#### **DOCUMENT-RESUME**

ED 377 862

AUTHOR Zimmerman, Claudia
TITLE The Effect of a New Bookmobile on Circulation

The Effect of a New Bookmobile on Circulation in the

IR 055 307

Holmes County District Public Library: An Ex Post

Facto Correlational Study.

PUB DATE Sep 94

NOTE 36p.; Master's Research Paper, Kent State

University.

PUB TYPE Dissertations/Theses - Undetermined (040)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS \*Bookmobiles; Budgeting; Correlation; Decision

Making; \*Library Circulation; Library Extension; Library Planning; \*Mobile Educational Services; Needs Assessment; \*Outreach Programs; \*Program Evaluation;

\*Public Libraries; User Needs (Information)

IDENTIFIERS \*Ohio (Holmes County)

#### ABSTRACT

The study of the effect of a new bookmobile on circulation and public use should give public libraries some data on which to base a decision about purchasing a new bookmobile or adding bookmobile services. Bookmobile circulation data and patron data was collected during June, July, and August of 1994 from the Holmes County (Ohio) District Public Library's new bookmobile and compared it to statistics gathered during the same months in 1993 from the system's now retired 1979 Gertenslager bookmobile. Bookmobile use showed an average increase of 27.37% for the three-month period, and patron visits to the library increased an average of 25%. The increase in circulation and patron visits provides encouraging data to those libraries seeking to upgrade their current bookmobiles or start that service if none currently exists if a needs assessment conducted by the library shows a population that would benefit from a mobile library service. Four appendixes contain the bookmobile schedules for both years and two comparison charts. (Contains 25 references.) (SLD)

\*



U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or dispanization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

# THE EFFECT OF A NEW BOOKMOBILE ON CIRCULATION IN THE HOLMES COUNTY DISTRICT PUBLIC LIBRARY AN EX POST FACTO CORRELATIONAL STUDY

A Master's Research Paper submitted to the Kent State University School of Library Science

by

Claudia Zimmerman

September 1994

LSCI 61398

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R. DuMont

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) "



## **ABSTRACT**

In order for libraries to effectively determine whether or not the purchase of a new bookmobile will rejuvenate that service, or perhaps whether a library not currently offering a mobile service to its underserved population needs justification for engaging in that service, literature is limited. The study of the effect of a new bookmobile on circulation and patron use should give public libraries some data on which to base this decision. The researcher collected bookmobile circulation and patron data during June, July, and August of 1994 from the Holmes County District Public Library's new bookmobile and compared it statistics gathered during June, July, and August of 1993 from the system's now retired 1979 Gerstenslager bookmobile. The increase in circulation and patron visits gives evidence to those libraries seeking data that would encourage them to either upgrade their current bookmobile, or start that service if none currently exists and needs assessment shows a population that would benefit from a mobile library service.



Master's Research Paper by

Claudia L. Zimmerman

B.A., Malone College, 1970

M.L.S., Kent State University, 1994

	Approved by
Adviser	Date



## TABLE OF CONTENTS

ABSTRACT	l
CHAPTER	
1. INTRODUCTION	1
Background of the Study	3
Need for the Study	3
Purpose of the Study	4
Definitions of Terms	4
Limitations of the Study	5
2. REVIEW OF THE LITERATURE	7
3. METHODOLOGY	13
Population	13
Materials and Apparatus	13
Procedures and Design	14
4. DATA ANALYSIS	15
Usage Analysis	15
Patron Visit Analysis	17
Significance	18
5. SUMMARY AND CONCLUSIONS	20
For Further Research	2
APPENDIX	
APPENDIX A: HOLMES COUNTY PUBLIC LIBRARY 1993 SUMMER BOOKMOBII = SCHEDULE	2



	APPENDIX B: HOLMES COUNTY PUBLIC LIBRARY 1994 SUMMER BOOKMOBILE SCHEDULE	25
	APPENDIX C: COMPARISON OF JUNE, JULY, AND AUGUST CIRCULATION OF THE HOLMES COUNTY PUBLIC LIBRARY'S MAIN LIBRARY AND BOOKMOBILE FOR 1993 AND 1994	
	APPENDIX D: COMPARISON OF PATRON VISITS TO THE HOLMES COUN PUBLIC LIBRARY BOOKMOBILE BETWEEN 1993 AND 1994	ΤY
RIRI I	GRAPHY	28



#### CHAPTER I.

#### INTRODUCTION

Bookmobiles had their beginnings in the late nineteenth century; as "book wagons" they provided books to people living in remote, rural areas, isolated from the conveniences of urban living. Mary Titcomb of Washington County, Hagerstown, Maryland, and Melvil Dewey were among the early supporters of taking the books to the people who were not able to visit a public library building. It was in 1918, that in Hebbing, Minnesota, the first bookbus was purchased for a cost of \$7,000. It was built by Greyhound Bus Lines; it was fifteen feet long by six and one half feet wide. It was over six feet high and was heated by a coal burner. The popularity and news about the vehicle set off the development of modern bookmobiles.

For many years the "bookbus" service was primarily used in rural areas. Eventually, urban libraries used this concept to test areas of a city that could potentially be branch sites. However, its service to rural areas has remained a service that is strongly desired and supported by its patrons. John Philip has emphasized the use of the bookmobile as a tool to reach isolated people and "those not culturally disposed to seeking out the library for information; recreation, and education." The Amish of Holmes County, Ohio, are such a group. The Amish came to the rich farmlands of Holmes County in 1809. This

In <u>The Book Stops Here: New Directions in Bookmobile Service</u>, ed. by Catherine Suyak Alloway, (Metuchen: N.J.: Scarecrow, 1990), 4.



Barb VanBrimmer, "History of Mobile Service," In <u>The Book Stops Here: New Directions in Bookmobile Service</u>, ed. by Catherine Suyak Alloway, (Metuchen: N.J.: Scarecrow, 1990), 20.
 John J. Phillip1, "Bookmobile Service: Justification to the Nonbellever (Or to the Weak of Heart),"

settlement of simple, utilitarian, and strongly religious people remained and flourished in this county.<sup>3</sup> Estimates of this large settlement are in the neighborhood of thirteen thousand (Amish often do not participate in census counts for religious reasons and thus make an exact count difficult). The Amish do not use automobiles, and shun electricity and its modern conveniences. Because they are primarily farmers, most live in very remote areas of the county that are not even served with electricity. The Amish farms are dotted along the dirt and gravel roads of the county. Their primary means of transportation is horse and buggy. This makes trips into "town" for reading material impractical.

