# DESIGNING A RESOURCE GUIDE FOR HORTICULTURAL THERAPY PROGRAMS AT BOTANICAL GARDENS AND ARBORETA

by

Ann Bernardene Parsons

Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree

o f

MASTER OF SCIENCE

in

Horticulture

APPROVED:

P. D. Relf, Chairman

J. P. Clouse

R. T. Johnson

January, 1985 Blacksburg, Virginia

### DESIGNING A RESOURCE GUIDE FOR HORTICULTURAL THERAPY PROGRAMS AT BOTANICAL GARDENS AND ARBORETA

by

#### Ann B. Parsons

#### (ABSTRACT)

Outreach programs in horticultural therapy at botanical gardens and arboreta are valuable resources to the community and to ongoing HT programs in nursing homes, special education classes, hospitals, psychiatric facilities, and other institutions and agencies. These outreach programs furnish written materials, plants, and staff expertise for existing programs and help establish new programs. Seminars and conferences are held providing information on and training in HT.

There are several outreach HT programs at gardens and arboreta throughout the United States and abroad. However, currently there is very little information available for developing this type of program.

This thesis provides a resource guide describing HT and how it can be incorporated into a botanical garden or arboretum. Resources from The Holden Arboretum in Ohio, Chicago Botanic Garden in Illinois, and North Carolina Botanical Garden, survey information, and literature from existing programs have been compiled suggesting possible procedures to follow in implementing a program. A slide presentation has been developed which illustrates the benefits of HT and describes the outreach HT program at Holden.

#### **ACKNOWLEDGEMENTS**

I would like to express my appreciation to Dr. Diane Relf for her tireless help and encouragement throughout this project. I also want to thank my committee members, Dr. Richard Johnson and Dr. James Clouse for their support. I really enjoyed working with them.

I am thankful for the friend I found in Ms. Marilyn Fisher Birkner during my internship at Holden. Her help and support have been constant and unfailing and greatly appreciated.

Also, I appreciate the opportunity to work at The Holden Arboretum—the help and information supplied by the staff has been invaluable. I appreciate the representatives from gardens and arboreta who responded to my survey, and especially Mr. Gene Rothert, Jr. at Chicago Botanic Garden and Ms. Bibby Moore at North Carolina Botanical Garden for their cooperation.

Thanks to my family and my friends for their support and prayers. I appreciate Gail Schnecker for her help through this past year and Barb Holcomb for her wonderful friendship. And I offer my deepest thanks to my mother and father for all they have done for me. Finally, I want to acknowledge my Lord and Savior Jesus Christ and thank Him for His faithfulness and for His mercy and for how He has worked in my life.

### TABLE OF CONTENTS

Abstract			i i
Acknowled	dgemen	t s	i i i
Table of	Conter	nts	i v
List of 7	Γables		v i
Introduct	tion		1
Literatuı	re Revi	i ew	5
Justifice	ation		10
Materials	s and N	Nethods	12
Results 8	and Dis	seussion	15
Conclusio	ons		20
Literatur	e Cite	ed .	21
Appendix	A	Summary of information relating to	24
		HT from 1983-84 AABGA survey (5).	
Appendix	B-1	Letter mailed in 1983 to ten	26
		botanical gardens/arboreta	
		and two individuals.	
	B-2	Gardens and arboreta contacted in	27
		May 1983; description of three types	
		of services offered in an outreach HT	
		program is included.	
Appendix	C-1	Letter mailed in May 1984 to	29
		botanical gardens and arboreta	
		throughout the United States,	
		its territories, and Canada.	

	C-2	Survey questions and summary	30
		of responses.	
	C-3	Gardens/arboreta which indicated a	33
		positive response to question	
		six on survey.	
Appendix	D-1	Sample letter mailed in	37
		October 1984 to horticultural	
		therapists at Chicago Botanic	
		Garden, North Carolina Botanical	
		Garden, and Denver Botanic Gardens.	
	D-2	Survey for <u>A Resource Guide for</u>	38
		Horticultural Therapy Programs at	
Appendix		Botanical Gardens and Arboreta	
	E	Summary of outreach HT programs	46
		at The Holden Arboretum, Chicago	
		Botanic Garden, and North Carolina	
		Botanical Garden	
Vita			48

### LIST OF TABLES

Table 1.	1.	List of chapters from <u>A Resource Guide for</u>						
		Horticultural Therapy Programs at Botanical						
	Gardens and Arboreta.							

#### INTRODUCTION

#### Outreach horticultural therapy programs

"Horticultural therapy, which is frequently referred to as HT, is the art and science of blending horticulture and therapy together into a form of rehabilitative medicine" (3). It involves professional personnel who design programs with individualized therapeutic goals to bring about behavioral and attitudinal changes in their clients (10). In a botanical garden or arboretum this type of therapeutic program is more highly structured than a horticultural education program for handicapped individuals. In general, such an educational program is one which has been physically or intellectually adapted to make it accessible to those who may be handicapped or disabled rather than designed to meet diagnosed treatment needs. The goals of the program are usually directed towards acquiring skills.

Today, many botanical gardens and arboreta are recognizing the needs of special populations—handicapped, disabled, and elderly men and women and are developing methods to include these individuals in their programs (4). The scope of the garden/arboretum's overall program can be broadened to include this new, growing audience by reaching handicapped and elderly individuals, both at the garden/arboretum and in the community, and by training professionals who work with special populations. This can be accomplished through

- o making buildings, grounds, and display areas accessible (4,28).
- o making educational programs accessible.
- o developing an HT program (28).

In a 1984 survey of botanical gardens and arboreta throughout the

United States, its territories, and Canada, conducted as part of this thesis, eighty-nine percent of the gardens/arboreta responding indicated that all or part of their buildings and grounds were already handicap accessible (or would be). Chicago Botanic Garden, in Illinois has gone beyond this preliminary step of building/grounds accessibility by creating a Learning Garden for the Disabled with the purpose of demonstrating how the landscape, garden tools, and gardening techniques can be modified for physically handicapped gardeners (13,21). The garden is maintained by a senior citizen group and by physically disabled individuals working under the supervision of the HT staff and interns. Sixty to seventy thousand people visit the garden each year. A similar garden developed to demonstrate gardening methods and tools adapted for disabled and blind individuals was created as a permanent area at a Royal Agricultural Show at Stoneleigh in England (1).

These gardens are designed as a learning tool and are not limited to disabled gardeners. An important factor in designing gardens or display areas for handicapped individuals is to avoid placing limits on the area by separating it from the rest of the garden and labelling it as a special place for a certain group (1,2,4,28).

The Advisory Committee for Blind Gardeners in England has developed guidelines to follow in creating gardens and dispay areas which are accessible but not limited in their appeal (1).

#### These include:

o an instructive guide/cassette tape, describing the features in the area—plants of interest, rest stops, and types of labels used.

- o smooth, even, and clearly defined pathways throughout the display area.
- o raised flower beds, if possible.
- o clearly labelled plants, not necessarily in Braille, since
  many visually impaired people are not able to read Braille.
- o plants which can be touched and smelled.
- o regular upkeep of plants and pathways.

(A U. S. government publication, "Barrier Free Site Design", contains more detailed information on designing gardens for accessibility.)

Horticultural education programs can also be adapted for special populations without changing the original goals or program content.

For example, deaf people may hesitate to participate in new activities because they are afraid of not being able to follow verbal instructions (2). Horticultural lectures may be adapted to encourage deaf people to attend by providing someone to sign the lecture along with the speaker.

Insuring buildings and grounds accessibility and adapting educational classes for special populations are important and valid services. These services may increase the use of the facility by involving handicapped individuals who are fully integrated into the community and no longer require therapeutic programming. In addition, projects such as this do not require specific individualized treatment plans and can be implemented without hiring additional professional staff trained in HT.

The third method for reaching special populations involves developing an HT program with the goal of meeting cognitive, affective, and pyschomotor needs of handicapped, disabled, and elderly individuals within the community.

This program can be integrated into the garden/arboretum's present program

and requires professionals trained in HT and registered (or eligible to be registered) by the National Council for Therapy and Rehabilitation through Horticulture (NCTRH).

