Hawaii Pacific Acchiele Council -AIA- February 1995

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When you can't halt hospitality... Allied comes through

Major improvements in scattered areas at the Princess Kaiulani Hotel called for a supremely accommodating contractor. Even as beautifully redesigned lobbies emerged, envisioned by the Gulstrom Kosko Group, and the popular Ainahau Showroom expanded with the overview of Ted Garduque, AIA, the hotelier continued to serve.

"We were on a tight timeline facing a holiday opening," observed Garduque. "Allied's crews were always responsive and concerned with quality execution. Even when the normal problems in renovation occurred, they stayed on top of things."

Adds GKG's David Chung, AIA: "Allied reacts well to the design professional. Beyond this, they know that change at hotels cannot interfere with visitor pleasure. They worked odd hours and with diplomacy when hotel guests were around."





1717 Akahi Street Honolulu, Hawaii 96819 Telephone (808) 847-3763 Contractor License BC-5068 Architect David Chung, Hotel Food and Beverage Manager Chip Bahouth, Architect Ted Garduque, ABS Project Manager Ed Sakai

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IN THIS ISSUE ...

This issue of *Hawaii Pacific Architecture* focuses on eco-tourism. This concept of responsible tourism development is defined as one that causes little or no negative impact on the physical, societal or cultural condition of the community in which it exists. Thomas P. Papandrew, AIA, FASLA provides an overview of the subject. Barry Lyseng describes attempts that have been made at eco-tourism in Southeast Asia.

Robert M. Fox, AIA, talks about a new meditation/rejuvenation center planned for Goa, India, which will be integrated with the local community.

For a local perspective, Robin Nelson discusses how Hawaii's golf courses are becoming part of the eco-tourism experience.

Environmentally-friendly products are also considered an important part of eco-tourism and sustainable environments. *Indoor Air Quality: The role plants play* focuses on how plants can be used in every-day settings to purify pollutants from indoor air. This month's cover photo is of the award-winning Tanjong Jara Beach Hotel and Rantau Abang Visitors' Center on the east coast of Malaysia, designed by Wimberly Allison Tong & Goo. Belt Collins was the landscape architecture firm for the project. The Hawaiian Tapa design used on the cover and throughout the magazine is courtesy of Bishop

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Frank S. Haines Wins Humanitarian Award

The Honolulu Chapter of the American Institute of Architects announced Frank S. Haines, FAIA, as the first winner of the Gordon W. Bradley Humanitarian Award. The award, created in memory of local architect Gordon W. Bradley, honors architecture professionals who, through their personal and professional lives, have exemplified Bradley's immense love of life and generous support of the community.

Haines' professional architecture career in Hawaii began in 1948. For the past 46 years he has worked for Architects Hawaii, Ltd. and its predecessors. Haines became president of the firm in 1969 and chairman in 1987. His contributions to Hawaii architecture are visible throughout the state.

A member of the AIA since 1949, Haines was elected a Fellow into the AIA by the national body in 1972. He has held a variety of leadership positions with the organization, both locally and on the national level, and has won numerous design awards.

1994 Concrete Achievements Winners

Hawaiian Cement recently honored the seven winners of its 1994 Concrete Achievements Competition with an awards banquet. The biannual competition, now in its fourth year, honors companies and key people who creatively use concrete and concrete products in their projects.

Winners of this year's competition are:

• Alii Place, Oahu; New Private Building Award

• Fort Shafter USAR Center, Oahu; New Public Building Award

• Old Wailuku Courthouse, Maui; Remodeled/Addition Building Award

• Private Residence, Hawaii; New Single-Family Residence Award

• Grand Waikapu Country Club, Maui; New Low-Rise Building Award

• State of Hawaii Judiciary, Oahu; Concrete Structure Built Before 1940 and Still In Use Award

• 1100 Alakea, Oahu; Judges' Award

Winners were selected by a jury committee representing the American Institute of Architects-Hawaii State Council; the Building Industry Association of Hawaii, General Contractors Association of Hawaii, Structural Engineers Association of Hawaii, University of Hawaii School of Architecture and the University of Hawaii College of Engineering.

Wood Dust – A Carcinogen?

The International Agency for Research on Cancer has concluded that there is sufficient evidence to classify wood dust as a human carcinogen. This conclusion is based on an evaluation of a number of studies conducted over the past two decades on the association between wood dust exposure and a rare form of nasal cancer referred to as nasal adenocarcinoma.

The classification applies to both hardwood and softwood dusts, but the study noted that the occurrence of the alleged nasal cancer is among workers predominantly exposed to hardwood.

The IARC is also evaluating the chemical formaldehyde, which is a component of urea-formaldehyde and phenol-formaldehyde resins used in various pressed wood products. It has confirmed a previous IARC classification of the substance as a possible nasal carcinogen.

The IARC will officially report its findings on both materials in a monograph to be published in two to four months. Since The Occupational Safety and Health Administration could initiate a wood dust ruling in the near future, the Architectural Woodworking Institute is closely monitoring any actions OSHA might take.

BIA EXPO Set for March 8–9

The 1995 BIA Building Materials EXPO will be held March 8, 3:30 to 8 p.m. and March 9, 11 a.m. to 8 p.m. at Neal Blaisdell Center in Honolulu.

Marvin Koshi, 1995 show chairman and vice president of GECC Financial, said, "The fact that this show traditionally sells out three months prior to its opening is a good indication of its status as Hawaii's top building industry trade show. Most importantly, BIA EXPO introduces the newest and most innovative building materials and products to Hawaii, keeping the local trade on the cutting edge of industry developments. Ultimately, it's the Hawaii consumer who reaps the benefits of this show," Koshi said.

Now in its 25th year, Building Materials EXPO is Hawaii's biggest exposition of new construction materials, equipment and services. Last year's show was attended by approximately 6,500 professionals from the construction industry and related businesses.

Uno Named BIA Chief Staff Executive

Curtis K. Uno has been appointed chief staff executive of the Building Industry Association of Hawaii.

The announcement was made by BIA president Ronald V. York, Sr.

Uno was previously a corporate vice president and general counsel to Persis Corporation, owner of nine mainland U.S. newspapers and former owner of *The Honolulu Advertiser*.

As chief staff executive of the BIA, Uno will serve as principal officer and will be responsible for the administrative operation of the Association.

BIA executive vice president Elroy Chun will continue to oversee government affairs, labor, safety and external relations.

Fire-Devastated Areas Still Build in Wood

All but one of the first 60 building permits given for new homes to replace the 300 destroyed by the October 1993 brush fires in Laguna Beach, Calif., are for homes built of wood.

Many changes to the building codes were enacted to make wood homes safer in this fire-prone area. The use of eve vents is prohibited; the size of side wall openings has been limited; fire protection is required on the underside of wood decks; and both triple glazed windows and Class "A" roof coverings are now required.



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Leadership Message

New Approaches to Architecture

by Stanley S. Gima, AIA President

his month's issue focuses on ecotourism, which demands a different approach in the design of tourist facilities. Hawaii could benefit from more emphasis on eco-tourism, rather than providing more of the typical luxury resorts. The issue provides stimulating "food for thought" about new approaches for the tourism industry.

Another new approach to architecture that has stimulated discussion among Hawaii's architects and engineers is design-build. In fact, this subject seems to be causing "indigestion" in many AIA members. Because of this dissatisfaction. the AIA Hawaii State Council has become quite active on the issue.