The Holmes County Public Library's bookmobile service has met the reading needs of this culturally unique and isolated group since 1958. At that time the library was one of five in Ohio to receive a bookmobile provided by federal funds at no cost to the citizens of the county. Today, throughout the year, it serves thirty-eight Amish parochial schools (one room, private schools), five Amish public schools (schools built and run by the East Holmes Local School District for the Amish), and three public schools with a blend of Amish and "non-Amish" children. The bookmobile also maintains forty-two stops serving the rural Amish community. The bookmobile circulates approximately 71,300 books each year to this rural population. This service comprises thirty-eight percent of the total system's circulation. Serving this community becomes even more unique when considering the fact that without electricity, radios, and television, reading is a primary recreational activity.



<sup>&</sup>lt;sup>3</sup> Gayle Patton, "Bookmobile Service and the Amish Community in Holmes County, Ohio: a Case Study" (M L.S. research paper, Kent State University, 1993), 2.

<sup>&</sup>lt;sup>4</sup> The State Library of Ohio, <u>Statistics of Ohio Libraries 1992</u>, (Columbus, Ohio, 1992), 64.

It was because of this support by the Amish community that, in 1992, the Board of Trustees of the Holmes County Public Library became committed to the replacement of its 1979 Gerstenslager bookmobile. One fact that became very clear was that the cost of the vehicles had risen sharply. The Gerstenslager had cost \$35,000 when purchased in 1979. Estimates were returned with a minimal cost of \$87,000. The board, in the meantime, became committed to the idea of an Americans with Disabilities Act approved wheelchair lift. It was also decided to wire the vehicle for a copier, cellular phone, computers, refrigerator, microwave, air conditioning, and electric heat. This pushed cost estimates into the \$90,000 to \$102,000 range. The new Blue Bird vehicle's final cost was \$97,500 and the library received its new bookmobile on March 3, 1994.

## Background of the Study

Russ Topping reiterates the expense and expertise that the purchase of a bookmobile requires.

Though a bookmobile can cost as much as a branch library and involves a very similar construction process, and though librarians are not trained in writing specifications for trucks any more than they are in designing buildings, there is little literature available.<sup>5</sup>

It is for these reasons that many libraries are slow to replace or add to their bookmobile service. However, in the case of the Holmes County Public Library, this service is a core component of serving its rural, Amish population. Thus, there was strong impetus for upgrading its service.



<sup>5</sup> Russ Topping, "How to Buy a Bookmobile," Wilson Library Bulletin 66 (May 1992): 38.

4

#### Need for the Study

With budgetary concerns being important for libraries across the United States, it is mandatory that resources be used to reach the greatest number of patrons possible. If a library system is in the position of determining whether or not to continue its bookmobile service with the purchase of a new vehicle, bookmobile will change circulation and patronage. There is little literature that suggests that this change is either positive or negative; therefore, a study of the effect of a new bookmobile should provide information in an area where very little is currently available.

## Purpose of the Study

The purpose of this study is to determine whether the use of a new bookmobile by the residents of Holmes County increases after the retirement of its former bookmobile. In considering this problem four questions will be addressed. What is the frequency of bookmobile use by the residents of Holmes County after the arrival of the new bookmobile? What was the frequency of bookmobile use by the residents of Holmes County with the old bookmobile? Is there an increase in usage of the bookmobile by the residents of Holmes County? If so, how does the increase in bookmobile circulation compare with increases in the Holmes County District Public Library system's main library over the same time period.

#### **Definitions of Terms**

For the purpose of this study, several terms must be defined in the context in which they will be used by the researcher.

"Residents of Holmes County, Ohio" is the identified population within the



service area of the Holmes County District Public Library. The service district of the library is comprised primarily of a rural dwelling population which consists of the "world's largest settlement of Amish," a religious sect which shuns modern conveniences in order to live a simplistic life.

Bookmobile patrons are those people who choose to avail themselves to the mobile library (bookmobile), its services and collection.

A library patron is considered to be a person using a fixed library facility in selecting his/her reading material.

Bookmobile use, in this research, will be defined as those books selected for checkout by the patrons of the bookmobile.

Library system use is considered to be the actual checking out of books at an outlet of the Holmes County District Public Library.

For purposes of this study, the "underserved population" is the rural Amish population of Holmes County whose access to a fixed facility is limited either by distance or availability of transportation to a fixed library facility.

The "Summer Bookmobile Schedule" is that schedule of stops and their rotation used by the Holmes County District Public Library's bookmobile during both the summer of 1993, and the summer of 1994. It consists of a fifteen day rotation of stops in the remote areas of the county where the underserved population has the opportunity to select books from the bookmobile.

The 1979 Gerstenslager bookmobile is referred to as the "retired bookmobile."

The 1994 Blue Bird is the "new bookmobile."

## Limitations of this Study

One limitation of this study is that only circulation of print materials will be considered as "use" by the residents of Holmes County. The new bookmobile



has some new services included that could not be managed effectively with the former bookmobile. Examples of the new services include a photocopier and a cellular phone from which reference questions and interlibrary loans are transacted.

Another limitation is that this study is conducted during the summer schedule of 1994. This schedule was chosen because it is nearly identical to the summer of 1993. The only changes that will be occurring are in stop order during a given day's run; or, in a couple of cases, the length of time at the stop will increase or decrease slightly when usage during the 1993 summer schedule indicated a need for change to better serve the clients of the bookmobile. Over a longer period of time, the increase may be shown to be more significant because in the rural Amish population of Holmes County, reading must be done around the more immediate work of the farm.



#### CHAPTER II.

#### REVIEW OF THE LITERATURE

The literature review was completed by searching online catalogs and databases. The Online Public Access Catalogs (OPACS) used included Kent State University's Catalyst, Wayne County Public Library's access to Clevenet, and the CLSI system used by the Holmes County District Public Library as a part of the computer rescurces sharing group of the Mid Ohio Library Organization. Databases included LISA, ERIC, and Library Literature available in the Kent State University's School of Library and Information Science's computer laboratory.

In searching a variety of sources, numerous articles related to bookmobiles were found. Much of this initial literature search provided the researcher with background information related to the history of bookmobile service in the United States and the continued viability of this service in reaching the underserved population of a library's service area. Lynn Hunter states that "Public libraries have a responsibility to serve their entire community - not just those people who can readily walk through the doors."6

Bernard Vavrek, of the Center for the Study of Rural Librarianship at Clarion University of Pennsylvania, hypothesized in his <u>Bookmobile User Survey</u> (1992) that:

Aside from books-by-mail programs, the bookmobile undoubtedly represents the most direct and convenient service currently being offered



<sup>6</sup> Lynn S. Hunter, "Why Bookmobile Service? An Administrator's View," New Jersey Libraries 25 (Summer 1992): 3

by public libraries.7

The conclusion of the survey bore out his hypothesis with 66.6% of respondents (1,738) replying "The bookmobile is convenient for me."8

The Book Stops Here: New Directions in Bookmobile Service, edited by Catherine Suyak Alloway (1990), provides numerous essays by a variety of experienced "bookmobile experts" centered around four distinct sections.

