment cela est possible. Certaines règles présentées dans cette



Algunas instituciones de Jardines Botánicas están considerando dentro de sus posibilidades el ecoturismo; sin embargo, no son siempre conscientes de los procesos de planeación y administración que esto requiere. La guía de ecoturismo de Lindberg et al's usa ejemplos de varias partes del mundo para mostrar el buen ejercicio del ecoturismo, y hace destacar las diferentes formas para poner en práctica los principios eco turísticos en los jardines botánicos. Los diferentes capítulos cubren importantes temas como: planificación, preparación de directrices, aumento de beneficios económicos, administración de visitantes, distribución de servicios, facilidades de bajo impacto, el crecimiento y la participación de la comunidad y los beneficios para la misma.

Eagles, P., McCool, S. Y Haynes, C. (2002) Turismo sostenible en áreas protegidas: Guías para planificación y manejo. Programa de Medioambiente de Las Naciones Unidas, The World Conservación Unit (IUCN) and the World Tourism Organización. ISBN: 2831706483

Basadas en experiencias y diferentes casos prácticos las guías Eagles et al's tratan de ayudar a los administradores en la planeación y manejo de áreas protegidas. Áreas protegidas, como parques nacionales y reservas de la biósfera, quienes juegan una parte fundamental en el crecimiento del turismo. Además, estas áreas protegidas necesitan el apoyo turístico para la financiación las mismas. El desafío mas importante para dichas áreas es el garantizar que el turismo sea sostenible. Es esencial que estas áreas sean administradas efectivamente para el turismo, en tanto que se mantienen sus valores naturales - lo que atrae a los turistas- y al mismo tiempo protegiéndolas para futuras



This book explores the importance of women and gender relations in plant genetic resource management and conservation through case studies derived from Latin America, Asia, Africa, Europe and North America. It provides an overview of the concepts, relationships and contexts explaining the gender dimensions of people-plant relations.

The contributors come from a range of disciplines including ethnobotany, geography, agronomy, anthropology, plant breeding, nutrition and development economics. They demonstrate how vital women are to plant biodiversity management and conservation at household, village, and community levels; and how gender relations have a strong influence on the ways in which local people understand, manage and conserve biodiversity.

Knowledge on gender and plant biodiversity management and conservation is essential for determining the parameters for policies and interventions. This book contributes to this knowledge and serves to empower people who want and need to know more.

Websites

<http://www.ecotourism.org.au/neap.asp>
Ecotourism Australia Association
 Ecotourism Australia Association is one of the world's leading ecotourism organisations. EAA is well known

publication peuvent être appliquées aux institutions botaniques. Jusqu'à ce qu'un ouvrage plus adapté aux Jardins Botaniques ne soit publié, les personnels des Jardins Botaniques trouveront utiles les publications sur l'écotourisme dans les parcs nationaux

Howard, P. (2003) Femme et plantes : relations hommes-femmes dans la gestion et la conservation de la biodiversité. Zed Books, UK. Tel: 44 (0) 20 7837 4014. ISBN. 1 84277 157 4.

Ce livre explore l'importance des femmes et des relations hommes-femmes dans la gestion et la conservation des ressources génétiques au travers d'exemples provenant d'Amérique Latine, d'Asie, d'Afrique d'Europe et d'Amérique du Nord. Il donne une vue d'ensemble des concepts, relations et contextes qui expliquent cette question du genre dans les relations entre plantes et personnes.

Les contributeurs proviennent de diverses disciplines tel que l'ethnobotanique, la géographie, l'agronomie, l'anthropologie, l'amélioration végétale, la nutrition et l'économie du développement. Ils montrent le rôle essentiel des femmes dans la gestion et la conservation de la diversité végétale au niveau du foyer, du village et de la communauté. Et comment les relations hommes-femmes ont une forte influence sur la manière dont les populations locales comprennent, gèrent et conservent la biodiversité.

Ce savoir sur le genre et la gestion et la conservation de la diversité végétale est essentiel pour déterminer les paramètres nécessaires à l'élaboration d'une politique et des niveaux d'intervention. Ce livre contribue à la diffusion de ce savoir et sera très utile pour aider et soutenir les personnes qui veulent et doivent en savoir plus.

