5-2016

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

Juliann Schneider

Follow this and additional works at: http://digitalcommons.esf.edu/honors

Part of the Plant Sciences Commons, and the Rehabilitation and Therapy Commons

Recommended Citation

Schneider, Juliann, "Development of a Plant Care Guide for the Veterans Hospital Horticultural Therapy Program" (2016). Honors Theses. 94.
http://digitalcommons.esf.edu/honors/94

This Thesis is brought to you for free and open access by Digital Commons @ ESF. It has been accepted for inclusion in Honors Theses by an authorized administrator of Digital Commons @ ESF. For more information, please contact digitalcommons@esf.edu, cjkoons@esf.edu.
Development of a Plant Care Guide for the Veterans Hospital Horticultural Therapy Program

by

Juliann Schneider
Candidate for Bachelor of Environmental Education and Interpretation
Environmental Forest Biology
With Honors

May 2016

APPROVED

Thesis Project Advisor:  
Lee Newman, Ph.D.

Second Reader:  
Elizabeth Folta, Ph.D.

Honors Director:  
William M. Shields, Ph.D.

Date:  5/9/16
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.
Table of Contents

Acknowledgements................................................................. 1

Project Body........................................................................ 1, 2

Advice to Future Students.................................................. 3

Works Cited........................................................................ 4, 5, 6, 7, 8, 9

Appendices ........................................................................ 10, 11, 12, 13, 14, 15
Acknowledgments

Throughout this project there have been several people who provided continuous support. First and foremost to my honors advisor, Dr. Lee Newman: thank you. Thank you for allowing me to take creative freedom and design with the creation of this book. This would not have been possible without your feedback, encouragement, and assistance every step of the way. Without Daniel Collins, who created and does the entire behind the scenes work to keep the therapeutic horticulture program, I would never have been introduced to this great opportunity. Thank you for spending the last two years working with plants with the patients and allowing me as a part of the program and to implement my ideas. The dedication to this program and relationships with patients that Dan and Dr. Newman exhibit have been overly encouraging and an inspiration to keep pursuing this project and my time spent there. I would also like to thank my academic advisor and professor of all interpretation courses, Dr. Beth Folta. This project allowed me to take everything I learned about themes, audiences, and design and combine it in one project, culminating my experience at SUNY-ESF. A fellow student, Susie Tran, also deserves many thanks. Without your help Susie, this project would not have come together as it did. I really value all of the effort put in and contributions of plants to this book that you created. I would also like to thank my parents and Andy for reading draft after draft of this 50-page book and for helping transform an idea into a finished project. Lastly, I would like to acknowledge Bill Shields, honors director who has challenged me and helped me grow as a student and person throughout my three years in the program. Thank you for supporting me with this honors project and throughout my time here at SUNY-ESF.
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 in 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 aim 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.
Aloe vera
"Aloe vera flower." www.evermotion.org
"Aloe gel." aloeveragelreview.tk
Photo credit: "Aloe Vera". Licensed under GFDL via Wikimedia Commons - https://commons.wikimedia.org/wiki/File:AloeVera.jpg#/media/File:Aloe_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

Chevril

Chive

Christmas cactus

Cilantro
Cinnamon Basil

Cornstalk Dracaena

Dill
https://www.organicfacts.net/health-benefits/seed-and-nut/dill.html

Dill Microgreens


Dwarf Lilac
http://www.elixiroils.com/lilac-essential-oil-benefits

http://www.gardenguides.com/128093-meaning-lilac-flower.html

http://www.almanac.com/plant/lilacs

English Ivy

Green Beans


Golden Gem Tomato

http://www.healthbenefitstim.es.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

"Red Jalapenos." Veghere.com


Janet Craig Dracaena deremensis

"Dracaena demerensis1" 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

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
"Lemon_basil_sauce.” By kochtopf [CC BY-SA 2.0 (http://creativecommons.org/licenses/by-sa/2.0)], via Wikimedia Commons

Lemon Grass
"Lemon Grass.” By Mokkie (Own work) [CC BY-SA 3.0 (http://creativecommons.org/licenses/by-sa/3.0)], via Wikimedia Commons
"Lemon Grass Tea.” By Miansari66 (Own work) [CC0], via Wikimedia Commons

Lettuce
"Lactuca sativa 003” by H. Zell - Own work. Licensed under CC BY-SA 3.0 via Wikimedia Commons - https://commons.wikimedia.org/wiki/File:Lactuca_sativa_003.JPG#mediawiki/File:Lactuca_sativa_003.JPG
"Lettuce iceberg variety from Salinas valley California”. Licensed under Public Domain via Wikimedia Commons - https://commons.wikimedia.org/wiki/File:Lettuce_iceberg_variety_from_Salinas_valley_California.jpg#mediawiki/File:Lettuce_iceberg_variety_from_Salinas_valley_California.jpg

Lincoln Peas
Pea_Trellis. Photo credit: Seatlegarden.wordpress.com
Pea_Plant. 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
Snap Peas
"Snap Peas." Photo credit: Christine Gallary
"Snap Pea Flower." www.homelardenjoy.com
"Snap Pea Vine." www.motherearthnews.com

Spicy Bush Basil

Spider Plant

Photo credit: Spiderette By Eptalon (Own work) [CC BY-SA 3.0 (http://creativecommons.org/licenses/by-sa/3.0) or GFDL (http://www.gnu.org/copyleft/fdl.html)], via Wikimedia Commons
Photo credit: Spider_flower By Jwchew1 (Own work) [Public domain], via Wikimedia Commons
Photo credit: Spider plant By Mokkie (Own work) [CC BY-SA 3.0 (http://creativecommons.org/licenses/by-sa/3.0)], via Wikimedia Commons

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.
Chervil- *Anthriscus cerefolium*

**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.