

EFFECTIVENESS OF COOPERATIVE EXTENSION SERVICE COMMUNICATION TECHNIQUES IN THE PROMOTION OF CONTAINER GARDENING AMONG APARTMENT DWELLERS

Thesis for the Degree of M. S. MICHIGAN STATE UNIVERSITY LAURA LEE WILLIAMS 1975

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ABSTRACT

EFFECTIVENESS OF COOPERATIVE EXTENSION
SERVICE COMMUNICATION TECHNIQUES
IN THE PROMOTION OF CONTAINER
GARDENING AMONG APARTMENT
DWELLERS

By

Laura Lee Williams

The effectiveness of communication techniques in reaching and influencing apartment dwellers to grow vegetables in containers was evaluated. Both bulletins and demonstrations were tested for their appeal and influence on apartment dwellers. In addition, the value of "give-away" programs in influencing behavior was tested.

A group of 1200 apartments was selected and divided into four offer groups of 300 apartments each. Group 1 was designated the control group and received no information on container gardening. Groups 2, 3, and 4 were each mailed letters designed to stimulate interest in container gardening. Members of group 2 received letters offering a free USDA bulletin on container gardening. Apartment dwellers in group 3 were invited by letter to attend a demonstration on container gardening at which they could also receive the free bulletin. Group 4 apartment dwellers were offered an opportunity to attend a demonstration at which they would receive a free bulletin, transplants, seeds and soil.

Telephone surveys were later designed and administered to a selected sample of the residents of the original 1200 apartments. The surveys were designed primarily to evaluate the effectiveness of the three offers in promoting container gardening. In addition, the surveys examined: past experience with and future intentions for container gardening, use of and readability of the USDA bulletin which was distributed, and knowledge of apartment dwellers of the availability of Extension services.

Response to the three offers and data from the questionnaires yielded the following results:

- 1. Offers appealed primarily to people without previous container gardening experience.
- 2. Mailed bulletins were most requested by apartment dwellers. Thirty-four percent of the apartment dwellers contacted requested bulletins, but fewer than ten percent attended either demonstration offer.
- 3. Of the apartment dwellers responding to the three offers, those attending the demonstration at which free supplies and bulletins were distributed became the most interested in container gardening, with 100% growing vegetables in containers.
- 4. Apartment residents responding to the three offers of information showed a much higher rate of intention of container gardening in the following year than did the control group.

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Ву

Laura Lee Williams

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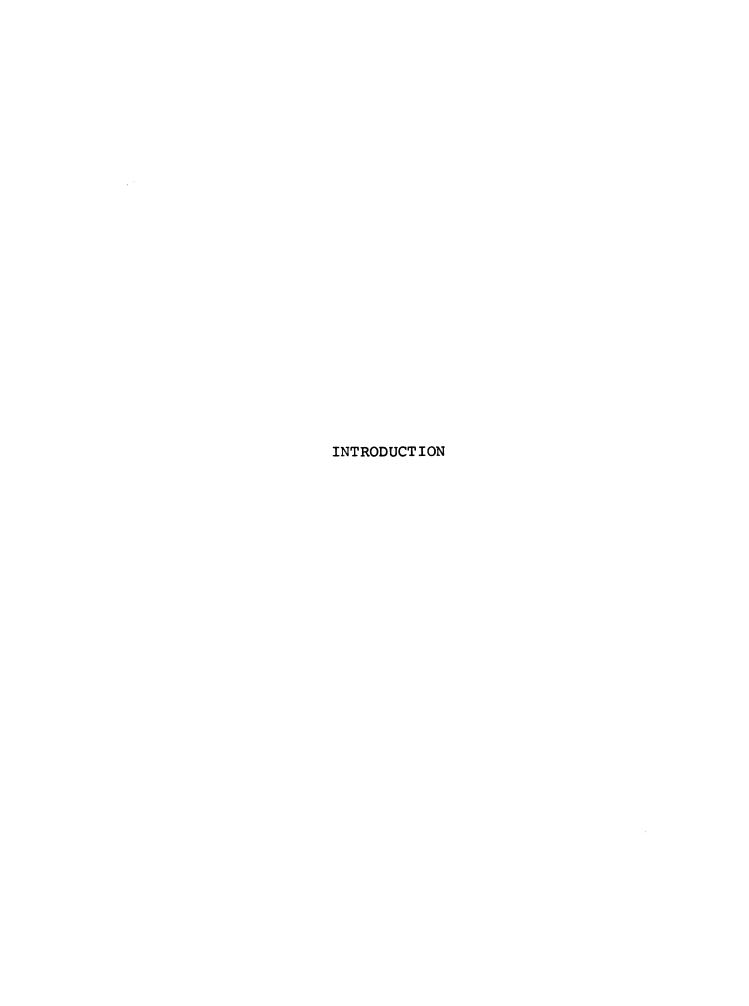
Lastly, I would like to recognize Archie and Mary Vomachka, the most enthusiastic container gardeners I've ever met.