These sections include: "In Defense of Bookmobiles," "Mobile Service Administration," "Keep On Rollin' --Mobile Vehicles and Equipment," and "Beyond the Bookmobile--Service Plus."

In her introduction, Alloway quotes Paul Little, Chief of Planning Services of the Metropolitan Library System of Oklahoma City, Oklahoma, by relating the results of library user surveys. Surveys conducted over several users underscore the bookmobile's service to the community: "...the bookmobile is consistently one of the most popular and highly rated services of the library."9

John Philip adds strength to the position that bookmobile users are loyal to that service. "Bookmobile Service: Justification to the Nonbeliever (Or to the Weak of Heart)" relates results of patron surveys done by the State Library of Ohio that show that thirty to fifty percent of (Bookmobile) patrons "have reasonable access to fixed library facilities but still choose the bookmobile." Furthermore, he states that bookmobiles remove barriers to library access.



<sup>7</sup> Bernard F. Vavrek, "Asking the Clients: Results of a National Bookmobile Survey," <u>Wilson Library Bulletin</u> 66 (May 1992): 35.

<sup>8</sup> Ibid., 37.

<sup>&</sup>lt;sup>9</sup> Catherine Suyak Al<sup>1</sup> way, <u>The Book Stops Here: New Directions in Bookmobile Service</u>, (Metuchen, N.J.: Scurecrow, 1990), ix.

<sup>10</sup> Philip, "Bookmobile Service: Justification to the Nonbeliever (Or to the Weak of Heart),", 2.

Those may include physical, psychological, and social barriers. 11

Barb VanBrimmer's "History of Mobile Services" describes the development of mobile libraries from their beginnings on February 8, 1893 by Melville Dewey and his "Traveling Collection" in New York on through the spread of the "Book Wagon" in Hagerstown, Maryland, in 1904 by Mary Titcomb and through the present. In December, 1947, the United States Office of Education reported 377 bookmobile units in operation in the United States; that represented a growth of seventy-seven units in three years. This increase caused support for federal legislation for additional governmental support. "It was felt that bookmobiles would likely play an important role in demonstrating the value of public library service, an assumption that later proved correct. 12 VanBrimmer concludes in her essay that although technology has decreased rural isolation, the bookmobile has found new audiences and has maintained its personal, door to door service, and provides a level of outreach that cannot be matched by any permanent facility. 13

Bernard Vavrek has also found that bookmobile service today is affected by several factors. The rurality of the community, the socio-economic characteristics of the community, the type of bookmobile stop, the dynamics of the collection, the enthusiasm of the staff, and the conception of the bookmobile are all factors that shape the role that a mobile library plays in rural America.<sup>14</sup>

In two national surveys done on bookn obile service by libraries with



<sup>11</sup> lbid., 3.

<sup>12</sup> VanBrimmer, "History of Mobile Services", 27.

<sup>13</sup> lbid., 29.

<sup>14</sup> Bernard Vavrek, "What is Happening Today in Rural Bookmobile Service," in <u>The Rural Bookmobile</u>: Going Strong After Eighty Years Conference Proceedings Held in Columbus, Ohio 19-21, June 1985, ed. Bernard Vavrek and Mary Lou Pratt (Clarion University of Pennsylvania: The Center for the Study of Rural Librarianshlp, College of Library Science, in cooperation with the State Library of Ohio, 1986), 20.

bookmobiles, the Center for the Study of Rural Librarianship, College of Library Science, Clarion University of Pennsylvania in 1979 and 1984 noted interesting statistics relating to the number of people served per year and the circulation per year by bookmobile service. Between 1979 and 1984 the typical bookmobile had seen an increase of two per cent in the number of rural people served by the bookmobile. That increase showed an average of 12,000 people per year were served by a bookmobile. But during that same five year period actual book circulation was down three thousand books per year. The 1379 survey showed that on the average 40,000 books per year were circulated from bookmobiles; in 1984, the number was down to 37,000 books circulated per year.

A third survey was done in 1986, again surveying libraries with bookmobile service. The 1986 National Survey and the 1984 National survey showed that circulating books through bookmobile services was not only more cost-effective than circulating them through a fixed facility, but also was becoming even less costly than circulating books through a main library. In 1984, the survey showed that circulating books from a bookmobile cost \$1.19 per book; from a main library the cost was \$2.19.16 The 1986 replication of that survey showed that circulating books from a bookmobile was up to \$1.48 per book, but during that same period the cost of circulating a book from a main library rose to \$2.74.17 This meant that in 1984 books circulated from a bookmobile cost libraries one dollar less than from a main library; by 1986, the



<sup>15</sup> Vavrek, "What Is Happening Today in Rural Bookmobile Service," 29. 16 lbid., 30.

<sup>17</sup> Bernard Vavrek, "Quality of Rural Bookmobile Service: Research Findings," In <u>The Rural Bookmobile: Quality as a Basic Ingredient Conference Proceedings The State Library of Ohlo's Second Annual Rural Bookmobile Conference held In Columbus, Ohio 18-20 June 1986. ed. Bernard Vavrek and Mary Lou Pratt (Clarlon University of Pennsylvania: The Center for the Study of Rural Librarlanship in cooperation with the State Library of Ohio, 1987), 27.</u>

savings had grown to one dollar and twenty-eight cents per book.

In support of bookmobile services, Bernard Vavrek has found there is a genuine belief in the value of bookmobile service, a real belief that if there wasn't a bookmobile, there wouldn't be anything else. 18

He has also found that among bookmobile staff that

there is a sense that the bookmobile is not just an instrument, not just a unit, not just a symbol, but it's really the library Itself.<sup>19</sup>

In strengthening that position, the bookmobile is important to its users, Vavrek conducted a 1986 National Bookmobile User Survey and found that

the bookmobile has a vitality much beyond its symbolism much beyond its physical form in relation to what it means to people.<sup>20</sup>

In fact the question which asked the level of satisfaction by users found that ninety-six percent indicate they are very satisfied.<sup>21</sup>

In searching the literature to find supportive evidence for the researcher's hypothesis that a new bookmobile would increase circulation and patron usage, the researcher found no literature directly related to bookmobiles and circulation. However, an ERIC search surfaced a report done in 1984, at the University of Oklahoma. The university opened an addition to its main library and added its first automated system at the same time. A user attitude survey was conducted. Among the facts that this report revealed were three that related to the researcher's hypothesis. Circulation decreased during the first year after the opening by ten percent; however, after that initial decrease an increased circulation of twelve percent was recorded. Secondly, in house use



<sup>18</sup> Vavrek, "What Is Happening Today in Rural Bookmobile Service," 31.

<sup>19</sup> Ibid., 31.

<sup>20</sup> Vavrek, "Quality of Rural Bookmobile Service: Research Findings," 21.