I'm referring specifically to designbuild projects administered by the state and counties. For example, the recent experiment by the Department of Accounting and General Services on two small school projects was very dissatisfying to participants, who were required to complete approximately one-third of the design work-at their own cost-in order to enter the design-build competition.

It was a "winner-take-all" contest, so all of the nonwinners-10 entries in two competitions-wasted their time and effort. It was unjustifiably expensive, so it's doubtful that DAGS will attract many entries in the future.

Another example would be the recent convention center competition. There were four finalists, but the stakes were astronomical. Each of the three losing finalists gambled away four months of manpower and travel expenses-trips to the mainland to consult with convention experts-plus the costs incurred by creating presentation models and drawings.

A few more design-build competitions could bankrupt some of Hawaii's architects and engineers who are already

Stanley S. Gima

wobbling, weakened by the ongoing recession.

Design-build in Hawaii has been given a black eye. State and county officials should discontinue this method of project delivery until they learn how to properly conduct these competitions.

There are detailed model guidelines available from the American Institute of Architects and the Associated General Contractors of America. These guidelines describe a procedure that assures the benefits of competition, but in a fair way. They also limit the financial burdens of entrants.

I remind public authorities that design-build is not the only way to competitively deliver a project. In fact, it may not be the most cost-effective method for the state and counties. These agencies lack the trained professional staff required to effectively conduct and manage this complicated construction process.

Instead of design-build, AIA favors a competitive selection process of design professionals, in which architects or design teams present credentials and evidence of experience before a selection committee, which rates entrants systematically.

Depending on the size and nature of the project, there can be variations of this qualifications-based selection process. Thus, the selection process can be highly competitive, while complying with the intent of the new state procurement law

AIA is ready to assist the legislative and administrative branches of the state government in developing new approaches to cost-effective and timely project delivery. Toward this objective, AIA intends to provide input into the state's legislative and administrative discussions regarding procurement of architectural services.



Tourism viewed within the context of the greater community

A Holistic Approach to Eco-Tourism

by Thomas P. Papandrew, AIA, FASLA

"When we try to pick out anything by itself, we find it hitched to everything else in the universe." John Muir

t is often assumed that a vacation is a very private act. But is it? Generally tourists are experiencing-or borrowing the experience-of another's place, culture, home, history and environment. A vacation is a public act of sharing others' life experiences.

Within this context, eco-tourism is the act of experiencing another's place, natural and man-made, in a responsible way, with little or no negative impact on either the natural or human socioeconomic system. To be sustainable over a long period of time, eco-tourism must also be economically viable.

Any publication whose focus is eco-tourism has to be fraught with contradictions, an array of opinions and points of view and many unanswered questions. Is it possible to determine what would be considered responsible ecotourism? Is responsible tourism development synonymous with responsible eco-tourism? Can any distant destination, such as Hawaii, sell itself as an eco-tourist destination, when the very act of getting there involves traveling thousands of miles in a jumbo jet? Often it seems that there are more questions than answers.

Ideally, responsible tourism would cause little or no negative impact on the physical, societal or cultural condition of the community in which it exists. Is this possible? Probably not, in its purest sense, unless one believes in the absurd suggestion that the best ecotourist is someone who stays home, and as someone ruefully suggested, "watches the Discovery Channel."

Holistic Approach

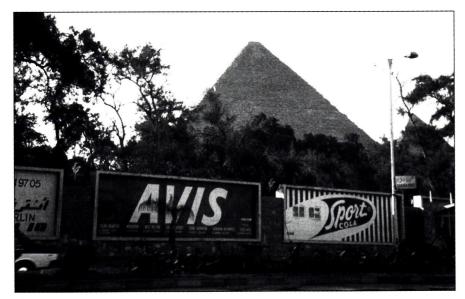
To be responsible to the entire community, tourism has to be looked at holistically as part of a larger whole, as part of the total community's economy, social life and physical experience. A myriad of related topics range from culturally- and environmentally-sensitive architecture to sensitive land planning and site design, from recycling water to renewable energy options, from agriculture to transportation. Other related issues include waste

> management, air quality, planning policies and taxation. The issues of self-sustaining communities, regenerative environments and healthy indoor environments are also part of the equation.

> When considering the topic of design as it relates to eco-tourism, one has to first understand the concept of the design of an ecosystem. According to John Tillman Lyle in "Regenerative Design for Sustainable Development," humans have been designing ecosystems for some 12,000 years, since they first learned how to cultivate plants.

The concept of the ecosystem itself, however, is a rather new concept,

Billboards lining the highway to the Pyramids of Cheops in Cairo, Egypt, are an example of how development has desecrated a tourist area.



having been first advanced by A. B Tansley in 1935. Simply defined, an ecosystem is the interacting assemblage of living things and their nonliving environment. Humans are integral, interacting components of ecosystems at every level.

Every ecosystem is a part or subsystem of a larger system, and that in turn includes a number of yet smaller subsystems. Thus, when one speaks of eco-tourism, it must be concluded that the tourists' destination is a part of the larger community and regional system which in turn affects smaller neighborhoods as well as other smaller ecosystems.

Design professionals need to be concerned about the design of the facilities where people stay, destination areas; the design and management of the experiences visitors encounter; and the direct and indirect impacts these experiences have upon the communities surrounding destination areas. Therefore, a key element in eco-tourism is how well it is integrated into the overall economic, social, spiritual and physical environment of the community. This means managing resources so that visitors can experience them while preserving them for future generations. The following are some examples of areas where sound management practices have been implemented; where the process of finding a solution is ongoing; and where measures have yet to be implemented.

Ayers Rock Resort

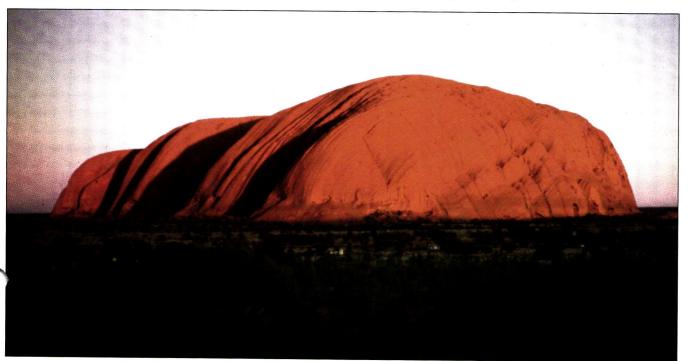
In the late 1960s, the visitor accommoda-

tions at Ayers Rock in Australia consisted of a number of motels and other places for visitors to stay right at the base of this geologic wonder, considered a sacred site to the native Aboriginal population who inhabit the region. A master plan, developed by the Belt Collins, Wimberly Whisenand Allison Tong & Goo and Pannel Kerr Forster consortium, proposed moving the visitor accommodations several kilometers from Ayers Rock. At the "new" location the rock could be seen from the accommodations and was still accessible. This was a responsible solution to the siting and location of visitor accommodations. The responsible management of the resource, however, is an ongoing process.

Recently, the restricting of visitors' access to the rock has been discussed. Currently there is one place where visitors are allowed to climb Ayers Rock. The Australian National Park Service, which manages this resource, is working with the local Aboriginal elders to reach appropriate and acceptable criteria for visitors to experience the area. This "visitors' experience" should be one which minimizes the impact on the physical resource and is in harmony with the cultural, spiritual and social life of the native population.

