

# MENDOCINO COAST BOTANICAL GARDENS

## Strategic Plan 2009--2014

### MISSION STATEMENT

- Our mission is to conserve plants suited to the climate of the Mendocino Coast and display them for the enjoyment and education of our guests.

### The Visitor Experience

*We will create environments in our gardens where our guests can feel closer to nature, and where they can find beauty and serenity.*

**Concept 1:** Hire one additional gardener to improve and expand the cultivated areas of the gardens. This will allow the Gardens to present more displays and thus attract more visitors.

- **Requirements:** Sufficient funds to support the position.
- **Strategic Plan year** 2009-2011

**Concept 2:** Expand succulent collection and redesign Pacific Iris and Mediterranean area. This will expand the horticultural collection of dry plants, improving the aesthetics of the area and provide visitors with information on water smart gardening and plants from similar ecosystems to MCBG.

- **Requirements:** Irrigation, soil, rocks, plants
- **Strategic Plan year** 2008-2009

**Concept 3:** Redesign and rebuild store and garden entrance corridor. Dependent on recommendations from Master Planners, however we need to improve the visitor ingress and egress as soon as possible.

- **Requirements:** Volunteer labor, volunteer architectural design, materials
- **Strategic Plan year** 2009

**Concept 4:** Determine use for former retail nursery area and remodel as necessary to meet needs.

Monitor use of current library and meeting space; test use of space for events/activities.

- **Requirements:** Architectural design, labor, materials
- **Strategic Plan year** 2009--2012

**Concept 5:** Begin implementation of closed-cone pine forest "restoration". This will improve the area aesthetically, create habitat for native plants and educate the public in plant conservation and native plant preservation.

- **Requirements:** Update plan written in 1990s. Apply for grant funding for labor. Propagate native plants.
- **Strategic Plan year:** 2009-2014

**Concept 6:** Begin implementation of coastal prairie "restoration". This will improve the area aesthetically, create habitat for native plants and educate the public in plant conservation and native plant preservation.

- **Requirements:** Conservation task force to determine management and restoration plan. Apply for grant funding. Propagate native plants
- **Strategic Plan year:** 2009-2014

## Education

Few horticultural or botanical opportunities exist on the Mendocino Coast to educate people about plants in nature or in cultivation. Therefore we intend to create an important educational resource at the Gardens for visitors to the coast, the local community, and the greater horticultural community. Part of this effort will focus on school-age children.

**Concept 1:** Lesson Plan -Teacher Training. Develop one-hour science-based plan for teachers, using MCBG as the "outdoor" classroom for grades 1 and 2

- Develop one-hour science-based plan for teachers, using MCBG as the "outdoor" classroom for grades 3 and 4
- Develop one-hour science-based lesson plan for teachers, using MCBG as the "outdoor" classroom, for grade 5.
- **Requirements:** Teacher training and printed materials developed by volunteers; lesson plan developed for teachers; materials for children to implement lesson (ex: magnifying glass, notebook, etc.); docent to supervise teachers and students during session in Garden. Teacher training and printed materials developed by volunteers; materials for children to implement lesson; docent to supervise teachers and students during session in Garden. Teacher training and printed materials developed by volunteers; materials for children to implement lesson; docent to supervise teachers and students during session in Garden.

**Strategic Plan year:** 2009-2014

**Concept 2:** Attract more children and families to the Gardens by developing special children's days that feature themes especially relevant to MCBG.

- Children's Days Fungi Day for children, winter
- Children's Day in May 2009: Free entry for children on the coast up to ages 16, with events planned in various areas of Gardens, free gift (badge or hat), refreshments.
- Children's Day, May 2010: Free entry for children on the coast up to ages 16, with events planned in various areas of Gardens, free gift (badge or hat), refreshments.
- **Requirements:** One staff person + 1 instructor to lead a 2-hour workshop with help from volunteers; materials for fungi exploration (hand lens donated by Out of This World); refreshments. Volunteers to plan events, staff and volunteers to present events and prepare areas, materials for crafts and games, food, and advertising.

Volunteers to plan events, staff and volunteers to present events and prepare areas, materials for crafts and games, food and advertising.

**Strategic Plan year:** 2009-2014

**Concept 3:** Engage children's interests and educate them by providing materials and signage about the plants and natural history at MCBG.

