

# THE HEALING GARDENS OF MAKAHIKILUA

By Calley O'Neill, 1980

To the best of our knowledge, THE HEALING GARDENS OF MAKAHIKILUA have the potential to become a prototype for healing in nature, in that the project is a community based, comprehensive replicable model of a fine art, ecological landscape incorporating the essential elements of food production, sustainable methods, rare aesthetics, and deep healing environments within an institutional framework.

Gardening is the sole activity which simultaneously addresses the three primary causes of disease of our time: stress, diet and the environment. The genius loci of MAKAHIKILUA, and the outstanding example of Ancient Hawaiian horticulture is a grand inspiration for a local, multi-ethnic, accessible landscape which will demonstrate the necessary reunification of beauty and utility, ecology and economics, quality and permanence – ideals the ancients could not have conceived as separate.

The landscape will include, over time, an 'ohia grove reconstruction, a one acre ethnobotanical garden, a keiki (children's) garden, and native Hawaiian fern garden. Semi-private patient gardens are designed according to the ancient principles of Feng Shui. Five private birthing gardens, a bio-intensive mini-farm, spectral garden rooms for color healing work, rejuvenative exercise, prayer and meditation, a chapel garden, two lively courtyards, and numerous water elements round out the Master Plan.

It will be, ultimately, a living laboratory for healing the Earth and our people, based on a dynamic community education model of hands on workshops, mini-courses, and The Work as Medicine Apprenticeship program. When the Healing Gardens are built, work will proceed in a slow teamwork construction process.

## **Inspiration: The Ancient Hawaiian Planters**

*Aina*, the land, (derives from the Hawaiian verb or noun *ai* – meaning that which feeds), is a term coined by the agricultural people of the highest order, who created a highly developed horticulture based on ingenuity, remarkable powers of observation, extensive botanical and climactic knowledge, well honed engineering skills and a diversity of agricultural methods, including extensive plant selection, wet and dry taro cultivation, aquaculture, soil building through specific mulching, lunar planting and *mauka* to *makai* (mountain to ocean) exchanges. The Hawaiians, who were gardeners rather than farmers, built a sophisticated culture without the immense benefit of seasonal flooding and soil renewal which formed the basis of many highly developed ancient societies. The Hawaiians developed the cultivation of *kalo* (taro – *Colocasia*

esculenta) to a higher degree than any other culture in the world, and their diet was the most nutritious in all Polynesia. (Handy, Handy, and Pukui, 1972)

### **Ecological Methods**

The organic gardening techniques will represent the best of east and west, and old and new. Bio-intensive raised bed gardens will be built with hand tools and nurtured through composting, green manuring, and mulching, companion planting, interplanting, floral and herbal borders, and the proliferation of beneficial worms, soil organisms, birds, frogs and geckos; without the use of chemical fertilizers or biocides. Garden tools for maintenance will be either human or solar powered, eliminating noise and pollutants from the patient area.

### **The Healing Gardens of Makahikilua Landscape Components – Native 'Ohi'a Grove Reconstruction**

Written accounts of early European travelers and native Hawaiian testimony describe Waimea at the time of contact as a verdant plains covered with a dense forest called the Ulu La'au (ulu – to grow, la'au – every plant that grows in the earth, particularly large trees, the forest). The native 'ohia forests sheltered numerous clearings of small cultivated residential and horticultural plots, as picturesque and productive as any agricultural fields in the world.

By the early 1800's, the dramatic effects of the prolific sandalwood trade (Iliahi, *Santalum paniculatum*), the *pulu* trade (the soft hairlike growth on the Hapu'u tree fern), introduced cattle grazing, logging, and pest infestations caused drastic depopulation in Waimea, abandonment of horticultural fields and deforestation. In just one century from contact, the native forest ecosystem and its bird life had vanished. While it may not be possible to totally restore the native forest, one can recompose native plant communities to create the new generation of forest ecosystems. Around the hospital, the beloved 'ohia lehua (*Metrosideros polymorpha*) will return as the dominant canopy tree with a lush understory of trees, shrubs, ferns and vines, that will be self-maintaining, requiring only initial mulching, and irrigation. The grove will mature in approximately 150-300 years.

### **The Self-Sufficient Hawaiian Garden**

Using the techniques of the ancient Hawaiians and local Hawaiian expertise, a garden of taro, sweet potatoes, yams, bananas, sugar cane and breadfruit will provide food, beauty and a rare demonstration of local food self reliance. A *hale* (thatched house) will serve as a gathering place for cultural and ceremonial activities. To offer pedestrians protection from the misty tradewinds, there will be a surrounding covered walkway planted primarily with the maile vine (*Alyxia oliviformis*) and green ti (*Cordyline*

terminalis), frequently used for medicine, lei making, hula skirts, traditional capes, sandals, and to wrap food for baking.

