

J. O. Dell

# ARCHAEOLOGICAL SURVEY IN VIRGINIA: TOWARD PRESERVATION PLANNING

## SURVEY REPORT SERIES NO. 1

J. Mark Wittkofski  
E. Randolph Turner, III  
Editors



1988

Commonwealth of Virginia  
Department of Conservation and Historic Resources  
Division of Historic Landmarks  
221 Governor Street  
Richmond, Virginia 23219

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*J. O'Dell*  
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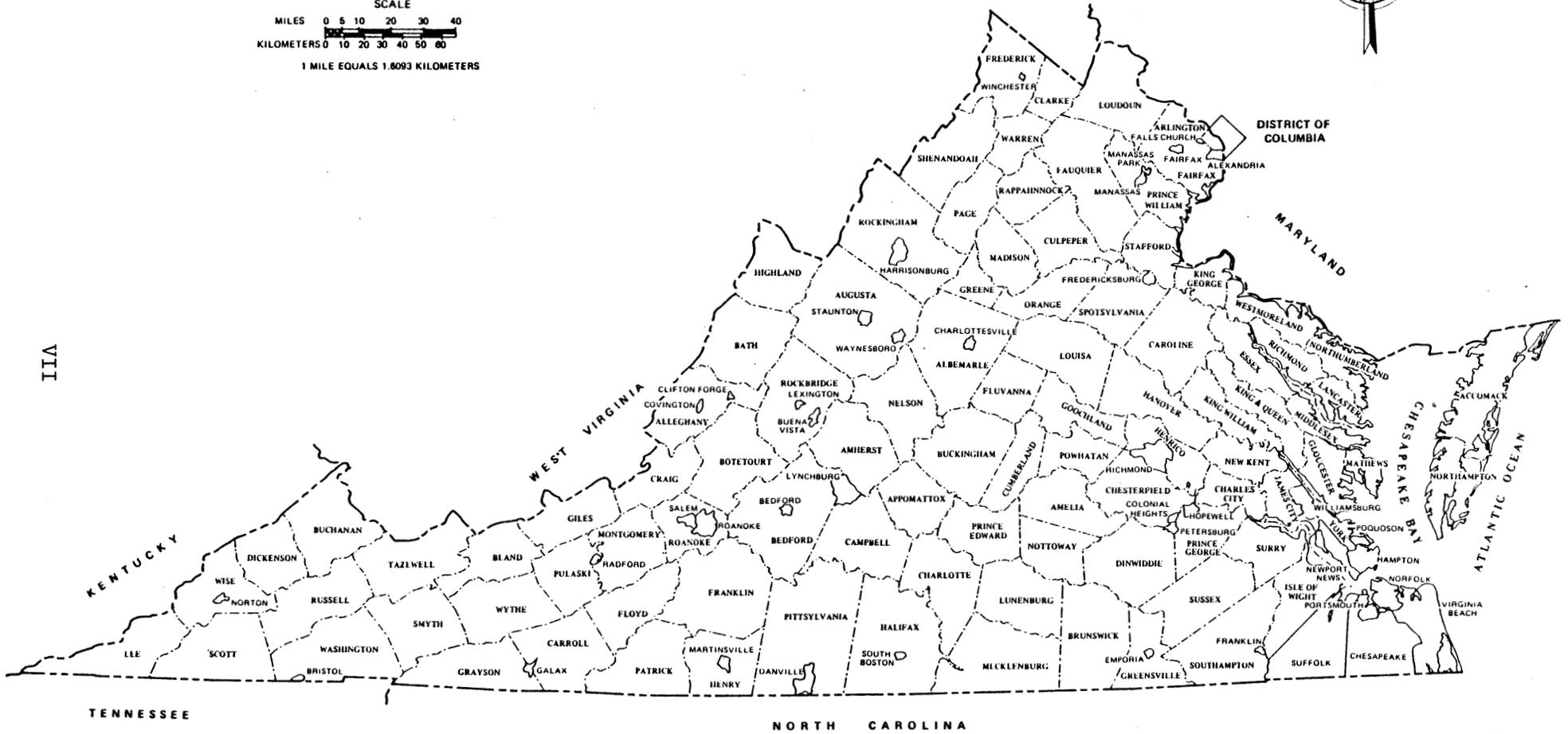
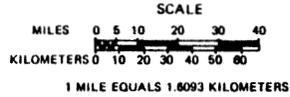
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# COMMONWEALTH OF VIRGINIA



## COUNTY AND CITY CORPORATE LIMITS



III

THE VIRGINIA DIVISION OF HISTORIC LANDMARKS  
SURVEY AND PLANNING SUBGRANT PROGRAM: AN ARCHAEOLOGICAL OVERVIEW

J. Mark Wittkofski

The Virginia Division of Historic Landmarks is the State Historic Preservation Office (SHPO) and is located across from the State Capitol and State Library at 221 Governor Street in downtown Richmond. Recognizing the importance of Virginia's many historic buildings and sites, the Virginia General Assembly created the Virginia Historic Landmarks Commission in 1966. It was directed to survey and recognize the most significant properties by listing them on a Virginia Landmarks Register. The Commission was also to encourage and promote the preservation of these significant cultural assets of the Commonwealth.

In 1985, the Historic Landmarks Commission staff became part of the newly created Department of Conservation and Historic Resources. At that time, the agency's name was changed to the Division of Historic Landmarks. The eleven members of the Historic Landmarks Board (nine of whom are appointed by the Governor) continue to oversee the activities and programs of the Division's professional staff and its Director. A State Review Board comprised of professional architects, archaeologists, architectural historians, historians, and other specialists, appointed by the Division's Director, oversees the agency's federally mandated activities.