Ayudhaya, Thailand

Ayudhaya, the ancient capital of Thailand which was destroyed by the Burmese in the 1700s, is a cultural resource that is being destroyed by visitors in an insidious way because of the lack of proper management. Ayers Rock in Australia is a geologic wonder, considered sacred to the native Aboriginal population who inhabit the region.



Visitors are being allowed to climb anywhere on the ruins.

Also, large spot lights have been installed with little regard to their placement or appearance. This type of "night lighting" is common on many cultural and historic sites around the world.

This has been done at the Parthenon in Greece and at the Pyramids of Cheops in Cairo, Egypt. In addition, at the Pyramids in Cairo, Egypt, huge, loud speakers have been installed as part of a light show for tourists' "night time enjoyment."

This kind of desecration is physically destroying these resources in much the same way as foreign invaders pillaged and destroyed Ayudhaya 200 years ago. Fortunately, recent visitors to the Pyramids report that climbing them is no longer allowed.

Stonehenge

A number of years ago, when visiting Stonehenge, you could walk right up to these marvels of humankind. Then the English realized that this uncontrolled experience was causing the slow destruction of Stonehenge.

Now, the management system, including the access road, visitor parking, visitor center and the walk around the site, is handled sensitively. The trail around the edifice is moved daily so that visitors always experience walking through the pastoral setting in which Stonehenge is sited.

The parking lot and access road are sited to be as inconspicuous as possible. The visitor center and vendor experience is well-designed and sited as a part of the parking lot complex and not seen from the area where Stonehenge is experienced.

National Park Service

The Eco-tourism Society, a professional organization in Alexandria, Va., defines eco-tourism as: "Responsible travel to natural areas that conserves the environment and sustains the well-being of local people."

Steve Griffith, publicity coordinator of the Sierra Club's outings program, agrees. "Eco-tourism has become a buzzword, but we've been doing it since John Muir led trips to the Sierra in 1901," Griffith said.

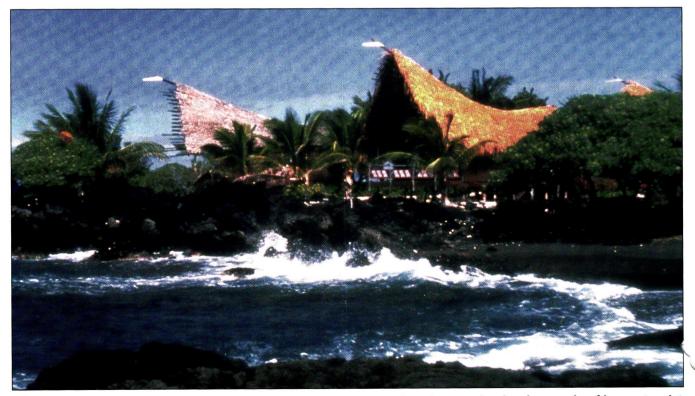
Don Fox, FASLA, a National Park Service staff person in Yosemite National Park has indicated that the Park Service is considering capacity limits to the number of visitors allowed in the park on a given day. This is not unlike the limits placed on the number of people who can inhabit a space like a theater, restaurant or elevator.

Limiting the number of visitors to a particular area is one way of managing and controlling the environmental impact on these fragile ecosystems. Such limits are being discussed to manage areas in Hawaii such as Hanauma Bay.

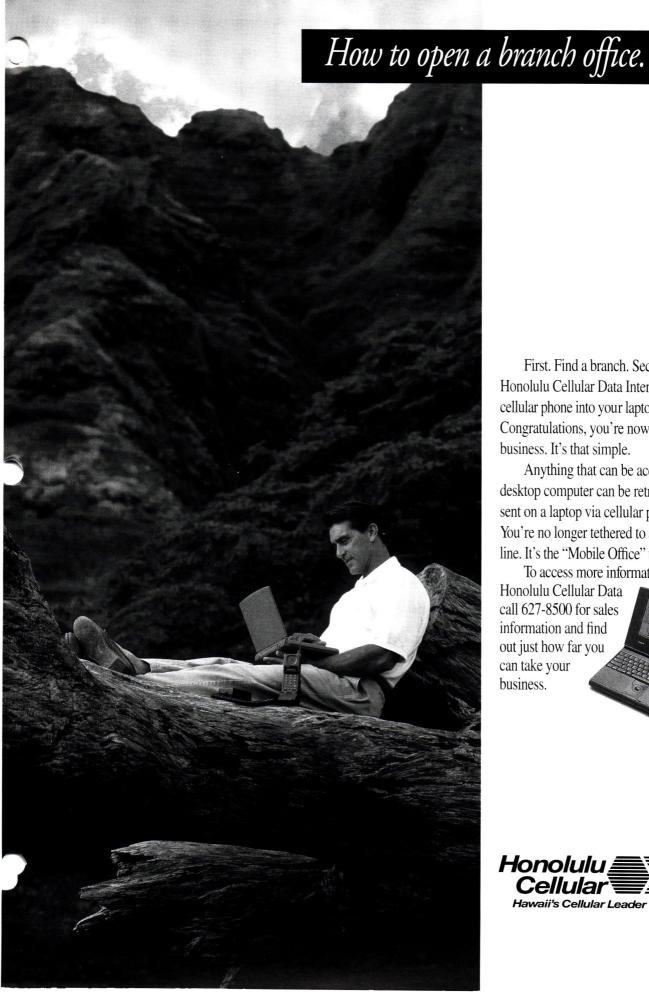
Conclusion

It has been said that the overall tourism experience should be viewed within the context of the greater community. To divorce humankind from the equation is to ignore the total ecological health of the community.

 → Thomas P. Papandrew is president of Belt Collins Hawaii, a firm that specializes in landscape architecture, planning and civil engineering.



The Kona Village on the Big Island, a Hawaiian-Polynesian cultural resort, is a local example of how a tourist destination can preserve an area's ecological and historical properties.



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Was this course built or was it always here? Hawaii's Golf Courses and the Eco-Tourism Experience

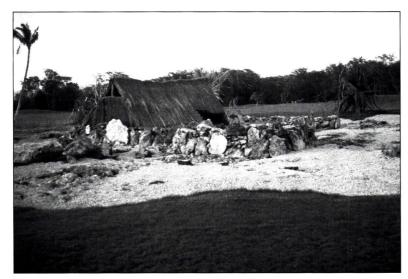
by Robin Nelson

an golf courses be a part of the ecotourism experience? Webster defines tourism as travel for recreation or culture — a loose definition perhaps, but none-the-less one which can be used to argue that Hawaii's golf courses are an excellent example of eco-tourism.

Hawaii boasts some of the most spectacular scenery in the world. White and black sand beaches, desert dunes, stark volcanic lava, panoramic vistas, waterfalls, headlands and lush tropical foliage can all be found in the Hawaiian Islands. Honolulu's skyline, Diamond Head's magnificence, the mystic beauty of waning sugar cane and the perfect symmetry of purple rows of pineapple all beckon visitors from every comer of the globe. Hawaii also has the extra ingredients which fit perfectly into an eco-tourism experience—culture, the diversity of its people and the intangible aloha spirit.

