Development of a Plant Care Guide for the Veterans Hospital Horticultural Therapy Program

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Development of a Plant Care Guide for the Veterans Hospital Horticultural Therapy Program

by

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Environmental Forest Biology
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APPROVED

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Abstract

The goal of this project is to provide a resource for both staff and patients at the Syracuse Veteran’s Affairs Medical Center (VA) to learn to care for the collection of plants in the therapeutic horticulture program and to also learn about the history and uses of the plants. The therapeutic horticulture program is designed to enhance the in-patient activities during short and long-term hospital stays for patients suffering from spinal cord disabilities or disease, and for those patients in long-term residential care. The horticultural therapy program has been active for three years, but until now, there was no information available to the patients regarding what plants were being grown in the patient rooms, common areas, or in the outside gardens, nor any guidance for their care. During the academic years, students from ESF guide the patients in plant care, but outside that time, hospital staff generously tends to the plants, and they themselves did not always have all the necessary knowledge to maintain the plants. This project was to compile information about all plants, outside garden plants, seed grown edibles and houseplants, into one living document, that would be both educational and entertaining. Each species is clearly detailed with care instructions, images, and some interesting information about history and uses. Additional copies of the pages for each plant are available if patients get released from the hospital and wish to take their plants home with them; thus having the resources they need to bring therapeutic horticulture into their own home. This project involved considerable in-depth research into over 50 plant species, including ideal growing conditions, history, medical uses, and more. It also incorporated interpretive design into compiling these facts into a digestible and approachable form for any reader. One of the unique features of this project is that it intends to be a living document so that as more species are brought into the program, additional pages can be created and added.
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Acknowledgments

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Project Body

The idea behind this project is to provide a resource for both staff and patients at the Syracuse Veteran's Affairs Medical Center (VA) to use to better inform themselves and care for the collection of plants in the therapeutic horticulture program. This therapeutic horticulture program will serve short and long-term patients suffering from spinal cord disabilities and disease. Being involved in this program they have the chance to plant seeds, watch them grow, care for them, practice and refine motor skills, and relaxation. Patients also have the opportunity to keep plants in their rooms to brighten their moods and décor. This therapeutic horticulture program, run by Dr. Lee Newman and graduate candidate Daniel Collins, also plants, provides, and maintains houseplants with the help of patients and staff, in common areas, lobbies, and on a green roof.

After volunteering at the VA for almost two years the concept of a plant care book was brought up. It was an idea that was tossed around, but no one had ever gotten the chance to accomplish. Until now there was not any record of what plants the program has in the hospital or common areas, nor any guidance for care. During school breaks staff generously tend to the plants, but do not always have all the necessary knowledge. This book compiles information about all plants, whether seed grown edibles or houseplants, into one compact place. Each species is clearly detailed with care instructions, images, and some interesting information. The care is the one section that is definitely included for each plant page. The other two sections vary to provide the most exciting or relevant information. For example, basil's “In the Kitchen” section highlights culinary uses of the basil, which allow patients to actually use what they are growing. Some feature the origins of interesting names or indigenous practices involving the species. Additional pages of each plant are also available if patients get released from the hospital and wish to take their plants with them. They now have all the resources they need to bring therapeutic horticulture into their own home.

This book also opened up a new niche for patients that have physical limitations. For those who may be bedridden or physically incapable of participating in planting activities, they can still interact with this book. It allows volunteers or family members to take the book to spend time and read with a patient. Showing them the pictures and sharing the information with them provides an experience different than planting but also a valuable one. Patients can learn a lot from this book, whether it is on its own or supplemental to the therapeutic horticulture activities.
This project involved much in-depth research into 50 species of plants, finding ideal growing conditions, history, medical uses, and much more. It also incorporated interpretive design into compiling these facts into a digestible and approachable form for any reader. It was important to take into mind the age, disabilities, and reading level of the audience and the wide range it covers. The design of this book, with large font, attractive pictures, and a low reading level aims to allow anyone to look at the book and enjoy it. The pages were printed in color and put in sleeves in a large binder. This book resides in the lobby of the spinal care unit at the VA on the fourth floor, conveniently placed next to our rack of growing plants.