Sites Internet

<http://www.ecotourism.org.au/neap.asp>
Ecotourism Australia Association
 L'Association Australienne d'Ecotourisme (EAA) est l'une des principales organisations d'écotourisme de par le monde. L'EAA est bien connue internationalement

generaciones. Para emprender el compromiso que el turismo seguirá para una ruta sostenible, las partes requieren de liderazgo y asociaciones a todos los niveles, particularmente entre la industria turística, gobierno relevante y agencias no gubernamentales. Este libro describe como esto puede llevarse a cabo. En dicha publicación se dan una serie de principios que se pueden implementar, y llevar a cabo en instituciones botánicas. Hasta que haya más información relevante publicada por jardines botánicos en este aspecto, el personal de los mismos jardines encontrara útiles estos trabajos enfocados a ecoturismo en parques nacionales.

Howard, P. (2003) Mujeres y plantas: estereotipo y relaciones en el manejo de la biodiversidad y conservación. Zed Books, UK. Tel: 44 (0) 20 7837 4014. ISBN. 1 84277 157 4.

Este libro explora la importancia que las mujeres juegan en el manejo de recursos genéticos de plantas y su conservación en diferentes casos a través de Latín América, Asia, África, Europa y Norteamérica. Así ofrece una prospectiva general de conceptos, relaciones y contexto explicando en que dimensión influyen las mujeres en cuanto la interacción gente-planta. Los contribuyentes de este libro pertenecen a varias disciplinas: etnobotánica, geografía, agronomía, antropología, reproducción vegetal, nutrición y desarrollo económico. Los contribuyentes demuestran así, que esencial es el papel de las mujeres en aspectos de manejo de la conservación en el hogar, la aldea y estructura de la comunidad; como ellas tienen gran influencia en las relaciones y la manera que ellas condicionan el conocimiento de la gente, manejo y conservación de la biodiversidad. Esta influencia femenina, es fundamental para determinar los parámetros de las intervenciones políticas. El libro contribuye a este conocimiento y sirve para conferir poder a quienes quieren y necesitan saber mas.

<http://www.ecotourism.org.au/neap.asp>
Asociación Australiana de ecoturismo (Ecotourism Australia Association)

internationally for its Nature and Ecotourism Certification Program (NEAP). NEAP was set up to identify and certify genuine nature and ecotourism products in Australia. The NEAP application form is a useful resource for botanic garden staff that are new to ecotourism. The application form identifies core criteria that an attraction, such as a botanic garden, must have to be certified either for nature tourism, ecotourism or advanced ecotourism. The core areas addressed in detail are interpretation, environmental sustainability, contribution to conservation, community partnerships, benefits to communities and cultural components. The application document also has a guide to innovative practice in these key criteria.

<http://www.ecotourism.org>

The International Ecotourism Society

The International Ecotourism Society (TIES) is a membership organisation founded in 1990. The society is the world's largest and oldest ecotourism organisation dedicated to generating and disseminating information about ecotourism. TIES promotes responsible travel to natural areas that conserve the environment and improve the well-being of local people. This web site is a valuable source of resources on sustainable nature-based tourism. There is information on guidelines and standards, training courses, technical assistance, and ecotourism publications. In addition, there are reports and articles by leading ecotourism researchers.

Recent TIES newsletters are also available to read. Botanic garden staff may find the articles addressing topics such as ecotourism innovations and partnerships of particular interest. The newsletters also have useful contact information on national ecotourism organisations in countries including Kenya, Brazil and Sri Lanka.