Calley designed the Hawaiian garden with the help of *Kumu Hula* Pua Case, and *Po'okela Kahuna La'au Lapa'au o Hawai'i* Papa Henry Allen Auwae, Dean of Hawaiian Herbal Masters. A large *La'au Lapa'au* garden will supply many important Hawaiian herbs, which are quite scarce at this time.

### **Kipaaloha: The Garden of Welcome**

*Kipaaloha* will greet visitors with reassuring color and design, according to the principles of Feng Shui (the ancient Chinese art of designing a harmonious environment) which will enhance the flow of natural currents of invisible energy, Qi (pronounced chi - cosmic breath) - which meanders along curved paths, improving health, life and destiny. The half circle reflecting pond graces the main entrance to bring health and protective energies into the hospital's spine. Living fish stimulate Qi, and red fish offer protection against fire.

Curved beds of native plants symbolize a living lei of aloha. The half circle plantings fronting the lobby display traditional good luck plants from Hawai'i and around the world.

### **The Keiki (Children's) Garden**

On the lee side of the lobby is the children's garden, with its ground level elements hidden from adult view. A sand bowl and a sunken 6' trampoline allow children to fall 'up' onto a soft mounded mondo grass surround. Other elements include German dance chimes, hopscotch, *Konane* (Hawaiian checkers), a porch swing, climbing rope, rocking horses, and non-toxic plants of interest to children of all ages. *Poha* and *ohelo* berries, mulberries, pineapple guava, strawberries, herbs and edible flowers.

### **PT/OT (Physical and Occupational Therapy) Garden**

The PT/OT garden is a mini-par course with seven exercise stops, including a multi-purpose bicycle to activate the water in the pond. The path will be composed of a variety of materials which deviate from level in one direction and another, including stairs and a curb to enhance patient mobility, balance and reflex action in a variety of real life situations. On the inside of the circuit are a series of ergonomically designed Earth forms and body bridges for reconstructive rest and stretching postures surrounding a lawn which accommodates 16 students and an instructor in full supine stretches. The large Earth cone is for inversions or upright relaxation with a smooth black solar heated stone on the south side, and a cool white stone on the north. The lush border is a riot of color for overall stimulation and energy enhancement. Adjacent to the garden

entrance is a small bio-intensive vegetable, flower and herb garden, a versatile workshop with a sizeable equipment storage area.

### **Courtyards**

The patient courtyard has 18 entrances from patient rooms. Privacy is afforded to patients in their rooms by a ring of mounded beds. The design focuses on a central pond with the feeling of an old tropical town plaza. The coping stones, pond and path lanterns, and walkway will be hand carved of gray stone from Bali with generous seating in the sunniest aspect of the courtyard. A river of lavender and yellow perennials run alongside the bed with a canopy of 'ohia, mamane and tree ferns. Beautiful hand-crafted Japanese bamboo sleeve screens provide privacy between the rooms.

### **The Botanical Lace: Patient Room Gardens**

These 27 Feng Shui designed semi-private gardens are accessible to all the patient, *ohana* (extended family) and staff rooms via sliding glass doors, providing fresh air and sunshine. Together the gardens form a flowing 'botanical garden lace' to: moderate temperatures, pump oxygen, create privacy, serenity, a lovely view and the sounds of nature, muffle noise and pollution, and create an easy focal point for patient contemplation and relaxation. Bamboo screens planted with *pua male* (*Stephanotis floribunda*) and gardenias afford privacy and a heavenly fragrance.

### **Birthing Gardens**

Each of the five birthing suites (LDRP's: labor, delivery, recover, post-partum) will open to a private birthing garden where a laboring woman and her family can walk, stretch, sit and breathe outdoors in privacy. The gardens, separated by 'ohia and eucalyptus (*Pseudosasa japonica*), a 6' high moss rock wall, and surrounding Moso bamboo grove (*Phyllostachys heterocycla pubescens*) will maximize sound absorption. Each garden will have a sounding water element, a labor post, chaise lounge, sitting areas, low voltage solar mushroom luminaries, and a lush perennial border in pinks, lavenders and blues.

### **Regenerative Parcourse 2001**

A fun walking/jogging circuit with wide paths and 21 graduated stops for stretching and aerobics will feature a bamboo water-wheel to aerate the main pond, a recirculating stream, fountain, waterfall and irrigation sprinklers activated by the participants' exercising motions. The course would allow for a range of stamina, ability and ages.