<sup>21</sup> lbld., 32.

was up thirty-three percent. Initially the increase was related only to the new facility; later it was concluded that both the building and the automated system aided that rise in use. Also noted was a five percent increase in the number of patrons using the library. Again, both facility and automation were credited for the rise.<sup>22</sup>

The researcher concludes from this initial review of the literature that bookmobile service is a viable, effective, efficient, and convenient service of the rural public library. Though finding literature directly related to the effect of a new bookmobile is not available, the research report from the University of Oklahoma suggests a possible correlation between facility, patronage, and circulation.



<sup>22</sup> Pat Weaver-Meyers; Jim Winters, <u>Changes in Facilities and Services and Their Effect on User Attitudes</u>, (Report of a user survey, University of Oklahoma, 1984) ERIC, ED 272 218, 8-10.

#### CHAPTER III.

#### **METHODOLOGY**

In this study of the usage of the new bookmobile compared/contrasted to the usage of the Holmes County District Public Library's retired bookmobile and the entire system an ex post facto correlational study was used. The independent variable is the new bookmobile. The dependent variable is the use of the bookmobile and how it is affected by the introduction of the new bookmobile.

## **POPULATION**

This study was conducted within the service area of the Holmes County District Public Library. This library was chosen because of its recent purchase and arrival of its new bookmobile. Another reason for this choice was the strong history of bookmobile patronage by the strongly rural service area.

#### MATERIALS AND APPARATUS

In June of 1993, after a needs assessment, development of specifications, vendor visits and presentations, the Holmes County District Public Library's Board of Trustees voted to order a 1994 Blue Bird chassis and have it upfitted to the system's specific needs. This included an Americans with Disabilities Act approved wheelchair lift. The vehicle was wired for automation (which will not occur for another year), and a cellular phone; also included was



a photocopier for client use. A microwave and refrigerator were added for staff convenience (the bookmobile is often out in areas without electricity); air conditioning was added for comfort and to protect the materials on board from humidity damage. The library took delivery of the new bookmobile on March 3, 1994.

## PROCEDURES AND DESIGN

Book circulation and patron visit statistics were collected during June, July, and August of 1994. These statistics were contrasted with the same circulation period during 1993. These three months were used because the stop locations, rotations, and circulation periods are nearly identical between the two summers. All of the stop locations used in this study occured on both the 1993 summer schedule and the 1994 summer schedule. The National Bookmobile Guidelines 1992 are used in determining both the amount of time at a location as well as the amount of book circulation considered to make a successful stop. According to those guidelines, a stop should be no less than twenty minutes and should circulate at least forty to fifty books per hour.<sup>23</sup> To note the significance of that increase, the new bookmobile's change in circulation was compared to the circulation of the Holmes County District Public Library during June, July, and August of 1993 and 1994.



<sup>23</sup> National Bookmobile Guidelines 1992. (Columbus, Ohio: State Library of Ohio, 1992), 3.

#### CHAPTER IV.

#### DATA ANALYSIS

In studying the circulation and patron visits of the bookmobile, data was kept on index cards with the location of the stop, the date of each visit, the number of patrons per visit, and the circulation was counted as juvenile, adult, and the total for the stop (a Gaylord charger is used for checking out). This system was used in both 1993 and 1994. The main library tallies its circulation with a CLSI automated system. That system separates adult and juvenile circulation, but it does not tally the number of patrons doing various transactions. For that reason the change in the number of patron visits was compared only from the 1993 Summer Bookmobile Schedule (Appendix A) to the 1994 Summer Bookmobile Schedule (Appendix B).

#### <u>Usage Analysis</u>

In the proposal stage of this research, it was determined that if the increases or decreases in bookmobile circulation were greater than that of the main library between 1993 and 1994, then the difference would be considered significant. It was also determined that if there was a greater increase between the June, July, and August, 1994 new bookmobile circulation and the same circulation period at the main library it would prove that the new bookmobile did indeed attract greater use (Appendix C).

When comparing the June increases in circulation, it was discovered that overall the main library had an increase of 8.7 percent from 1993 to 1994.



The bookmobile in turn had a total gain of 29.91 percent during the comparison period. There was a 21.21 percent difference when the new bookmobile's use was compared to the main library's use. Therefore, the June circulation of the new bookmobile substantiated the research question of a new bookmobile raising bookmobile use.

During July, 1994, the main library and the new bookmobile both exhibited growth over July, 1993. The circulation at the main library increased 9.02 percent. The new bookmobile's circulation increased 25.83 percent over the July, 1993 circulation with the old Gerstenslager Bookmobile. The 16.81 percent difference between the main library's July increase and the new bookmobile's increase, for the second month of the experiment, proved the new bookmobile was substantially increasing the mobile service's use.

August, 1994, provided interesting data. The main library experienced a 31.5 percent increase in circulation over the same month in 1993. The new bookmobile also had a large increase in circulation over the 1993 circulation period with the 1979 Gerstenslager bookmobile. Use was up 26.38 percent. While the main library's circulation was larger, the difference between the main and the new bookmobile's increases was less than five percent. Therefore, comparing the main library's and the new bookmobile's circulation indicated only that both facilities had substantial increases in August 1994 circulation over the same period in 1993. Therefore, the bookmobile's increase was significant when compared to that of the old bookmobile (1993).

An interesting note to the usage data was that the bookmobile was only out at stops Monday through Thursday during the summer and then only for no more than seven and a half hours per day. The main library remained open six



days per week for eleven hours per day, Monday through Thursday; on Fridays the main library is open for nine hours, and on Saturday it is open for eight hours. Another interesting note to the summer bookmobile usage data is that, on its last Thursday in July, the new bookmobile circulated one thousand books in one day. That was a one day usage record for the service.

## Patron Visit Analysis

To determine frequency of use by the underserved rural Amish of Holmes County, the bookmobile staff counts the number of patrons per visit per stop. This has been a routine used for several years in determining whether to lengthen, shorten, or possibly eliminate or split stops. Therefore, it was logical to compare the data gathered during the 1993 Summer Bookmobile Schedule to the 1994 Summer Bookmobile Schedule with the new bookmobile in use. The use of this data determined whether or not the same people were merely taking out more books, or whether there was an actual increase in the number of patrons visiting and using the new bookmobile.

In June, 1993, the old bookmobile was visited by a total of eight hundred and forty-three patrons. During that same period in 1994, one thousand and sixty-eight patron visits were recorded. This was an increase of 26 percent with the new bookmobile.

During July, 1993, the Gerstenslager bookmobile had one thousand and seven patron visits. July, 1994, brought one thousand two hundred and forty-one patrons to the new bookmobile. The gain was twenty-three percent over the old bookmobile's July statistic.

