



**College of Tropical Agriculture  
and Human Resources**  
University of Hawai'i at Mānoa

**Resource Management**  
**Dec. 2008**  
**RM-17**

## **Achieving Sustainable Tourism in Hawai'i Using a Sustainability Evaluation System**

Linda J. Cox<sup>1</sup>, Melanie Saucier<sup>1</sup>, John Cusick<sup>2</sup>, Harold Richins<sup>3</sup>, and Bixler McClure<sup>4</sup>

<sup>1</sup>CTAHR Department of Natural Resources and Environmental Management, <sup>2</sup>UH Mānoa Environmental Center, <sup>3</sup>UH Mānoa School of Travel Industry Management, <sup>4</sup>UH Mānoa Department of Geography

Visitor arrivals in Hawai'i for 1995–2006 showed consistent growth, and currently about 7.5 million visitors are expected each year to visit Hawai'i and join the resident population of just over one million (DBEDT 2007) to enjoy the islands' beauty and natural resources. According to Honey (2002), the number of visitors that support environmentally and socially responsible tourism is increasing, yet at the same time the state faces soaring energy costs, continuing degradation of native habitats, finite potable water resources, and increasing public sensitivity to its economic dependency on tourism. Examples of the increasing public concern include last year's legislative initiative to cap visitor numbers and statewide opposition to short-term accommodations in residentially zoned neighborhoods. Policy makers responded to these concerns, in part, by initiating the Sustainability 2050 Task Force as a means to engage public participation in designing a vision that secures some degree of self-sufficiency within the state by the year 2050 (Hawai'i 2050 Plan 2008). However, the current *Hawai'i Tourism Strategic Plan 2005–2015* (HTA 2005) suggests an expanded scope for tourism development and gives little consideration to long-term environmental or cultural issues that must be addressed to achieve sustainability. Given today's economic climate, many are focused on maintaining Hawai'i's share of the global tourism market. This heightened level of focus on economics may take resources away from the efforts to check environmental degradation, deal with insensitivity toward the state's existing social and cultural structure, and address public unease with the status quo, which many feel must be addressed in order to embrace sustainability.

This publication presents an overview of sustainable tourism and outlines the current situation in Hawai'i with the intention of helping the public understand how tourism in Hawai'i can become more sustainable. As Cox and Cusick (2006) pointed out, the complexity of sustainability challenges the ability of a single institution to ensure implementation of long-term planning by public and private stakeholders. The first section below presents definitions of sustainable tourism and ecotourism, which will be needed in order to design a vision in this area. The next section is an overview of the existing sustainable tourism and ecotourism efforts in the state. Finally, the components of a system designed to encourage sustainable tourism are discussed and recommendations for moving forward are summarized.

### **Defining sustainable tourism and ecotourism**

Widespread confusion regarding the concepts of *sustainable tourism* and *ecotourism* often results in public officials and the visitor industry using these terms interchangeably. The World Tourism Organization ([www.wto.org](http://www.wto.org)) defines "sustainable tourism" as tourism that meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future of the tourist sector. WTO has concluded that sustainable tourism guidelines and management practices are applicable to all forms of tourism in all types of destinations. Sustainable tourism, according to WTO, is based on sustainability principles, which refer to the environmental, economic, and socio-cultural aspects of development. Sustainability implies that a suitable bal-

ance must be established between these three dimensions. Hunter and Green (1995) developed a list of criteria for sustainable tourism, including

- Follow ethical principles that respect the culture and environment of the area, the economy and traditional way of life, and the political patterns.
- Involve the local population, proceed only with their approval, and provide for a degree of local control.
- Keep intra-generational equity in mind, including fair distribution of benefits and costs.
- Plan and manage tourism with regard for the protection of natural environment for future generations.
- Plan in a manner integrated with other economic sectors.
- Continuously assess to evaluate impacts and initiate action to counter any negative effects.

“Ecotourism” is a term that was coined in the late 1970s when “mass tourism” reached its peak and people began to realize that the mass tourism experience isolated them from the host culture and damaged the environment. Some people view ecotourism as a niche market that incorporates an environmentally friendly and culturally protective approach. Others consider it a luxury available only to wealthy travelers who are trying to have a unique experience while not feeling guilty about doing so, or a term used by companies trying to take advantage of a niche market. Honey (2002) identified eight elements of authentic ecotourism. These include

- travel to natural areas
- minimized impacts
- building environmental and cultural awareness for hosts and guests
- providing direct financial benefits for conservation
- providing financial benefits and empowerment for local communities
- respect of local culture
- sensitivity to the host country’s political environment and social climate
- support of human rights and international labor agreements.