The services offered may include direct client services, consultation services, and professional development services. The primary goals of these services are to provide resources for and to offer consulting to HT programs in local facilities such as nursing homes, correctional facilities, and hospitals and to train professionals and volunteers from many different fields, including education, occupational therapy, social services, and vocational rehabilitation. The services may be offered at the botanical garden/arboretum or in the community facilities. For the purpose of this thesis, this type of HT program at a botanical garden or arboretum has been defined as an outreach HT program. Also, for ease of reading, the terms "Holden", "Chicago", and "North Carolina" are used rather than "the staff in the HT department at The Holden Arboretum, or Chicago Botanic Garden, or North Carolina Botanical Garden."

There are several such programs at botanical gardens and arboreta throughout the United States and abroad. However, currently there is little written material available for developing this type of HT program. A resource guide describing HT and how it can be incorporated into a garden/arboretum has been developed as a result of this thesis. An eighteen minute slide presentation has also been developed which illustrates some of the benefits of HT and briefly describes the outreach HT program at Holden; slides from Chicago, North Carolina, Denver Botanic Gardens, Royal Botanic Gardens in Canada, and the Banksia Center in Australia are also included.

#### LITERATURE REVIEW

Benjamin Rush is often credited with first noticing the therapeutic benefits of HT for mentally ill individuals as early as 1798 (8,11,14,26).

Later, other men working in hospitals in Europe and the United States also noted therapeutic aspects of horticultural projects (8,11,14,25,26).

The early emphasis in these programs was on food production and landscape maintenance (11,26). Gradually, though, there was a shift in the focus of horticultural activities, from developing skills or products to the individual's welfare (8,11,26). Veterans hospitals established after

World War II began incorporating HT into therapy programs as the therapeutic benefits became more evident (23,26). The term "horticultural therapy" was first used during this period (14,26).

As interest in the field increased, the need for a professional organization became apparent (19). The National Council for Therapy and Rehabilitation through Horticulture (NCTRH) was founded in 1973 "to help new and developing (HT) programs and to exchange information among established ones" (18). NCTRH publishes monthly newsletters, determines guidelines for student internship sites and registration policies for horticultural therapists, conducts annual conferences, and offers resource HT materials (18). The national council also seeks to provide clear direction for this developing therapy.

Horticultural therapy involves utilizing plants and activities with plants to promote the welfare of mentally, physically, or emotionally handicapped individuals, disabled people, elderly men and women, and disadvantaged adults and children (2,11,12). Plant activities may be included in many recreational and educational programs (11) which may

not develop individualized goals or use horticulture as a diagnostic tool. However, these programs are generally included within the broad scope of the term HT.

Horticulture can also be incorportated into therapeutic (11), vocational training, or rehabilitation programs. In these programs, specific goals which fulfill the diagnosed needs of clients are defined by trained professionals. NCTRH promotes the use of horticulture with such a therapeutic or rehabilitative purpose.

For instance, the HT treatment goals at the C.F. Menninger Memorial Foundation in Kansas focus not only on vocational training but on the individual's relationship to the group, the need to learn responsibility, the need to appreciate nature, and the need to deal with frustrations and setbacks (14). These goals reflect the philosophy of HT which is centered on meeting the needs of the individual (11).

Gardening is an example of a therapeutic tool which may be used in an HT program (10,14). Relf (16) reports that gardening may be particularly effective with geriatric clients as it "gives the older person a sense of responsibility and of being needed." The Men's Garden Club of America developed twelve gardening projects for children with emotional, mental, or physical handicaps with the goal of increasing their life quality and pleasure (27). Gardening projects have been used in inner-city communities to show individuals that they can have control over their environments (17). Such outdoor gardening activities as hoeing, weeding, and harvesting offer opportunities for social development, self-confidence, vocational training, and aggression release (30).

These types of benefits from an HT program can be divided into three domains—the cognitive, affective, and psychomotor. The cognitive domain involves learning, communicating, and sorting information (9). Specifically, the benefits from HT in this domain include learning new skills in horticulture, increasing skills in communication, increasing a sense of curiousity, increasing an awareness of the environment, and training in a vocation (3,10,11,20,22,24). Activities which can be used to meet cognitive needs include plant propogation, flower arranging, and grafting (30). For instance, flower arranging can be used as a diagnositic tool to test the awareness of spatial concepts and numbers and to test the ability to remember and concentrate (22,29). Horticultural therapy can be used in vocational training programs to supply products or services related to horticulture or to fill horticultural jobs in the industry in addition to meeting theraputic goals (18,20).

The affective domain involves integrating ideas and values which affect personal growth and development (9). Many plant activities which relate to life-death plant cycles, reproductive cycles, growth patterns, and plant nutrient requirements can be used to reinforce the individual's own mental and emotional development and growth (3,8,11,14,16,17,20,22,23,24,25,29,30). According to pyschologist, Ira Stamm and horticultural therapist, Andrew Barber at the Menninger Foundation (25), even people with very disturbed personalities are able to recognize the similarities between human and plant growth and development and the necessity of the earth in sustaining life. For example, a diseased plant may provide a model for a patient in the hospital—methods taken to cure the plant can be related to the patient's own medical treatment which may then

help the patient better understand and accept what is happening to him (23). In addition, daily living skills may be correlated to many types of plant care activities (24,29). Seeing the need for a routine to prune, fertilize, and water helps a patient establish a pattern for his own health and cleanliness needs (24,29).

The affective domain also includes social interactions as clients work with one another and with the therapist (2,3,8,10,11,20,22,23,24,25,29).

Relf (17) states that therapists can use plants to develop a nonverbal bond with patients "to open communications on subjects that the patient finds extremely threatening." Group activities such as gardening, weeding, and flower arranging (30) help the healing process by encouraging conversation and cooperation (2,10,17,29). Stamm and Barber (25) support this by saying that social interaction "provides the opportunities for emotional growth found in most group settings: the chance to work as a member of a team, an opportunity to experience sibling rivalry and other competitive feelings, and to experience group support as well as confrontation."

The psychomotor domain includes gross and fine motor movements and verbal and nonverbal methods of expression. Horticultural activities can improve motor development in addition to providing opportunities for outdoor projects (3,10,11,20,22). Eugene A. Rothert, Jr. and James R. Daubert at the Chicago Botanic Garden in Illinois (22) have correlated physical benefits which can be realized from an HT program to specific neurological and orthopedic disabilities. For example, patients with muscular dystrophy may improve the strength in their upper extremities through such activities as propagating plants or arranging flowers.

These cognitive, affective, and psychomotor benefits from HT are

attained through specific program planning and careful evaluation of all plant activities. Thus, an important aspect in the HT program is establishing an overall purpose and developing general goals. Then, types of activities can be identified and individualized treatment goals developed. For instance, vegetable gardening may be more appropriate than flower arrangement with a group that needs increased gross motor activities.

The Melwood Horticultural Training Center in Upper Marlboro, Maryland is a vocational training school for mentally retarded adults (19). Originally the goals of the program focused on affective and psychomotor skills for mentally retarded adults. Then through special education staff, cognitive skill training was included in the program. Horticultural therapy in such a vocational rehabilitation program may focus on job preparation by teaching a skill in horticulture, job-related behavior, and social behaviors (10,19).

The professional in an HT program plays a crucial role in developing a treatment program designed to meet the client's present level of functioning. The therapist needs to be able to determine specific learning objectives for clients, develop plant activities for the treatment program, evaluate the activities and learning objective, and train other professional or volunteer staff in HT techniques (7,22).

The value of horticulture in a therapeutic program is evident both from the history of HT (11,14,23,25,26) and from the benefits derived from the activities (3,10,11,16,17,18,20,22,23,24,25,29,30).

#### JUSTIFICATION

There is very little written material on establishing an outreach HT program and the resources which are available seem contradictory and incomplete. There is little communication between HT staffs at different botanical gardens and arboreta making it difficult to acquire specific guidelines about program development. There is confusion over terminology, in that terms, especially HT, are used differently. Many times horticulture classes which are accessible to handicapped or elderly people are labeled as an HT program, when in fact such classes are part of an educational program which has been made accessible to a special population but does not have treatment plans or individualized goals.