<http://www.nationalgeographic.com/travel/sustainable/>

National Geographic Sustainable Tourism Resource Centre

The National Geographic Society is inaugurating a program to increase knowledge about sustainable tourism. They have set up a web site with comprehensive directories of hyper links

pour son programme de certification du tourisme nature et de l'écotourisme (NEAP). Le NEAP a été mis au point pour permettre d'identifier et de certifier des produits authentiques en matière de tourisme-nature et d'écotourisme en Australie. Le document de candidature pour le NEAP représente une source d'informations utile pour le personnel de jardins botaniques encore inexpérimenté en écotourisme. Le document présente les critères principaux auxquels une attraction comme un jardin botanique doit répondre pour être certifiée dans les catégories tourisme-nature, écotourisme ou écotourisme avancé. Les principaux sujets abordés en détail sont l'interprétation, la durabilité environnementale, la contribution à la protection de la nature, les partenariats avec les communautés locales, les avantages pour ces communautés et les composantes culturelles. Le document de candidature contient aussi un guide des pratiques innovatrices dans ces domaines.

<http://www.ecotourism.org>

International Ecotourism Society

La Société Internationale d'Ecotourisme (TIES) est une organisation d'adhésion fondée en 1990. Cette société est la plus grande et la plus ancienne organisation d'écotourisme, elle se consacre à l'élaboration et à la distribution des informations concernant l'écotourisme. TIES promeut les voyages qui respectent les espaces naturels, préservent l'environnement et augmentent le bien-être des habitants locaux. Son site est une bonne source d'informations sur le tourisme-nature durable. On y trouve des informations sur les directives et les standards, les cours de formation, l'assistance technique et des publications sur l'écotourisme. De plus, il y a des rapports et des articles sur le tourisme durable écrits par des chercheurs de pointe.

Les derniers bulletins de TIES peuvent être consultés en ligne. Le personnel des jardins botaniques pourrait trouver un intérêt particulier aux articles concernant des thèmes comme les innovations en écotourisme et les partenariats. Les bulletins contiennent aussi des informations utiles sur les

La Asociación Australiana de Ecoturismo (EEA) es una de las organizaciones mundiales líderes en ecoturismo, por su Programa de Certificación de Ecoturismo (NEAP). NEAP fue establecido para identificar y certificar productos genuinos naturales y de ecoturismo en Australia. La forma de aplicación de la NEAP es una fuente útil para el personal del jardín botánico que son nuevos en ecoturismo. La forma de aplicación identifica los criterios centrales que una atracción tal como un jardín botánico debe tener para ser certificado ya sea como un lugar para turismo natural, ecoturismo o ecoturismo avanzado. Las áreas centrales dirigidas en detalle son interpretación, sustentabilidad ambiental, contribución a la conservación, comunidades en sociedad, beneficios a las comunidades y componentes culturales. El documento de aplicación también tiene una guía para innovar prácticas en estos criterios claves.

<http://www.ecotourism.org>

Sociedad Internacional de Ecoturismo (The International Ecotourism Society)

La Sociedad Internacional de Ecoturismo (TIES) es una organización miembro fundada en 1990. La sociedad es la organización de ecoturismo mas grande y mas antigua del mundo. TIES promueve el viaje responsable a las áreas naturales que conservan el medioambiente y mejoran el bienestar de los pobladores locales. Este sitio web es una fuente valiosa de turismo basado en la naturaleza sustentable. Hay información sobre lineamientos y estándares, cursos de entrenamiento, asistencia técnica, y publicaciones de ecoturismo. Adicionalmente, hay reportes y artículos de investigadores líderes en el campo del ecoturismo.

Recientemente se cuenta con boletines informativos de TIES disponibles para leerse. El personal del jardín botánico puede encontrar los artículos enfocados a tópicos tales como las innovaciones de ecoturismo y asociaciones de interés particular. Los boletines también tienen útiles contactos de información sobre

aimed at tourism professionals, such as botanic garden staff, as well as travelers and residents. Their goal is to encourage everyone, whether resident, visitor, or professional, to conduct tourism in a way that supports the geographical character of the place being visited—its environment, culture, heritage, aesthetics, and the well-being of its citizens.

The directory includes several sections of particular interest to botanic gardens, with links to sites providing advice and how-to guides on offering a service attractive to 'green' tourists, definitions and policy guidelines, research on sustainable tourism and many case studies of successful sustainable tourism operators. There are also links to on-line forums giving support, advice and news for those working in the sustainable tourism sector.