### **The Spectral Garden Rooms**

Separate color gardens will provide comfortable sitting areas within blooming displays reflecting the healing qualities and scents of the featured hue. Each garden room will have a different color, shape, size, sound, feel, look, scent, art and architecture, children's area, ergo-dynamic Earth form or seat, Parcourse exercise stop, meditation/prayer space, and a rich botanical complexity within a concisely ordered whole. Each of the gardens will center upon the living presence of water ~ essential for beauty, tranquility and sound, aquatic food production (watercress, water chestnuts, lotus root), nutrient rich irrigation water, and oases for frogs, birds, captivating fish and pollinating insects.

### **Manaolana (The Garden of Hope, literally, The Garden of Floating Thoughts)**

The meditation chapel garden will have only white blossoms, symbolic of universal Oneness, peace and purity. Its essence is enriched by a natural outdoor chapel of 75 year old blue gum eucalyptus trees. Within is a water garden, *Mahealani* (Garden of the Full Moon Night), with white lilies and lotuses, a water wheel, and an inviting hand-crafted Japanese garden bridge.

### **The Bio-Intensive Mini-Farm**

Near the kitchen, one may stroll through a curving vegetable garden on a 4-fold crop rotation of compost enriched beds. Beds are planted on a triangular matrix system, creating a living mulch to conserve water and soil, while providing 4 to 16 times the yield of conventional farming with just a fraction of the energy, water and fertilizer. After several rounds of double digging, only mulching, light aeration, and the natural proliferation of earthworms are required to sustain soil fertility. Various cultural beds will be planted to Chinese, Japanese, Filipino and European herbs and vegetables. Perennial beds – including asparagus, strawberries, pineapples, lilikoi, poha, rhubarb, Okinawan and Malabar spinach, ong choy, the winged bean and chayote – will surround the annuals. Flower selection will emphasize companion and pest deterrent species. The harvest will provide the hospital with plentiful organic vegetables, fruit and edible flowers. Nutritional, culinary and medicinal herb gardens will supply fragrance, color, texture and the liveliness of beneficial insects, as well as seasonings, aromatic and healing herbs, teas, bath herbs and medicines for the hospital.

### **Permaculture and The Mini Orchards**

Fruit and nut trees will provide bananas, papayas, avocados, loquats, cherimoya, starfruit, macadamia nuts, and a wide variety of citrus. 'Thalas' (drip line sized saucers, thickly mulched with macadamia nut hulls or bark chips) below the trees conserve

water, nutrients, and microbiotic soil life. Focus is on the creation of tree places for human enjoyment, as well as good production and permaculture research.

### **Ka Hale Ani Ani: (The House of Glass) the Solar Greenhouse and Landscapes Utilities**

A solar greenhouse will be constructed for heat loving plants, for propagation, for interior plant rotations and an organic gardening library. A utility area stores garden equipment and recycling bins for glass, paper, cardboard, aluminum and plastic. The composting arena will have a drop-off point for community donations of leaves and grass clippings. A potential water catchment system/reservoir could be the source of cost and chloramines free irrigation water. Garden, lighting, irrigation, mowers and weed eaters will be solar powered. Inside the hospital, houseplants and soil microorganisms in the pots will absorb CO<sub>2</sub> and CO and other gases and vapors, and replace them with oxygen, help modify temperature and humidity, and balance ions in the air.

### **Garden of The Four Noble Plants and Three Friends** (Emergency Entrance Garden)

This garden will function primarily on a deep, or psychological level. The simple Narijara Bamboo (Japanese Temple Bamboo, *Semiarundinaria fastuosa*) grove provides an atmosphere of tranquility and welcome in an otherwise stressful environment. The four noble plants are: bamboo, orchid, chrysanthemum and plum. The three friends are Buddha, Confucius, and Lao Tsu, symbolized by the bamboo, pine, and plum.

### **In Conclusion**

People can be made to feel divine or degenerate by the mere fact of their surroundings. THE HEALING GARDENS OF AKAHIKILUA have been designed to be a "balanced and self renewing environment containing all the ingredients necessary for human biological prosperity, social cooperation, and spiritual stimulation" (McHarg). The project is a community based, comprehensive replicable model of a fine art ecological landscape which will demonstrate the necessary reunification of beauty and utility, ecology and economics, quality and permanence as applied to urban, suburban and rural situations.

This is indeed the time to mobilize the abundant collective intelligence, creativity, and latent healing abilities of our people and our planet. In a time when near term global trends point to catastrophic food, soil, water and population crises, THE HEALING GARDENS OF MAKAHIKILUA project a compelling image of the future that is deeply healing, abundant and sustainable. THE HEALING GARDENS are, in essence, a meditation and a prayer for harmony with the bounty and healing power of this living Earth. Inspired originally by the visionary, Paul Mitchell, the Master Plan is dedicated to World Peace and Abundance. *E ola ka'aina! Eola ka poe o Hawai'i nei!* So that the land may live! So that the people of Hawai'i may live and thrive!