The Division of Historic Landmarks is responsible for carrying out the federally sponsored historic preservation program in Virginia and for administering funds awarded to Virginia by the National Park Service for those preservation activities. Included

in this program are completion of reconnaissance and intensive surveys; the nomination of Virginia landmarks to the National Register of Historic Places; review of rehabilitation projects utilizing the Investment Tax Credits to assure compliance with the Secretary of the Interior's Standards for Rehabilitation; review and comment upon all federally funded, licensed, or sponsored projects which may threaten an historic building, district, or archaeological site; preparation of a comprehensive statewide preservation plan; administration of the Certified Local Government program which is designed to involve local governments in direct participation in the federal preservation program; and administration of funds devoted to a program of grants awarded for survey and planning projects around the state. The last activity is the focus of this report.

Virginia's cultural heritage spans not only the last 380 years of historic settlement, but also an additional 10,000 or more years of prehistory. A rich and diverse variety of archaeological sites has been discovered including not only those relating to Virginia's famous citizens and soldiers but also those of ordinary individuals and/or minority communities such as slaves and free blacks from the colonial period. Other sites have included churches, taverns, forges, and canals, as well as prehistoric Indian villages, hunting camps, quarries, and rockshelters. These precious resources are nonrenewable and deserve constant attention in order to protect them from human and/or natural destruction.

At present, archaeologists working in Virginia have helped record nearly 20,000 archaeological sites. However, when realized that the Commonwealth of Virginia contains slightly more than 43,000 square miles, the above number of inventoried sites is equal to less than one recorded archaeological site per every two square miles (or

one site per nearly 1,500 acres), an extremely low site density figure.

Recent calculations for determining the amount of time necessary to complete the identification of all archaeological sites within the Commonwealth indicate that it would be 500 years or longer at the current rate of archaeological survey efforts (Mitchell et al. 1986:1). A complete archaeological inventory would be the most thorough way to identify those sites worthy of protection. Recognizing, however, the near impossibility of creating such a complete inventory, a program was developed by the Division to begin sampling discrete units of space (i.e., counties, cities) and develop predictive models for site locations. These models, when combined with other data, could then be converted into preservation documents available to planners, developers, archaeologists, and other cultural resource managers concerned with both long-range and immediate preservation problems in the area.

Virginia, like its neighboring eastern seaboard states, has seen a tremendous growth in its population during the last five years. This growth has resulted in an increase in new housing starts, new industrial, commercial, and office development, as well as great pressure to construct more and better transportation networks. As an example of this growth in the metropolitan Richmond area alone, nearly \$100 million was spent for new industrial space in 1985; in the first half of 1986, this figure increased by more than twenty percent. Creation of space in the same area was responsible for an expenditure of some \$61 million in 1985; during the first six months of 1986 nearly \$140 million had been spent, an increase of close to 130 percent over the entire previous twelve months (Foxwell 1987:personal communication). Other areas

experiencing tremendous growth have been Tidewater and Northern Virginia, and to a lesser degree the Charlottesville area, Roanoke, and Blacksburg. The majority of communities in Virginia have experienced some level of impact caused by the recent surge in growth and development.

Sadly enough during the same last five years, funding for historic preservation programs has remained static or actually decreased. The U.S. Department of the Interior through its Historic Preservation Fund had provided to the states considerable money for archaeological surveys and planning studies. The current administration has endeavored to eliminate this money from the federal budget, while Congress has voted to maintain preservation funding at level spending which in and of itself is way below the 1980 level. Inflation has meant a reduced level of funding in each succeeding year. Consequently, the Division developed a program for greater public participation that demanded less monetary expenditures.

The program, involving competitive matching grants, was instituted by the Division for Federal Fiscal Year 1984 for survey and preservation planning activities. Money for this grant program was provided to Virginia on a matching basis by Congress from the Historic Preservation Fund. Activities eligible for these matching grants can be any of the following:

- 1) Surveys: Comprehensive (both historic/architectural and archaeological resources); Historic/Architectural Resources; Archaeological Resources; and Thematic (a type of architectural or archaeological resource). All surveys must use VDHL inventory forms and procedures. Recommendations for reconnaissance level survey strategies are available from the VDHL.

- 2) Planning: Comprehensive cultural resource protection plans for both historic/architectural and archaeological resources.
- 3) National Register Nomination Reports: Multiple Property Nominations and Historic District Nominations. Guidelines and samples of nominations are available from the VDHL upon request.
- 4) Education: Curriculum modules on preservation topics for elementary and secondary schools.

Rehabilitation of historic structures and full-scale archaeological research projects are not considered by the National Park Service to be survey and planning activities and are therefore not eligible for funding through this program.

All projects receiving grants must be conducted in a manner consistent with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation issued in the Federal Register (1983). Eligible applicants for these subgrants can be any of the following:

- 1) Local governmental units including towns, cities, or counties and local, state, or regional agencies;
- 2) Educational institutions;
- 3) Non-profit, tax-exempt organizations, such as historical societies and foundations; and
- 4) Private businesses.

Applicants are required to demonstrate their capacity to administer the grant and provide for grant expenditure in anticipation of quarterly reimbursement. Federal share match in the past has ranged from fifty to seventy percent of the total project costs.

Applications for survey and planning subgrant awards are evaluated and rated on comprehensiveness, urgency and significance, need for the project in the proposed area, project design, and administrative capacity. Each of these ranking characteristics is keyed to one or more sections of the application. Final decisions on awards rest with the Division's Director.

Surveys are evaluated based upon their need as determined by Division staff using criteria developed from the agency's architectural and archaeological inventories and statewide comprehensive planning efforts. Proposals for reconnaissance surveys will be given higher priority when conducted in areas not already intensively surveyed or previously reported to the National Park Service by the Division. Preference is given those proposals that will complete survey efforts to the reconnaissance level for an entire county or city unit. There remain many such geographic units within the Commonwealth that qualify for reconnaissance level surveys.

Comprehensive preservation planning proposals can be submitted for any locality regardless of the extent or adequacy of previous surveys. In the past, priority has been given to cultural resource protection plans for localities that have achieved survey coverage to at least the reconnaissance level. Preservation planning proposals also are required to have the support of the responsible local officials.