August is traditionally the slowest of the summer months. Several factors play into this. The bookmobile summer schedule continues past the opening



date of many Amish Parochial Schools (usually about August 15th); therefore, many school aged patrons (seven to sixteen years old) are lost until the fall schedule begins. Another important factor involves the beginning of the harvest season on both Amish and non-Amish farms, but with the Amish, who do not use modern farm equipment, there is little or no time for pleasure reading until the first frost. For the non-Amish, rural patron, the county agricultural fair is held during the middle of August. In a rural county like Holmes County, this means many entire families spend the week at the fairgrounds tending animals in addition to maintaining essential farm work. These factors all have an effect on patron visits to the bookmobile during August. This year, with the new bookmobile, patron visits rose twenty-six percent. During August, 1993, the Gerstenslager Bookmobile was visited seven hundred and forty-eight times by patrons. During August, 1994, the new Bluebird Bookmobile brought nine hundred and eighty-five patrons into its doors.

## <u>SIGNIFICANCE</u>

The increase in bookmobile circulation and patron visits from June, July, and August of 1993, to 1994. underscores the importance upgrading a bookmobile can play in strengthening bookmobile circulation. Overall, 1994 had a twenty- five percent increase in the number of patron visits. During June, July, and August of 1994, three thousand two hundred and ninety-four visits were made by the rural underserved population that the Holmes County Bookmobile serves. This can be compared to a total of two thousand six hundred and thirty-seven visits made to the old bookmobile by these same rural, underserved persons. To further the significance of the increase, it should be noted that the schedules included the same stops. In almost all cases these



stops fell on the same day of the week, same time of day, and same order during both 1993 and 1994. These statistics should encourage libraries, whose bookmobile program needs a "shot in the arm," to make the strong commitment to its undeserved population that a new bookmobile brings.



### CHAPTER V.

#### SUMMARY AND CONCLUSIONS

Although the Holmes County Public Library has a strong tradition of support in its rural bookmobile service to its underserved population, the Bot d of Trustees, the administration, and the staff are committed to the idea that a new bookmobile would attract new users. It is designed to meet ADA standards of accessibility and upfitted to allow service to be upgraded as new technologies are made available. The new bookmobile is equipped with a cellular phone to enhance the staff's ability to conduct reference transactions and for added staff safety. It is wired for computers which will be added in 1995, to help the staff serve the patrons better with quicker transactions. An interesting method of obtaining "community ownership" occurred when the library announced a graphics contest open to all residents of Holmes County. The winner was a fifth grader whose vision was that of a child's view of a rain forest and whose theme was "Let Your Imagination Grow...READ!" When the graphics were completed, there was some concern among the staff that these graphics might undermine their efforts of trying to gain patrons among the adult Amish population. Out of this fear grew the researcher's decision to investigate whether or not a new bookmobile would attract more patrons and increase usage significantly.

Whether or not a new bookmobile would increase use and patron visits was tested. The statistics showed a three month average increase in use of 27.37 percent (29.91%+25.83%+26.83%/3). The average increase in patron



visits was 25 percent (26%+23%+26%/3). The fear of losing adult use proved unfounded when the data was tallied. Adult use increased 75.15 percent during the three month period while juvenile use increased only 12.53 percent.

The similarity in the structure of the 1993 and 1994 summer bookmobile schedules strengthens the conclusion that even if no other changes in service are made a new bookmobile will increase both patron visits and patron usage. A director or supervisor of bookmobile services should be able to take the data gathered and analyzed in this study and use this information to support the decision to upgrade its mobile service with a new bookmobile. The dividends received by a library system when its new bookmobile is on the road are felt immediately in statistics. But, more importantly, people who have never used either a bookmobile or a library are attracted to the vehicle and once there seem to become repeat patrons and, therefore, improve the quality of their own lives.

## For Further Research

The researcher believes that bookmobile service is again on the rise. Because of the many demographic factors in today's society, people are seeking the most convenient library service. Whether these people live in cities, suburbia, or rural areas, the bookmobile has the capability of meeting that need. It is a "personal," neighborhood service to the young, to the disabled, to the elderly, and to the isolated. This study underscored what a new bookmobile can do in a rural community. Similar studies should be undertaken in suburban and urban areas. Such replication in different settings would add support to libraries that want to reach the greatest number of persons in their service



areas.

Other related research areas could involve use of a fully ADA accessible bookmobile by the disabled population. Is it "cost effective" to buy the additional bus length and spend the extra money for a wheelchair lift? Do libraries need to change their schedules to allow this underserved population to use such a vehicle. What other improvements could be made to the interior of a new bookmobile to make it barrier free to this population? These are questions that could be studied by actual use and surveying those libraries that have gone that service route.

Bookmobiles offer the library the greatest flexibility in serving many different population groups. It behooves a library to consider whom it is not reaching when it is in the market for upgrading its bookmobile.