The fisherman's huts at Ewa Beach International Golf Club on Oahu have been restored to help teach visitors about the history and cultural

Hundreds of thousands of rounds of golf are played annually in Hawaii, and in most cases, in environments normally inaccessible to the average recreation seeker.



Ewa Beach International Golf Course, for example, is located in a remote area of Pearl Harbor. Previously, the golf course area was overgrown with dense kiawe and hale koa. The entire site was solid rock, barren of soil. It was not an area tourists would visit as part of their vacation to a tropical paradise.

Now, however, it is one of the most popular golf courses in Hawaii due to careful planning and the beauty that was uncovered during construction. The course now can host 80,000 people a year with its pristine lakes, gnarled kiawe and endangered birds such as the nene, while providing a challenging round of golf.

The Bishop Museum, teamed with local archaeologists, has restored culturally significant fisherman's huts which tell the story of life in the region hundreds of years ago. Man's contemporary hand of technology is also seen in the ecosystems at work. The lakes (experienced first-hand by wayward golfers) are simply holes in the ground exposing subsurface water. This water is used to irrigate the course — a recyclable system that does not impact the island's precious water supply.

The ground water is brackish—in fact too salty for most turf grasses. Salt-tolerant grasses have been imported from Australia and only salt-loving vegetation surrounds the course. Kiawe, Sandalwood, Eucalyptus, Hala and Ironwood trees have been preserved or supplemented to create a surprisingly beautiful environment. It's difficult to imagine that the golf course was once an unattractive, overgrown and forbidding environment.

Many world-renowned golf course architects have opened up ecological and recreational experiences in some of the most spectacular scenery available to man. At Princeville's Prince Albert course on Kauai, great care was taken by the Robert Trent Jones II organization to provide a celebration of the beautiful valleys, meadows, streams and vistas on this spectacular site.

At this course a golfer can experience rolling hills, pleasant trade winds, abundant wildlife and most of all peace and solitude. Only trees and shrubs indigenous to the area were preserved or restored. The question is often asked: "Was this course built, or was it always here?"

Hawaii's diverse golf courses allow numerous

opportunities to visit the unusual and forbidding. Mauna Lani's Francis I'i Brown's two golf courses are world famous for showcasing their geologic evolution and man's ability to co-exist in environmental harmony. The entire resort, including the golf courses, is built on such harsh lava that it would take hours to walk (or navigate) the sharp lava to reach a destination.

Now, due in part to international television coverage of the annual Senior Skins' game, countless visitors from around the world come to "experience" this unique environment, which is unlike anywhere else in the world. The juxtaposition of the black, stark lava, velvet green grass, clear blue ocean, ancient foot trails and petroglyphs, with local goats, ducks and birds all add up to an unforgettable experience.

The Hapuna Course at Mauna Kea on the Big Island and the Links at Kuilima on Oahu are two new courses designed by the talented team at Arnold Palmer's golf course design firm. They are stark contrasts in environment. yet similar in their ecological benefits. The Links has preserved and created new wetlands while preserving the vegetation and dune lands found at the Punahoolapa Marsh. It is also a native sanctuary to at least four endangered bird species-Koloa, Nene, Gallinule and Stilt. Each ecological area of the course is highlighted by strategically-placed interpretive signs. Up to 250 people a day can enjoy the camaraderie of golf, rejuvenation of recreation and enrichment of new environments.



By contrast, the Hapuna Course has what appears to be very little vegetation, utilizing native grasslands to highlight the natural ecology of the area. It is impressive to note that Peter Geyer, landscape architect with Belt Collins Hawaii, spent months on the site ensuring that nature will be allowed to take its course.

The golfing experience at this course is one which teaches the golfer how older lava flows have matured and shows the slow process which produces soil from rock. It becomes apparent that wind, geologic time and animals all play a part in the evolution of the land.

Due to the boom in golf's popularity and the proliferation of new courses, the game has received serious attention in the past decade. Why is it so popular—is it good for the environment? Is it good for the economy? Is it a benefit to the local population and to society in general? All of these are important issues that need to be addressed.

As a result of this close scrutiny, golf has increased the public's awareness concerning its benefits. Regulations have tightened so that new courses cannot be built without obvious ecological benefits.

Can golfers who play at Kapalua, Wailea, Mauna Kea, Mauna Lani, Princeville or any of the other magnificent courses in Hawaii not come away with the exuberance of experiencing the ecology of the Hawaiian Islands?

•• Robin Nelson is president of Nelson Wright Haworth Golf Course Architects.

The Mauna Lani Resort course on the Big Island is famous for its showcase of lava and velvet green grass.

Scheduled for March 22-25 at UH Manoa International Symposium on Asia-Pacific Architecture

he First International Symposium on Asia-Pacific Architecture: The East-West Encounter, set for March 22-25, is a chance for local architects to accelerate their learning curve and expand their network of Pacific Rim contacts. The symposium, co-sponsored by the University of Hawaii School of Architecture, the Cultural Studies Division of the East-West Center, AIA Honolulu and the Architects Regional Council Asia, will be held on the UH Manoa campus. The event is expected to attract delegates from around the world and across academic disciplines.

W.H. Raymond Yeh, FAIA, dean of the UH School of Architecture, said he believes that "those architects who take the time to learn the nuances of the culture and the subtleties of the business environment—and who make timely adjustments to their practice methods will stand to benefit from these opportunities.

"The upcoming conference," said Yeh, "offers local architects a rare opportunity to learn first-hand about this flourishing market—from design professionals who work in the region and government officials who oversee building projects in other countries."

The multi-disciplinary event will explore the social, political, anthropological, historical, climatic, cultural and economic factors which influence architecture in the Asia-Pacific region. The three-day conference is specifically designed as an encounter: a forum for scholars, business persons, policymakers and professional practitioners to discuss areas of mutual concern.

David Miller, AIA, principal of Architects Hawaii, said he feels the symposium is a great opportunity for Hawaii-based architects both in terms of exposure to decision-makers and the stimulation that comes from cross-cultural and cross-disciplinary interchange. "The volume of subject matter to be covered in three days is impressive," said Victor Olgyay, AIA, assistant professor at the School of Architecture. "Attendees will have to choose from a number of sessions which will be presented simultaneously," Olgyay added. Ed Aotani, AIA, president of Aotani and Associates, said he thinks that the value of the symposium can be found both *in* the sessions and *between* them: "This conference is valuable at both an academic and a very practical level. It is a terrific chance to learn and to network."

An integral part of the symposium is the jurying of the Kenneth F. Brown Asia-Pacific Culture and Architecture Design Awards Program. From the more than 80 entries, a distinguished jury of panelists will select architectural designs that exemplify an understanding of Asia-Pacific cultures and demonstrate exceptional sensitivity to the physical environment. Jurors include: Kenneth F. Brown, FAIA, Hawaii; Charles Mark Correa, FIIA, India; Ashley De Vos, RIBA, SLIA, Sri Lanka; and Fumihiko Maki, JIA, Japan.

In addition to the symposium sessions, tours of Oahu's cultural and historic sites and architecture will be offered, as well as a twoday post-symposium tour to the Big Island which will feature unique perspectives on resort development.

Co-chairing the Symposium are Edward Aotani, AIA, architect/planner; Reginald Kwok, Ph.D., professor of regional planning and Asian studies at UH; and Willa Tanabe, Ph.D., interim dean of the UH School of Hawaiian, Asian and Pacific Studies.