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	. ii
LIST OF TABLES	. iv
INTRODUCTION	. 1
LITERATURE REVIEW	. 3
PUBLICATION	. 9
Preface. Abstract Introduction Study Design Results and Discussion Limitations of the Study Conclusions and Recommendations Footnotes. References	12 15 23 24 26
BIBLIOGRAPHY	. 28
APPENDICES	
A. Letters Offering Free Information on Con- tainer Gardening to Apartment Dwellers	. 29
Reply Postcards Enclosed with Letters Offering Free Information	. 30
B. Tabular Data from Telephone Survey Question- naires	31

LIST OF TABLES

Table		Page
	TABLE IN LITERATURE REVIEW	
1.	Acceptability of Information Channels in Three Wisconsin Areas	7
	TABLES IN PUBLICATION	
1.	Response of Apartment Dwellers to Offers of Information on Container Gardening	16
2.	Effectiveness of Offers of Free Information and Supplies in Encouraging Container Gardening in 1974	18
3.	Past Experience with and Future Plans for Container Gardening Among Apartment Residents Responding to the Three Offers	20
4.	Usage of USDA Bulletin "Minigardens for Vegetables" among Bulletin Recipients	22



INTRODUCTION

The Cooperative Extension Service of the United
States is one of the most highly developed adult education
enterprises. With the aim of promoting additudinal and behavioral changes to improve quality of life, the Cooperative Extension Service appropriates considerable monies and
manpower annually to develop educational programs in agriculture and home economics to fit current needs of the population. To keep abreast with current trends, Cooperative
Extension has expanded its programs to better serve rapidly
growing urban and suburban populations, offering information
on such topics as nutrition, family living, and home horticulture to interested citizens. The rapidly expanding area
of Cooperative Extension programs and communication techniques used in educational programs for the non-rural dweller are the major emphasis of this paper.

Communication techniques traditionally employed by the Cooperative Extension Service in educational programs include use of written materials (such as United States Department of Agriculture or state Cooperative Extension Service bulletins) and lecture demonstrations given by extension personnel. Often these techniques are included

in programs without prior thought regarding their suitability for the target population or effectiveness in inducing change. This research program was developed in the Department of Horticulture, Michigan State University during 1974 to measure the effectiveness of Cooperative Extension Service techniques in promoting behavioral change. Different communication techniques were employed in an attempt to promote the practice of container gardening of vegetables for apartment dwellers. Through this research it was hoped that conclusions could be drawn regarding ways in which Extension resources could be most efficiently utilized in dealing with urban dwellers.



LITERATURE REVIEW

The population of the United States has been slowly shifting from rural to urban living situations since U.S. census measurements began in 1790. In 1790, one out of every twenty Americans lived in an urban area, but in every decade thereafter (with the exception 1810 to 1820) the growth rate of the urban population exceeded that of the rural population. By 1920 the urban segment of the U.S. population had exceeded the rural, and in 1960, five out of every eight persons were living in urban areas. Population census in 1970 classified 73.5% of the U.S. population as urban.

The Cooperative Extension Service continues working toward its goal of improving the quality of life of the American people, but due to the relatively small percentage of the U.S. population now classified as rural, the information needs of the people have changed from primarily agricultural production procedures and techniques to include information on such topics as family nutrition and home horticulture. Keel et. al. (2) defined home horticulture as "activities concerned with the arrangement, selection, planting, growing, and maintenance of trees, shrubs, flowers, lawns, home food gardens, and other plant materials in and/or around dwellings, including protection

from and the control of plant insects, diseases, and weeds."
Clearly it is recreational horticulture, in contrast to
rural horticulture, which is often a man's livelihood.

In 1958, mail requests for Extension information received by the USDA and Congress indicated an increasing demand for information from non-farm people (3). The following year, John W. Hamiltion, Chairman of the Publication Judging Committee of the American Association of Agricultural College Editors, noted that "more Extension publications are being slanted and directed to the urban consumer."

The trend toward devoting more Extension monies and manpower to the urban and suburban populations continues, undoubtedly accelerated in the late 1960's and early 1970's by the "Ecology Movement" and increased interest in environmental beautification. Currently, all 50 states have organized Extension home horticulture programs due to public or consumer demand (2). On a nationwide basis, the Extension staff annually devotes 500 man years to home horticulture programs, including state, area, county, and paraprofessional staff members (2). Demands for Extension assistance on home horticulture problems increased in 49 states from 1971 to 1974, and remained the same in one state (2). A recent survey by the USDA and Extension Service (2) found that the majority of states surveyed believed that the Cooperative Extension Service had a definite obligation to supply

homeowners with information, since "if we are to continue to make this country a better place to live, some form of home horticulture education program must be provided."

Establishing the validity of Extension involvement in home horticulture programs leads to the question of whether the Cooperative Extension Service is effectively reaching urban and suburban populations with horticultural Research dealing with public awareness of the information. availability of Extension Services has been limited. federal study conducted among Illinois farmers in 1957 (3) found that 90% were aware they could obtain USDA publications from the Cooperative Extension Service. However the Cooperative Extension Service at the University of Minnesota surveyed gardeners in the Minneapolis-St. Paul metropolitan area in 1972 and found that only one half had seen Extension publications on home gardening (2). From these two surveys it may be concluded that urban dwellers are generally less aware of the availability of Extension Services than rural dwellers.

An appropriate question would then be, what are the best communication methods for reaching urban dwellers with horticultural information? The most traditional and widely used is the Extension bulletin. Many USDA and state bulletins dealing with home horticulture are currently being published and disseminated to urban areas. However research has failed to conclusively establish that bulletins are the most effective method of conveying home horticulture information. The

most recent and extensive research done in the area of communicating home horticulture information was conducted in 1970 by the Cooperative Extension Services of Minnesota, Wisconsin, and the USDA. Their first report (2) analyzed extensive surveys conducted in Minnesota and Wisconsin with both urban and rural dwellers. The study sought to determine the nature and scope of home horticulture and ways in which Extension is dealing with increasing home horticulture needs. One section of a survey (2) conducted among residents of Wisconsin by the Wisconsin Extension Service was designed to determine public preferences for ways in which home horticulture information can be received. idents of three Wisconsin areas--Milwaukee County (a large metropolitan area), Oshkosh (a smaller urban area) and Lancaster (a rural area) -- were asked to rate a number of information channels as either good or bad ways to receive home horticulture information. From the data a mean for each channel was determined for each population group, and used to establish information channel preferences for the three groups. The following table illustrates the acceptability of different information channels by the three groups.