# <u>APPENDIX</u>



## APPENDIX A

······································	LIBRARY 1993 SUMMER BOOKN						
OWNSHIP	LOCATION	TIME SLOT	WEEKDAY	1ST DATE	2ND DATE	3RD DATE	4TH DATE
ALTCREEK	BOONTOWN SPRAYER	8:45-10:00	MONDAY	JUNE 7	JUNE 28	JULY 19	AUG. 9
ALTCREEK	CR229 ANDREW E. RABE		MONDAY	JUNE 7	JUNE 28		AUG. 9
ALTCREEK	FRYBURG	1:45-2:45	MONDAY	JUNE 7	JUNE 28		AUG. 9
ALTCREEK	BOWMAN'S TRACTOR	12:45-1:30	MONDAY	JUNE 7	JUNE 28	JULY 19	AUG. 9
BERLIN	GINGERICH TRACTOR	9:30-10:30	TUESDAY	JUNE 8	JUNE 29	JULY 20	AUG. 10
CLARK		11:00-12:00	TUESDAY	JUNE 8	JUNE 29	JULY 20	AUG. 10
CLARK	······································	1:00-2:00	TUESDAY	JUNE 8	JUNE 29	JULY 20	AUG. 10
CLARK	······································	2:15-3:00	TUESDAY	JUNE 8	JUNE 29	JULY 20	AUG. 10
CLARK	SR 557 & TR 190	9:00-9:30	WEDNESDAY	JUNE 9	•••••••••	JULY 21	·•··········
CLARK	······································	9:45-10:15	•		JUNE 30	***************************************	AUG. 11
CLARK		<u> </u>	WEDNESDAY	JUNE 9	JUNE 30	JULY 21	AUG. 11
MECHANIC	TR 188 M. HERSHBERGE		WEDNESDAY	JUNE 9	JUNE 30	JULY 21	AUG. 11
***************************************	BECKS MILLS	11:30-12:30	··••··································	JUNE 9	JUNE 30	JULY 21	AUG. 11
Berlin Richland		1:30-2:30	WEDNESDAY	JUNE 9	JUNE 30	JULY 21	AUG. 11
NICHLAND	GLENMONT SR. CTR.	10:00-11:00	THURSDAY	JUNE 10	JULY 1	JULY 22	AUG. 12
MAINER CREEK	IN'HOUSE	8-4	FRIDAY	JUNE 11	JULY 2	JULY 23	AUG. 13
WALNUT CREEK	US 62 ALPINE ALPA	9:15-10:00	MONDAY	JUNE 14		JULY 26	AUG. 16
WALNUT CREEK	CR168 GOSPEL LIGHT CH		MONDAY	JUNE 14		JULY 26	AUG. 16
WALNUT CREEK	CR172 ATLEE D. MILLER		MONDAY	JUNE 14		JULY 26	AUG. 16
WALNUT CREEK	CR144 KAUFMAN DIESEI		MONDAY	JUNE 14	ļ	JULY 26	AUG. 16
CLARK	FARMERSTOWN AUCTION	4	TUESDAY	JUNE 15	JULY 6	JULY 27	AUG. 17
CLARK	CHARM SCHOOL	11:30-12:15	TUESDAY	JUNE 15	JULY 6	JULY 27	AUG. 17
BERLIN	TR369 & 371	12:30-1:00	TUESDAY	JUNE 15	JULY 6	JULY 27	AUG. 17
WALNUT CREEK		1:15-2:15	TUESDAY	JUNE 15	JULY 6	JULY 27	AUG. 17
BERLIN	TROYER RIDGE SCHOOL		TUESDAY	JUNE 15	JULY 6	JULY 27	AUG. 17
SALT CREEK	MT. HOPE AUCTION	9:00-11:15	WEDNESDAY	JUNE 16	JULY 7	JULY 28	AUG. 18
SALT CREEK		11:30-12:15	WEDNESDAY	JUNE 16	JULY 7	JULY 28	AUG. 18
SALT CREEK	BOWMAN'S HARNESS	12:45-1:30	WEDNESDAY	JUNE 16	JULY 7	JULY 28	AUG. 18
BERLIN	······································	1:45-2:45	WEDNESDAY	JUNE 16	JULY 7	JULY 28	AUG. 18
PAINT	SR241 ASHERY STORE		THURSDAY	JUNE 17	JULY 8	JULY 28	AUG. 19
PAINT	CR200 ENOS L. MILLER		THURSDAY	JUNE 17	JULY 8	JULY 28	AUG. 19
PAINT	FOUNTAIN VALLEY SCH.		THURSDAY	JUNE 17	JULY 8	JULY 28	AUG. 19
PAINT	PLEASANT HILL BUGGY		THURSDAY	JUNE 17	JULY 8	JULY 28	AUG. 19
PAINT	TR652 DAN A. TROYER	2:15-3:00	THURSDAY	JUNE 17	JULY 8	JULY 28	AUG. 19
***************************************	IN HOUSE	8-4	FRIDAY	JUNE 18	JULY 9	JULY 29	AUG. 20
PRAIRIE	TEA RUN SCHOOL	9:00-10:30	MONDAY	JUNE 21	JULY 12	AUG. 2	AUG. 23
PRAIRIE	SUNNYSLOPE SCHOOL	11:00-12:00		JUNE 21	JULY 12	AUG. 2	AUG. 23
PRAIRIE	CR 329 & 553	12:45-1:15	MONDAY	JUNE 21	JULY 12	AUG. 2	AUG. 23
PRAIRIE	CR329 WAYNE A YODER	1:30-2:30	MONDAY	JUNE 21	JULY 12	AUG. 2	AUG. 23
WASHINGTON	CR385 CHARLIE MOHLE		TUESDAY	JUNE 22	JULY 13	AUG. 3	AUG. 24
RIPLEY	TR516 JONAS A. KIEM		TUESDAY	JUNE 22	JULY 13	AUG. 3	AUG. 24
PRAIRIE	TR554 JOHN M. YODER		TUESDAY	JUNE 22	JULY 13	AUG. 3	AUG. 24
CLARK	TR178 ANDY. MILLER J	R9:00-9:45	WEDNESDAY	JUNE 23	JULY 14	AUG. 4	AUG. 25
CLARK	TR176 J. BARKMAN	10:00-10:30	WEDNESDAY	JUNE 23	JULY 14	AUG. 4	AUG. 25
CLARK	SR643 BRUSH RUN SCH		WEDNESDAY	JUNE 23	JULY 14	AUG. 4	AUG. 25
CLARK	TR166 TRIVALLEY WOO	••••••	WEDNESDAY	JUNE 23	JULY 14	AUG. 4	AUG. 25
SALT CREEK	BENTON/FAITH HAVEN	· • • • • • • • • • • • • • • • • • • •	THURSDAY	JUNE 24	JULY 15	AUG. 5	AUG. 26
WALNUT CREEK	TR301 JESSIE MILLER		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	JUNE 24	JULY 15	AUG. 5	AUG. 26
WALNUT CREEK	ERB'S TARP	1:00-2:00	THURSDAY	JUNE 24	JULY 15	AUG. 5	AUG. 26
	IN HOUSE	8-4	FRIDAY	JUNE 25	JULY 16	AUG. 6	AUG. 27