The 21-member program committee consists of distinguished individuals from the University of Hawaii, the East-West Center and the professional architectural community in Honolulu.

| Day | Tuesday | Wednesday | Thursday | Friday | Saturday |
|-------------------------------------|---|---|---|--|---|
| Date | March 21, 1995 | March 22, 1995 | March 23, 1995 | March 24, 1995 | March 25, 1995 |
| Morning | | 7:30-9 Registration East-West Center 7:30-9 Morning Coffee East-West Center | 7:30-9 Day Registration Morning Coffee 7:30-8:30 Tour | 7:30-9 Day Registration Morning Coffee | 8:30-11 APCA Organizational Meeting (Raymond Yeh) |
| Plenary Sessions | 9-noon Design Awards Jury Review Awards Chair: Leighton Liu | Ed Aotani, AIA Master of Ceremonies 9-9:30 Opening Remarks 9:30-10:30 Keynote Address 10:30-10:45 Break 10:45-11:45 Plenary Address | Dr. Reginald Kwok Master of Ceremonies 9-9:45 Presentation 9:45-10 Break 10-10:45 Presentation 10:45-11 Break 11-11:45 Presentation | Dr. Willa Tanabe Master of Ceremonies 9-11 Design Awards Entries Slide Presentation 11-noon Tour | Post-Conference Tour |
| Noon | Noon-1:30 Lunch Jurors Only | Noon-1:30 Lunch East-West Center | Noon-1:30 Lunch Campus Center | 11:30-1 Lunch School of Architecture | |
| Afternoon Concurrent Sessions | 1:30-4:30 Design Awards Jury Review | 1:30-5 "Case Studies in China" 1:30-3 "Architectural Education ACSA/AJA Roundtable" 1:30-5 "Historical View of the Future Designs" 1:30-5 Sociological,Political and Anthropological Concerns 1:30-5 "Architectural History/ Aesthetics, Session 1" 3-3:30 Break | 1:30-5 "Case Studies in the Pacific" 1:30-5 "Architecture and Production of Cultural Meaning" 1:30-5 "Business Practices in the Asia-Pacific Region" 1:30-5 "Traditional Architectural Responses to Asia-Pacific Climates" 1:30-5 "Architectural History/ Aesthetics, Session 2" 3-3:30 Break | 1-4:30 "Case Studies in Vietnam" 1-2:30 "Case Studies in Japan" 1-4:30 "AIA Continuing Education Unit, Level 2" 1-4:30 "Climatic Design Practice in the Asia Pacific Region" 1-4:30 "Architectural History/ Aesthetics, Session 3" 2:30-3 Break 4:45-5:15 "Concluding Panel" | |
| Evening | Rendezvous for attendees Ala Moana Hotel 5:30-7 Early Registration Ala Moana Hotel 5:30- 7 | 7-9 Opening Reception | 5:30-7 Reception East-West Center 7-8 Presentation | 7-9 Recognition Dinner Dinner at Ala Moana Hotel | |
| Other Events | | | <i>1:30-5:30</i> "Tour of Honolulu" | <i>1:30-5:30</i> "Tour of Honolulu" | |

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Designed to be integrated with the local environment India's Meditation/ Rejuvenation Center

by Robert M. Fox, AIA

ourism has thrived for thousands of years where local culture and heritage have been respected and preserved. Where culture and the environment have been exploited, the visitor industry is a disaster for the local population. Sensitivity to the environment can provide substance for visitors through involvement with the local community and tradition. This will help preserve the culture and heritage of these tourist destinations.

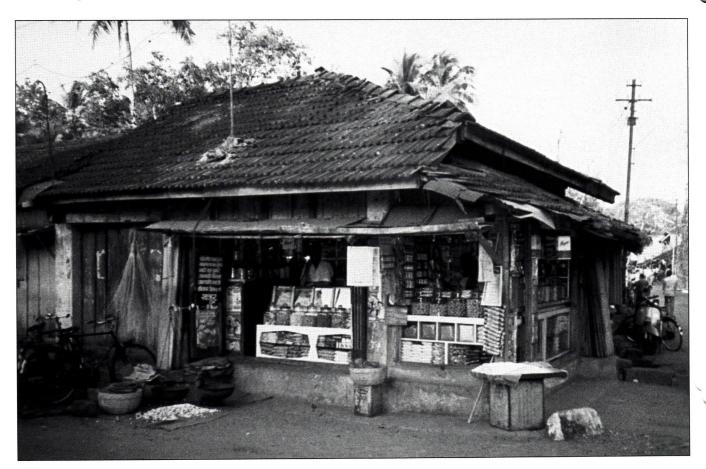
Village shops like this one will remain viable when the Meditation/Rejuvenation Center is completed.

A new Meditation/Rejuvenation Center in Goa, India, is being designed to be totally integrated with the fragile framework of the ecological, cultural and social sensitivities of the local area.

The primary focus of the Center will be to provide training to expand a consciousness and awareness of the mind and body. The physical atmosphere of the Center must complement this philosophy in serene harmony with its environment.

The project will be located on a 200-acre parcel with an extensive sandy beach, stands of casuarina trees, a copra plantation and rolling hillocks.

In planning the project, the recognition, evaluation and integration of the existing site



features and external environments were all considered to mitigate potential adverse effects. A prime consideration was the continued viability of the fabric surrounding this community. This viability is necessary to maintain the existing balance of the community.

A small fishing village along a river out-flow will remain and flourish with an expanded market to provide seafood for the Center. A small village commercial center close to the site encompasses the social, educational, commercial and religious needs of the community.

This village will be nominated as a national historic site and kept intact to remain the commercial and social center for the community.

A separate facility will be located away from the village to provide commercial activity for visitors. Shops will be set aside for local merchants to sell goods and services to visitors without upsetting the balance of the existing community.

The ruins of an abandoned stone fort (circa 1700), which has a commanding view of the river entrance and the villages below, will be restored. The ramparts, look-outs, stone-wall courtyards, archways and interior rooms, although in disrepair, are still standing; no roof structures or wooden features currently exist. The ruins of the fort will be utilized to teach the history and culture of the region.

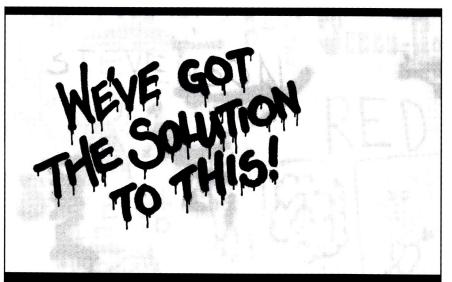
The Meditation/Rejuvenation Center development will include preserving existing flora and fauna while expanding gardens for research into medicinal herbs and traditional Indian medicine.

The entire development will be self-sustaining in a natural, garden setting with vegetables and fruits necessary to sustain the Center. A wide variety of edible landscaping will also be grown on site.

This Center will be a featured part of an ecologically-compatible resort with amenities which will enhance the learning experience and provide an environment for total relaxation.



Center visitors will also be able to experience the culture of India by traveling to a local village.



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The ruins of this abandoned stone fort will be restored and used to teach the history and culture of the region.

The project will bring new jobs to the area, while sustaining and perpetuating the rural life-style.