There was general agreement among the three areas that newspapers, printed bulletins, and television were all important ways of communicating home garden information, and that illustrated slides were not well accepted methods.

TABLE 1.--Acceptability of Information Channels in Three Wisconsin Areas¹

	Mean ²				
Information Channel	Milwaukee County	Oshkosh	Lancaster		
Newspapers	1.27	1.14	1.22		
Printed Bulletins	1.33	1.28	1.19		
Television	1.47	1.34	1.36		
Radio	1.63	1.57	1.40		
Telephone	1.67	1.66	1.72		
Demonstration	1.72	1.55	1.44		
Personal Consultation	1.78	1.77	1.55		
Organized Classes	1.81	1.81	1.69		
Illustrated Slides	1.92	1.81	1.81		

Adapted from Table 15, Evaluation of ways in which information can be received--ranked by responses from Milwaukee County but showing relationship with Oshkosh and Lancaster data. (2)

Disagreement was apparent between rural and urban dwellers in regard to communicating home horticulture information via radio and demonstrations. These two methods were rated significantly higher in acceptability by rural than by urban dwellers, showing some important differences in communication channel preferences between the two groups which Extension serves.

The Wisconsin survey partially answers the question of which communication channels are preferred by urban people for receiving home horticulture information. However, it does not adequately answer the question of whether

²Means computed on the basis of 1=good, 2=bad.

information received through these channels is actually understood and utilized by those who receive it. Actual use of Extension furnished information would appear to be a more valid index of channel effectiveness than stated preference. A federal study conducted among Illinois farmers (3) asked the question whether people actually used Extension publications, and found that approximately half the farmers surveyed reported using an idea from a USDA or state Extension publication in the year preceding the study. It should be noted, however, that the survey was conducted among farmers, and the results should not automatically be generalized to the urban dweller for whom current agricultural information is usually not of such vital economic importance as it is to a farmer.

Thus it is apparent that further research needs to be conducted concerning communication channels and techniques most valuable in disseminating home horticulture information to the public. More extensive research must be undertaken if Cooperative Extension is to effectively serve the growing urban population of the U.S.

PREFACE

The following paper is to be submitted to the <u>Journal of Extension</u>, a journal directed toward the professional advancement of those with extension and other adult education responsibilities. The style and format of the paper are in accordance with that prescribed by the journal.

COMMUNICATING HOME HORTICULTURE INFORMATION TO APARTMENT

DWELLERS

Abstract

Two communication methods, USDA bulletins and demonstrations, were tested for their effectiveness in promoting container growing of vegetables among apartment dwellers. The value of "giveaway" programs was also tested.

Four groups of 300 apartments each were selected. One group was the control. The remaining three groups received free mail offers respectively of: a bulletin on container gardening; a group demonstration and bulletin; and, a group demonstration, bulletin, and gardening supplies. Telephone surveys were conducted to determine the effectiveness of the offers. Offer of bulletins alone received most response at 34%. However, of those responding to the offers, people receiving free supplies showed the highest (100%) incidence of container gardening. Only half of the apartment dwellers were aware of any services provided by Cooperative Extension.

Introduction

Is Cooperative Extension reaching the urban dweller in the most efficient way possible? Many programs are in the planning stages or currently underway to take Extension out of its traditional rural setting and adapt it to serve the needs of the expanding urban population. However, many of these educational programs are undertaken without prior research regarding their suitability for the urban population, and consequently may not utilize Extension monies and manpower to reach and serve the greatest number of people. Further research must be done to determine communication methods most effective in reaching and educating urban dwellers if Extension is to continue to improve the quality of life of the American people.

This study was conducted in the spring of 1974 to measure the effectiveness of Cooperative Extension Service communication techniques in encouraging container gardening among apartment dwellers of the Lansing, Michigan area.

Two communication techniques traditionally employed by the Cooperative Extension Service, distribution of USDA bulletins and public demonstrations, were tested to determine their effectiveness in inducing apartment dwellers to grow vegetables in containers. A third technique, a "giveaway" program, similar to that proposed by Congressman James A.

Burke of Massachusetts (1) was also tested.

The study was conducted to answer the following questions:

- 1. Do apartment dwellers prefer to receive information on container gardening via mailed bulletins or through attendance of a free demonstration?
- 2. Which communication method, written bulletins or demonstrations, is most effective in encouraging apartment dwellers to container garden, and are offers of free plants an effective inducement in promoting container gardening?
- 3. Do Cooperative Extension Service offers of information on container gardening attract people experienced in the activity, or people with interest but no experience?
- 4. Do people receiving information on container gardening continue their interest in the activity beyond the one year in which they receive the information?
- 5. Are Extension bulletins such as <u>Minigardens for Vegetables</u> (USDA Home and Garden Bulletin No. 163) read and understood by those who receive them, and are they used by people other than the initial recipients?
- 6. Are apartment dwellers aware of the services which Cooperative Extension provides to the public?

Study Design

In April and May of 1974 a total of 1200 apartments in 18 apartment complexes in the greater Lansing, Michigan

area were selected for the study. Since container growing of vegetables generally requires an outside area to be successful, only apartments which had balcony or patio areas were selected. Problems which might effect the study arising from differences between apartment complexes with regard to average age or income of the tenants were avoided by randomizing each complex into four groups, with equal numbers of residents from each complex being assigned to each of the four offer groups or a total of 300 apartment residents per offer group.

Of the initial four offer groups, three received information designed to stimulate interest in growing vegetables in containers. Druing May 1974, 900 letters with stamped, addressed return postcards enclosed were mailed to the addresses of the selected apartments in offer groups 2, 3, and 4. No letters or communications were prepared for group 1, the control group.