Proposals for multiple property National Register nominations have priority if they have the support of the responsible local officials and relate to an area previously surveyed to the the reconnaissance or intensive level.

Education project proposals must concisely answer questions about the project's design, need, and use in the local community.

Particularly important is whether the module will have application beyond those immediately targeted.

Detailed guidelines containing more specific information about the subgrant program are available by contacting the Virginia Division of Historic Landmarks. Included within these guidelines are data pertaining to specific budget items, administrative requirements, and grant conditions, as well as definitions and copies of appropriate sections of the Secretary of the Interior's Standards and Guidelines.

As of December 1987, approximately \$575,000 had been awarded to eligible recipients through the Division's Survey and Planning Subgrant Program and related Certified Local Government (CLG) Subgrant Program. Less than \$275,000 was awarded for surveys and preservation planning activities involving in part archaeological resources. The Appendix lists all archaeologically related subgrants awarded and the products produced from the beginning of the program in 1984 until December 1987.

The papers in this volume were presented at the Annual Meeting of the Society for Historical Archaeology in Savannah, Georgia, January 10, 1987 in a symposium entitled, "The Virginia Division of Historic Landmarks' Survey and Planning Subgrant Program," chaired by J. Mark Wittkofski. Since the conference was historical by nature, papers selected from the Subgrant Program for the symposium were those involving at least in part historical period investigations. As such, this volume should be seen as a representative sampling of subgrants involving historical archaeology funded by the Division during its four years of providing competitive grants. As the Appendix indicates, many of these subgrants also included prehistoric archaeological investigations and architectural studies.

The first paper was written by Dr. Jeffrey L. Hantman and Mr. Thomas S. Klatka, both of the Department of Anthropology at the University of Virginia in Charlottesville. It discusses archaeological surveys of two county-wide areas (ca. 1,400 square miles) located in the central Virginia Piedmont, work funded in part through the VDHL subgrant program. The purpose of the paper is to describe the manner in which the surveys were implemented and to illustrate how the data obtained in such preliminary survey may be used both to provide reliable inventory data and to address broad research questions concerning social history. The interpretation of the historic sites offers an additional perspective to that resulting from traditional surveys of standing structures and also provides a comparative data base to the structures used by Henry Glassie in his Folk Housing in Middle Virginia.

Within the Division's Archaeological Survey and Planning Subgrant Program, a smaller non-competitive subgrant was awarded to Historic Gordonsville, Inc. (HGI), a private conservation organization, to conduct an intensive archaeological survey of the densely vegetated acreage surrounding the National Register site of Governor Alexander Spotswood's 18th-century plantation known as the "enchanted castle." The site and much of its adjoining acreage was threatened by destruction from residential and highway construction. The intensive survey, directed by Douglas W. Sanford and relying predominantly upon volunteer labor, employed a systematic, sub-surface sampling procedure which identified, inventoried, and assessed 30 prehistoric and historic sites. Although not directly a part of the Division's Survey and Planning (federally-funded) Subgrant Program, this paper was included as it provides an example of the corollary state-funded program. Data from the survey will be

used to enhance both future archaeological research as well as to provide the basis for Historic Gordonsville's preservation and management plan for these resources.

Frederic W. Gleach, formerly of Virginia Commonwealth University's Archaeological Research Center, discusses the Richmond Metropolitan Area Archaeological Survey (RMAAS) which was undertaken with the help of the Division's Survey and Planning Subgrant Program in an attempt to offset intolerable losses resulting from rapid development in and around the city. Richmond and its suburban counties are located at the falls of the James River in a region rich in historical and archaeological resources. Both prehistoric and historic sites of national significance are being impacted at an unprecedented rate due to the explosive rate of development. To provide a base for preservation planning, the survey prepared an inventory of more than 1,000 archaeological sites, of which each component was evaluated using standardized criteria. In addition, an extensive computerized data base on the sites (including geographic and historical data) has been compiled to allow predictions of site locations and significance throughout the city and the two adjacent counties. The RMAAS project clearly illustrates the need for, and complexities of, coordination between state and local governments and academic institutions.

The creation and development of a resource protection plan is only the first step in effective management; equally important is a continuing commitment to fulfilling long- and short-term objectives of the plan. In Gregory J. Brown's paper, he discusses a plan funded in part by the Division's Survey and Planning Subgrant Program and produced by the Colonial Williamsburg Foundation. This plan resulted in the proposal to create a regional information

center at the College of William and Mary, dedicated to implementing, revising, and updating the plan through interaction with local planners, developers, and scholars. Preliminary efforts in the establishment of the center, as well as steps in the development of the plan itself, are reviewed and analyzed. A pilot study organized for the James City County Historical Commission, involving implementation of crucial remedial studies and ongoing sensitivity analysis, is also discussed.

In 1985, the Heritage Resources program of Fairfax County, Virginia, produced two important documents under a Survey and Planning Subgrant from the Virginia Division of Historic Landmarks. The grant called for an integrated archaeological/architectural survey of 2,500 acres of western Fairfax County. The results of this project were used as a test case for the County's new Heritage Resource Management Plan. This plan contained some distinctive modifications, including merging archaeological and architectural resources into one resource class (as did Colonial Williamsburg) and developing a local "public" significance criterion independent of the National Register's criteria. In Michael F. Johnson's next paper, he describes the context in which the plan and the survey were developed. Special emphasis is placed on: integrating preservation programs into the land use planning system at the local level; survey and planning as opposed to salvage and excavation; the special place citizens have in this kind of program; and, the Fairfax County experience with political and fiscal self-sufficiency.

In the final symposium paper, Dr. E. Randolph Turner, III, reviews the Division of Historic Landmarks' Archaeological Survey and Planning Subgrant Program. He describes how since 1984 explicit

efforts have been made to integrate archaeological survey results with newly emerging preservation plans for cultural resources. Emphasis has been placed on the local and regional levels with particular successes noted where there has been explicit support by local government units from a project's inception. The incorporation of data on archaeological resources with that of historical and architectural resources into preservation plans has proven to be especially valuable in enhancing the likelihood of archaeological resources being considered by local communities when making decisions affecting their integrity and long-term preservation.