One of the unique features of this project is that it intends to be a living document. As more species are brought in, additional pages can be created and added. The sleeves in the binder allow this book to be consistently updated and maintained, providing accurate information for the future of the program and all its participants.
Advice to Future Students

My advice to honors students reading this are simple. You can do it! Right now you may have a project or thesis in mind, or maybe you have absolutely no clue. Both are okay. If you choose a topic that you are passionate about, you will regret nothing about it. Doing this project has taught me immense amounts about work ethic, professionalism, and collaboration. It has allowed me to continue my volunteering at the VA, which I thoroughly enjoy, and contribute something that I can see people enjoying. I advise you to do the same. Pursue something that you are excited about, pick something that you can’t wait to do and see other people benefit from. And lastly, don’t be afraid to ask for help! That’s what professors are for.
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Photo credit: "Aloe Vera". Licensed under GFDL via Wikimedia Commons - https://commons.wikimedia.org/wiki/File:AloeVera.jpg#/media/File:Aoe_Vera.jpg

Arugula
"Arugula leaf.” Photo credit: realfoodforlife.com
"Arugula root.” Photo credit: www.gourmet.com
"Flowering arugula.” Photo credit: petalsandwings.wordpress.com

Asparagus

Basil
"Pesto Pizza.” By Jon Sullivan [Public domain], via Wikimedia Commons

Chamomile
"Chamomile plant” www.organiceyourlife.com
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Chevril

Chive

Christmas cactus

Cilantro
Cinnamon Basil

Cornstalk Dracaena

Dill
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Dill Microgreens


Dwarf Lilac
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English Ivy

Green Beans

Golden Gem Tomato
http://www.healthbenefittimes.com/health-benefits-of-tomatoes/

Gourd

Heart Leaf Philodendron

Jalapeños
"Immature jalapeno capsicum annuum var annuum". Licensed under CC BY-SA 3.0 via Wikimedia Commons -
http://commons.wikimedia.org/wiki/
File:Immature_jalapeno_capsicum_annuum_var_annuum.jpeg#mediaviewer/File:Immature_jalapeno_capsicum_annuum_var_annuum.jpeg
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Janet Craig Dracaena deremensis
"Dracaena deremensis1" by KENPEI - KENPEI's photo. Licensed under CC BY-SA 3.0 via Wikimedia Commons -
https://commons.wikimedia.org/wiki/File:Dracaena_dermenensis1.jpg#/media/File:Dracaena_dermenensis1.jpg
Japanese Red Maple Tree
http://www.arborday.org/trees/treedetail.cfm?ItemID=866

Lemon Basil
"Full_Lemon_Basil.” By Dobromila (Own work) [GFDL (http://www.gnu.org/copyleft/fdl.html) or CC BY-SA 4.0-3.0-2.5-2.0-1.0 (http://creativecommons.org/licenses/by-sa/4.0-3.0-2.5-2.0-1.0)], via Wikimedia Commons
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Lemon Grass
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Lettuce
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Lincoln Peas
Pea_Trellis. Photo credit: Seattegarden.wordpress.com
Pca_Piant. Photo credit: Parkseed.com

Marigold

Mesclun
"Mesclun leaves.” Photo credit: tinyfarmblog.com

Minette Basil

Morning Glory
Photo credit U.S. Fish and Wildlife Services, Burpee.com
Naked Lady Amaryllis
"Amaryllis belladonna sketch." Kumbula Nursery
"Amaryllis hybrids." By Paul Tyerman- Pacific Bulb Society.