In offer group 2, each resident was mailed a letter encouraging him to try container gardening, and offering a free booklet (Minigardens for Vegetables, USDA Home and Garden Bulletin No. 163) on how to grow vegetables in containers.

In offer group 3, letters were sent to each apartment inviting the residents to attend a free demonstration
on container gardening. Two dates were given for attending
the demonstration, and the apartment residents were also informed they would receive a booklet on container gardening
at the demonstration.

In offer group 4, letters and postcards were mailed inviting the apartment dwellers to attend a free demonstration on container gardening. In addition, each apartment dweller was informed he would receive free seeds, transplants, potting soil and a booklet on container gardening at the demonstration. Containers for the potting soil were provided by the apartment dwellers.

Members of the three groups receiving offers of information on container gardening were requested to return an enclosed postcard if they wished to be sent a booklet or were planning to attend one of the scheduled demonstrations. The demonstrations for offer groups 3 and 4 were held on the Michigan State University campus, and consisted of a 20 minute demonstration and a slide presentation on the culture of container grown vegetables.

Month further contact was made with the selected apartment dwellers until autumn of 1974 to allow time for the apartment dwellers to utilize the information they had received. In September, 1974, telephone interviews were conducted with a randomly selected sample of 176 of the original 1200 apartment residents contacted. The primary purpose of the survey was to determine the relative effectiveness of the three information offers in encouraging container gardening. However, the survey was also designed to investigate whether the information offers appealed primarily to people already familiar with container gardening or to

novices, and whether people receiving information displayed interest in container gardening beyond the one year in which they received the information. Public awareness of the availability of Extension Services as well as use and readability of the Minigardens for Vegetables bulletin were also examined.

Seven similar surveys were administered to seven categories of apartment dwellers representing the control group and apartment residents in each offer group who either responded or did not respond to the offers. Whenever possible, 35 persons were selected and surveyed in each category. However, in the two cases where the entire category was composed of less than 35 people, all members of that category were surveyed.

Results and Discussion

Mailed bulletins were most requested by apartment dwellers in the three offer groups (Table 1). Thirty four percent of those offered only free bulletins responded. Of those offered demonstrations (Offers 3 and 4), fewer than ten percent responded, even when free supplies were offered.

Thus mailed bulletins were the most effective means of reaching apartment dwellers with horticultural information. However, an equally important question is, what portion of those who received information on container gardening utilized the information to the extent that they tried container gardening? From the telephone survey it

TABLE 1.--Responses of Apartment Dwellers to Offers of Information on Container Gardening^a

Offer to Apartment Dwellers	Number in Offer Group	Percent Response
Bulletin	300	34 (102) ^b
Demonstration and bulletin	300	4.3 (13)
Demonstration, bulletin and free supplies	300	8.3 (25)

aThe control was not included since no offer of information was made for which there could be a response.

bNumbers in parentheses indicate the number of apartment dwellers responding to each offer.

was determined that apartment dwellers receiving a complete package of bulletin, demonstration, and supplies had the highest percentage container gardening in the summer of 1974 (Table 2).

All apartment dwellers who attended a demonstration and received a bulletin and free supplies container gardened, as opposed to approximately one-third of those who received the bulletin alone or attended demonstrations at which free supplies were not distributed. Thus it is noted that while free supplies do increase the incidence of container gardening, comparatively few people are willing to commit themselves to attending a demonstration in order to receive the supplies.

Among members of the control group (Table 2) who were surveyed, 20% reported having grown vegetables in containers in the summer of 1974. This high percentage is thought to be in part due to the abundance of information on container gardening which was available to the public during the summer of 1974. The State Journal of Lansing, Michigan published several articles on container gardening from April through June of that year. In addition, numerous books on container gardening were commonly available in local bookstores.

An additional aspect of the survey was to determine whether the three information offers appealed primarily to people with previous experience in container gardening or

TABLE 2.--Effectiveness of Offers of Free Information and Supplies in Encouraging Container Gardening in 1974.

Sample Surveyed	Number Surveyed	Percent of Surveyed Re- spondents Container Gardening	
Bulletin Recipients	35	37 (13) ^a	
Demonstration and bulletin recipients	13	38 (5)	
Demonstration, bulletin, and supply recipients	23	100 (23)	
Control group	35	20 (7)	

aNumbers in parentheses indicate the number of apartment dwellers in the surveyed sample container gardening.

to those with interest but no experience. Accordingly, a sample of the apartment residents responding to the three information offers and from the control group were asked whether they had ever container gardened in the past (Table 3). Less than 10% of the apartment dwellers sampled in the three respondent categories had any previous experience with container gardening. A slightly higher percentage of those apartment dwellers sampled from the control group had container gardened in the past. These results suggest that the offers of information appealed primarily to apartment dwellers with little experience in container gardening.

It was also noted that a large portion of the apartment dwellers who received information through the three offers voiced the intention to container garden the following summer (Table 3). Although stated intentions may not always become reality, these results do indicate a continued interest in container gardening on the part of those who received information.

It is through examining past experience, present behavior, and future intentions of container gardening among those responding to the offers and the control group that the most positive results from the offers are seen. Nine percent or less of all apartment dwellers responding to the offers reported experience with container gardening before 1974. However, an average of 58% container gardened in 1974, and 74% intended to in 1975. This may be contrasted

TABLE 3.--Past Experience with and Future Plans for Container Gardening Among Apartment Residents Responding to the Three Offers.