The entire project will be ecologically-compatible and totally integrated with the existing environment. All buildings will be set far back from the shoreline, tucked within the existing stands of trees and rolling topography.

Guest accommodations and support buildings are being designed to reflect the architectural character of this region of India. Local materials will be used extensively for construction and finishes to further create a sense of place within a village environment.

Emphasis will be on walking and bicycle transportation throughout the Center grounds. Small boats will be used for access beyond the site, minimizing the need for vehicular transportation.

As part of the learning experience during their stay at the center, visitors will be exposed to a broad understanding of the environment, culture, heritage and other sensitivities concerning this area of India.

 The Meditation/Rejuvenation Center was designed by Fox Hawaii, a locally- based international architecture and plan- ning firm. Robert M. Fox is president of the company.

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Opinion



Catch words in architecture Sustainability and Eco-Tourism

by Nick Huddleston, AIA

ustainability and eco-tourism are catch words in architecture, politics and public relations. Easily trivialized by overuse, these concepts are complementary and hold keys to the future of our islands when they are understood in the context of the Hawaiian experience.

"Sustainability" has many meanings. It involves husbanding our resources, recycling and reducing waste. It has something to do with creating communities that we can care about, with livable neighborhoods and walkable streets, efficient public transportation and affordable and beautiful homes. It requires us to live in harmony with natural systems. It imposes a responsibility to meet our own needs without compromising the ability of future generations to meet theirs.

Sustaining the best aspects of the Hawaiian experience demands a culture that each of us owns. Young and old must have a stake in social goals, ways of contributing, and rewards in achievement



In Bali water is held as a sacred resource, and water temples from each district fill a sacred compound in the mountains.

that benefit all of us and bring out the best that we have to give. Building on our strengths and reaching out to others to share what we have learned is an essential part of this process.

"Eco-tourism" advocates see Hawaii's natural and cultural assets as keys to attracting tourist dollars. The term evokes images of hiking trails and bike paths, wind and board surfing, snorkeling, diving, fishing and kayaking, hunting and camping and of the quiet contemplation and active enjoyment of the



beauty of the islands. It suggests that people might come to experience our culture, appreciate our history and learn.

Cash flow and economic indicators are frequently cited measures of progress toward the goals of sustainability and growth in eco-tourism. A great deal more than dollars and the economy is at stake.

Hawaii has traced steps that the world must follow. As successive waves of immigrants have moved out of the fields and into positions of prominence in our communities, we have

of the land and the terracing of rice paddies that facilitate a husbanded and precise use of water in Bali have been described as a wonder of the world.

The channeling

learned to live and work with one another, to appreciate and learn from our differences. We have learned that talent, love and grace are not unique to a particular people.

Hawaiian culture, with its concepts of aloha, ohana and kokua and the natural beauty of our environment, has underwritten the society we have crafted and the human lessons that are a gift to each of us who live in these islands. These gifts are Hawaii's offering to the world, and carry with them the strength and the obligation, in a world darkened by shadows of racism and ethnic hatred, to light the way to the harmony within diversity that we enjoy.

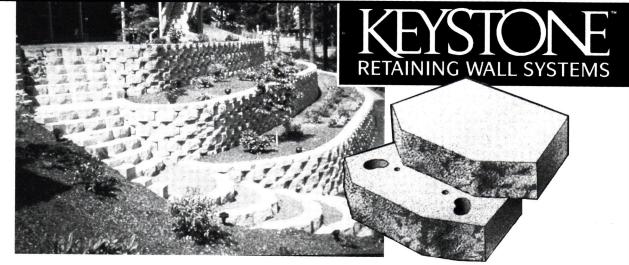
Eco- and cultural tourism, with an emphasis on today's Hawaii created from a rich mix of cultures and shaped by Hawaiian values, offer opportunities to share the lessons we have learned and the beauty of our island environment. Eco-tourism founded on these values can create a powerful draw for travelers from around the world. This type of tourism will help sustain Hawaii's economy, while underscoring the importance of the values and natural assets that residents enjoy. Perhaps we can offer visitors insights that can help them sustain and improve their own lives and communities.

Living "in harmony with nature" is one of the many challenges we face if we are to fulfill this potential. Establishing green belts and preserving agricultural lands are a start. Creating and preserving open spaces; sheltering environments in garden settings; and maintaining close contact with the land, sea and sky and with our fellow citizens are essential.

Planning must include the larger picture, acknowledging and celebrating the beauty and sanctity of the land. Every environment has sacred places and Hawaii is richly imbued with them. Great care is needed to identify these special places and protect them from erosion and encroachment. Input from people with a deep feeling and special knowledge of the land is vital. Among these individuals are native Hawaiians and their *Kupuna*.

We need to do a better job of conserving and allocating our natural resources. Most of us scratch our heads over the disposition of Waiahole Ditch water as the interests that control water resources in the islands uncharacteristically make the news. The challenge of converting from waning monocultural agribusiness to diversified environmentally-sensitive agriculture seems daunting. Valuable lessons are readily available in the practices of indigenous cultures.

The Balinese have managed the water resources of their island community for centuries. Water is held as a sacred resource and water temples from each district fill a sacred compound in the mountains. The channeling of the land and the



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91-209 Hanua Street • Kapolei, Hawaii 96707 Exclusive Manufacturer & Licensee of Keystone Products in Hawaii terracing of rice paddies that facilitate a husbanded and precise use of water in Bali have been described as a wonder of the world. They also lend a special beauty to the landscape of the island. Early Hawaiians managed and improved the natural resources of these islands with a sensitivity, insight and deep feeling for the land that we can benefit from today.

Comprehensive planning and close tracking of plans in-place and

in-the-making are basic to the maintenance of an essential vigilance. Each island needs a welldeveloped geographical information data base, computerized, mapped and available to the public and concerned practitioners. Comprehensive community-based planning powers are critical.

Ian McHarg wrote a quarter of a century ago,

"...without new planning powers...Uncontrolled growth, occur-



ring sporadically, spreading without discrimination, would surely obliterate [and]...cover the landscape with its smear, irrevocably destroy all that is beautiful and memorable. No matter how well-designed each individual subdivision might be, no matter if small parks are interfused with housing, the great landscape would be expunged." (Page 83, Design with Nature).

The demands that we make on the world's resources to support our habits of consumption are too high. We need to make-do with less and work to see that others have more. We need to work for an architecture and community plans of greater environmental and human responsibility and lower cost. We need to extend our hand to all of our people.

These changes can enhance rather than degrade life. Native Hawaiians enjoy too small a share of our communities' wealth, but who would say that they know less than we do about hospitality, aloha and human warmth, about the pleasures and subtle power of being alive in these islands.

We must become more aware and more caring of our relationships with one another and with the land. Cultural and human resources are the key. We need to provide better settings for the creation and expression of cultural and artistic assets. We need special places where residents and visitors can enjoy the power of hula performed in a natural setting, the beauty of a slack key guitar accompanying a falsetto voice ringing clear under a tropic moon, the wisdom of a Kupuna.

Many of these ends could be served by restoring the Hawaiian people to their historic role as stewards of the land, protectors of special places and creators of culture and arts uniquely suited to the islands.

•• Nick Huddleston has worked with AIA Honolulu on housing and urban design issues for a number of years. Huddleston is an architect in independent practice.