- Expand the "quail trail" concept to provide information for parents and older children.
- Develop maps or brochures for children to highlight areas of interest in the Gardens.
- Use the information and materials suggested in the prototype adventure pack.
- **Strategic Plan Year:** 2009--2012

**Concept 4:** Educate visitors by developing interpretive signs about the major gardens, collections, and plant communities, and about current and historic uses of plants.

- Develop educational signage in Vegetable Garden (a Master Gardener Project)
- Educational signage in North Forest.
- Ethnobotanical signage focusing on Pomo uses of native plants
- **Requirements:** Wording and graphics by Master Gardener volunteers; sign material. Wording and graphics by volunteers; sign material wording & graphic in conjunction with Pomo elder; sign material
- **Strategic Plan year:** 2009-2010

**Concept 5:** Pomo History: Educate visitors about native people's use and relationship with plants in the area.

- Explore with local Pomo how their history and culture can become a presence in the Gardens. Possible projects:
  - construction of Pomo shelter replica;
  - Basket display in cliff house; workshops taught by Pomo representatives; interview of Pomo elder on DVD.
- **Requirements:** Depending on decisions and contacts, construction materials and builders for shelter replica, Pomo workshop instructor, materials for workshop; filmed documentary for DVD.
- **Strategic Plan year:** 2009-2014

**Concept 6:** Internships: Train students in various aspects of botanical garden work including horticulture, design, visitor experience, education, and conservation.

- Develop plan to attract interns, focusing on those with relevant skills and objectives that enhance Garden mission statement; incl. Housing referrals
- **Requirements:** advertising; housing resources
- **Strategic Plan year:** 2009—2014

**Concept 7:** Adult programs: provide educational opportunities for adults through programs on gardening, horticulture, conservation, and natural history.

- Continue to develop Master Gardeners' programs.
- Develop annual lecture series
- Develop brochures or maps with information about natural areas and native plants at MCBG

## CONSERVATION

Because all life on earth is dependent upon plant diversity, we will work to conserve the species and natural habitats of our local flora and other plants especially suited to our gardens.

**Concept 1:** MCBG can help visitors understand natural processes in garden and natural settings and distinguish between native and non-native flora to reduce introduction of invasive species.

- Manage transition between gardens and natural areas to provide better definition.
- Assess importance and health of non-native plants in transition area.
- Confirm that specimens have been mapped
- Remove non-native collections as appropriate.
- Propagate collections of importance
- **Requirements:** work with specialists in target groups.
- **Strategic Plan year:** 2009--2014

**Concept 2:** MCBG property is home to important plant communities: California coastal closed cone pine; northern California Coastal Scrub; site appropriate for northern California Coastal Grassland; Coastal Bluff; and wetlands including marshes and riparian communities. Most of these are now represented by only a few remnants along the coast. It is fundamentally important to MCBG's mission to restore and interpret these plant communities on its property.

- Restore natural areas on property. Restoration will occur in stages in each plant community; assessment, treatment, and monitoring will be done by the same team of people.
  - Increase understanding of current status of natural areas at MCBG: Update map of the rare plant communities; assess their current health status; determine what would be required to return them to an intact, healthy state
  - Restore selected areas:
    - Increase the area on the bluffs protected from foot traffic by roping them off; use interpretive signs to explain the reason these areas are protected.
    - Restore Closed Cone Pine Forest by creating openings and planting.
    - Begin mowing meadow.
  - Monitor restoration to determine most effective methods.
- **Requirements:** Contract with consultant to supervise teams of interns and volunteers. Collaboration with College of the Redwoods, California Native Plant

Society, etc. No non-natives to be planted in natural areas. Use best practices for habitat restoration.

- **Strategic Plan year: 2009-2014**

**Concept 3:** The need for appropriate and effective habitat restoration is among the greatest conservation concerns regionally. MCBG should provide leadership in regional habitat restoration beyond its borders, especially by using staff and facilities resources to help assure use of appropriate plant materials for local restoration.

- Provide expertise to agencies and organizations in planning restoration activities.
- Participate in harvesting seed and other propagules for restoration purposes.
- Propagate plants for restoration purposes.
- **Requirements:**
- **Strategic Plan year: 2009-2011**

**Concept 4:** Non native plants are the second greatest threat to native flora, second only to development. MCBG can help reduce the potential for non-natives to be a problem both by eliminating them from its natural areas and by informing the public about the dangers while suggesting alternatives.