## APPENDIX B

rownship	LOCATION	TIME	DAY	1ST DATE	2ND DATE	3RD DATE	4TH DATE
SALT COPPL	DOONTOWN CODAYED	0.45.10.20					
SALT CREEK	·•····································	8:45-10:30	MONDAY	JUNE 6	JUNE 27	JULY 18	AUG. 8
SALT CREEK		10:45-11:45	MONDAY	JUNE 6	JUNE 27	JULY 18	AUG. 8
SALT CREEK	CR229 ABE A. RABER	12:30-1:30	MONDAY	JUNE 6	JUNE 27	JULY 18	AUG. 8
SALT CREEK	BOWMAN'S TRACTOR	2:00-3:00	MONDAY	JUNE 6	JUNE 27	JULY 18	AUG. 8
BERLIN	GINGERICH TRACTOR	9:00-10:00	TUESDAY	JUNE 7	JUNE 28	JULY 19	AUG. 9
CLARK	CR70 ROY MILLER	******************************	TUESDAY	JUNE 7	JUNE 28	JULY 19	AUG. 9
CLARK	TRIVALLEY ENGINE	1:00-2:00	TUESDAY	JUNE 7	JUNE 28	JULY 19	AUG. 9
CLARK	CR70 DAN L. MILLER	2:15-3:15	TUESDAY	JUNE 7	JUNE 28	JULY 19	AUG. 9
CLARK	TR180 ELI A. RABER	9:00-9:30	WEDNESDAY	JUNE 8	JUNE 29	JULY 20	AUG. 10
CLARK		10:30-11:30	WEDNESDAY	JUNE 8	JUNE 29	JULY 20	AUG. 10
MECHANIC	BECKS MILLS	12:00-1:00	WEDNESDAY	JUNE 8	JUNE 29	JULY 20	AUG. 10
BERLIN	SALTILLO	2:00-3:00	WEDNESDAY	JUNE 8	JUNE 29	JULY 20	AUG. 10
SALT CREEK	FRYBURG	10:00-11:00	THURSDAY	JUNE 9	JUNE 30	JULY 21	AUG. 11
*******************************	IN HOUSE	8-4	FRIDAY	JUNE 10	JULY 1	JULY 22	AUG. 12
PAINT	US62 ALPINE ALPA	9:15-10:00	MONDAY	JUNE 13		JULY 25	AUG. 22
WALNUT CREEK	(R168 GOSPEL LIGHT	10:30-11:45	MONDAY	JUNE 13		JULY 25	AUG. 22
WALNUT CREEK	CR172 DAN A. MILLER	12:30-1:45	MONDAY	JUNE 13	Ī	JULY 25	AUG. 22
CLARK	FARMERSTOWN AUCTION	9:00-10:45	TUESDAY	JUNE 14	JULY 5	JULY 26	AUG. 23
CLARK	CHARM SCHOOL	11:00-12:00	TUESDAY	JUNE 14	JULY 5	JULY 26	AUG. 23
BERLIN	TR369 & 371	1:00-1:45	TUESDAY	JUNE 14	JULY 5	JULY 26	AUG. 23
WALNUT CREEK	TR374 ATLEE RABER	2:15-3:15	TUESDAY	JUNE 14	JULY 5	JULY 26	AUG. 23
SALT CREEK	MT HOPE AUCTION	9:00-10:45	WEDNESDAY	JUNE 15	JULY 6	JULY 27	AUG. 24
SALT CREEK	NISLEY FARM EQUIP	11:3012:00	WEDNESDAY	JUNE 15	JULY 6	JULY 27	AUG. 24
SALT CREEK	TR629 & CR77 BOWMAN		WEDNESDAY	JUNE 15	JULY 6	JULY 27	AUG. 24
BERLIN	TR353 KEN GERBER	2:30-3:00	WEDNESDAY	JUNE 15	JULY 6	JULY 27	AUG. 24
PAINT	···	9:00-10:30	THURSDAY	JUNE 16	JULY 7	JULY 28	AUG. 25
PAINT		10:45-11:45	THURSDAY	JUNE 16	JULY 7	JULY 28	AUG. 25
PAINT	FOUNTAIN VALLEY SCH	12:30-1:15	THURSDAY	JUNE 16	JULY 7	JULY 28	AUG. 25
PAINT	TR652 DAN A. TROYER	1:30-2:15	THURSDAY	JUNE 16	JULY 7	JULY 28	AUG. 25
	IN HOUSE	8-4	FRIDAY	JUNE 17	JULY 8	JULY 29	AUG. 25
PRAIRIE	TR554 JOHN M. YODER	9:00-9:45	MONDAY	JUNE 20	JULY 11	AUG. 1	AUG. 29
RIPLEY	TR516 JONAS A. KIEM	10:15-11:15	MONDAY	JUNE 20	JULY 11		AUG. 29
WASHINGTON	CHARLIE MOHLER	12:30-1:00	MONDAY	JUNE 20		AUG. 1	······
RICHLAND	GLENMONT SR. CTR	1:45-2:45	•	· · · · • · · · · · · · · · · · · · · ·	JULY 11	AUG. 1	AUG. 29
PRAIRIE			MONDAY	JUNE 20	JULY 11	AUG. 1	AUG. 29
PRAIRIE	TEA RUN SCHOOL SUNNYSLOPE SCHOOL	9:00-10:30	TUESDAY	JUNE 21	JULY 12	AUG, 2	AUG. 30
PRAIRIE			TUESDAY	JUNE 21	JULY 12	AUG. 2	AUG. 30
PRAIRIE	CR329 & TR553	12:45-1:30	TUESDAY	JUNE 21	JULY 12	AUG. 2	AUG. 30
CLARK	CR329 WAYNE A. YODER TR1780 A. MILLER JR.	9:00-9:30	TUESDAY	JUNE 21	JULY 12	AUG. 2	AUG. 30
CLARK	TR176 J. BARKMAN	·• · · · · · · · · · · · · · · · · · ·	WEDNESDAY	JUNE 22	JULY 13	AUG. 3	AUG. 31
CLARK	····;·························	9:45-10:30	WEDNESDAY	JUNE 22	JULY 13	AUG. 3	AUG. 31
	BRUSH RUN SCHOOL	11:30-12:00	WEDNESDAY	JUNE 22	JULY 13	AUG. 3	AUG. 31
CLARK	VALLEY VIEW WOOD	12:30-1:15	WEDNESDAY	JUNE 22	JULY 13	AUG. 3	AUG. 31
WALNUT CREEK	CR144 KAUFMAN DIESEL	***************************************	WEDNESDAY	JUNE 22	JULY 13	AUG. 3	AUG. 31
SALT CREEK	BENTON/FAITH HAVEN	9:00-10:00	THURSDAY	JUNE 23	JULY 14	AUG. 4	SEPT. 1
WALNUT CREEK	TR401 JESSIE MILLER	10:30-12:00	THURSDAY	JUNE 23	JULY 14	AUG. 4	SEPT. 1
WALNUT CREEK	SR515 ERB'S TARP	1:00-1:45	THURSDAY	JUNE 23	JULY 14	AUG. 4	SEPT. 1
BERLIN	TROYER RIDGE	2:00-3:15	THURSDAY	JUNE 23	JULY 14	AUG. 4	SEPT. 1
	IN HOUSE	8-4	FRIDAY	JUNE 24	JULY 15	AUG. 5	SEPT. 2