Concluding the volume, Dr. Pamela J. Cressey, who has established a nationally recognized local program in archaeology, was asked to be a discussant for this Society for Historical Archaeology symposium in Savannah, Georgia. Her comments, insights, and viewpoints serve as a vehicle for connecting the papers of this symposium as well as highlighting the importance of local resources, citizenry, and politics in the effective development and implementation of preservation planning.

These collected papers illustrate certain types of archaeological subgrants that have been funded by the Division of Historic Landmarks. It should be again noted that these papers reflect the discipline of historical archaeology.

Applications and proposals for future matching grants are encouraged. The amount of money available will depend upon the amount of annual grants given to the Division by the National Park Service. For further information, please contact:

Survey and Planning Subgrant Program  
Virginia Division of Historic Landmarks  
221 Governor Street  
Richmond, Virginia 23219

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## SOCIAL HISTORY AND ARCHAEOLOGICAL SURVEY IN CENTRAL VIRGINIA

Jeffrey L. Hantman and Thomas S. Klatka

This paper discusses the goals, methods and results of the University of Virginia's systematic regional survey research conducted in the Virginia Piedmont over the last two years. The survey has focused to date on the central Virginia counties of Albemarle and Buckingham (see Figure 1), and has been conducted within the framework of the Virginia Division of Historic Landmarks Survey and Planning Subgrant Program. As such, its stated goal has been that of bringing two specific counties to the "reconnaissance" level of survey according to the terms defined by the Department of the Interior. At the same time, this work represents the first systematic, regional survey undertaken in the inner Piedmont, and has created a data base which serves as the foundation for ongoing research which addresses specific questions relating to the history and prehistory of Piedmont Virginia. In 1987-88, the University of Virginia will undertake a new survey of neighboring Fluvanna County, which along with recent systematic survey in Orange County, will add to this growing data base.

In this paper we will describe our most recent survey effort conducted in Buckingham County, a 582 square mile area located in the inner Piedmont (see Figure 1). The James River makes up the entire northern border of the county and was a primary focus of historic settlement and economics, particularly following canal and railroad construction in the eighteenth and nineteenth centuries. First, we will outline how the resource planning and research goals of our survey program complement and enhance one another. Next we

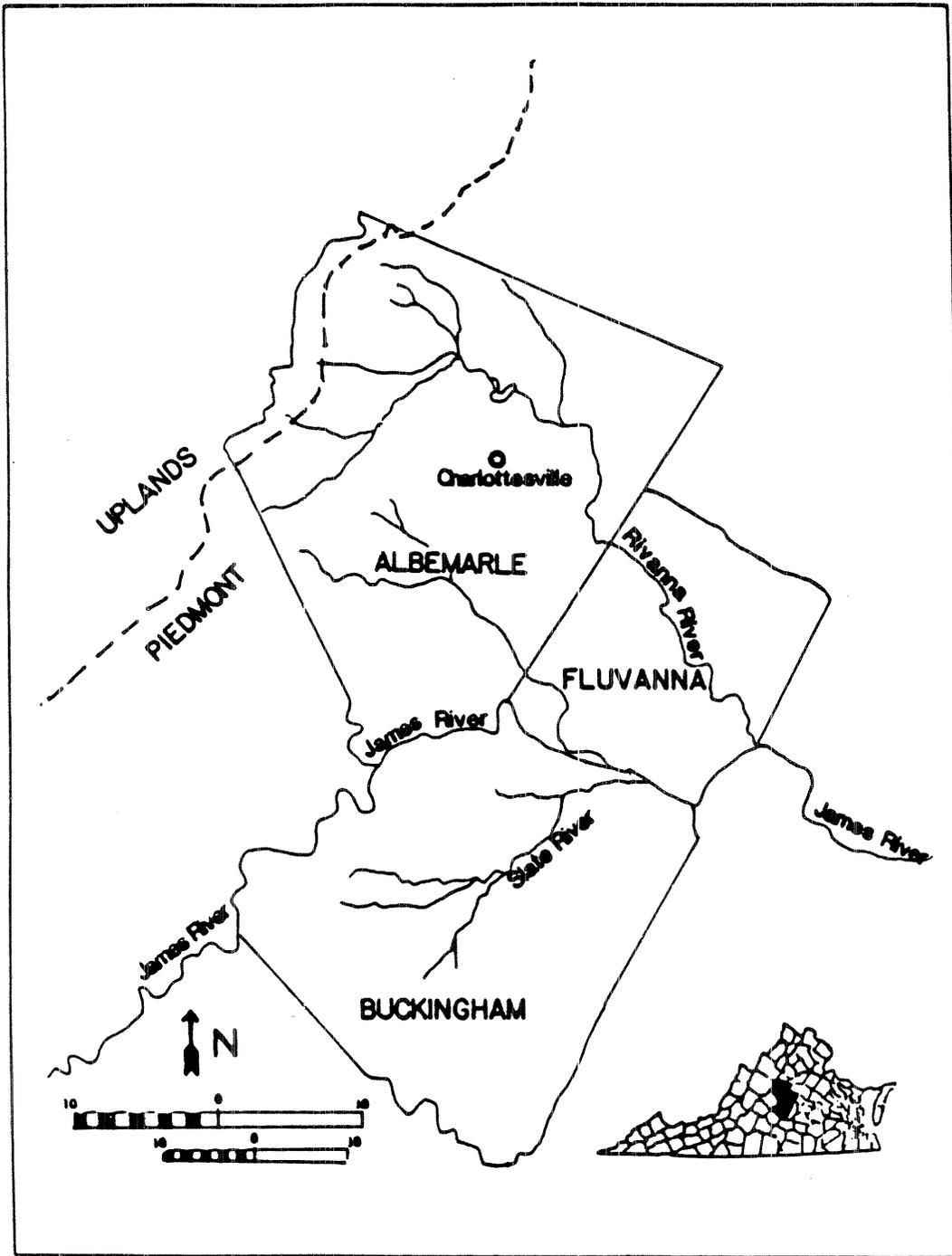


Figure 1. Location of the areas of county level archaeological reconnaissance survey conducted by the University of Virginia, 1984-87.

will describe our particular strategy for data collection and field research in central Virginia, and demonstrate what kinds of inferences can be made concerning basic issues of resource density, diversity, and distribution. Finally, we will describe the particular research issues relating to historic settlement in Buckingham County which have been identified in our survey program.