<http://www.rainforest-alliance.org>

Rainforest Alliance

Rainforest Alliance is a leading international conservation organization. Their education sections contain lesson plans, downloadable resources (many of which are in English, Spanish and Portuguese), activities and facts and figures sheets which could be useful for developing educational and interpretation displays. They also have a monthly email newsletter which provides news of new resources and case studies of education work based on learning about rainforests.

Lucy Sutherland is a lecturer at Middlesex University in the U.K. She is currently writing up her PhD thesis on sustainable tourism in botanic gardens.

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Correction of address

In the last issue of *Roots* we inadvertently printed the wrong address for Marcin Zych.

The correct address is:

Marcin Zych

email: mzych@biol.uw.edu.pl

ogrod@biol.uw.edu.pl

phone: 48225530511

fax: 48225530510

organisations d'écotourisme nationales dans les pays tels que le Kénia, le Brésil et le Sri Lanka.

<http://www.nationalgeographic.com/travel/sustainable/>

Centre de ressources sur le tourisme durable du National Geographic

La *National Geographic Society* a inauguré un programme pour la promotion des connaissances sur tourisme durable. Ils ont mis au point un site internet avec de vastes répertoires de liens destinés aux professionnels du tourisme, comme le personnel de jardins botaniques, ainsi qu'aux voyageurs ou aux habitants. Leur but est d'encourager tout le monde, qu'ils soient habitants, voyageurs ou professionnels à mener le tourisme de façon à ce qu'il maintienne le caractère de l'endroit visité – son environnement, sa culture, son patrimoine, son esthétique et le bien-être de ses habitants.

Le répertoire contient plusieurs sections d'un intérêt particulier pour les jardins botaniques, avec des liens vers des sites offrant des conseils et des guides « Comment faire » pour offrir un service attractif vis à vis des touristes 'verts', des sites donnant des définitions et des lignes directrices en matière de politique, des sites sur la recherche en tourisme durable, et beaucoup d'exemples de réussite d'opérateurs de tourisme durable. Il y a aussi des liens vers des forums en ligne qui proposent de l'aide, des conseils et des nouvelles pour ceux qui travaillent dans le domaine du tourisme durable.

<http://www.rainforest-alliance.org>

Rainforest Alliance

L'Alliance pour la Forêt Tropicale est une des principales organisations internationales de protection de l'environnement.

Les sections éducatives contiennent des programmes de cours, du matériel téléchargeable (beaucoup sont en anglais, espagnol et portugais), des activités et des feuilles d'information qui pourraient être utiles lors du développement d'affiches éducatives ou d'interprétation. Il y a aussi un bulletin mensuel disponible par courriel qui informe sur de nouvelles ressources et donne des exemples de travail éducatif au sujet des forêts tropicales.

organizaciones nacionales de ecoturismo en países como Kenia, Brasil y Sri Lanka.

<http://www.nationalgeographic.com/travel/sustainable/>

Centro de Recursos de Geografía Nacional para el turismo sustentable (National Geographic Sustainable Tourism Resource Centre)

La Sociedad Nacional de geografía (The National Geographic Society) esta inaugurando un programa para incrementar el conocimiento acerca del turismo sostenible. Ellos han establecido un sitio web con un amplio directorio de links dirigidos a profesionales del turismo, tal como personal del jardín botánico, viajeros y residentes. Su objetivo es motivar a todos, ya sea residente, visitante, o profesional, para conducir el turismo en una forma que apoye el carácter geográfico del lugar que esta siendo visitado, su medioambiente, cultura, herencia, estética, y el bienestar de sus ciudadanos.

El directorio incluye diferentes secciones de interés particular a jardines botánicos, con links a sitios que proveen consejo y guía para el ofrecimiento a servicios atractivo a 'turistas verdes', definiciones y lineamientos de políticas, investigación sobre turismo sostenible y muchos casos de estudios de exitosos operadores de turismo sustentable.

<http://www.rainforest-alliance.org>

Alianza para el Bosque Tropical (Rainforest Alliance)

La Alianza del bosque tropical es una organización que dirige la conservación internacional.

