

Horticulture

Sources for gardeners

by Kathy Fescemyer

As the long winter of 2003 is finally over and warm, sunny weather abounds, it is time to begin growing plants, both beautiful and delicious. Gardening is one of the major leisure activities of American adults, and each spring millions enjoy the beauty of growing flowers, fruits, herbs, and vegetables. The term *horticulture* is derived from two Latin words—*hortus*, which means garden plant, and *cultura*, which means culture. Modern horticulture consists of home gardening and other topics such as flower, fruit and vegetable production, plant propagation, plant physiology, plant breeding, and storing and processing fruits and vegetables.

Hundreds of Web sites on horticulture and gardening are available with new ones starting regularly. This article focuses on growing plants, and emphasizes home gardening, production of fruits, vegetables, ornamentals, and flowers. Sites chosen are for researchers, professional horticulturists, and the gardening public; are limited to North American horticulture (with a few exceptions); and must be freely accessible. Due to space limits, sites related to one type of plant (such as roses or daffodils) are not included, but can be located through the entrance sites.

Entrances

- **GardenWeb.** Published by the Virtual Mirror, Inc., GardenWeb is one of the most comprehensive horticultural sites on the Web. The

Hortiplex provides images and information to over 50,000 taxa. Over 90 community forums help gardeners communicate about many types of plants. Garden writer Sesbania Tripeti provides practical advice on creating gardens that are beautiful and easy to maintain. This site is also home to the Calendar of Garden Events, The Rosarian, Wild-Flowers, and sister sites in Europe and Australia. *Access:* <http://www.gardenweb.com/>.

- **Gardening Launch Pad.** One of the largest entrances for gardening information on the Web, this site links to over 4,700 gardening sites throughout the world. Links are divided into over 90 categories from specific plants to garden design and everything in between. Jim Parra, retired from the Zilker Botanical Gardens, created and maintains this site. *Access:* <http://gardeninglaunchpad.com/>.

- **Gardening.** From the NBII: The Nation's Biological Information System, this site provides abundant links on many aspects of gardening. The majority of these links lead to full-text articles. *Access:* <http://www.nbii.govdisciplines/botany/gardening.html>.

- **The Garden Helper.** Created, written, and maintained by Bill Beaurain, the Garden Helper provides gardening, landscape advice, and tips for all gardens. Sections include "Gardening for Beginners"; "Gardening Guides" for creating different styles of gardening; "Plant Guides" containing profiles for growing and caring for hundreds

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of different annual or perennial plants, as well as delicious fruits and vegetables; "Plants for Specific Needs"; "House Plants" for indoor gardening; and the "Gardening Calendar," which is a monthly schedule of gardening tasks. *Access:* <http://www.thegardenhelper.com/>.

- **Garden Gate.** This site has links to only content-related gardening sites selected by creator Karen Fletcher. Sections include the "Reading Room," the "Teaching Garden" for reference information, the "Garden Shop," the "Sun Room" for houseplant information, and the "Holding Bed," where new links reside. *Access:* <http://gardengate.prairienet.org/>.

- **Gardening.** Deborah Simpson is the About.com guide to this large group of links to many aspects of gardening. *Access:* <http://gardening.about.com/mbody.htm?once=true&>.

Reference

- **Garden Guides.** My favorite site for basic horticultural information on vegetables, flowers, and herbs is Garden Guides. Entries are short, readable descriptions with charming drawings of plants. Basic articles on gardening are also available. *Access:* <http://www.gardenguides.com/>.

- **National Gardening.** One of the best sites for horticultural information on the Web, this site provides tremendous numbers of articles on flowers, fruits, vegetables, herbs, and ornamentals. Also available are "Regional Reports," "Q & A Library," "Article Library," "Pest Control Library," "Dictionary," and "Food Gardening Guide." *Access:* <http://www.garden.org/>.

- **Botany.com, the Encyclopedia of Plants.** Three useful sections on this site are the common names of plants, botanical names of plants, and the dictionary of botanical words. Plant entries include the general description, various methods of cultivation, soil and temperature requirements, pruning, propagation methods, and the different varieties and hybrids. *Access:* <http://www.botany.com/index.html>.

- **Bulb.com.** Everything about bulbs and growing bulbs, from the U.S. Netherlands Flower Bulb Information Center (NFBIC) is on this site. Bulb.com has photographs, planting information, spring and summer bulbs, and sources of bulbs. *Access:* <http://www.bulb.com/>.

- **Botanical Glossary.** B&T World Seeds provides an online glossary of commonly used botanical terms and common name look-up, which lists approximately 25,000 common names from a number of different languages.

Access: <http://www.b-and-t-world-seeds.com/botgloss.htm>.