Sample Surveyed	Pre Expe in Co	Having evious erience ontaine rdening	Gard r in	lening	to	ntending Container rden in 1975
Bulletin recipients (n=35)	3	(1) ^a	37	(13)	46	(16)
Demonstration and bulletin recipients (n= 13)	8	(1)	38	(5)	85	(11)
Demonstration, bulletin and supply recipients (n= 23)		(2)	100	(23)	91	(21)
Control group (no offer) (n= 35)	14	(5)	20	(7)	14	(5)

and Numbers in parentheses indicate the number of apartment dwellers in the surveyed sample container gardening.

with the apartment dwellers who received no information (the control group) in which the same percentage who reported container gardening in the past (14%), anticipated continuing in 1975, with no increase.

The use and readability of the USDA bulletin Minigardens for Vegetables was investigated through three questions in the telephone surveys. Offer respondents were asked, "Did you read, leaf through, or not read at all the booklet on container gardening which you received?" and "Did you give the booklet to any of your friends or neighbors to read?" An average of 52% of the bulletin recipients sampled reported reading 41% leafed through, and only 7% did not read the bulletin at all (Table 4). Approximately one-third of all apartment residents receiving bulletins passed them on to their neighbors and friends, thus extending the usefullness of the bulletins beyond one person (Table 4).

The bulletin was found by all who received it to be easily read. All bulletin recipients surveyed reported they encountered no difficulty in reading and understanding the bulletin.

Seventy percent of the apartment dwellers responding to the three offers reported having friends or neighbors who container garden. However, of those who did not respond to the offers, only 40% had friends or neighbors container gardening. This data would suggest that interest in container

TABLE 4.--Usage of USDA Bulletin <u>Minigardens for Vegetables</u>
Among Bulletin Recipients.

Sample Surveyed	% Read ing Bulleti	Through	% Not Reading Bulletin	% Whose Friends or Neighbors Read Bulletin
Bulletin recipients (n=35)	51 (18)	a 40 (14)	9 (3)	29 (10)
Demonstration and bulletin recipients (n=13)	46 (6)	54 (7)	0 (0)	15 (2)
Demonstration bulletin and supply recipients (n=23)	56 (13)	35 (8)	9 (2)	43 (10)

aNumbers in parentheses indicate number of apartment dwellers in the surveyed sample which compose the stated percentage.

gardening may be generated by observing associates who container garden.

While the overwhelming majority of the offer respondents showed interest in the Cooperative Extension bulletins they received, and read or leafed through them, substantially fewer were aware that Extension services such as bulletins were available to the public. An average of 52% of all the apartment dwellers surveyed reported some knowledge of the purpose of or services provided by the Cooperative Extension Service. These results are in agreement with data from the Minnesota-Wisconsin Es-USDA Home Horticulture Project (2), in which only half of a surveyed sample of gardeners in the Minneapolis-St. Paul metropolitan area had ever seen Extension publications on home gardening. In contrast, a federal study conducted among Illinois farmers in 1957 (3) found that 90% of the farmers were aware they could obtain USDA publications from the Cooperative Extension Service. These studies indicate that a large segment of the urban population may not be taking advantage of Cooperative Extension Service publications due to being uninformed of their availability.

Limitations of the Study

A major limitation of the study was the small number of apartment dwellers responding to the two offers involving demonstrations. In each of the two offers, the number responding was less than 35 (the normal number surveyed)

out of a possible 300 initially contacted. Only 13 people responded to the offer of a free demonstration and booklet, and 25 to the offer of a demonstration, booklet and supplies. In addition, only 23 of the 25 apartment dwellers attending the demonstration and receiving supplies were able to be reached for the telephone survey.

A large portion of the apartment dwellers contacted during the study reported graduate education levels. A sample of such highly educated people might respond more positively to information communicated via written channels than would a less educated group. In this way, the response to the offer of free bulletins might have been much higher than would normally have been expected.

An additional limitation was the seasonal timing of the offers. When respondents to the three offers were asked if they would have preferred the offers to have been made at another time of year, many answered affirmatively. Sixtynine percent of those receiving bulletins alone stressed that earlier arrival of the bulletins would have allowed more time for planning and preparation. The lateness of the offers may accordingly have decreased the number of offer respondents container gardening in 1974.