- Contribute to conservation of the region and provide a model to visitors by eliminating invasive non-natives from the grounds.
- Collaborate with experts on each species.
- Have a formal policy regarding use of potentially invasive non-natives in the gardens
- Have a formal policy regarding use of potentially invasive non-natives sold in the nursery or as seeds or other materials in the shop.
- Publicize MCBG's policy on invasive plants.
- **Requirements:** Staff time to develop policies.
- **Strategic Plan year: 2009-2014**

**Concept 5:** MCBG has six species considered by the California Native Plant Society to be of conservation concern. It has the unique opportunity to protect these species and to interpret them to the public

- Develop management plans for all native species of conservation concern on property  
Collaborate with experts on each species.  
Consult with State and Federal agencies and California Native Plant Society to develop formally accepted management plans.
- **Requirements:** possibly 20--30 hours of staff or volunteer time per species

**Concept 6:** Twenty-nine species of plants in the greater Fort Bragg area are considered to be of conservation concern. MCBG should provide local and regional leadership in efforts to conserve native plants.

- Participate in providing training in plant conservation efforts through internships and collaboration with College of the Redwoods, California Native Plant Society, and local agencies. [Education]
- Participate in organizing a conference on native plants similar to the one on mushrooms.

- **Requirements:** Volunteer time; collaboration with sister organizations.
- **Strategic Plan year:** 2009-2014

**Concept 7:** Conserve plants from other regions that are adapted to climatic and other conditions unique to the Mendocino Coast : 131 of the 245 species of *Magnolias* worldwide are threatened or endangered. At least 11 of the species of conservation concern are in the MCBG collection. MCBG had 120+ species of *Rhododendron*, some endangered in their native area, and it has an unusually good collection of *Camellia* species. MCBG has a good collection of *Fuchsia*.

- Assess conservation status of existing plant collections
  - Work with BGCI and botanists in countries of origin to determine conservation needs of plants threatened in their native habitats
  - Implement conservation strategies for those plants; develop educational and interpretive programs to promote conservation in those areas.
  - **Requirements:** work with specialists in target group
- Strategic Plan year:** 2009-2014

## Plant Collections

Mendocino Coast Botanical Gardens, as a botanic garden, maintains collections of living plants; curation of these collections, including acquisition, record-keeping, and maintenance of their health, is an essential part of the work and responsibility of the Gardens.

In general, the tasks required for each collection include:

- Assess existing plant collections to determine strengths in representation; determine goals, feasibility and advisability of increasing each collection.
- Develop priorities and strategy for new acquisitions

### 1. Rhododendron Collection

MCBG maintains two collections of Rhododendrons:

>The Rhododendron species collection contains about 150 species representing more than 26 subsections, with special strength in subgenus *Pontica* and subgenus *Rhododendron*. The purpose of the collection is develop a collection of tender species rhododendrons that can only be cultivated in a restricted area of North America. The goals are to introduce our visitors to species rhododendrons, educate them on their native habitats, and to help maintain a small portion of a larger gene pool in collaboration with other botanical gardens.

- Assess the health and coverage of the collection.
- Develop an acquisition plan to add to collection.
- Develop a replacement/propagation plan for important aging collections
- Develop interpretive materials for the collection.
- Begin propagation of important specimens that are either aging or planted in inappropriate places.
- Prepare interpretive materials for the current collections.

>The Fort Bragg cultivar collection contains historic germplasm of cultivars developed by Mendocino Coast Rhododendron breeders, and historic plantings. The collection will include these and other cultivars that have the potential for reintroduction into the commercial trade.

- Determine what cultivars are candidates for the collection.
- Determine criteria for setting priorities and develop plan for acquisition and planting of desired cultivars.
- Develop interpretive materials for the collection.

## **2. Hardy heath and heather collection:**

The collection focus is to develop and display a Pacific Northwest Hardy Heath and Heather reference collection of the genera *Erica* and *Calluna*. Professional and amateur horticulturists can utilize these species and registered cultivars. The collection will also feature genera not typically found in heath and heather collections, including *Daboecia*, *Phyllodoce*, and *Cassiope*. These genera are recognized by the North American Heather Society (NAHS).

The collection will also focus on the ex-situ conservation of South African *Erica* species to assist in conserving species that are disappearing due to impacts of urban sprawl and agribusiness.