The goals of the Buckingham County survey were specific in some areas and general in others. At the broadest level we sought to gather systematic archaeological data which would contribute not only to preservation planning goals in Buckingham County, but which would also be directly relevant to the planning process for Piedmont study units in general. Even with the number of recent archaeological surveys in the Piedmont province of Virginia, systematic data on the archaeological resources in this region remain fairly limited. As the Buckingham County survey began, only six counties in the Virginia Piedmont were listed by the Division of Historic Landmarks as being at, or in the process of reaching, the reconnaissance level of survey. The nearly 30 remaining counties have received only minimal attention. Of these, the inner Piedmont counties are most sorely in need of attention. The development of an effective preservation plan for the Piedmont requires a larger, more systematic and representative regional sample than currently exists. This is necessary if accurate estimates of archaeological site type, diversity, density, and locational characteristics are to be made. Thus, at this broad level of study, we sought to gather data which would be consonant with that previously collected in such areas as Albemarle, Fairfax, and Henrico counties, and would thus contribute towards the Division of Historic Landmarks' goal of a regional preservation plan for the Piedmont.

On a more specific level, the survey was designed in order to generate data which would allow reliable planning in a context unique to Buckingham. This includes the identification of local research and interpretive issues, a consideration of local development plans, as well as the assessment of site types and distributions. As this survey began, there were 211 archaeological sites recorded for Buckingham County in the State site files. That number of sites may sound reasonably large. However, in the context of a large geographic area (582 square miles), and with the representativeness of those 211 sites impossible to evaluate, that information is surprisingly uninformative. The latter issue of site file representativeness will be discussed in more detail later, and is the central problem we see in the use of site files in preservation planning. This issue, and others, are considered in our review of the congruence of the Resource Protection Planning Process (RP3) with our research goals in central Virginia.

A primary aim of the Buckingham survey was what the Resource Protection Planning Process - RP3 - refers to as the "identification" of historic resources. Eight questions relating to resource identification are specified by the Department of the Interior in formulating the identification part of the planning process. These questions, summarized briefly below, are quite basic, but bear repeating. They are fundamentally the same issues any researcher working in a poorly known area would need to consider, and as such they also laid the foundation for the design of the University of Virginia survey and research program. These questions are:

- 1) What types of historic properties are included in the study unit?



- 2) Where are those types located, and what is the nature and density of their distribution?
- 3) How many historic resources of each type once existed, how many currently exist, and what conditions are they presently in?
- 4) Have past surveys been done in the study unit?
- 5) What is the quality and bias of those past surveys?
- 6) What data gaps currently exist in the study unit?
- 7) What are the appropriate types of survey required to identify and locate historic resources in the study unit?
- 8) What priority should be given to future surveys for the study unit?

In order to address these questions, a two part plan of research was undertaken. The first involved the review of previous studies in the county and the analysis of all previously recorded sites in the Buckingham County site file at the Division of Historic Landmarks. The second entailed the implementation of a systematic field survey, utilizing controlled sampling techniques and the subsurface testing methods required by the Piedmont terrain. The use of the systematic sample survey allows for the reliable and quantified estimation of site density and distribution parameters, as well as establishing a means of assessing the potential biases in existing site file records. The site file data and the new systematic survey data taken together provide suitable information on what types of historic properties are included in the study unit, what data gaps exist, and what priorities need to be established.

Finally, the use of systematic sample data enables the projection (within certain confidence intervals) of the total number and type of historic resources projected to exist in different areas of the county as well as for the county as a whole. Such data are critical in evaluating site uniqueness and significance in the preservation planning process.

Finally, establishing research and interpretive issues for a study unit is a critical step in the management and evaluation process. There are a diversity of research topics which can be approached based on the archaeological resources of Buckingham County. For the historic period, although a good deal is known about the politics and life of the elite in the Piedmont, much of the rural history can be enhanced with the recovery and analysis of archaeological data. As Glassie's now classic architectural study in neighboring counties of central Virginia demonstrates, the history of the non-elites numerically dominates the historical landscape, but is sorely underplayed in traditional perceptions of central Virginia's fairly recent past (Glassie 1975:64-65). Assessing that perception in light of archaeological survey data is a key question for Buckingham County, and the Piedmont in general. In addition, Buckingham County research issues which we have defined relate to the fluctuating integration of Piedmont Virginia in the greater world market, and the social and economic impact of mill, road, canal, and railroad construction.

It is our contention that one cannot comprehensively address these types of research issues without controlling for variables such as population size, regional settlement pattern, site density distributions, and the variable distribution of material culture. Each of these variables is best reconstructed with the use of

regional survey based on probabilistic sampling strategies such that inferences can be made concerning regional population densities and variation in site types throughout the county. Even as Glassie warned that architectural survey not get bogged down in "statistical deception" (Glassie 1975:42), one of the more critical revelations of his survey in Middle Virginia is the numerical breakdown of house sizes which noted the overwhelming predominance of small (2-4 room) houses. As he noted "if you can count, you should count." While statistically based systematic deception", at the level of the county planning survey, it is quite simply the only way that we can count. And, in regional historical research, counting houses is often the best place to begin (cf. Glassie 1975:41-65). It is also the only way in which the representativeness of state site file, HABS, and architectural survey data can be evaluated. Finally, as stated previously, such methods are also those which are required in order to reliably address the management and identification issues of RP3. Thus, the dual goals of management and research are ably met with the survey strategies and data analysis used on the Buckingham County survey. These methods are described briefly in the following section.