*Ecotourism* is defined more narrowly than *sustainable tourism*, in that ecotourism is a subset of sustainable tourism and not all types of sustainable tourism can be considered ecotourism (see diagram, p. 3). Sustainable tourism, in general, requires that sustainable management practices are followed, and adherence to these

practices is a common thread through both of these types of tourism.

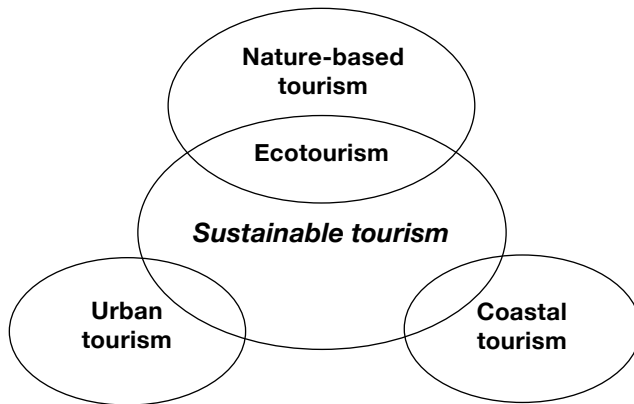
### **Sustainable tourism and ecotourism in Hawai'i**

Tourism has been Hawai'i's largest economic sector since the early 1960s (Hawai'i Tourism Authority 2005). As growth slowed in the 1990s, policymakers began to look toward niche markets, including ecotourism, for continued growth. The Hawai'i Ecotourism Association (HEA) was formed as an outcome of the statewide Conference on Ecotourism held in Waikiki in October 1994. The conference planning committee members continued to meet throughout 1995 to form HEA and quickly signed on over 100 members. In 2001, HEA obtained a grant from the Hawai'i Tourism Authority (HTA) to develop a certification program entitled *Hawai'i Pono*. The effort did not produce a program, because HEA members could not agree on the process or content for such a program. Then, the events of September 11, 2001 had a considerable negative impact on the tourism sector and shifted focus away from development of niche markets toward maintenance of the existing market. HEA members likewise struggled to keep their businesses profitable, and by 2007 membership had dwindled to half of its peak.

In spite of the state's focus on mass tourism in recent years, some work has been done to develop a clearer understanding of sustainable tourism and ecotourism by policymakers. HTA defines sustainable tourism as maximizing “social and economic benefits to Hawai'i's communities and businesses while respecting, nourishing, preserving and enhancing Hawai'i's natural, cultural and human assets” (HTA 2005), while the Hawai'i Department of Business, Economic Development, and Tourism (DBEDT) describes sustainable tourism as “managing tourism so as to sustain the environmental and social vibrancy of Hawai'i for the people of our state” (DBEDT 2005). Clearly, the definitions used by these agencies are not the same, which presents challenges as the policymakers behind Sustainability 2050 strive to make the state more sustainable. At the same time, HTA (2005) also proposed the following definition for ecotourism:

Ecotourism in Hawai'i is an economically, socially and environmentally sustainable activity that responsibly and authentically connects visitors with Hawaii's natural and cultural landscapes, resulting in beneficial exchanges among these landscapes, the host community, and the visitor.

### Sustainable tourism and ecotourism components



Source: (Bien 2004)

While these definitions provide some clarification of official positions, which can serve to provide a vision for sustainable tourism, Mak (2008) indicated that the State lacks an overall plan for sustainable tourism, which will make the goal of becoming sustainable very difficult to reach. Hunter and Green (1995) concluded that planning is a major component in the criteria for sustainable tourism and, therefore, the state should initiate a comprehensive planning effort in order to make progress.