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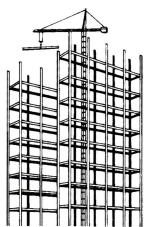




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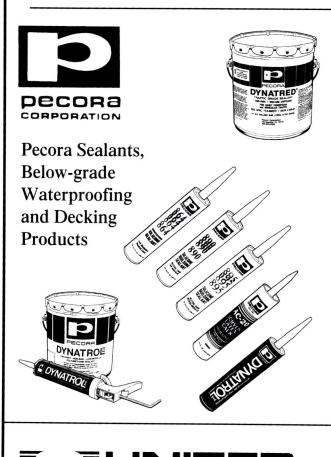
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The role plants play Indoor Air Quality

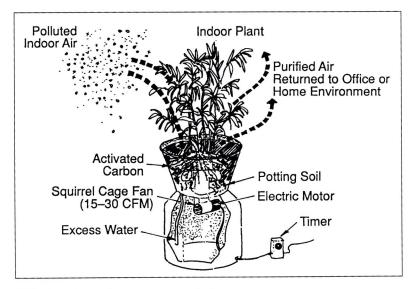
by Thomas P. Papandrew, AIA, FASLA

n the past when Hawaii relied almost completely on natural ventilation for its offices and homes, the issue of indoor airborne pollution was not a problem. Today, however, most offices and many residences, particularly high-rise condominiums, are air conditioned and the indoor environment can be tainted with a vast array of carcinogens and toxins.

These toxins are given off by appliances, furniture, building materials and various common household products. The Environmental Protection Agency has identified hundreds of volatile organic compounds that can exist inside tightly sealed, poorly ventilated buildings.

The answer to dealing with the primary toxins, formaldehyde, benzene and tricloroethylene, that contribute to "sick building syndrome" can come from ordinary houseplants, according to B. C. Wolverton, Ph.D. Wolverton, once a scientist at NASA, was given the task of working with a team to develop a closed system for dealing with sewage and other waste materials on board spacecraft.

This indoor air purification system combines houseplants and activated carbon.





This planting technique, where the plant's soil is unshielded, allows for a more efficient air cleansing process.

What Wolverton and his team discovered was that plants were ideally suited to filter sewage and other wastes. He found that the same process that filtered these wastes would also digest the pollutants found in closed, indoor environments. Most of this digestion occurs within the root zone and with the soil microbes at the interface of the root zone. "While all plants scavenged pollutants to some extent, their efficacy varied widely," Wolverton said.

Importantly, air cleaning proved most efficient when a plant's soil was unshielded by rocks, bark, coconut fiber or low-hanging leaves. These items are typically placed on the tops of indoor plant containers to make them more "aesthetically" pleasing.

The symbiosis between the root system and microorganisms is the most important part of the cleansing process. According to Wolverton, 90 percent of the work is done by the microbes. While it is true that plants absorb pollutants through their leaves along with carbon dioxide in the process of photosynthesis, the interaction previously described is more important in the digestion and cleansing of indoor toxins.

Testing has been done on more than 40 plants for their ability to filter out pollutants. Among the most useful for the average householder and office dweller are the areca palm, golden pothos, dracaena, spider plant, spathaphylum, philodendrum and raphis palm.

Some common houseplants have a specific appetite for certain toxins. Spider plants and Boston ferns have an affinity for formaldehyde; Spathaphylum absorbs trichloroethylene; English ivy and chrysanthemums digest benzene. All of these plants are easy to grow indoors, require only low light and are effective air-cleaners

homes and offices will have indoor gardens built into them as biological air filters and waste treatment systems. He also said that by cutting ourselves off from the natural world, "we create an imbalance that puts us at risk. People came late to planet earth. Plants and microbes were here first."

Preliminary data suggests using one to two 10- or 12- inch potted plants per 100 square feet of floor space. Work is ongoing to refine this data and the specific toxins that a particular plant removes best.

In addition, fan-driven plant filters, developed by NASA several years ago, are proving useful in increasing the effectiveness of plants' filtering abilities. The plants are rooted directly into activated carbon, supplemented with a little potting soil. A small fan draws room air through the carbon, which collects and holds organic pollutants until microbes and plants can degrade them. Commercial versions should be readily available in the near future.

Although the purifying characteristics of plants are important in indoor air quality, it should not become necessary to rely on such systems. Instead, the focus should be to remove the sources of unhealthy contaminants.



More integrative development with existing land uses is encouraged Eco-Tourism in Southeast Asia

by Barry Lyseng

n Southeast Asia, there is a growing trend to re-fashion tourism development under the tenets of eco-tourism and sustainable development. Eco-tourism and sustainable development involve projects which integrate all elements of ecology—including the "human landscape."

However, in Southeast Asia, reality presents some unique challenges to the ultimate success of eco-tourism and sustainable development. Indonesia, for example, embodies many of the challenges and realities which can exasperate eco-tourism proponents including:

• The peculiarities of the existing and forecasted tourist markets

• The practices of land acquisition

• The comprehensiveness of what is consid-

ered during the site selection, design and implementation of tourism developments

• The government manpower, policy and legislation

There is no doubt that some of the tourism development in Southeast Asia has had negative impacts on the environment and cultures. Not all tourism development has been negative, but Cambodia, Thailand, Malaysia and Indonesia have all seen at least one ugly result of environmental or cultural degradation due to tourism development—scarred archaeological sites, sex tourism, shrinking habitat for vegetative and wildlife species or ill-advised diversion of waters.

For example, the Indonesian Ministry of Environment has identified tourism and resort development, along with the textile and pulp and paper industries as the primary contributors to an unsustainable demand on available water supplies. Areas on the island of



considered sustainable developments, the Aman Resorts in Southeast Asia have been commended for sensitivity to architectural design and site planning.

While not



Java are drawing water from aquifers at three times the replenishment rate. As a result, saltwater intrusion of the aquifer, land subsidence, flooding and water logging are increasing and impacting water supplies for personal, business and recreational users.

Tourism Market Demand

In the past, attempts at environmentally sensitive tourism developments have been made in Southeast Asia. Belt Collins was involved with Wimberly, Allison, Tong & Goo in the 1970s with the award-winning Tanjong Jara Beach Resort which endeavored to preserve and showcase the sea turtle breeding beach habitat found along the east coast of Malaysia. More recently, the Aman Resorts have been acclaimed for their sensitivity to architectural and site aesthetics.

However sensitive in their architectural design or site planning, neither could truly be said to represent eco-tourism or sustainable developments. Both are as consumptive as most other tourist developments. Neither has considered its impact in a broader regional context.

It is hoped that soon, successful eco-tourism and sustainable developments, such as Maho Bay Camps and Harmony in the U.S. Virgin Islands, will be realized in Southeast Asia. Maho Bay, with its restricted vegetation clearance practices, inconspicuous buildings and infrastructure systems, low-demand utility consumption and recycling programs, sets a standard to be emulated.

However, the first reality in Southeast Asia is that the market demand for such a product is still relatively rare. In Indonesia, the strongest growth forecast is for the mid-star and internal domestic-generated tourism developments. Neither market niche is particularly attracted to the subtleties and enjoyment usually associated with eco-tourism. The domestic-generated tourist market is characterized, perhaps unfairly, as being disinterested in recreational pursuits and environmentally-aware lifestyles. Their custom is primarily focused on retail, gaming and restaurants.