Transects were used as the type of sampling unit for the survey. Based largely on replications using prehistoric archaeological data, transects have been found to provide the optimal sampling unit for a variety of reasons which are detailed in many other summaries of survey methods (Plog 1976; see also McManamon 1983; Custer 1983; Catlin 1986 for Middle Atlantic survey research). We hope to evaluate such survey strategies more critically from the specific perspective of historic sites research in the near future. In any case, existing studies have shown that

smaller and more numerous transects provide more precise estimations of site variability and density than larger sampling units (Plog 1976). As a compromise between the desire for optimal precision and the need to minimize the logistical constraint of travel time, the size of the transects was kept to the area which could be surveyed by a four person crew in one day. We have found that when small crews and subsurface testing are employed in Piedmont survey, a transect of one-half mile by 20 yards is most efficient.

On the basis of existing information and previous survey work in the Piedmont, the survey universe (Buckingham County) was divided at the outset into two strata. The first was the James River area, a 55 mile long stretch of the river which defines the county's north border. The second was the remainder of the interior of the county, cross-cut by minor and major tributaries of the James. Within both of these strata, we also arbitrarily focused attention on areas designated by the Buckingham County Comprehensive Plan as "growth and development" areas, without compromising the randomness of our survey. One important point needs to be made about this survey strategy as we employ it concerning a common misconception about the "restrictiveness" of the systematic survey method. That point is simply that a tremendous amount of effort is also invested in the field in non-random investigation of likely site areas, informant interviews leading to site recording, and simply keeping eyes open while on the way to defined survey units. In addition, every effort is made prior to beginning the field survey to examine archival documentary data (maps, traveller's accounts, etc.), and to field check the presence and condition of any sites identified in that manner. While sites recorded in these ventures are not built into the randomly generated statistical assessment of the county, they

nevertheless are a fundamental part of the data base used in interpreting the archaeological record of the county. Too often, systematic sample surveys are perceived as ignoring these time honored means of site identification, and in some cases perhaps they have. However, we feel that our survey methods cover the same ground that non-systematic surveys do, but include the systematic sample as well.

By example, the Buckingham County survey investigated (with sub-surface testing) a total of 292 acres; 86 acres were "on-transect", while 206 were investigated "off-transect." A total of 59 previously unrecorded sites were discovered. Eighteen of these are historic sites, of which seven were identified on random transects. Of the 18 total sites, 8 are agricultural complexes consisting typically of a house and one or more barns; 8 are isolated houses; and 2 are mills.

These figures allow us to <sup>estimate</sup> generate an average density for Buckingham County historic sites of 1 site per 12.4 acres. In the James River area the density figure is lower at 1 site per every 23 acres; however, these sites are consistently and atypically large. In the interior of Buckingham County, the historic site density is 1 site per every 8 acres; these more numerous sites are on average smaller than the James River sites. While this is useful baseline information in and of itself for planning purposes, it takes on more significance for its comparative value in the Piedmont. It is of more than passing interest that our earlier survey of Albemarle County, conducted in 1985, revealed a strikingly lower density of 1 site per every 27 acres for historic sites, although this density was also higher on the major drainages (the Rivanna) than away from them. Such patterns require explanation and are worthy of

investigation as to the cultural factors underlying them. Suffice it to say that unsystematic survey could not reveal such patterns which are important both to planning and historical understanding.

A final outcome of our systematic survey concerns the evaluation of data in existing site files. It is not the case that unsystematic survey has inherent biases and systematic sample survey does not - clearly, both strategies have their built in biases. What is valuable, however, is the merging of the two data bases and the acknowledgement of their particular indiosyncracies. Combining the two sorts of information generates a fairly comprehensive assessment of site variability within a regional study unit such as a county. What we determined from the Buckingham County and Albemarle County surveys was that the site file data is more reliable for providing information on the range of historic site types in an area. For instance, the Buckingham County systematic survey identified only three types of sites - houses, agricultural complexes, and mills. The site file data contains information on eight site classes, including small, functionally specific sites such as gold mines and cemeteries which can easily be missed in transect survey. However, the numbers and relative percentage of these site types is poorly represented in the site file data and this bias should be made clear. For instance, 44% of the historic sites found on our systematic survey in Buckingham were agricultural complexes, while only 2% of the sites in the site file were classified in this way. Such discrepancies need greater attention, but we suspect that the greater source of error is in the unsystematic site file data. It must also be said at this point, that a major source of error in comparing historic site numbers and density distributions between study areas lies in the different ways

historic archaeologists record historic "sites." To some, the agricultural complex is a single site; to others each building within the complex represents a site. Both methods of recording have their merits; the variation in recording does present a problem of standardization which will require some attention at the state level. Until that time, comparison between regions should include some correction factors relating to the recording method used in each area, or in the case of site file data, at each site. Chronologically, on the basis of our experience in two counties, both the site file and systematic survey data bases reveal the full temporal range of occupation.

In summary, site file data provides useable information on the range of site types and on rare or unique sites; the systematic survey data supplements this with a control for relative frequencies and densities. As we stated at the beginning of this paper, perception of such relative frequencies is often one of the more critical issues in reconstructing the history of rural Piedmont Virginia, and should not be ignored.

In concluding this paper, we will review some of the historical issues we are considering in Buckingham County and the Piedmont in general. The historical issues which are of concern to us in Buckingham County are rather typical of the Piedmont as a whole.

Westward expansion out from the Tidewater area and the initial growth of settlement in Buckingham County began in the first half of the eighteenth century. The relative isolation of the area facilitated the formation of a local community closely bound together by kinship and shared concerns. This isolation also necessitated the initial development of plantation self-sufficiency in food items, the training of skilled slave artisans, and the

establishment of local market and artisan services to support both the plantations and the smaller farms. Mercantile stores of the early merchant/planters introduced the regional market economy into the area, and were centered at landings on the James and Appomattox Rivers.