#### Achieving sustainable tourism

Once the vision for sustainable tourism is agreed upon and clearly articulated, then a system to determine how to measure progress toward this vision is needed. Carrying capacity, the amount of use that a natural resource or even a community can withstand without being damaged for future use, has been a key component for measuring progress because it sets benchmarks with which to assess progress as suggested by Hunter and Green (1995). Carrying capacity identifies the cultural, social, and ecological limits to tourism growth, but estimating carrying capacity, particularly cultural or social carrying capacity, is challenging. Reducing use or holding growth to a limit is equally as challenging. For example, Vieth and Cox (2001) found that the 1977 Hanauma Bay Beach Park Site Development Plan estimated the recommended optimal use level or “capacity” for Hanauma Bay at 1,363 people per day, using the Bureau of Outdoor

Recreation and U.S. Army Corps of Engineers’ beach capacity standards. However, the actual use of Hanauma Bay increased from about capacity in 1975 to about five times the recommended capacity in 1999. Currently, an educational program, which involves the mandatory viewing of a four-minute video and beach closures once a week, is used at Hanauma Bay in an effort to increase the carrying capacity so that the average daily visitor count of 3,000–3,500 can be more easily sustained without damaging the environment. While Hanauma Bay’s management plan has increased the carrying capacity, the ecosystem still shows signs of damage.

The difficulties associated with estimating carrying capacity as the basis for an absolute limit to use have decreased interest in this approach in recent years. The approach strives to reach a compromise between resource protection and recreational use by identifying a maximum use ratio rather than an absolute number, although the methods for relating the ratio to all elements of sustainability are not clearly defined.

Economic theory suggests that any effort to restrict supply in order to achieve sustainability will cause a price increase. The higher price caused by restrictions will mean that businesses, in order to survive, will target customers with a higher willingness to pay. These customers will tend to have higher incomes and be more environmentally conscious. Thus, a move toward limits in order to become more sustainable will result in businesses targeting environmentally conscious visitors that have higher incomes and are willing to pay a higher price. The state’s visitor profiles will undergo a fundamental change, which is likely to result in tourists frequenting more “local” recreational areas. Potential conflicts may arise as rural and small regional communities without sufficient infrastructure to accommodate more visitors are increasingly frequented by tourists.

Long-term survival of tourism requires that the state and the tourism sector embrace sustainability initiatives, and a strategic effort that includes identification of benchmarks indicating progress will be required to bring about a permanent change in the sector’s management practices. Kozak and Nield (2004) concluded that quality and eco-labeling systems have a number of potential benefits as a means of tracking tourism’s sustainability performance. The tourism sector is familiar with reliable, measurable indicators of satisfaction, such a Fodor’s star rating system for hotels, which are aimed at ensuring that service providers conform to various practices. These

types of measures include (1) quality indicators that reflect how consumers feel about the services, which are readily available from a variety of sources; (2) health, hygiene, and safety indicators that are often regulated by the government; and (3) sustainability indicators that have been developed in tourism destinations internationally. Hawai'i has systems in place for emphasizing and monitoring the first two types of indicators, but no statewide system is in place for producing and monitoring sustainability in the tourism sector (DBEDT 2005).

Around 100 programs worldwide certify tourism sustainability, with 78 percent of these being based in Europe and 68 percent focusing on accommodations (Bien 2004). Without such a system, visitors will never know whether a firm is truly utilizing sustainable tourism practices or if it is "greenwashing," i.e., presenting itself as sustainable when it does not comply with generally accepted standards (Bien 2004). Australia and Costa Rica have programs that are considered to be models of effective certification programs that contribute to furthering the goals of socially responsible tourism (Medina 2005).

Recently, HEA developed an ecotourism operator review process to certify that the operator conforms to HEA's definition of ecotourism. However, few have participated in the program, and it is not considered to be an "official" statewide certification program ([www.hawaiiecotourism.org](http://www.hawaiiecotourism.org)). In addition, DBEDT manages the Hawai'i Green Business Program, which establishes a level of performance for sustainable business practices and is run by the Department of Health's Waste Minimization Program, The Chamber of Commerce of Hawai'i, and DBEDT's Clean Hawai'i Center. It is a voluntary program that is based on self-evaluation by hotel businesses and provides for three levels of participation. Hotels are a major target group for the program, and recently many hotels have decided to participate. Businesses must meet the following criteria to be recognized as green (<http://hawaii.gov/dbedt/info/energy/resource/greenbusiness>):

- Monitor, record, and post rates of water and energy usage and solid and hazardous waste generation.
- Participate in ongoing training opportunities and provide incentives to encourage management and employee participation.
- Inform customers about the business' efforts to meet the Green Business Standards.
- Assist at least one other business in learning about the Green Business Program and encourage them to enroll.