Practices of Land Acquisition

In Indonesia, much of the human landscape is made up of sustenance farmers. They live in villages, traveling to surrounding fields. Home and field ownership is rare. Technically, all land is state-owned. At best, the tenant secures a leasehold to use the land for 30 years. But lax registration of title or leaseholds, poor surveys and a population ill-prepared in legal niceties make even such a lease-in-hand of suspect value.

When the idea of a tourism development, whether large or small, "low-impact" or traditional mega-project is floated by developers to local authorities, the authorities upon "approval," simply gazette an area to a developer. Rarely does the developer hold clear title to the land before approaching local authorities or is there a formalized public forum or appeal procedure regarding the gazetting.

The developer is left to negotiate fair compensation with the tenants. Often the developer has connections to key members of Indonesia's elite, and, with the assistance of the local authorities wishing to curry favor This tranquil setting at the Aman Resort in Phuket, Thailand, offers guests a peaceful getaway. with this elite, immense pressure can be placed on the local population to sell.

Apart from the negative image created among the former tenants, even otherwise successful "ecotourism" projects adversely impact on the former tenants—or the human landscape.

Land Use Development

During site selection, design and implementation, the local human landscape is as much at risk of destruction as any other part of the natural environment. To disregard any segment of the natural environment is to tempt the potential negative impact it will ultimately have on a development.

The reality is that most tourism development in Indonesia is on or near densely-inhabited or relativelyaccessible areas. Projects such as Maho Bay, in isolated locations or on defensible islands—not subject to the pressure of surrounding populations—are rare.

Eco-tourism is usually dominated by a concern to mitigate the impacts of tourism development on the natural environment. This presumes a luxury rarely available in Southeast Asia—that there is a "natural environment" left to deal with.

The strains of high population growth, especially in areas such as the Indonesian archipelago, have made "natural environments" quite sparse. For example, the islands of Bali and Java—the focus of much of Indonesia's tourism development hold an evenly spread rural population of 100 million. Applied to Oahu, this would be the equivalent of 1.6 million people—not concentrated to a single urban setting such as Honolulu—but evenly spread across the entire island.

To ignore the reality of a dense agriculturally-based population sets in motion a number of scenarios which challenge basic tenets of ecotourism and sustainable development. The first scenario is the abandonment of long-established, ecologically-sound sustaining farming practices. Without clear or enforceable land use planning policies, this has led to the indiscriminate transfer of productive crop land, specifically rice paddies, into development. The challenge is to encourage more integrative development with the existing land uses.

Another scenario is that the selling of this land requires the relocation of the population. The reality is that the former tenant is unlikely to have secured a "great deal." Rumors of the purchase of entire farmholds, in a newly-targeted development area, for the price of

There are fundamental problems which present hurdles to furthering eco-tourism and sustainable development.

a new radio are common.

This population is not mobile. Car ownership is virtually nonexistent. Motorbikes are still rare. Along with poor education, the displaced tenants are not empowered to make an independent decision about where to relocate and improve their lot.

Instead, the tenant moves to a location somewhere in the immediate area. This involves either carving another bit out of the rare remaining natural environments, or squatting in some even more marginal location in an already crowded land.

Or it's off to the bright lights of Jakarta—a phenomenon so common it inspired a popular new song "Why Have You Moved to Jakarta?"

It is likely that the new tourism development will be a powerful magnet for a population now divorced from its agricultural economy and attracted to the unskilled service jobs offered by such developments. This population shift could result in anarchic and inadequately-serviced new villages of displaced tenants growing immediately on the doorstep of the tourism development.

Apart from not providing satisfactory living environments, this village development jeopardizes the very value of the tourism development and the economy of the region which is now more dependent on it.

Policy and Legislation

The last reality is that the makeup of government authorities and key government policies actually exasperate the objectives of ecotourism and sustainable development.

There are fundamental problems which present hurdles to furthering eco-tourism and sustainable development. But many movements are working to improve the situation. This extends from simple changes in developer awareness—while not the fastest growing trend—to a growing sophistication of the consumer.

Added to this is the increasing awareness by consultants and government agencies to become proactive; intervene; and provide a more educational and supportive role in all aspects of environmental protection.

After years of staid conservation in world politics, the World Banks' and World Tourism Organizations' policies have been re-defined. This reorganization provides an agenda for action that will help countries manage their environments and tourism developments better. Even the new General Agreement on Tariffs and Trade, which allows protection of the environment to be one objective of trade restrictions, provides an added impetus to the governments of Indonesia and others throughout Southeast Asia.

➡ Barry Lyseng is a land planner who works for Belt Collins International. Based in Singapore, Lyseng has worked on a number of eco-tourism developments in Indonesia, Thailand and Malaysia.

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By the 18th Century, terrazzo was being used extensively in monumental structures and eventually made its creative way into the home of America's first president, George Washington, who selected the Italian import for many of the rooms at Mount Vernon. Terrazzo's artful qualities were enhanced by American ingenuity in installation techniques and the wealth of marble available in the United States. Architects and designers today have brought terrazzo full circle, utilizing it in contemporary as well as classic design concepts. You might enjoy seeing the fine example in Honolulu's Beretania Street State Office Building. To find out more about terrazzo, including how it may help increase the value of

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Letters

Dear Editor:

Hawaii Pacific Architecture is to be commended for the excellent and extremely important article in your January 1995 edition titled "Hawaii Experiences a Termite Epidemic" by Jim Reinhardt, Elmer Botsai and Julian Yates.

The article included the statements: "The most significant change that has occurred has been the banning of Chlordane," and also "The new chemicals...do not last nearly as long and may in fact be subject to breakdown even earlier than anticipated...."

This article describes design options that may mitigate termite vulnerability in new construction, however, existing homes in Hawaii are now at great risk because of the banning of the very effective Chlordane.

Because this "termite epidemic" is



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a direct result of government action, the government has a clear and urgent responsibility to take direct and positive action to correct this problem.

The design professionals in Hawaii who have direct knowledge as to the causes and progress of this serious "home-destroying" epidemic must work directly with the responsible government agencies and particularly with our elected officials to develop specific corrective measures to protect the existing housing in our state.

Currently, our government agencies are rightly concerned about preventing an invasion of the Brown Tree snake from Guam. Having Brown Tree snakes in our forests and gardens would be a disaster, but would not cost individual homeowners up to \$250,000 for the termite damage repairs mentioned in your article.

Alan S. Lloyd, PE

Dear Editor:

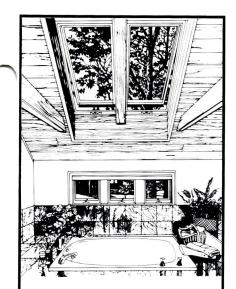
In your December 1994 issue of *Hawaii Pacific Architecture*, the cover featured the McGee Residence, designed by the firm of Dinmore & Cisco Architects. One of the features that this residence used was the folding wood frame/glass doors opening to the lanai. We have been looking for a similar type of door and system for one of our projects.

Do you have a telephone number, fax number and possibly a contact person at Dinmore & Cisco Architects whom I may contact to inquire about their McGee Residence folding doors?

I would appreciate any information you can provide me. Thank you for your time and assistance. If you have any questions, please feel free to call me.

> Garret Horimoto Kajioka Okada Yamachi Architects Inc.

Editors Note: We were pleased to provide the information requested and will provide similar assistance to any reader.



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