- Continue to verify existing and unknown historic specimens.
- Photo document current and new collection specimens.
- Utilize International Registrar of heathers at Wisbech, England, to identify unknown taxa currently in collection.
- Assemble desiderata list for 5-year goal of collection.
- Contact South African Cape *Erica* species authority Dr. E.G.H Oliver, and International Registrar of heathers, Dr. E. Charles Nelson, for recommendations of hardy heath and heather species.
- Establish relationships with other botanical gardens and arboreta with significant heath and heather collections.
- Consult with local heather society on taxa selection, collection maintenance, financial support, and education outreach.
- Develop a retail propagation list of proposed collection taxa with staff nursery manager, Neely Bryant.
- Improve irrigation system for collection.
- Develop propagation list of potential collection specimens to be used for replacement or expansion of display plantings.
- Obtain soil test evaluation of potential sites for proposed collection i.e. Mediterranean and perennial gardens.
- Replace mature heaths and heathers that are 10-12 years old with the same or newly selected cultivars and species.
- Remove all unidentified specimens.

- Continue to research and assemble a known wild origin *Erica* species collection that is representative of the genetic diversity of the taxa.
- Build species collection. Complete acquisition of proposed collection.
- Remove and document any species, subspecies, or cultivated hybrids observed to be invasive. This action supports a volunteer Code of Conduct policy to protect local native plant communities.
- Improve accessibility and aesthetics by replacing path material within the current collection site.
- Add the tested Hardy Heaths and Heathers inventory to the Gardens web site for heather enthusiasts and local professional landscapers and gardeners.
- Create a CD on heaths and heathers to be sold at the Gardens retail store to help fund the development of the proposed collection.
- Develop a self-guided heather and heath brochure. Include: geographical distribution; hardiness zones; basic morphological similarities and dissimilarities; uses; history at the Gardens; and society and nursery contacts. Partner with the local Mendocino Coast Heather Society to share or sponsor initial costs of printing and design.
- Develop a Hardy Heather and Heath interpretive sign for our visitors. Gather input from Gardens staff, and members of Mendocino Coast Heather Society on content.

### **3. Magnolia collection**

MCBG has more than 60 species of *Magnolia* growing, many of them mature, and many of them not commonly found in other botanical gardens. The purpose of is to develop a collection of species in the Magnoliaceae family that are suitable for our climate, unusual in this country, and rare in their natural environments. The goal of this collection is to introduce our visitors to a larger range of the Magnolia family and to help maintain a gene pool of more unusual specimens.

- Identify the species that have the potential to thrive at MCBG and determine their availability.
- Set priorities for acquisition focusing on broadening the range of species represented so that MCBG can maintain a gene pool of unusual species.
- Identify areas in the gardens where new acquisitions should be placed to best advantage.
- Develop a phased acquisition plan.

### **4. Camellia collection**

MCBG has more than 36 species of *Camellia* of a worldwide total of about 120, and 9 cultivars. Its species collection is one of the best in the state. The purpose is to develop a collection composed primarily of sub-tropical, tender species that can be cultivated in our coastal climate. The goal of this collection is to introduce species camellias to our visitors and to test the hardiness of new species that are becoming available as more of Asia opens to plant exploration.

- Identify the species that have the potential to thrive at MCBG and determine their availability.
- Set priorities for acquisition focusing on broadening the range of species represented so that MCBG can maintain a gene pool of unusual species.
- Identify areas in the gardens where new acquisitions should be placed to best advantage.
- Develop a phased acquisition plan.

## **5. Conifer collection**

MCBG has some 120 species and cultivars of conifers, many of them unusual. The purpose is to develop a collection of conifer species that are rare or endangered in their native habitats. The goal of this collection is to introduce our visitors to these conifers and to help maintain a gene pool of the more unusual specimens.

- Evaluate current holdings for their horticultural, display, or conservation value.
- Determine the design needs of the gardens and potential places where new conifers might be placed.

## **6. Fuchsia collection**

MCBG has 20 species and 50 cultivars or hybrids of *Fuchsia*. There are about 100 species of this genus worldwide, most in tropical or subtropical climates. The purpose is to develop a collection of *Fuchsia* species and cultivars that do well in the local climate and are mite resistant.

- Evaluate current holdings for their horticultural, display, or conservation value.
- Determine the design needs of the gardens and potential places where new conifers might be placed.

In addition to these collections, MCBG maintains collections of begonia (20 cultivars), heritage roses (66 cultivars), and dahlias (140 cultivars) for display. These collections will be evaluated each year to determine which cultivars best suit display purposes and what new cultivars should be added.