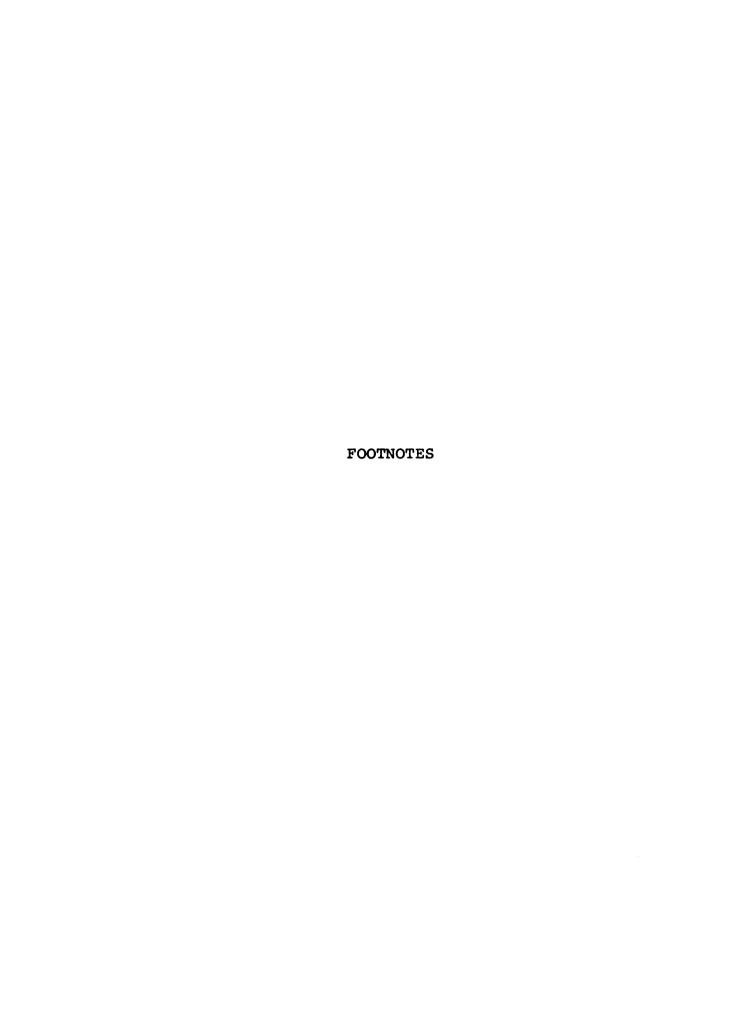
Conclusions and Recommendations

From the results of the study it was concluded that although none of the three methods tested were extremely successful in encouraging container gardening, Extension

Service bulletins were the most effective method of communicating home horticulture information to apartment dwellers. Response to the offer of free bulletins was four to eight times greater than to offers of demonstrations. The two demonstration offers attracted few people, even when free seeds, transplants, and potting soil were offered. Accordingly, due to the relatively low cost of mailed bulletin in comparison to demonstrations, bulletins are the most feasible communication method. An additional important finding was that a substantial portion of apartment dwellers appear to be unaware of the services provided by the Cooperative Extension Service.

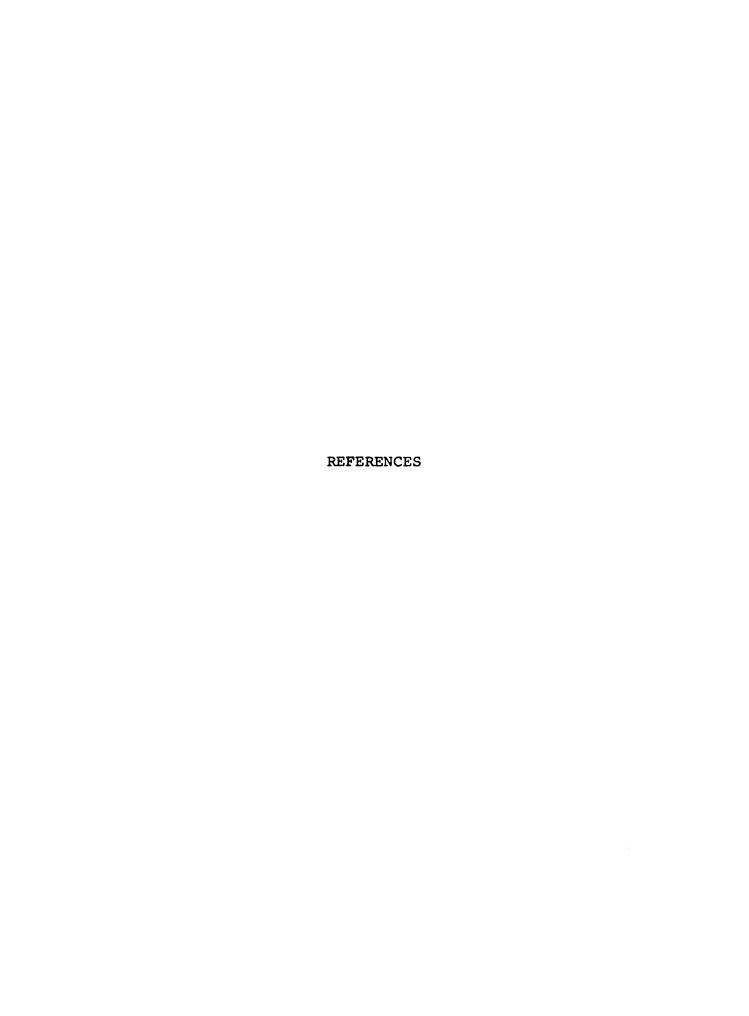
Based on these findings and an analysis of previous studies (2,3) the following recommendations are made regarding future programs of Extension for reaching and educating the urban public:

- 1. Attempts should be made to improve community awareness of the functions of and services provided by Cooperative Extension. It is likely that the effectiveness of Extension in urban areas is being adversely affected by the low profile of Extension as a community service agency.
- 2. Manpower and monies should be focused to developing a variety of high quality home horticulture publications,
 since publications were found in the study to be the most
 effective communication method.