- **The Spirit of Gardening.** Compiled by Michael P. Garofalo, this site provides poems, quotations, and a timeline of the history of gardening. The timeline starts from ancient times and goes to the present. *Access:* <http://www.gardendigest.com/>.

- **Neoflora.** Created by NeoInformatics, NeoFlora markets its database as "The World's Largest Plant Database" and contains over 38,000 entries. *Access:* <http://www.neoflora.com/>.

- **Plants For A Future.** Created in England for rare and unusual plants, the Species Database contains over 7,000 species with details on edible, medicinal, and other uses together with information about their cultivation and habitats. *Access:* <http://www.comp.leeds.ac.uk/pfaf/index.html>.

- **Perry's Perennial Pages.** From Leonard Perry at the University of Vermont, this source provides links and articles about herbaceous perennials. Information for both the professional, researcher, and the home gardener is available. Challenging quizzes, an A-Z database, and lots more are on this site of one of the most popular forms of gardening. *Access:* <http://www.uvm.edu/~pass/perry/>.

Government

- **Census of Horticultural Specialties.** The census of horticultural specialties provides detailed statistics on the size and structure of the horticulture industry for planning, policymaking, research, and market analysis. The 1998 version includes producers of floriculture, nursery, and other specialty crops, such as sod, mushrooms, food crops produced under glass, transplants for commercial production, and seeds. *Access for 1998:* <http://www.nass.usda.gov/census/census97/horticulture/horticulture.htm> and <http://www.nass.usda.gov/census/census92/ag0400.htm>.

- **National Agricultural Statistics Service (USDA).** Current and historical statistics with tables on fruit and vegetable production and prices are easily accessible at this site. *Access:* <http://www.usda.gov/nass/>.

- **USDA Economics and Statistics Service.** Hosted by the Albert R. Mann Library at Cornell University, the system organizes over 300 economic reports on agriculture. Horticultural information is located under "Specialty Agriculture." *Access:* <http://usda.mannlib.cornell.edu/usda/>.

- **AGRICOLA.** All major horticultural publications and related agricultural materials are in-

dexed in AGRICOLA, which is produced by the USDA's National Agricultural Library. The search engine is awkward and cumbersome to use, but the citations and abstracts are freely available to researchers worldwide. *Access:* <http://www.nal.usda.gov/ag98/>.

- **Patent and Trademark Office.** Plant patents may be granted to anyone who has invented or discovered and asexually reproduced any distinct and new variety of plant. Over 10,000 patents have been issued for plants and the majority of these patents are for horticultural specimens. To limit the search to plant patents, use six as the application type. *Access:* <http://www.uspto.gov/>.

- **PLANTS Database.** Standardized information about the vascular plants, mosses, liverworts, hornworts, and lichens native to the United States and its territories is supplied by the USDA's Natural Resource Conservation Service. Entries include names, plant symbols, checklists, distributional data, species abstracts, characteristics, images, plant links, and references. *Access:* <http://plants.usda.gov/>.

- **Current Research Information System (CRIS).** CRIS was developed by the USDA to describe and report on research projects in agriculture and forestry, which includes horticultural research. Over 30,000 descriptions of current, publicly supported research projects of the USDA agencies, the State Agricultural Experiment Stations, the state land-grant colleges and universities, and USDA grant recipients are in the system. *Access:* <http://cris.csrees.usda.gov/>.

- **National Plant Germplasm System (NPGS) and Germplasm Resources Information Network (GRIN).** NPGS is a cooperative effort by public and private organizations to preserve the genetic diversity of plants. The entries in GRIN database document information on the germplasm of many economically important plants. More than 450,000 accessions (distinct varieties of plants) are in GRIN and represent more than 10,000 species of plants. *Access:* <http://www.ars-grin.gov/npgs/>.

Regional horticultural sites

- **Universities, Cooperative Extension Service and Botanical Gardens.** Growing plants is dependent on many geographically specific elements, such as habitat and weather. Getting the information for your geographic region is the purpose of this section. For the best information specifically for your growing region, be sure

to consult your state Cooperative Extension Service site at <http://www.ree.usda.gov/1700/statepartners/usa.htm>. Examples of a few outstanding regional horticultural sites from various regions in the country are selected.

West

- **Aggie Horticulture.** Aggie Horticulture is from the Texas Horticulture Program at Texas A&M University and is full of information for the Southwestern horticulturist. Especially notable are the "Sections on Wildflowers," "Just for Kids," and "Gardening." A very deep site, full of content on growing many types of fruits, vegetables, herbs, flowers, and ornamentals. *Access:* <http://aggie-horticulture.tamu.edu/>.

- **Landscape Plants: Images, Identification, and Information.** Produced by Oregon State University, images and information on over 800 landscape plants (mostly woody) are listed here in alphabetical order by genus, from *Abelia* to *Zelkova*. Each entry has multiple pictures of the entire plant, leaves, and flowers and information about the plant. *Access:* <http://oregonstate.edu/dept/ldplants/>.