To date only three projects investigating HT programs at botanical gardens and arboreta have been completed. In 1981, James Daubert (6) reported that eight gardens/arboreta in this country and in Canada had outreach HT programs. However, only three of these gardens are identified in the thesis and no details are provided explaining the source of the information.

In 1983, the American Association of Botanical Gardens and Arboreta, Inc. (AABGA) (5) conducted a survey, in part to obtain information about HT programs at botanical gardens and arboreta. Although thirty-three gardens indicated they offered some type of horticulture therapy program, only seven stated that they had written information on HT policies or HT as a profession. (see Appendix A for a summary of the information related to HT from this survey).

In 1984, the horticultural therapist at the North Carolina Botanical Garden conducted a phone survey of twelve botanical and arboreta in the

United States which had indicated they offered training, classes, and workshops on the 1983 AABGA Survey (15). However, in North Carolina's phone interviews, two gardens revealed they did not offer HT and seven did not have any staff for the HT program.

These surveys emphasize the need for accurate information and accurate methods of obtaining information. The lack of publications indicates the need for resource materials to be developed. The booklet compiled as part of this thesis project describes the services offered in HT programs at two botanical gardens and one arboretum in the United States. The goals, outreach services, and funding for these programs is documented to serve as a model in implementing similar programs at other gardens and arboreta.

#### MATERIALS AND METHODS

The information for the resource guide and slide presentation is based on a four month internship during 1983 at The Holden Arboretum in Ohio, survey information and literature from Chicago Botanic Garden, the North Carolina Botanical Garden and other gardens and individuals, and a literature review.

The purpose of the internship at Holden was to gain practical experience in HT and to begin research for the resource guide. The internship involved designing, implementing, and participating in HT programs with psychiatric patients, with children in a general care hospital, with blind and partially sighted adults and children, and with spinal cord injured males.

Slides documenting the services offered at Holden were taken throughout the internship period and during a visit to the arboreta April 1984. The extensive collections of the arboretum and of Dr. Diane Relf were also used in developing the slide set. The slides were first shown in a department seminar in May 1984. In June and July 1984 the slide presentation was reorganized and a second-draft script was written. A second visit to the arboretum in July 1984 was needed to obtain more Holden reviewed the rough version of the slide presentation slides. and provided further details about the structure of the HT program. Later, Holden reviewed the script prior to taping. North Carolina and Denver Botanic Gardens sent slides illustrating their programs and Introductory slides and slides of publications and written facilities. materials were produced by the Learning Resource Center (LRC) on campus. Mr. J.G. Ruggiero at the LRC provided consultation on the script and music for the presentation. He read the script for a preliminary tape;

after corrections were made in the script, a final draft was written and Mr. Ruggiero made the final tape. The slides and script were synchronized with inaudible pulses and audible beeps; background music was selected for the introduction and conclusion. The slide presentation was shown at the 1984 NCTRH Conference in Washington, D.C. Final revisions were made in December 1984 and January 1985. A written script is included in the resource guide.

Individuals at ten botanical gardens and arboreta and two individuals in the U.S. and Canada were contacted in May 1983 for information and literature about their programs and HT. These gardens/arboreta were identified by Dr. Diane Relf as having HT programs; Dr. Relf also suggested writing to the individuals since they had previously worked in HT programs at gardens/ arboreta. This was a preliminary survey to gather resources on outreach programs. See Appendix B for a copy of the introductory letter and the mailing list used for this survey.

In May 1984, a ten question survey was developed to determine the present scope of HT programs in botanical gardens and arboreta in order to establish the interest in, and need for, a HT resource guide. This survey was sent to staff at gardens and arboreta in the United States, its territories, and Canada. See Appendix C for a copy of the letter and survey questions.

Later, a more extensive questionnaire was written requesting specific information about outreach services, student internships, publications, funding, volunteers, building and grounds accessibility, and organization structure. This survey was mailed to horticultural therapists at the three other botanical gardens/arboreta in the United States with outreach

HT programs—Chicago Botanic Garden, North Carolina Botanical Garden, and Denver Botanic Gardens. Staff from two of these gardens (Chicago and North Carolina) responded, sending additional program information. The program at Denver is newly established and the staff is still developing outreach services. A phone interview was conducted in January 1985 to clarify details about the services and funding at Holden, Chicago, and North Carolina. A copy of the resource guide was sent to each of the gardens/arboreta so that the horticultural therapists could review the guide and insure their program was accurately described. See Appendix D for the letter and questionnaire responses from this third survey.

The resource guide was then compiled from the materials on program development from Holden collected during the internship, from questionnaires and literature from Chicago and North Carolina, from other publications, and from a literature review.

#### RESULTS AND DISCUSSION

The May 1983 letter was sent to individuals at ten botanical gardens and arboreta in the United States and Canada, and two individuals. The staff at nine of the gardens/arboreta and the two individuals replied to the letter, sending information about their outreach programs and/or information listing available publications. See Appendix B for a summary of the HT programs at the gardens/arboreta which responded to the letter.

The second survey, mailed in May 1984, was sent to representatives at gardens and arboreta throughout the United States, its territories, and abroad (see Appendix C). Staff from one hundred and forty gardens/arboreta surveyed responded (forty-eight percent). Of those responding, thirty-two (twenty-three percent) expressed an interest in developing an HT program; twenty-one (fifteen percent) had hosted seminars, conferences, or classes related to HT for professionals or volunteers; twenty-five (eighteen percent) indicated an interest in hosting a seminar or conference or offering classes related to HT. Staff at one hundred eleven gardens/arboreta (seventy-nine percent) indicated an interest in receiving a copy of the guide.

Of these one hundred and forty gardens and arboreta, staff from twelve gardens/arboreta indicated they presently had an HT program or plans to implement a program. (See Appendix C for a list of these gardens/arboreta and the type of services offered.) This number may be misleading though, because representatives from several of the gardens/arboreta did not seem to have a clear understanding of HT as shown by the following statements answering question six from the survey:

Does your botanical garden/arboretum presently have an HT program?

"Yes. Intergenerational prayers with students (5th) and older adults

at the Hebrew Home in the Bronx." "Yes. Our volunteer program is open
to the handicapped."

Two gardens are associated with universities; Temple University offers courses related to working with special populations or in the behavioral sciences and Clemson University serves as a lab for undergraduates or graduates in the HT degree program. Nine of the twelve gardens/arboreta have an element of an outreach HT program (see Appendix C).

The third survey was sent in October 1984 to horticultural therapists at three gardens (see Appendix D). Mr. Eugene Rothert at Chicago Botanic Garden and Ms. Bibby Moore at North Carolina Botanical Garden answered the extensive questionnaire and sent additional information documenting their programs. The information from these questionnaires was incorporated into the resource guide. The HT staff at these gardens clarified goals and outreach services in a subsequent phone interview. Appendix E contains a table summarizing the HT outreach programs at Holden, Chicago, and North Carolina.

The internship at Holden provided first-hand experience and knowledge of an outreach program. Material was utilized from the HT department and from the arboretum's slide collections. Extensive interviews were conducted with the arboretum's horticultural therapist in order to understand the purpose and goals of the program and to develop a structure organizing the types of services offered by the department.

The results of this thesis consist of a booklet and slide set.

The booklet, A Resource Guide for Horticultural Therapy Programs at Botanical

Gardens and Arboreta is divided into seven chapters and includes an extensive appendix. Chapters one and two define terminology, introduce the basic concepts of HT, and describe how HT can be incorporated into a botanical garden/arboretum. This information is from the literature review and from the introduction to the thesis. Chapters three through seven were written based on the survey questionnaires, publications, written materials, and first-hand knowledge. These chapters are listed in Table 1.

Appendices include supplementary information such as a curriculum which outlines goals and activities for a specific client population, "The Growing Difference" newsletter published by the HT program at Holden, and publications from Chicago and North Carolina publicizing their programs.