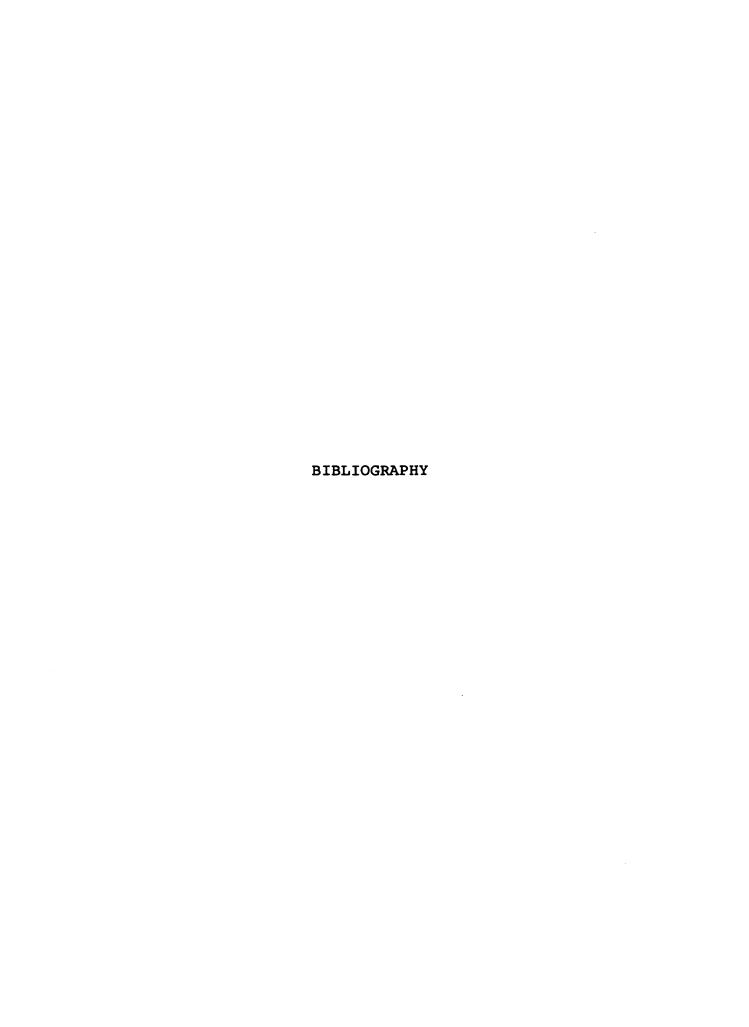
FOOTNOTES

The surveyed categories were as follows: The control group which received no information offer; Bulletin offer recipients who requested and were sent the bulletin; Bulletin offer recipients who did not request the bulletin; Demonstration offer recipients who attended a demonstration; Demonstration offer recipients who did not attend a demonstration; Demonstration with free supplies offer recipients who attended a demonstration and received supplies; Demonstration with free supplies offer recipients who did not attend a demonstration.



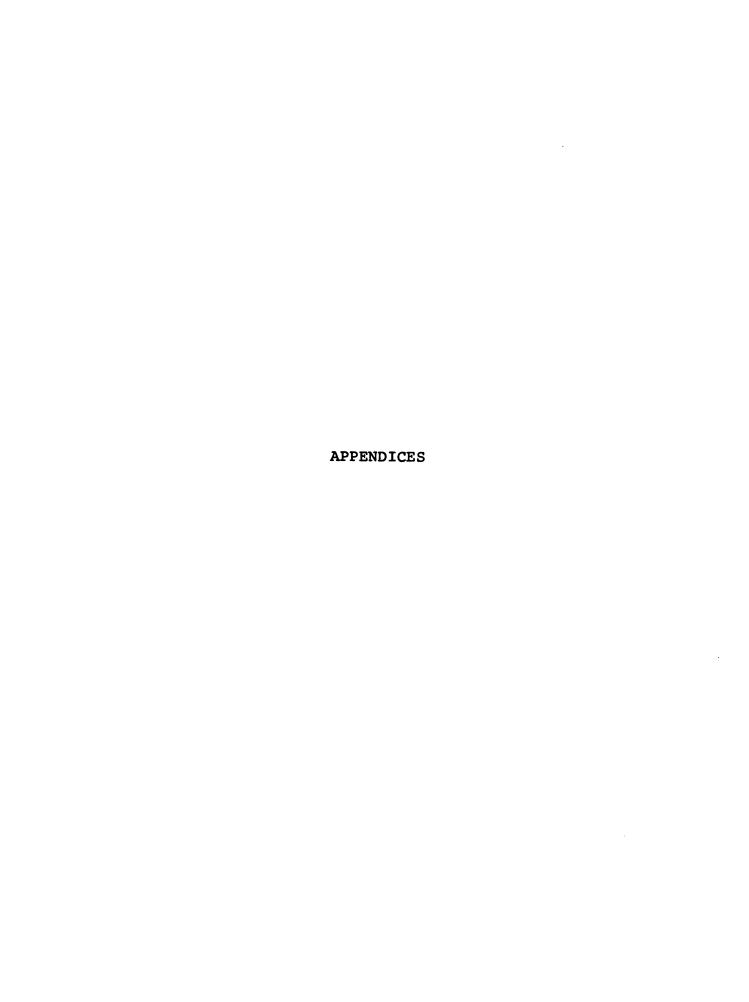
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APPENDIX A

Letters Offering Free Information on Container Gardening to Apartment Dwellers

Reply Postcards Enclosed with Letters Offering Free Information.

COOPERATIVE EXTENSION SERVICE
MICHIGAN STATE UNIVERSITY • EAST LANSING • MICHIGAN 48823

Department of Horticulture Horticulture Building

AND U.S. DEPARTMENT OF AGRICULTURE COOPERATING



Like to raise vegetables this summer in your apartment ?

CONTAINER GARDEN!

You can grow vegetables in flower pots or other containers with very little care on your balcony, porch, or other small outside area. It is easy to raise an assortment of fresh vegetables and herbs in this way, including tomatoes, lettuce, peppers, parsley, and many others.

Does this idea appeal to you? If so, we will be happy to send you a free booklet to get you started. Included in the booklet is the information you will need on what size containers to use, how to fertilize and water your plants, and the answers to many other questions you might have.

This offer is sponsored by the Cooperative Extension Service of Michigan State
University, a non-profit government agency, and is not a sales solicitation.

TO RECEIVE YOUR FREE BOOKLET, JUST RETURN THE ENCLOSED, STAMPED POSTCARD WITHIN ONE WEEK.

Sincerely,

J. Lee Taylor
Extension Specialist

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COOPERATIVE EXTENSION SERVICE
U.S. DEPARTMENT OF AGRICULTURE
Michigan State University
East Lansing, Michigan 48824

OFFICIAL BUSINESS 9-73: 500M POSTAGE AND FEES PAID U.S. DEPARTMENT OF AGRICULTURE Agr 101



AN EQUAL OPPORTUNITY EMPLOYER

Dr. L. Taylor

Department of Horticulture Horticulture Building Michigan State University East Lansing, Michigan

48824

APPENDIX B

Tabular Data from Telephone Survey Questionnaires.