The efforts by HEA and DBEDT represent the state's two organized efforts for tourism businesses to assess their level of sustainability. Both programs are voluntary, require self-assessment, and have had limited participation.

Many sustainable tourism and ecotourism initiatives focus exclusively on certification. However, certification is only one component, and without addressing all the components of an assessment system it has a very low possibility of being effective. At the same time, many different interest groups need to be involved at various points in the process of implementing and maintaining a sustainable tourism system. In Hawai'i these groups include organizations and businesses in the tourism sector, customers of the tourism industry, and members of the public who are affected by tourism or are interested in the ecological and economic health of the state.

Three types of standards are found in sustainability evaluation systems used around the world (Honey 2002). These include prescriptive standards that outline how efforts will be accomplished, performance standards that outline what will be achieved, and management system standards that specify the elements of sustainable management processes. The standards used by HEA and DBEDT in their voluntary certification program are generally prescriptive and are limited in both approach and potential for success in achieving useful outcomes. Potentially, a sustainability evaluation system that includes all three types might be most useful. Advantages and disadvantages exist each type (Table 1).

Performance-based standards that set benchmarks for minimally acceptable levels are becoming more common than prescriptive or management-system approaches and are considered to be more effective (Rivera 2004). Standards may also vary depending on whether they are evaluated using a conform/not-conform system or a degree-of-conformity system. For example, a standard to reduce waste by 50 percent allows for a yes/no assessment, while a standard calling for waste reduction by 50 percent, 75 percent, or 85 percent identifies the degree of participation, which is more effective (Rivera 2004).

The key to a sustainability evaluation system is determining who conforms, who does not, and the validity of the determination. Assessment and certification systems vary depending on who is responsible for completing the assessment and who is responsible for ensuring that a product, service provider, or management system conforms to a standard. The three basic types are:

**Table 1. Types of sustainability evaluation systems** (based on Honey 2002).

<i>Type</i>	<i>Example</i>	<i>Advantages</i>	<i>Disadvantages</i>
<b>Prescriptive</b> How efforts will be accomplished	Strict use of Energy Star and water saving appliances and fixtures	Applicant knows what is required	No test of the final product, while restricting innovation and alternative solutions
<b>Performance</b> What will be achieved	Solid waste reduction by 50 percent	Allows alternative solutions	More ambiguity and imprecision, with the burden of proof on the applicant
<b>Management system</b> Elements of sustainable management processes	Monitor utility usage and waste stream	Allows alternative solutions	No requirements to improve performance

- *First-party assessment/certification* involves the suppliers assessing themselves and declaring themselves in conformance. For example, HEA and DBEDT assessments are done by the businesses themselves, so they are considered to be “first party.” At the same time, HEA and DBEDT certify their assessment programs, so they are considered to be first-party certification programs.
- *Second-party assessment/certification* involves the customers or purchasers assessing the suppliers and/or their products and assuring that they are in conformation.
- *Third-party assessment/certification* is done by an independent organization not related to the supplier or the purchaser, and it may be mandatory or voluntary. If the third party is a recognized standards-developing organization, the standards are “formal,” while those organizations that are more ad hoc and do not reflect a broad-based consensus are considered to provide “informal” standards. The status of the standard-developer and their range of uses help determine which standards are formal and which are informal.

Tourism certification programs mandated by governments are more rigorous and expensive than voluntary, private-sector programs. Voluntary programs around the world examine conventional tourism, sustainable tourism, and ecotourism, although their quality varies greatly (Bien 2004). Rivera (2004) concluded that third-party assessment/certification is most effective.

Accreditation is the process used to certify the certifiers, which is crucial to third-party systems that rely heavily on accreditation to provide credibility. No international accreditation program exists for tourism, although work is now underway to establish such a program. Most accreditation systems use the same evaluation methods as are used in certification, but peer review is also utilized as an option. Generally, the peer review process includes self-evaluation, on-site assessment by auditors, and judgment by an accreditation body. Because, in general, the goal of accreditation is to enhance credibility with clients and the public, everyone involved needs to understand the scope of the accreditation program (Honey 2002). HEA’s and DBEDT’s programs are not accredited.

The long-term goal of a sustainability evaluation system is to gain the recognition of the tourism sector and those associated with it so that they rely upon the accreditation program. Accreditation and recognition address credibility, but acceptance requires that producers and customers understand the benefits of certification. A complementary marketing effort will be needed to alert all stakeholders about issues to ensure that the system evolves over time to produce the desired benefits. Once acceptance occurs, the marketplace is expected to provide an incentive to certified suppliers so that an increased return on investment results in the tourism sector’s willingness and ability to fund the program in order to support the system.