A second part of the thesis is the slide set consisting of one hundred and twenty eight slides and an eighteen minute tape documenting the outreach program at Holden. The slide presentation introduces some of the concepts of HT and illustrates the benefits of an HT program. The outreach services offered by Holden are documented and a brief history of the outreach program at Holden is included. Slides from Chicago, North Carolina, Denver Botanic Gardens in Colorado, Royal Botanic Gardens in Canada, and the Banksia Center in Australia are also included.

The purpose of this resource guide is to provide a publication compiling some of the existing information and materials in a clear and logical way. This slide set is designed to help staff and garden/arboretum supporters understand HT and how it can be incorporated into the garden/arboretum.

# Table 1. List of chapters from <u>A Resource Guide for Horticultural Therapy</u> Programs at Botanical Gardens and Arboreta.

#### TABLE OF CONTENTS

#### **ACKNOWLEDGEMENTS**

INTRODUCTION

CHAPTER 1 WHAT IS HORTICULTURAL THERAPY?

CHAPTER 2 INCORPORATING HT INTO A BOTANICAL GARDEN/ARBORETUM

Outreach HT programs

Organization of the HT program

CHAPTER 3 PLANNING AN OUTREACH HT PROGRAM

Assessing community needs

Surveying human service agencies

CHAPTER 4 DEVELOPING AN OUT REACH HT PROGRAM

Establishing program goals

Program structure
Direct client services
Consultation services
Professional development services

CHAPTER 5 EVALUATING THE OUTREACH HT PROGRAM

Rationale

Methods

CHAPTER 6 FUNDING THE OUTREACH HT PROGRAM

Introduction

Budget considerations

CHAPTER 7 PUBLICIZING THE OUTREACH HT PROGRAM

Designing written materials

Documenting the outreach program with a slide-tape

show

Importance of publicity

LITERATURE CITED

The resource guide and slide presentation can also be used by the cooperative extension service, the master gardener program, men's and women's garden clubs, indoor light gardening societies, public gardens, and similar organizations to promote an interest in HT.

A forty-seven inch by thirty-five inch poster was made to publicize the resource guide. Three color prints (one 8x10, two 5x7) were enlarged from slides used in the slide show. Excerpts, explaining HT and outreach HT services, were taken from the slide-tape script. The poster was displayed in October 1984 at the Graduate Student Poster Session at VPI & SU and in November 1984 at a HT conference in Charlottesville, Virginia.

In addition, a second poster, measuring four feet by eight feet, will be developed to discuss the results of the surveys from this thesis.

This poster will be presented at the 1985 NCTRH annual conference and the 1985 ASHS annual conference.

#### CONCLUSIONS

Since HT is still a relatively new field, the public needs to be educated about its role in therapeutic, rehabilitative, and vocational services. Terminology needs to be clearly defined and understood. Informants in the May 1984 survey of botanical gardens and arboreta did not always have a clear idea about HT or what is involved in an HT program. Future surveys should state a clear, precise definition of "horticultural therapy" and the term "outreach HT". The staff at the garden/arboretum should list the purpose and goals of the HT program and should describe the HT services offered.

The May 1984 survey did reveal a growing interest in HT and indicated the need for and interest in resource materials documenting outreach programs. The guide and slide set are planned for publication by NCTRH and will be made available to the public, either on a purchase or rental basis. They will also be available through the horticulture department at VPI & SU; a copy will be purchased by Holden for their HT library. A copy of the manual will be sent to the AABGA for review in their newsletter.

The purpose of this guide and slide presentation is not only to provide a resource manual, but to encourage further efforts in documenting outreach programs. A manual detailing a specific HT program should include a brief history of the program, the organization of the program within the administration, the types of services offered (including fees), how the program is funded, and how the program has been incorporated into the garden/arboreta's overall program. Goals for the program should be clearly stated.

#### LITERATURE CITED

- 1. Anon. 1979. The enjoyment of gardens by blind and partially-sighted people. NCTRH Newsletter 6(6):7-8.
- 2. Anon. 1980. Understanding the disabled: implications for horticulture. NCTRH Newsletter 7(7):4-6.
- 3. Birkner, Marilyn Fisher. 1982. Untitled paper. Paper presented at regional meeting of the AABGA, Mentor, OH. Available from: HT department at The Holden Arboretum, Mentor, OH 44060.
- 4. Burston, Nicola Jane. 1980. Visitor orientation in public gardens and arboreta. MS Thesis, Virginia Polytechnic Institute and State University, Blacksburg.
- 5. Clark, Frances (ed). 1983-1984. Educational resources at botanical gardens and arboreta. Survey published by AABGA, Inc.
- 6. Daubert, James R. 1981. The use of horticultural therapy at a public garden, park district, or county extension agency. MS Thesis, Kansas State University, Manhattan.
- 7. Daubert, James R. and Eugene A. Rothert, Jr. 1981. Horticultural therapy at a psychiatric hospital. Glencoe, Illinois: Chicago Horticultural Society.
- 8. Draper, H. Richard, III. 1972. Therapy through horticulture. Newsletter of the Arboretum of the Barnes Foundation.
- 9. Gage, N. L. and David C. Berliner. 1975. Educational psychology. Chicago, Illinois: Rand McNally College Publishing Company.
- 10. Hagedorn, Rosemary. 1980. ...But is it therapy? NCTRH Newsletter 7(7):3-6.
- 11. Hefley, P. Diane. 1973. Horticulture: a therapeutic tool. Journal of Rehabilitation 39(1):27-29.
- 12. Horticultural therapy services. 1981. Pamphlet published by the North Carolina Botanical Garden, North Carolina. Available from: HT department at North Carolina Botanical Garden, Chapel Hill, NC 27514.
- 13. Huber, Rena. Therapeutic horticulture. Published by the Chicago Horticultural Society. Available from: HT department at Chicago Botanic Garden, Glencoe, IL 60022.
- 14. McCandliss, Rhea R. 1967. The plant-man-environment. Talk presented at the professional staff meeting at the C. F. Menninger Memorial Hospital. Topeka, Kansas.

- 15. Moore, B. 1984. Unpublished phone survey of twelve botanical gardens and arboreta. Available from: HT department at North Carolina Botanical Garden, Chapel Hill, NC 27514.
- 16. Relf, P. Diane. 1978. Horticulture as a recreational activity. American Health Care Association Journal 4(5):2.
- 17. Relf, P. Diane. 1981. Dynamics of horticultural therapy. Rehabilitation Literature 42(5-6):147-150.
- 18. Relf, P. Diane. 1981. The use of horticulture in vocational rehabilitation. Journal of Rehabilitation (July/August/September):53-54.
- 19. Relf, P. Diane. 1982. Horticulture: job training for mentally retarded. NCTRH Newsletter 9(9):2-3.
- 20. Relf, P. Diane, A. R. McDaniel, and D. Chaves. 1982. Horticulture in prevocational training for the EMR student. NCTRH Newsletter 9(8):2-4.
- 21. Rothert, Eugene A., Jr. 1982. The greening of Chicago: the botanic garden's department of urban horticulture. Published by the Chicago Horticultural Society.
- 22. Rothert, Eugene A., Jr. and James R. Daubert. 1981. Horticultural therapy at a physical rehabilitation facility. Glencoe, Illinois: Chicago Horticultural Society.
- 23. Schwarz, Joel. 1983. Growing healthy. American Way (March):55-57.
- 24. Slayton, Dorothea. 1978-1979. Meeting individual needs through horticulture therapy. NCTRH Newsletter 5(12):3; 6(1):2; 6(2):2; 6(3):2.
- 25. Stamm, Ira and Andrew Barber. 1978. The nature of change in horticulture therapy, p.11-16. In: "Directions", Proc. of 6th Annual NCTRH Conference, 17 September 1978, Topeka, Kansas, (Edited version).
- 26. Tereshkovich, George. 1975. Horticultural therapy: a review. NCTRH lecture and publication series 1(1):1-2.
- 27. The Horticultural Therapy Research Project of NCTRH. 1978. Innovative horticultural therapy programs. Mt. Vernon, Virginia: NCTRH.
- 28. Utrata-Halcomb, Holly. 1980. Horticultural therapy for arboreta and botanical gardens, p.154-158. In: "The Eighties: A Decade of Discovery, Development and Dedication", Proc. of 8th Annual NCTRH Conference, 26 August 1980, Boys Town, Nebraska.