Tabular Data from Telephone Survey Questionnaires

Ques	Of. Question	Offer Group 1 (Control)	Offer Group (Bulletin)	fer Group 2 (Bulletin)	Offer (Demonstratio	Offer Group 3 (Demonstration & Bulletin)	Offer (Demonstrati and Free	Offer Group 4 (Demonstration, Bulletin, and Free Supplies)
		n=35	respondents n=35	nonrespond- ents n=35	respondents n=13	nonrespond- ents n=35	respondents n=23	nonrespond- ents n=35
i	 Do you recall the offer? 	N/A*	N/A	22 yes 13 no 0 not sure	N/A	26 yes 8 no 1 not sure	N/A	25 yes 10 no 0 not sure
2. 1	<pre>2. Did you grow vege- 7 yes tables in containers? 28 no</pre>	7 yes 28 no	13 yes 22 no	5 yes 30 no	5 yes 8 no	4 yes 31 no	23 yes 0 no	3 yes 32 no
	3. If yes, did you have problems?	3 yes 4 no	4 yes 9 no	l yes 4 no	2 yes 3 no	1 yes 3 no	17 yes 6 no	1 yes 2 no
4	4. Had you ever container er gardened before?	5 yes 30 no	l yes 34 no	4 yes 31 no	l yes 12 no	4 yes 31 no	2 yes 21 no	6 yes 29 no
r,	 Do you recall receiving a booklet on container gardening? 	N/A	35 yes 0 no 0 not sure	N/A	13 yes 0 no 0 not sure	N/A	23 yes 0 no 0 not sure	N/A
9	 Did you read, leaf through or not read it? 	N/A	18 read 14 leaf 3 not read	N/A .	6 read 7 leaf 0 not read	N/A	13 read 8 leaf 2 not read	N/A

*Indicates that the question was not applicable to that group.

Offer Group 4 (Demonstration & Bulletin, and Free Supplies) respondents nonrespond-n=23 ents n=35 1 summer 1 yes 34 no N/A N/A N/A 3 late spring 7 yes 16 no 0 not sure 4 early spring 21 yes 0 no 10 yes 13 no N/A N/A 2 early spring respondents nonrespond- respondents nonrespond-n=35 ents n=35 n=13 ents n=35 N/N N/A N/A N/A 6 yes 7 no 0 not sure 6 early spring 13 yes 0 no 2 yes 11 no N/A N/A 2 yes 18 no 2 not sure l early
spring
l fall
2 winter Offer Group 2 (Bulletin) N/A N/A N/A N/A 24 yes 1 no 10 not sure 19 early spring 5 winter yes 10 yes 25 no N/A N/A 32 Offer Group 1 (Control) n=35 N/A N/A N/A N/A N/A N/A Would you have preferred the offer at another time of year? to respond if the offer was at Would you have been more likely Did friends or neighbors read your booklet? 7. Was it easy to understand? 10. If so, when? another time 12. If so, when? Question 11. **.** 6

CONTINUED

21 yes 13 no 1 not sure 4 yes 17 no 14 not sure 25 yes 10 no 0 not sure 13 yes 20 no 2 not sure respondents nonrespondmean=35 Offer Group 4 11 yes 24 no 8 yes 14 no 1 not sure sure sure gure 11 yes 10 no 2 not 17 yes 5 no 1 not mean=32 21 yes 0 no 2 not 10 p 17 yes 6 no no not sure 17 yes 18 no 0 not sure 20 yes 15 no 0 not sure no not sure nonrespondmean=32 12 yes 23 no 3 yes 19 no 13 not 15 yes 18 no 2 not Offer Group 3 9 yes 3 no 1 not sure 9 yes 3 no 1 not sure no not sure sure respondents nonrespond- respondents mean=30 0 no 2 not 7 yes 6 no yes 11 yes 400 14 yes 21 no 0 not sure 3 yes 26 no 6 not sure 14 yes 19 no 2 not sure 1 not sure mean=35 12 yes 23 no 16 yes 18 no Offer Group 2 16 yes 19 no 0 not sure 17 yes 18 not sure no 6 no not sure 13 not sure 9 no 2 not sure 19 yes 16 no 16 yes 24 yes 19 yes 2 11 no 5 not sure 0 not sure yes no not sure Offer Group 1 mean=34 5 yes 19 no 11 not 19 yes 16 no 17 yes 18 no 25 10 10 Did you have another Do you plan to conany of the services source of infor-mation on contain-er gardening? tainer garden next Do your friends or neighbors con-tainer garden? tension Service? How old are you? Are you aware of provided by the Cooperative Exflowers in con-Did you raise tainers this summer? year? Question 18. 17. 13. 14. 15. 16.

CONTINUED

0<h.S. 3 H.S. 8 college 10 coll. deg. 14 graduate nonrespond-ents Offer Group 4 9 yes 26 no 2<H.S. 0 H.S. 3 college 5 coll. de. 1 13 graduate Offer Group 2 Offer Group 3 Offer respondents nonrespond- respondents nonrespond- respondents ents 7 yes 16 no 0<H.S. 3 H.S. 11 college 6 coll. deg. 15 graduate 1 9 yes 26 no 0<h.S. 0 H.S. 1 college 3 coll. deg. 9 graduate 5 yes 8 no 4<H.S. 9 H.S. 8 college 5 coll. de. 9 graduate yes 10 0<H.S. 2<H.S. 6 H.S. 3 H.S. 10 college 10 college 7 col. de. 6 col. deg. 12 graduate 14 graduate 13 yes 22 no Offer Group 1 9 yes 20 no 19. What is your level
 of education? 20. Are you presently in school? Question

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