Su sección de educación contiene planes de secciones, recursos accesibles (mucho de los cuales están en Inglés, Español y Portugués), actividades, hechos y hojas de figuras las cuales podrían ser usadas para desarrollar exhibiciones educativas y de interpretación. Ellos también tienen un boletín electrónico mensual el cual provee noticias de nuevos recursos y casos de estudio de trabajos educación basado sobre aprendizaje del bosque tropical.

How to join Botanic Gardens Conservation International

The mission of BGCI is to build a world network for plant conservation. It was founded in 1987 and now includes over 525 member institutions in 115 countries, working together to implement the *International Agenda for Botanic Gardens in Conservation* and the new *Global Strategy for Plant Conservation*.

Institutions can join BGCI for the following benefits:

- Membership of the worldwide plant conservation network
- Botanic Garden Management Resource Pack (upon joining)*
- Regular publications:
 - the regular newsletter, *Cuttings*
 - *BGjournal* – an international journal for botanic gardens (2 per year)
 - *Roots* - environmental education review (2 per year)
 - A wide range of new publications
- Invitations to BGCI congresses and discounts on registration fees
- BGCI technical support and advisory services

Institution Membership		£ Stlg	US \$	£ Euros
A	BGCI Patron Institution	5000	7500	7500
B	Institution member (budget more than US\$2,250,000)	600	940	940
C	Institution member (budget US\$ 1,500,000 - 2,250,000)	440	660	660
D	Institution member (budget US\$ 750,000 - 1,500,000)	300	440	440
E	Institution member (budget US\$ 100,000 - 750,000)	160	220	220
F	Institution member (budget below US\$100,000)*	75	110	110

*Generally applies to institutions in less developed countries

Other Membership Categories:

Membership benefits depend on category - see below. These can include:

- Regular publications:
 - the regular newsletter, *Cuttings*
 - *BGjournal* - an international journal for botanic gardens (2 per year)
 - *Roots* - Environmental Education Review (2 per year)
- Invitations to BGCI congress and discounts on registration fees

Corporate Membership		£ Stlg	US \$	£ Euros
G	Corporate Gold Member (<i>BGjournal</i> , <i>Roots</i> and <i>Cuttings</i> plus more)	5000	7500	7500
H	Corporate Silver Member (<i>BGjournal</i> , <i>Roots</i> and <i>Cuttings</i> plus more)	1000	1500	1500

Individual Membership		£ Stlg	US \$	£ Euros
J	Conservation donor (<i>BGjournal</i> , <i>Roots</i> and <i>Cuttings</i> plus more)	160	220	220
K	Associate member (<i>Cuttings</i> and <i>BGjournal</i>)	35	50	50
L	Associate member (<i>Cuttings</i> and <i>Roots</i>)	35	50	50
M	Friend (<i>Cuttings</i>) available through online subscription only (www.bgci.org)	10	15	15

* Contents of the Botanic Garden Management Resource Pack: *The Darwin Technical Manual for Botanic Gardens*, *A Handbook for Botanic Gardens on the Reintroduction of Plants to the Wild*, *A CITES Manual for botanic gardens*, *BGjournal* - an international journal for botanic gardens (2 past issues), *Roots* - environmental education review (2 past issues), *The International Agenda for Botanic Gardens in Conservation*, *Global Strategy for Plant Conservation*, *Environmental Education in Botanic Gardens*, *BG-Recorder* (a computer software package for plant records).

Payment may be made by cheque payable to Botanic Gardens Conservation International, or online at www.bgci.org or by VISA/Mastercard sent to BGCI, Descanso House, 199 Kew Road, Richmond, Surrey, TW9 3BW, U.K or Fax: +44 (0) 20 8332 5956.

I wish to apply for membership of Botanic Gardens Conservation International.

Name
 Telephone
 Address

 Fax
 E-mail
 Internet site

Membership category Annual rate
 VISA/Mastercard number Credit card expiry date
 Signature Print name

I would like to make a donation to BGCI. Amount

Please clearly state your name (or the name of your institution) on all documentation. Please contact info@bgci.org for further information.



BGCI

Plants for the Planet

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