- 29. Utrata-Halcomb, Holly. 1980. Horticultural therapy-the fulfillment of our responsibility to serve all people, p.17-20. In: "Reaching the Public", Proc. of 1980 Annual AABGA Conference, 11 April 1980, Atlanta, Georgia.
- 30. Utrata-Halcomb, Holly. Greenhouse occupational therapy. Unpublished paper developed at The Holden Arboretum, Ohio. Available from: HT department at The Holden Arboretum, Mentor, OH 44060.

APPENDIX A. Summary of information relating to HT from 1983-84

AABGA survey (5).

BOTANICAL GARDENS & ARBORETA	INFORMATION & SERVICES	EDUCATIONAL PROGRAMS					
	HORT. AS THERAPY POLICY/PHILOSOPHY	HORTICULTURE AS THERAPY				TRAINING PROGRAMS	
		TOURS	WORKSHOPS	CIASSES	GARDEN PLOTS	31,1S-440	HORT. THERAPY
University of British Columbia, BC		X				У	
Oxen Pond Botanic Park, NF		Х					
Royal Botanic Gardens, ON	Х		X	Х		Х	Х
Living Desert Reserve, CA		Х		X			
Sherman Library and Gardens, CA		х	х	Х			
Strybing Arboretum & Botanical Garden, CA	X		X	X			X
Atlanta Botanical Garden, GA		Х	Х	Х			X
Callaway Gardens, GA		Х					
Chicago Botanic Garden, IL	X	х	х		Х	Х	х
Glen Oak Botanical Garden, IL		х					
Kentucky Botanical Garden, KY		х	Х	х		х	
Berkshire Garden Center, MA	Х	х	х	х	х	х	х
Fernwood, MI			Х	Х		х	Х

BOTANICAL GARDENS & ARBORETA	INFORMATION & SERVICES						
	HORT. AS THERAPY POLICY/PHILOSOPHY	HORTICULTURE AS THERAPY					TRAINING PROGRAMS
		TOURS	WORKSHOPS	CIASSES	GARDEN PLOTS	OFF-SITE	HORT. THERAPY
Michigan State University, East Lansing, MI	x	x	X	X			х
Arbor Lodge State Historical Park Arboretum, NE		x					**************************************
Morris County Park Commission, NJ		Х	Х	Х	Х	х .	Х
Brooklyn Botanic Garden, NY		Х	х	Х			
New York Botanical Garden, NY		х					Х
Planting Fields Arboretum, NY		Х	Х				
Queens Botanical Garden, NY		х	Х	Х	Х	х	х
Duke Gardens, NC		х					
North Carolina Botanical Garden, NC	X.	х	X			Х	Х
Garden Center of Greater Cleveland, OH			Х	х			
Holden Arboretum, The, OH		х	Х	х		х	Х
Hoyt Arboretum, The, OR		х					
Pennslyvania Horticultural Society, PA			х				
Taylor Memorial Arboretum, PA		х					
Temple Unversity, PA				х			
Wilcox Park, RI		Х	Х	Х	Ÿ	х	
Clemson University Horticultural Gardens, SC		х					X
Dallas Civic Garden Center, TX		Х		X.		х	
State Arboretum of Utah, UT	X	Х	х		Х	х	
Norfolk Botanical Garden, VA		Х		Х			Х

APPENDIX B-1. Letter mailed in 1983 to ten botanical gardens/arboreta and two individuals.

9228 Sperry Road Mentor, OH 44060 May 27, 1983

Address

Dear

As part of a masters thesis project under the supervision of Dr. Diane Relf at VPI & SU, I am preparing a handbook-"A Resource Guide for Horticultural Therapy Programs at a Botanical Garden." I will be working in a four month horticultural therapy extension internship at the Holden Arboretum in Mentor, Ohio (May-September 1983) as part of this research.

I am now in the process of compiling printed material in order to increase my understanding of horticultural therapy programs as they are implemented at arboreta and botanical gardens. Could you please send any information available through your organization, including sample materials such as pamphlets, literature, etc. If there is a cost associated with the material, please notify me.

Also, would you be willing to complete a survey dealing with horticultural therapy at your gardens as part of this resource guide?

I am sending this letter to the following people/groups: Denver Botanical Garden, Chicago Botanic Garden Library, Mary E. Mandeville, Helen Hesselgrave, New York Botanic Garden Education Department, Cleveland Garden Center, Holly Utrata-Halcomb, Royal botanic Gardens Library, UBC Botanical Garden, Eugene Rothert, Berkshire Garden Center, and N. C. Botanical Garden. If you know of any other gardens I should contact, please let me know.

Thank you in advance for your assistance in providing materials useful to the development of this resource guide.

Sincerely,

Ann B. Parsons Graduate Student Horticultural Therapy APPENDIX B-2. Gardens and arboreta contacted in May 1983.

Three types of services offered in an outreach HT program are: direct client services, consultation services, and professional development services. Direct client services are services which involve the horticultural therapist working with a specific client population either at the garden/ arboretum or in a community facility. These services do not necessarily include individualized treatment goals, but rather they include broad Consultation services are directed towards program general program goals. development. The purpose of these services is to train the professional staff and volunteers at social service facilities in methods incorporating HT into their existing therapy program. These HT programs should include developing activities to meet cognitive, affective, and pyschomotor needs of individual clients. As part of the consultation services, the horticultural therapist from the garden/arboretum helps establish goals and develops curriculum guides designed for specific client populations. Professional development services are designed to provide HT training for and develop horticultural skills of professionals, volunteers, and Three types of professional development services are student students. internships, seminars and workshops, and publications.

Those gardens/arboreta and individuals which responded to the letter are indicated with an asterick (\*).

\*Royal Botanic Gardens
Mr. Brian Holley
Box 399
Hamilton, Ontario
Canada L8N 3H8

\*UBC Botanical Garden
Mr. David Tarrant
6501 Northwest Marine Drive
Vancouver, British Columbia
Canada V6T 1W5

Direct client services Consultation services Professional development services

Consultation services Professional development services \*Denver Botanic Gardens Mr. Merle Moore 909 York Street Denver, CO 80200 Direct client services Consultation services Professional development services

Fernbank Science Center Ms. Sarah Hodges 156 Heaton Park Drive NE Atlanta, GA 30307 Attn: Library

\*Chicago Botanic Garden Mr. Eugene A. Rothert, Jr. HTR P.O. Box 400 Glencoe, IL 60022

\*Berkshire Garden Center Ms. Sherry Boutard Stockbridge, MA 01262

\*The Frelinghuysen Arboretum Ms. Helen Hesselgrave-HTR P.O. Box 1295-R Morristown, NJ 07960

\*New York Botanical Garden Education Department Dr. Damon R. Olszwy Watson Building Bronx, NY 10458

\*North Carolina Botanical Garden Ms. Judy Carrier Tottem Center, 457-A Chapel Hill, NC 27514

\*The Garden Center of Greater Cleveland Ms. Nancy C. Stevenson-HTR Hortitherapy Activities Coordinator 11030 E. Boulevard Cleveland, OH 44106

Direct client services Consultation services Professional development services

Direct client services Professional development services

Direct client services Professional development services

Professional development services

Direct client services Consultation services Professional development services

Direct client services
Professional development
services

### Individuals contacted in May 1983 survey.

\*Ms. Mary E. Mandeville-HTM 720 West Jefferson Ann Arbor, MI 48103

\*Ms. Holly Utrata-Halcomb-HTR 6270 Ross Road Fairfield, OH 45014

# APPENDIX C-1. Letter mailed in May 1984 to botanical gardens and arboreta throughout the United States, its territories, and Canada.