## APPENDIX C

HOLMES COUNTY PL	JBLIC LIBRARY'S	MAIN LIBRARY AND	BOOKMOBILE	
OR 1993 AND 199	4			
OCATION	JUNE 1994	JUNE 1993	% OF CHANGE	
MAIN				
MAIN ADULT CIRC.	5725	5199	UP 10.12%	
MAIN JUVENILE CIRC.	4132	3869	UP 6.8%	
MAIN TOTAL CIRC.	9857	9068	UP 8.7%	
300/140DH F				
BOOKMOBILE BOOKMOBILE ADULT	2240	1204	110 71 700	
BOOKMOBILE ADULT	2240 5018		UP 71.78% UP 17.16%	
JOOKINODILE JUV.	5018	4230	UF 17,10%	
BKMOBILE TOTAL	7258	5587	UP 29.91%	
	, , , , , , , , , , , , , , , , , , , ,	5507	57.3178	
LOCATION	JULY 1994	JULY 1993	% OF CHANGE	
MAIN				
MAIN ADULT CIRC.	5782	5231	UP 10.53%	
MAIN JUV. CIRC.	4302	4019	UP 7.04%	
MAIN TOTAL CIRC.	10084	9250	UP 9.02%	
DOOKNOON E				
BOOKMOBILE	2710	1511		
BOOKMOBILE ADULT BOOKMOBILE JUV.	2719	· · · · · · · · · · · · · · · · · · ·	UP 79.95%	
BOOKMOBILE JUV.	5651	5141	UP 9.92%	
BOOKMOBILE TOTAL	8370	6652	UP 25.83%	
DOOKHODIEL TOTAL	0370	0032	UF 23.0376	
LOCATION	AUGUST 1994	AUGUST 1993	% OF CHANGE	
			1	
MAIN				
MAIN ADULT CIRC.	5895	4579	UP 28.74%	
MAIN JUVENILE	4036		UP 34.85%	
MAIN TOTAL	9931	7572	UP 31.15%	
BOOKMOBILE	<u> </u>			
BOOKMOBILE ADULT	2154		UP 73.71%	
BOOKMOBILE JUV.	4083	3695	UP 10.5%	
	.1		<u>i</u>	



## APPENDIX D

	OF PATRON VISITS T BETWEEN 1993 AND		
MONTH	1993	1994	% OF CHANG
JUNE	846	1068	UP 26%
JULY	1007	1241	UP 23%
AUGUST	784	985	UP 26%
TOTAL	2637	3294	UP 25%



## <u>BIBLIOGRAPHY</u>

- Alloway, Catherine Suyak, ed. <u>The Book Stops Here: New Directions in Bookmobile Service</u>. Metuchen, N.J.: Scarecrow, 1990.
- "Bookmobiles: Alive and Kicking (Outreach is 'in' Again)."
  RQ 29 (Winter 1989): 176-178+.
- Andros, Peter J. "More Than One Look at Bookmobile Service." Wilson Library Bulletin 68 (January 1990): 56-57.
- Berry, Diane. "Creativity and Mobile Services." In <u>The Book Stops Here: New Directions in Bookmobile Service</u>, ed. by Catherine Suyak Alloway, 253-261. Metuchen, N.J.: Scarecrow, 1990.
- Boyce, Bert and Judith Boyce. "The Bookmobile, a Service Mechanism for the Nineties?" Wilson Library Bulletin 66 (October 1991): 31-34+.
- Gibbs, Sheila. "Promoting Mobile Services." In <u>The Book Stops Here: New Directions in Bookmobile Service</u> ed. by Catherine Suyak Alloway, 113-118. Metuchen, N.J.: Scarecrow, 1990.
- Grunenwald, Joseph F. "Marketing the Bookmobile." In <u>The Book Stops Here:</u>
  New Directions in Bookmobile Service ed. by Catherine Suyak Alloway, 105-112. Metuchen, N.J.: Scarecrow, 1990.
- Hole, Carol. "Scheduling Mobile Services." In <u>The Book Stops Here: New Directions in Bookmobile Service</u> ed. by Catherine Suyak Alloway, 80-104. Metuchen, N.J.: Scarecrow, 1990.
- Hunter, Lynn S. "Why Bookmobile Service? An Administrator's View." New Jersey Libraries 25 (Summer 1992): 3-6.
- Mort, Ann. "Scheduling: Where and When." In <u>The Book Stops Here: New Directions in Bookmobile Service</u> ed. by Catherine Suyak Alloway, 74-79. Metuchen, N.J.: Scarecrow, 1990.



- National Bookmobile Guidelines, 1992. Columbus, Ohio: State Library of Ohio, 1992.
- Patton, Gayle. "Bookmobile Service and the Amish Community in Holmes County, Ohio: a Case Study." M.L.S. research paper, Kent State University, 1993.
- Philip, John J. "Bookmobile Service: Justification to the Nonbeliever (Or to the Weak of Heart)." In <u>The Book Stops Here: New Directions in BookmobileService</u> ed. by Catherine Suyak Alloway, 1-7. Metuchen, N.J.: Scarecrow, 1990.
- . "The State of the Art of Bookmobile Service." Wilson Library Bulletin 66 (May 1992): 31-34.
- The Rural Bookmobile: Going Strong after Eighty Years. Conference Proceedings. Clarion, Pennsylvania: Center for the Study of Rural Librarianship, 1986.
- <u>The Rural Bookmobile: Quality as a Basic Ingredient.</u> Conference Proceedings. Clarion, Pennsylvania: Center for the Study of Rural Librarianship, 1986.
- Smith, Ted J. "A 1990 Survey of Bookmobile Operations Within the State of Ohio." M.L.S. research paper, Kent State University, 1990.
- The State Library of Ohio. <u>Statistics of Ohio Libraries 1992</u>. Columbus, Ohio, 1992.
- Topping, Russ and Carol Hole. "How to Buy a Bookmobile." Wilson Library Bulletin 66 (May 1992): 38-42.
- VanBrimmer, Barb. "History of Mobile Services." In <u>The Book Stops Here: New Directions in Bookmobile Service</u> ed. by Catherine Suyak Alloway, 16-31. Metuchen, N.J.: Scarecrow, 1990.
- Vavrek, Bernard F. "Asking the Clients: Results of a National Bookmobile Survey." Wilson Library Bulletin 66 (May 1992): 35-37+.
- "Mapping the Bookmobile: Recent Surveys." In <u>The Book Stops Here:</u>
  New Directions in Bookmobile Service ed. by Catherine Suyak Alloway,
  9-15. Metuchen, N.J.: Scarecrow, 1990.



"Quality of Rural Bookmobile Service: Research Findings." In <a href="The-">The Rural Bookmobile: Quality as a Basic Ingrecient Conference Proceedings</a>
<a href="The-State Library of Ohio's Second Annual Rural Bookmobile">The State Library of Ohio's Second Annual Rural Bookmobile</a>
<a href="Conference Held in Columbus">Conference Held in Columbus</a>, Ohio 18-20 June 1986. edited by Bernard Vavrek and Mary Lou Pratt, 19-32. Clarion, Pennsylvania: The Center for the Study of Rural Librarianship in cooperation with the State Library of Ohio, 1987.

"What Is Happening Today in Rural Bookmobile Service." In <u>The</u>
Rural Bookmobile: Going Strong After Eighty Years Conference
Proceedings Held in Columbus, Ohio 19-21 June 1985. edited by
Bernard Vavrek and Mary Lou Pratt, 19-32. Clarion, Pennsylvania: The
Center for the Study of Rural Librarianship in cooperation with the State
Library of Ohio, 1986.

Weaver-Meyers, Pat and Jim Winters. Changes in Facilities and Services and Their Effect on User Attitudes. Report of a user survey. University of Oklahoma. 1984, ERIC, ED 272 218.