Although much of the early farm's output was consumed by the family, its labor force and livestock, a secondary group of consumers consisted of residents of the local area. These residents composed a community based primarily on ties of kinship, religion, and language. Furthermore, the local community structure was originally founded upon the lineal family, an extended family form in which a set of reciprocal rights and obligations operated to link individual family members and related families (Henretta 1978). Therefore, while the market economy tended to regulate the overall terms of trade between farmers, artisans, and merchants, in daily life this price system was initially subordinated by the lineal family structure to informal transactions of barter based on exchange value and delayed reciprocity (Merrill 1976; Henretta 1978; Schlotterbeck 1980).

Heightened European demand for tobacco in the mid-eighteenth century initiated a dramatic increase in the output and size of the tobacco industry in the James River area (Henretta 1978). During the late eighteenth century, wheat was established as an important secondary cash crop. The production of tobacco and wheat acted to strengthen local participation in the regional market economy. However, unstable external market conditions and changing agricultural practices precipitating from the Revolutionary War, decreased any focus on production for external markets and gradually fostered an increased reliance on production for the local economy.

By the early nineteenth century, this process led to the emergence of a diversified local economy in which goods, labor, and services moved within the local community through an elaborate exchange network (Merrill 1976; Schlotterbeck 1980). Continued growth of a non-agrarian population within the local community increased access to goods and services, and provided a stable market for surplus crops. The local economy became characterized as a community level of self-sufficiency which operated through ties of kinship and the lineal family which had increased in complexity and extent during the eighteenth century. Small villages developed through clusterings of related families which offered artisan and mercantile services. These villages became the primary exchange centers of the local community. The diversified local economy developed in part as a response to unstable external market conditions, but more importantly, as an embodiment of the reaffirmation of traditional values and relationships inherent in the lineal family structure.

The diversified local economy of the Piedmont area was based on mixed farming which provided a localized self-sufficiency in food production. This mixed farming economy also required the development of numerous support services. Throughout the nineteenth century, tobacco and wheat production had a strong impact on the local economy. Wagon and batteaux construction was necessary to transport hogsheads to regional market centers. While tobacco was processed on individual farms and plantations, inspection warehouses and tobacco factories were built and operated along the James and Appomattox Rivers (Martin 1835). Grist and flour merchandising mills, and cooper services, were required for the processing of wheat and transportation of flour to local and regional market

centers. Also, the production of agricultural items for subsistence and local marketing required an expansion and development of the local service economy. This was facilitated by the completion of the James River and Kanawha Canal, and the construction of ferries and bridges along the James River which connected northern Buckingham County to the elaborate transportation system to the north (Moore 1976; Pawlett 1981; Roberts 1950).

By the mid-nineteenth century, the diversified local economy in Buckingham County was fully developed, and united the agrarian population with the non-agrarian population. The daily exchanges enacted by these people bound them together through an elaborate system of mutual dependency. Yet, because many of these people were related through cohesive lineal ties, or were friends or fellow church members, these ties transcended economic relationships and were encompassed by social relationships.

The pattern of settlement produced by the local economic development of the nineteenth century was one of decentralization, with a lack of any specialization of services. Clusters of service-oriented establishments were scattered throughout the county and were connected by a minimum number of common roads (see Mitchell 1836; 1865). Notable exceptions to this pattern of dispersed, unspecialized settlements include villages located on the primary water transportation routes which were associated with the external marketing system of tobacco and wheat, and the village of present day Buckingham where numerous specialized establishments were concentrated as an extension of its role as seat of county government.

The economic stagnation which occurred in Virginia between the War of 1812 and the 1850s acted to strengthen the diversified system

of production in the Buckingham County area. During this time period, the unpredictable fluctuations of foreign markets, coupled with falling farm prices and increasing competition from Midwestern agricultural development, caused increased risk and uncertainty for external market production (Henretta 1973). However, the local economy, based on mixed agriculture and artisan services, focused on production for local markets and was therefore strengthened to the point of community self-sufficiency. The stable internal markets enabled local farm producers to shift the intensity of cash crop production in response to changing external market conditions.

A gradual dissolution of community self-sufficiency and diversified local economy began shortly after the Civil War and continued throughout the late nineteenth century and into the twentieth century. This coincided with the slow integration of the Buckingham County area into the larger regional economy. The building of improved road systems and stable tobacco and produce markets benefited a focus on commercial agricultural production. Retail establishments successfully competed with locally manufactured goods, and caused a decline in local artisan services. Informal economic exchanges of goods, services, and labor, were replaced by formal transaction based on cash. The strength of the lineal tie was diminished. Finally, with self-sufficiency on the decline, many large farms and plantations became subdivided, and subsistence farmers became increasingly few in number. The shifting economy of the Buckingham County area was lent some stability by the slate industry and the developing pulpwood industry. But, by the early twentieth century, this shift to commercial production and formal economic transactions signalled a structural transformation, the results of which constitute the present economic structure of

Buckingham County.

The general social and economic history of Buckingham County described above provides an example of the type of historical and regional framework needed for the interpretation of sites identified in archaeological survey. An overview of this sort serves the necessary planning purpose of establishing an historical context within which resource significance may be evaluated. It also is written in such a manner that questions of a broader research purpose may be addressed, with implications for the region and the advancement of our understanding of historical processes in general.

For example, it is of interest to us that the historical sequences described in the preceding section follow much the same pattern as that described for counties north of the James River by Glassie in Folk Housing in Middle Virginia (1975). In that study, using architectural data, Glassie described an initial period of social "balance". This is followed by the adoption of the Georgian order, which in the Piedmont is seen contextually as a disequilibrating force - a lack of balance. Finally, he suggested a period of synthesis and contraction, or a return to locally defined community styles and values. The archaeological and architectural data generated by the University of Virginia survey of Buckingham County can be used to test the correlation between Glassie's patterns and those of Buckingham County. Such a use of the regional data base will allow not only an increase in understanding of the structure of historic Buckingham County, but also an evaluation of the structural principles described in Glassie's work. While more study remains to be done regarding the dating and architectural details of some of the structures located by the

survey, the prerequisite tasks of identification and evaluation of representativeness (i.e. counting houses and projecting densities) have been accomplished by the reconnaissance survey.