COLLEGE OF AGRICULTURE AND LIFE SCIENCES

#### VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DEPARTMENT OF HORTICULTURE

April 25, 1984

Dear Sir/Madam:

As part of my Master's program I propose to develop a resource guide for botanical gardens and arboreta to use in establishing an extension horticultural therapy program. The purpose of this survey is to determine the present scope of horticultural therapy programs in arboreta and botanic gardens in order to establish the interest in, and need for, such a resource guide.

Your response to the following questions will be essential in developing a useful guide. Please complete the attached survey and return it to me by May 10, 1984.

Thank you in advance for your help.

Sincerely,

Ann B. Parsons Graduate Student

Diane Relf, Advisor Associate Professor of Horticulture

Attachment

APPENDIX C-2. Survey questions and summary of responses.

A total of one hundred and forty surveys were returned.

NA indicates "no answer"—either the informant did not answer the question or the informant felt the question was not applicable and marked NA on the form.

DN indicates "don't know"—the informant was not sure of the answer and stated "don't know" or simply put a "?" in the space.

Percents were rounded to the nearest hundredth.

1. Is there an educational department at your botanical garden/arboretum?

Yes - 60; 43% No - 75; 54% NA - 5; 4%

2. Does your botanical garden/arboretum have an internship program?

Yes - 52; 37% No - 84; 60% NA - 4; 3%

3. Is your botanical garden/arboretum, or any part of it, handicap accessible?

Yes - 125; 89% No - 10; 7% NA - 5; 4%

4. Does your botanical garden/arboretum have an educational program accessible to, or specifically for, the handicapped?

If yes, please describe briefly and attach any related information.

Yes - 44; 31% No - 92; 66% NA - 4; 3% 5. Presently, are there any horticultural programs in hospitals, nursing homes, rehabilitation centers, schools for handicapped or similar facilities in your area?

Yes - 61; 44% No - 52; 37% NA - 4; 3% DN - 23; 16%

Does your botanical garden provide information or services to these programs?

Yes - 46; 33% No - 67; 48% NA - 27; 19%

6. Does your botanical garden/arboretum presently have a horticultural therapy program? If yes, please describe briefly and attach any related information (i.e., brochure, newspaper clippings, etc.)

Yes - 12; 9% No - 122; 87% NA - 6; 4%

7. Has interest been expressed in developing a horticultural therapy program?

Yes - 32; 23% No - 101; 72% NA - 5; 4% DN - 2; 1%

8. Has your botanical garden/arboretum hosted seminars, conferences, or classes related to horticultural therapy, for professionals and/or volunteers who work with the handicapped? If yes, any details regarding these meetings would be appreciated.

Yes - 21; 15% No - 113; 81% NA - 6; 4% 9. Has interest been expressed in conducting a seminar or conference or offering classes related to horticultural therapy?

Yes - 25; 18% No - 109; 78% NA - 5; 4% DN - 1; 1%

10. Would you be interested in receiving a copy of this resource guide?

Yes - 111; 79% No - 22; 16% NA - 7; 5%

PLEASE RETURN TO:

Ann B. Parsons VPI & SU Horticulture Department Blacksburg, VA 24061 APPENDIX C-3. Gardens/arboreta which indicated a positive response to question six on survey.

Staff from fourteen gardens/arboreta indicated they had an HT program or plans for a program at their facility. The following section lists these gardens/arboreta, indicating the type of services offered in the outreach HT program. Comments from the survey (questions 4,5,6,7,8, and/or 9) are included to clarify and describe the services at these facilities. (See Appendix B-2 for the definitions of direct client services, consultation services, and professional development services.)

University of Georgia Botanical Garden 2450 South Milledge Avenue Athens, GA 30605

Comments: "Our volunteer program is open to the handicapped."

Honolulu Botanic Gardens 50 N. Vineyard Boulevard Honolulu, HI 96817 Direct client services

<u>Comments:</u> Some interest has been expressed in developing an HT program.

The Morton Arboretum Lisle, IL 60532

Professional development services

Comments: Occassionally provides information or services for HT programs in local facilities. Interest has been expresed in developing an HT program and also in conducting a seminar or conference or offering classes related to HT.

Fernwood 1720 Range Line Road Niles, MI 49120 Direct client services Professional development services

Comments: Continued interest in developing an HT program. Some interest has been expressed, by activities directors in local facilities, in conducting a seminar or conference or offering classes related to HT.

Maintains HT library.

The Crosby Arboretum 3702 Hardy Street Hattiesburg, MI 39401

Comments: Plans to develop an HT program and to provide information or services to HT programs in local facilities. Interest has been expressed in conducting a seminar or conference or offering classes related to HT.

The Frelinghuysen Arboretum P.O. Box 1295R Morristown, NJ 07960

Direct client services Professional development services

Comments: Provides information and services for HT programs in local facilities.

Brooklyn Botanic Garden Brooklyn, NY 11225 Direct client services

Comments: Provices consultation (on telephone) for HT programs in local facilities. Interest has been expressed in expanding the HT program. Plans for conducting an HT seminar.

Wave Hill, Inc.
Department of Education
675 West 252 Street
Bronx, NY 10471

<u>Comments:</u> Provides information or services for HT programs in local facilities.

"Intergenerational prayers with students (5th) and older adults at the Hebrew Home in the Bronx."

Interest has been expressed in conducting a seminar or conference or offering classes related to HT.

Temple University
Ambler Campus
Department of Horticulture
and Landscape Design
Ambler, PA 19002

Professional development services

<u>Comments:</u> Provides information or services to HT programs in local facilities.

Offers elective course related to working with special populations or in the behavioral sciences as part of the college curriculum.

Clemson University
Department of Horticulture
College of Arts and Sciences
Clemson, SC 29631

Direct client services Professional development services

Comments: Provides information or services for HT program in a local facility.

"Gardens (are) used as an outdoor lab facility for undergraduate course in horticultural therapy and for MS degree program in horticultural therapy."

Interest has been expressed in developing an HT prgram and also in conducting a seminar or conference or offering classes related to HT.

Fort Worth Botanic Garden 3220 Botanic Garden Drive Fort Worth, TX 76107

Direct client service Professional development services

Comments: Provides information and services for HT programs in local facilities.

Interest has been expressed in developing an HT program.

State Arboretum of Utah Building 436 University of Utah Salt Lake City, UT 84112 Consultation services

Comments: Provides information or services to HT programs in local facilities and has plans to expand services. Interest has been expressed in developing an HT program and also in conducting a seminar or conference or offering classes related to HT. Plans for hosting an HT workshop.

APPENDIX D-1. Sample letter mailed in October 1984 to horticultural therapists at Chicago Botanic Garden, North Carolina Botanical Garden, Denver Botanic Gardens.

Horticulture Department VPI & SU Blacksburg, Virginia 24061 September 15, 1984

Mr. Gene Rothert, HTR Chicago Botanic Garden P.O. Box 400 Glencoe, IL 60022

Dear Mr. Rothert,

Last summer I contacted you with reference to my thesis project—"A Resource Guide for Horticultural Therapy Programs at Botanical Gardens and Arboreta" in order to obtain literature about the program at your facility and to ask for your support in a follow-up survey. I am beginning to develop the guide now and would like to include specific information about your program.

The Holden Arboretum, North Carolina Botanical Garden, Denver Botanic Gardens, and Chicago Botanic Garden have unique and established HT programs providing models for other botanical gardens and arboreta to follow in establishing new HT programs. The information you provide will be invaluable for the development of these new programs.

Please answer the questions in the attached survey and return to me by October 3, 1984. Thank you very much for your help with this project.

Sincerely,

Ann B. Parsons

APPENDIX D-2. Survey for <u>A Resource Guide for Horticultural</u>

Therapy <u>Programs at Botanical Gardens and</u>

Arboreta.

Many of these questions may be answered with prepared materials--Please feel free to send literature to answer any of the following questions.

1. When was the HT program at your garden initiated?

CHICAGO: 1977

NORTH CAROLINA: Program was initiated in 1975 when the garden staff started seeing a need for a fulltime person to do horticultural therapy projects. Staff was hired 1978.