Nasturtium

Opal Basil
"Opal Basil." By Quinn Dombrowski (Flickr: Dark opal basil) [CC BY-SA 2.0 (http://creativecommons.org/licenses/by-sa/2.0)], via Wikimedia Commons

Parsley

Radish
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Rosemary
http://www.almanac.com/plant/rosemary

Sage

Scallion
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Sensitive Plant

Snake Plant
**Snap Peas**

"Snap Peas." Photo credit: Christine Gallary


"Snap Pea Flower." www.homegardenjoy.com

"Snap Pea Vine." www.motherearthnews.com

**Spicy Bush Basil**


**Spider Plant**

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**Spoonleaf Peperomia**

**Swedish Ivy**

**Sweet Banana Pepper**


**Thai Basil**
"Flowering Basil." By Sven.petersen - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=42368005


**Wax Plant**


**Yellow twig dogwood**
"Dogwood flower." www.forestfarm.com

"Mature Yellow Twig Dogwood." www.flickr.com


Appendices

The following are copies of randomly selected pages from the book, which permanently resides at the VA hospital. They demonstrate the general format of the entire project and provide some exciting insight on the finished product.
Culinary Uses
Chervil is an herb, common in fine cooking. It can be a compliment to any mild food, using the chopped leaves to enhance foods flavor. Garnish fish, chicken, cheeses, sauces, salads and soups with chervil to add a French gourmet feel.

Health Benefits
In folk medicines chervil was used as a refreshing eyewash. It was also dried for tea or ingested to reduce blood pressure. Eye Wash Tea: Pour 1 cup of boiling water over 1 Tbs. fresh chopped chervil. Let steep for 20 minutes. Cover this to keep in the volatile oils. When cool, moisten a cotton ball with some of the mixture and place over closed eyes for 10 minutes.

Care
Chervil is low maintenance and requires cool and moist conditions. If the temperature gets too hot, chervil will flower and seed, not producing lush leaves for harvest. Select a semi-shaded location Plant in the early spring, harvesting into the summer or try planting late summer for a fall harvest. Chervil has a long taproot, so do not attempt to transplant after seeding. However, chervil can grow successfully in a container garden too!
Cinnamon Basil- *Ocimum basilicum*  
*Cinnamon*

**Appearance**  
Cinnamon basil has narrower and darker leaves than sweet basil. It also has a distinct cinnamon colored stem, hence its common name. This plant produces petite light and dark purple flowers.

**Culinary Uses**  
Cinnamon basil is popular in Asian and Indian cuisine. It has a spicy and cinnamon like taste. Commonly paired in dishes with fruit, add cinnamon basil on top of your next fruit salad to spice it up!

**Care**  
Like basil, this variety does very well as an indoor grown herb, but can also be grown outdoors. Seeds should be started indoors 6 weeks before the last spring frost. Plants require full sun and moist well draining soil. Remove flower heads immediately to ensure leaves continue to grow. Temperatures around 70 degrees Fahrenheit are ideal.
Nasturtium - *Tropaeloum majus*

**History**
Nasturtium is native to South America, and introduced to Europe in the 1600s. It was used in South America as a disinfectant and healing agent. Today this herb is primarily used for urinary tract infections, respiratory tract infections, and external bacterial infections.

**Health Benefits**
This plant is a good source of vitamin C to boost your immunity and help fight the flu and colds. Its antibacterial properties make it helpful in fighting fungal infections. Infused in teas, or applied in an external compresses, nasturtium has a variety of benefits; it has even been used as a remedy for hair loss!

**Care**
Nasturtium is a fairly easy and rapidly growing plant. Provide ample water, but do not soak and overwater. Prune your plant and remove dead flowers to prolong blooming. Surprisingly, poorer soils produce more blooms, and fertilizers will inhibit your plants growth.
Red Star- *Cordyline australis*

**History**
This tree, in the family Dracaenaceae, originated in New Zealand. It is known commonly as Red Star, Red Grass Palm, and Cabbage Tree.

**Appearance**
This plant is a palm-like sub-tropical beauty, with long, thin, bronze-red leaves. This tree can grow between 20 and 30 feet tall and 8 to 10 feet wide. In springtime long clusters of white flowers bloom, contrasting with the red and sometimes purple looking foliage.

**Care**
This plant is easy to maintain and requires partial to full sun. Water moderately, when soil feels slightly dry to the touch. It can be put outdoors in the summer, but needs a frost free residence in colder months. If growing outside permanently, it needs a location protected from strong winds and free draining soil.