## Conclusion

Movement toward sustainable tourism is a long-term goal that will require changes in the tourism sector that need to be outlined in a strategic sustainable tourism plan and implemented over the long term. According to Mak (2008), Hawai'i does not have such a plan, and its absence will prevent the state from moving toward sustainable tourism in any meaningful way. The process of establishing a sustainability evaluation system to ensure that progress toward this goal occurs requires an open dialog that includes important stakeholders and others who may be interested and prevents any one interest group from controlling the discussion (Medina 2005). A commitment to political progress is also needed, as change may be a threat to the beneficiaries of the status quo. Sustainability in the tourism sector will not come about in a short period of time, nor can conflict be avoided; therefore, care must be taken to resolve differences.

At the same time, major stakeholders who prefer a grading mechanism within a certification system to a pass/fail approach need to be acknowledged, and these options should be considered, because a grading mechanism provides a means of tracking progress, thereby providing management with some incentives for changing behaviors. A useful system will need to be supported by tourism-sector groups, government operators, and customers. In addition, plans must include a self-financing component in order to be successful. One way to proceed is to implement a particular international certification program within the state, with its more generic yet well tested standards. Another approach would be to have local Hawai'i-based policymakers begin the process by building on the work that has been done both locally and internationally to develop a program that is unique to the Hawai'i and acceptable to diverse stakeholder groups.

## Literature cited

- Bien, A. 2004. A simple user's guide to certification for sustainable tourism and ecotourism. The International Ecotourism Society.
- Cox, L.J., and J. Cusick. 2006. What is Sustainable Development? University of Hawai'i at Mānoa, College of Tropical Agriculture and Human Resources, Resource Management 14. 4 p. [www.ctahr.hawaii.edu/oc/freepubs/pdf/RM-14.pdf](http://www.ctahr.hawaii.edu/oc/freepubs/pdf/RM-14.pdf).
- Hawai'i 2050 Sustainability Task Force. 2008. Hawai'i 2050 Sustainability Plan.
- Hawai'i Department of Business, Economic Development, and Tourism. 2005. Planning for sustainable tourism in Hawai'i: Economic and environmental assessment modeling study.
- Hawai'i Department of Business, Economic Development, and Tourism, Green Business Program website. <http://hawaii.gov/dbedt/info/energy/resource/green-business>. Accessed 12 September 2008.
- Hawai'i Department of Business, Economic Development, and Tourism. 2007. Research and Economic Analysis Division visitor plant inventory.
- Hawai'i Ecotourism Association. 2008. [www.hawaiiecotourism.org](http://www.hawaiiecotourism.org). Accessed 10 September 2008.
- Hawai'i Tourism Authority. 2005. Hawai'i Tourism Strategic Plan (2005–2015).
- Honey, M. 2002. Ecotourism and certification setting standards in practice. Island Press, Washington, D.C.
- Hunter, C., and H. Green. 1995. Tourism and the environment: A sustainable relationship? Routledge, New York.
- Kozak, M., and K. Nield. 2004. The role of quality and eco-labeling systems in destination benchmarking. *Journal of Sustainable Tourism* 12(2): 138–148.
- Mak, J. 2008. Developing a dream destination: Tourism and tourism policy planning in Hawaii. University of Hawai'i Press.
- Medina, L.K. 2005. Ecotourism and certification: Confronting the principles and pragmatics of socially responsible tourism. *Journal of Sustainable Tourism* 13(3): 281–295.
- Riveria, J. 2004. Institutional pressures and voluntary environmental behavior in developing countries: Evidence from the Costa Rican hotel industry. *Society and Natural Resources* 17: 779–797.
- The World Tourism Organization. [www.unwto.org](http://www.unwto.org). Accessed 4 August 2008.
- Vieth, G., and L.J. Cox. 2001. Sustainable use management of Hanauma Bay. University of Hawai'i at Mānoa, College of Tropical Agriculture and Human Resources, Resource Management 11. 2 p. [www.ctahr.hawaii.edu/oc/freepubs/pdf/RM-11.pdf](http://www.ctahr.hawaii.edu/oc/freepubs/pdf/RM-11.pdf).