2. How is your HT program organized within the organizational structure at your garden? (i.e., as an indpendent department, or within the education department, or in another way?)
Briefly describe the organizational structure of HT at your garden:

CHICAGO: Director--Assistant Director--Manager Urban Horticulture, Gene Rothert--Coordinator of Hort. Therapy, Rena Huber

NORTH CAROLINA: HT is a department in and of itself. It is currently operated (staf) through the Botanical Garden Foundation. All other staff positions here (10) are administered through the UNC-CH Dept. of Biology.

3. Describe direct client services provided by your program: (these are services which directly involve a specific client population)

CHICAGO: Seven off site, yr-round, HT programs, involving 15 clients for 1 hour of weekly Hort. Therapy activity + educational training for activity staff. Specific population groups include the elderly, developmentally disabled young adults, visually impaired or blind and hospitalized children and at Rehabilitation Hospitals.

Also weekly meetings with seniors from suburban senior centers during outdoor gardening season

NORTH CAROLINA: Currently we are initiating a "trial" program in seeing individual or small group clients for horticultural therapy-individuals who will be referred to us by OT's, Voc. Rehab., Rec. therapists etc. for the

benefits of horticulture. These clients will be seen on a fee basis here at the garden.

In the past we have supported programs for residents of nursing homes, in-patient psychiatry, out-patient and day treatment psychiatry, senior citizen centers, cancer units, etc.; however, we no longer have funds to provide services for free.

4. Describe consultation services provided by your program: (these are services directed towards program development in community facilities)

CHICAGO: Information programs regarding:

- 1. yr. round HT programming
- 2. what is Horticultural Therapy-for organization information
- 3. specific population HT programming re HT with children, HT for the blind
- 4. three unit workshops-each eight hrs. long-open to general public
- 5. special project consultants e.g., greenhouses, accessible gardens, etc.

NORTH CAROLINA: At present, consultation is offered on a contract basis: For example, one-two day workshops for state psychiatric/mental retardation facilities; year long contract with three mental health units in NC state prisons; 5 month contract with a geriatric hospital for Dept. of corrections; two vocational horticulture programs for corrections paid for by two different technical institutes; limited contacts with mental health centers for staff training and program development-60 hours ea. These contracts are shared by one full time staff and one part time staff.

5. Describe professional development services: (services designed to provide training and develop skills of professionals, volunteers, and students)

CHICAGO: 1. workshops-3 per year, each 8 hrs. intense unit training appropriate to season and specific populations for all staff including professionals, paraprofessionals and volunteers

- 2. alternate weekly training for activity staff at each facility structured similar to student teaching experience
- 3. training and supervising of 4 HT interns each year

NORTH CAROLINA: A grant has been written and submitted for a three year period to develop training program in HT for graduate students in the Allied Health Sciences

Field at the University of North Carolina at Chapel Hill (includes OT, Rehab therapists, Speech therapists and will be open to social work, rec. therapy, nursing students as well). Program is designed to place 10 interns in field placements each year. October 1 we will find out about funding.

6. How many agencies/facilities in your area have HT programs?

CHICAGO: Approximately 20. As to date, yr. round HT programs were initiated by Chicago Botanic Garden at 41 facilities. Because of lack of staff and time, follow up has been insufficient but estimated continuation of HT programs should be above 50% in the area, or 20 facilities.

NORTH CAROLINA: I have recently invited 90 agencies to participate in a HT network meeting to share our experiences. These are programs at all different levels of organization from across North Carolina representing perhaps 60% of programs of this type. My definition of a HT program is one that has year round programming, is written on paper with goals and objectives with administrative support in terms of financial support and staff time. For the latter I would say there are 30 of this type program in NC, primarily in large institutions or in private treatment centers.

7. How many agencies does your HT program provide with information/materials/consultations?

CHICAGO: Ten to fifteen each year

NORTH CAROLINA: Perhaps 30/year

8. Does your garden host seminars/classes related to HT? Please enclose any related pamphlets/brochures announcing these seminars/classes

CHICAGO: Enclosed are the past year's workshop agendahandouts are too numerous to mail (20 sheets a year)

NORTH CAROLINA: Not at present...we have in the past.

9. Does your HT program have a student internship program? Please describe the program/goals/projects/etc.

CHICAGO: To train a HT intern in a well-rounded background of specific population disabilities and abilities. To provide opportunities for professional growth through action and work-study techniques. Social interaction skills,

task analysis, group and individual goal setting are all used daily to gain the practical knowledge necessary as a professional Horticultural Therapist. Written assignments are required, but majority of the 1500 hours are to assist with program plans, design and implementation, supply ordering and distribution, help with workshops, evaluations and consultations.

NORTH CAROLINA: Not at present-we may in the near future

10. Do you have an HT greenhouse and/or garden? How do you use materials from the greenhouse/garden in your program?

CHICAGO: The C.B.G. greenhouse grower provides plant material for all 120 clients (8 facilities x 15 clients) for two units, outdoor gardens and indoor gardens.

NORTH CAROLINA: We have a 30' x 50' greenhouse for a selection of indoor houseplants, ferns and succulents. We have access to a large selection of herbs and display use of a carnivorous plant collection. Stock baskets, cuttings and seeds, and flower and vegetable transplants are provided by our program for the agencies with whom we work and also are given to community agencies who have a HT program, usually during the summer.

We work co-operativiely with a Technical college which teaches horticulture classes for the immured and provide materials for these instructors as well. We also will be using the greenhouse for work with clients. Dried plant materials are often collected for us from the garden membership.

11. Does your HT program offer classes in basic horticulture for professionals working with special populations? Please list and describe

CHICAGO: Only through the three seasonal unit workshops:
1. outdoor gardening, 2. natural crafts unit, 3. indoor gardening.

NORTH CAROLINA: I am working on a contract to provide this kind of training to staff of the mental health centers in NC on a regional basis. Probably one series of 10 classes this year with one region.

Does your HT program offer classes in basic horticulture for the general public? Please list and describe

CHICAGO: Yes-the same as above (#11)-basic information is for the yr-round programming but is open to the general public.

## NORTH CAROLINA: No

Does your HT program offer classes in basic horticulture for special populations? Please list and describe

CHICAGO: No

NORTH CAROLINA: Only as part of our HT program contracts. example, inmates in correctional facilities; mental health, geriatric inmates, special education programs. nursing home residents.

Do you have a list of publications related to HT available 12. from your garden? Could this list be included in the guide? If so, please enclose the list.

CHICAGO: The C. B. G. library is open to the public and they have an extended list. We give a mixed list for horticulture information and therapeutic techniques. our four manuals:

"Horticultural Therapy for Senior Centers, Nursing Homes, Retirement Living"

"Horticultural Therapy for Mentally Handicapped"
"Horticultural Therapy at a Psychiatric Hospital"

"Horticultural Therapy at a Physical Rehabilitation Facility"

There is a \$10.00 charge per manual and a total of approximately 3,432 have been sold to date.

NORTH CAROLINA: "Get into Growing: Horticulture as Recreation" produced in conjunction with NC Division of Parks and Recreation to promote gardening projects in NC

A second teaching/training guide has not been completed/we have only 6 chapters finished.

13. Does your HT program publish a newsletter? Name of newsletter: Circulation:

CHICAGO: No, not as yet, but will beging in 1985.

NORTH CAROLINA: No

How is your HT program financed? 14.

public grants--Please list and briefly describe each grant

CHICAGO: Not since 1982

NORTH CAROLINA:

b) private funds--Please describe

CHICAGO: All year round programs are \$2500 to cover material and supplies for the first year. Additional years cost are approximately \$300-\$400. All are covered by income generating activities.

NORTH CAROLINA: 1981-82--\$40,000 grant
On a yearly basis monies must be found. A gift of \$25,000 was given to the program in 1983-unsolcited!

c) income-generating activities within the HT program--Please list activities within your program that generate income

CHICAGO: Dried flower arrangements, tea bags, potpourri, spice boil holiday mix.

NORTH CAROLINA: Contracts on a per/service basis with a hourly fee of \$15.00/hour-\$20.00/hour depending on the length of the contract.

d) other--Please describe

CHICAGO: --

NORTH CAROLINA: Support from the Botanical Garden Foundation includes use of office space, secretarial support, greenhouse space and financial support of about \$3,000/year.