South

- **Horticulture Information Leaflets.** This site from North Carolina State University Cooperative Extension Service is not fancy, but maintains links to many full-text leaflets purely on horticulture. Unfortunately, there is no search engine specifically for these leaflets. *Access:* <http://www.ces.ncsu.edu/hil/>.

Midwest

- **WebGarden.** Known by many names, such as PlantFacts or Horticulture and Science in Virtual Perspective, WebGarden from Ohio State University has extensive databases of horticultural information. The "Plant Dictionary" provides photos and basics on ornamental plants, turf, pests, and fruits and vegetables. In "PlantFacts," the Web Search accesses over 60,000 pages of Cooperative Extension fact sheets and bulletins from 46 different universities and government institutions across the United States and Canada. "PocketGardener" lets you load horticultural images to your handheld. Two other features are a "Question and Answer Database" and a "Glossary of Plant Terms." *Access:* <http://webgarden.osu.edu/>.

- **NewCROP.** Created by Center for New Crops & Plant Products at Purdue University,

NewCROP provides entries to lesser known plant species of potential economic importance. County-by-county statistics are provided for the United States, and full-text materials are available throughout the site. *Access:* <http://www.hort.purdue.edu/newcrop/>.

• **Missouri Botanical Garden.** Located in Saint Louis, the Missouri Botanical Garden is a delightful place to visit on the Web and in person. In Gardening Help, these areas are especially helpful, Plant Finder with picture and information on over 2700 plants, Vegetables of the World, NurseryTracker, HortLine with articles on over 300 topics, and Integrated Pest Management. *Access:* <http://www.mobot.org/>.

• **University of Illinois: Horticulture and Home Garden.** Visually appealing, this site has areas for the professional horticulturist and the home gardener. Home gardeners will find useful "Hort Corner," which lists extension Web sites that cover lawn care, fruits and vegetables, insects, and seasonal issues, and "Horticulture Solutions Series," which provides full-text information on varied topics in horticulture. Both home gardeners and professionals will use the "Home Yard and Garden Pest" weekly newsletter and the "Integrated Pest Management" section to identify horticultural pests and control them. "I PLANT" is intended for the use of landscape contractors, commercial nursery and greenhouse operators, and avid plant enthusiasts in the Midwest. Also available for professionals is a section on Pesticide Applicator Training and Pesticide Safety Education. *Access:* <http://www.extension.uiuc.edu/home/homelawn.html>.

East

• **New York Botanical Garden.** Two areas on this site provide information on horticulture: "Science" provides searchable databases such as the Virtual Herbarium, and the "Index to American Botanical Literature." "Plant Information" provides a gardening calendar, answers to growing plant and plant information sheets. *Access:* <http://www.nybg.org/index.html>.

Canadian

• **ICanGarden.** Canadian gardening is the focus of this site. The articles link provides access to many full-text articles by well-known garden authors. *Access:* <http://icangarden.com/>.

Other

• **Tree Care Information Brochures.**

From the International Society of Arboriculture, brochures are available for caring for the most valuable part of the landscape—trees. Information ranging from selecting new trees to caring for them properly throughout their long lives is available here. *Access:* <http://www.isa-arbor.com/consumer/consumer.html>.

• **Flowerweb.** This is a Dutch site that is intended for the commercial florist. The database, FlowerBase, is the most useful, providing photographs of many types of flowers and their scientific names, and common names in English, Dutch, Spanish, Italian, French, Swedish, German, and Danish. *Access:* <http://www.flowerweb.net/>.

• **OrganicGardening.com.** The archives and OG Basics provide many articles on how to grow plants without using synthetic fertilizers and pesticides. *Access:* <http://www.organicgardening.com/>. ■

("Diversity initiatives..." continued from page 310) with internship experience, introducing them to the academic and professional life of librarians and librarianship.

The success of any particular library residency program in building a diverse staff is debatable, but as an initiative that looks to create diversity within the profession, it has definite merit. It helps those recent graduates who have the academic knowledge, but often have not had much library work experiences and are apprehensive about their practical skills, and provides them with an opportunity to work in a more controlled environment. They have a chance to hone their skills gradually and are under less pressure to perform as permanent employees.

Residency programs also provide new librarians with work experience that many tenure-track jobs for academic library positions require. The residency program does increase diversity, not at the staff level necessarily, but by allowing people with different cultural, educational, and work experiences to start their professional career right after graduate school.

Rather than seeing diversity initiatives and residency programs as competing entities, we must see them and promote them as integral to each other. The combination of diversity initiatives and residency programs commits the entire campus and its surrounding community to work toward a common goal that can cement ties and bridge cultural differences. ■