- 15. Percent of finacing from:
  - a) grants CHICAGO: --NORTH CAROLINA: 30%
  - b) private funds CHICAGO: 100% first year NORTH CAROLINA: --
  - c) income-generating activities CHICAGO: 100% second year NORTH CAROLINA: 60%
  - d) other CHICAGO: -NORTH CAROLINA: 10% Botanical Garden Foundation
- 16. In what ways do other departments at your garden cooperate and support the HT program? (i.e., as guest speakers in seminars, providing plants, etc.)

CHICAGO: Occasional guest speakers; provide plant materials-we are billed for this; sharing equipment (slide projector, etc.); dept. newsletter

NORTH CAROLINA: Other departments provide plants and sometimes teach some sections of our workshops.

17. Do you utilize volunteers in your HT program? In what ways?

CHICAGO: Weekly at the Learning Garden for the Disabled, client assistance as a HT; workshops; volunteers from each facility are also used at all facilities in programming.

NORTH CAROLINA: One year we did. However, when funds became limited, programs in the immediate area were cut back, making it difficult to use volunteers. Occasionally, I use volunteers who work with the "Propagation Programs" here. Our garden is primarily for research and conservation of native plant materials. We grow and teach others to grow native wildflowers from seed. We also have a large display herb garden with 50 volunteers in this program with 2 herb sales a year.

18. Does your HT program arrange field trips to the botanical garden?

CHICAGO: Information given but not accessible to most special populations. Special population visitors are handled through normal tour channels. Special arrangements are made.

NORTH CAROLINA: All the field trips are arranged through Dot Wilbur our Education Program Co-ordinator so I refer any of my clients to her...sometimes I conduct the tours myself though.

19. Are the buildings and grounds at your garden handicap accessible?

CHICAGO: Building-yes; grounds-some; greenhouse-some areas. Special population visitors are handled through normal tour channels. Special arrangements are made.

NORTH CAROLINA: Mostly. We are testing this out now.

20. In what ways do you utilize community resources in your HT program?
Please describe

CHICAGO: Funding for a yr-round program often comes from a community garden club or combination of clubs to begin a program. Public relations with news media is encouraged to promote HT and for public awareness.

NORTH CAROLINA: I use Ag. extension agents for talks and materials (literature) also, for volunteers. I use universities for films, slide shows, etc. I do co-operative programming with other educational facilities-community tech institutes; we get discounts at local nurseries because of our Garden affiliation.

21. Please enclose any relevant materials which would illustrate your HT program and the services you provide.

CHICAGO: --

NORTH CAROLINA: --

22. Please describe any other features of your HT program which were not covered by the survey:

CHICAGO: --

NORTH CAROLINA: Questionnaire seems excellent; however, it seems you might need a perspective on the size of the public who come to the various gardens for lectures and classes. Size and proximity of the nearest metropolitan area. In NC the three nearest cities are of modest population compared to Chicago or Denver...therefore some of our services have to be state wide in order to have the demand for hortitherapy programs that are more readily to be found in a higher density population.

Raleigh-capitol of NC, 28 miles away, pop. 130,000 Durham-15 miles away, pop. 90,000 Chapel Hill pop. 60,000

All three communities have a large university.

We have approximately 40 mental health centers in the state. The HT program has worked with 50% of these.

North Carolina added question 23.

23. What do you see as the future of your program in terms of funding or in terms of areas of service?

The Botanical Garden is just now developing a focus for service as over the last five years the program has developed where the money has been. The garden is just now finalizing its long range plan and thus the horticultural therapy program fits into this planning.

More programs are being planned to be delivered at the Botanical Garden and we see as a strong possibility getting private funds to develop more training and public service programs here. At least, that fits better to the over all role of the the NC Botanical Garden.

North Carolina Botanical Garden.

Arboretum, Chicago Botanic Garden, and

GOALU	Services which involve the	CONSULTATION SERVICES Services directed towards HT program development	PROFESSIONAL DEVLELOPMENT SERVICESServices designed to provide HT training for professionals, volunteers, and students
THE HOLDEN ARBORETUM  o to train professionals in using horticulture for therapeutic purposes  o to establish HT programs in human service facilities  o to serve as an extension service, providing information related to HT for professionals and students  o to educate the community about HT	o The Golden Agers Program,  o "The Gardening Show" Radio Program  o Traveling workshops	o Provide consulting services to existing programs and establish new HT programs  o HT Discount Card o Indoor-Outdoor Gardening Gardening Competition  o Free one-time consultation	o 6 month student internship  o Fall and spring seminars  o Publications, including activity booklet, curriculum guide,  "The Growing Difference" newsletter
CHICAGO BOTANIC GARDEN  o to promote HT as a profession in the Chicago community  o to establish HT programs, modified for specific client populations, in different types of facilities  o to train facility and organizational staff in HT philosophy and techniques  o to increase the life quality of clients through gardening projects	o The Learning Garden for the Disabled  o HT staff working at human service facilities which have contracted with the garden	o Consultation and general information on HT or for special projects through individual or short term meetings  o Year-long contracts for HT program development in a particular human service facility  o Free one-time consultation	o 6 month student internship o 3 workshops each year o 4 manuals on horticulture and therapeutic techniques o Quarterly newsletter
NORTH CAROLINA BOTANICAL GARDEN  o to promote the use of HT as a therapeutic medium by:  - providing information on HT  - providing information on adaptive gardening techniques  - offering services to clients  - training professionals  - promoting research  - acting as a network for horticultural therapists in N.C.	o Special education class and Day Treatment Adult Group,	o Contracts to develop HT at human service facilities o Free one-time consultation	o No internship at present time o Five types of seminars

HT STAFF/ ORGANIZATION	STAFF RESPONSIBILITIES	FUNDING SOURCE	DISPLAY GARDENS/ GREENHOUSE	HT LIBRARY	AREA SERVED	
l full time l intern HT program in Education Department	Administer program, plan workshops, schedule visiting groups, supervise intern	Private funds 95% Income-generating activities 5% Start-up money from private grant	Yes greenhouse	Library in HT staff office	3 counties including the city of Cleveland Presently serve 70-80 facilities	
1 full time 1/3 time 2 interns HT program in Department of Urban Horticulture	Plan, assign contracts, administer contracts, supervise interns, conduct correspondence	activities 100% Funds from Chicago Botanic	den,maintained by volunteer group	Library in main library	3 counties, 50 mile radius to develop a HT program Presently 20 facilities with programs	47
			7			
1 full time 1 part time HT program in HT Department	Administration, fund-raising, training development, provide IIT services, pro- vide direct services at garden for groups	Income-generating activities 60% Grants 30% Funds from Botanical Garden Garden Foundation 10%	No display garder Yes greenhouse	office with books logged into main library catalog information take	Presently 30 facilities en	
	ORGANIZATION  I full time l intern  HT program in Education Department  I full time 1/3 time 2 interns  HT program in Department of Urban Horticulture  I full time l part time HT program in	ORGANIZATION  RESPONSIBILITIES  1 full time 1 intern  Administer program, plan workshops, schedule visiting groups, supervise intern  Plan, assign contracts, administer contracts, supervise interns  Administration, fund-raising, training HT program in HT Department  Administration, fund-raising, training development, provide lIT services, pro- vide direct services at	ORGANIZATION  I full time l intern  I full time l contracts, administer contracts, supervise intern  I full time l/3 time l contracts, administer contracts, supervise interns  IT program in Department of Urban Horticulture  I full time l functional time l part time l provide li l part time l provide l l l l l l part time l provide l l l l l l part time l provide l l l l l l l l l l l l l l l l l l l	RESPONSIBILITIES  I full time lintern program, plan workshops, schedule visiting groups, supervise intern  I full time l/3 time 2 interns  HT program in Department of Urban Chrban Chroticulture  I full time la furt time la furt time la furt time la part time la furt time la fur	Torogram in Department of Urban Eloration and Eloration an	Total time

## The vita has been removed from the scanned document