As this paper has attempted to demonstrate, when carefully designed, reconnaissance level surveys such as those supported by the Department of the Interior's matching grant program are a means of achieving and enhancing planning and research goals simultaneously. In fact, we suggest, neither goal can be met adequately without careful consideration of the other.

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A RECONNAISSANCE SURVEY OF THE GERMANNA AREA,  
ORANGE COUNTY, VIRGINIA

Douglas W. Sanford

Long recognized as a region of Virginia deserving of, but heretofore lacking in, broad and systematic archaeological research, the Piedmont has recently received overdue attention and investigation. As part of the Virginia Division of Historic Landmarks' (DHL) Survey and Planning Subgrant Program, archaeological surveys of varying scales have been implemented in Fairfax, Prince William, Chesterfield, and Henrico counties, as well as Albemarle, Buckingham, and Orange counties, the latter three being within the central portion of the Virginia Piedmont physiographic province. These surveys promise to not only further define the region's long term culture history, but will generate adequate and necessary information for large-scale cultural resource management and local land-use decision-making. This paper describes a small-scale, but intensive reconnaissance survey in northeastern Orange County that accomplished the several goals established at its inception.

In the case of the Germanna survey, a small private preservation organization, Historic Gordonsville, Inc. (HGI), applied for and received a modest grant to conduct a Phase I archaeological survey. HGI's main interests center on protecting and effectively managing its property that encompasses a National Register site and other significant sites known through historic documents. Highway construction, nearby residential development, and at the time of the survey, the very real problem of a protracted and potentially unsuccessful land purchasing arrangement by HGI for 62 acres, threatened these sites as well as those suspected but not

yet discovered. Other sites on adjacent properties where permission had been given to conduct survey work faced similar problems (see Figure 1).

Three known site complexes exist in the Germanna area of Orange County. Listed on the National Register, the most prominent site at present consists of the early Georgian mansion and plantation estate of colonial Lt. Governor Alexander Spotswood. Known later as the "enchanted castle," this residential complex served as the administrative seat both for what was then Spotsylvania County (1720-1734), and for Spotswood's vast plantation holdings (see Figure 2). At the time of the survey (1985-1986), this site had already undergone partial archaeological investigation, with research conducted by the Virginia Research Center for Archaeology (VRCA) in 1984 and by Mary Washington College in 1985, among others. As with other survey projects, the Germanna survey incorporated existing information concerning previously discovered sites.

The second site complex, situated on an adjacent property, centers on the 1714 frontier fort established by Spotswood and settled by immigrant German iron miners. Naming the fort, his plantation, and the early to mid-eighteenth-century community in honor of these Germans and of Queen Anne of England (i.e., Germanna), Spotswood intended the fort to defend the frontier, to manage the Indian fur trade of the nearby region, and to facilitate the settlement of the newly formed western agricultural frontier. Fort Germanna also marked the jumping off point for Spotswood's exploratory expedition of 1716 which crossed the Blue Ridge mountains and entered the Shenandoah Valley, a trek later romanticized by historians as the journey of the "Knights of the Golden Horseshoe." More importantly, the expedition symbolized the

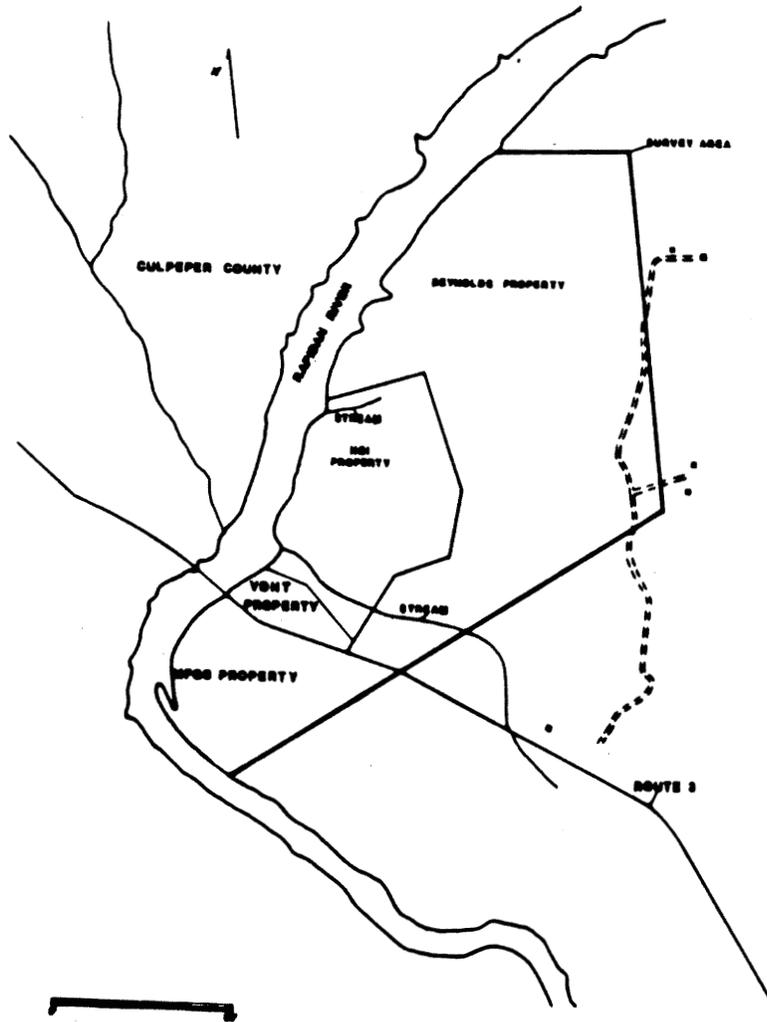


Figure 1. The Germanna survey area, Orange County, Virginia

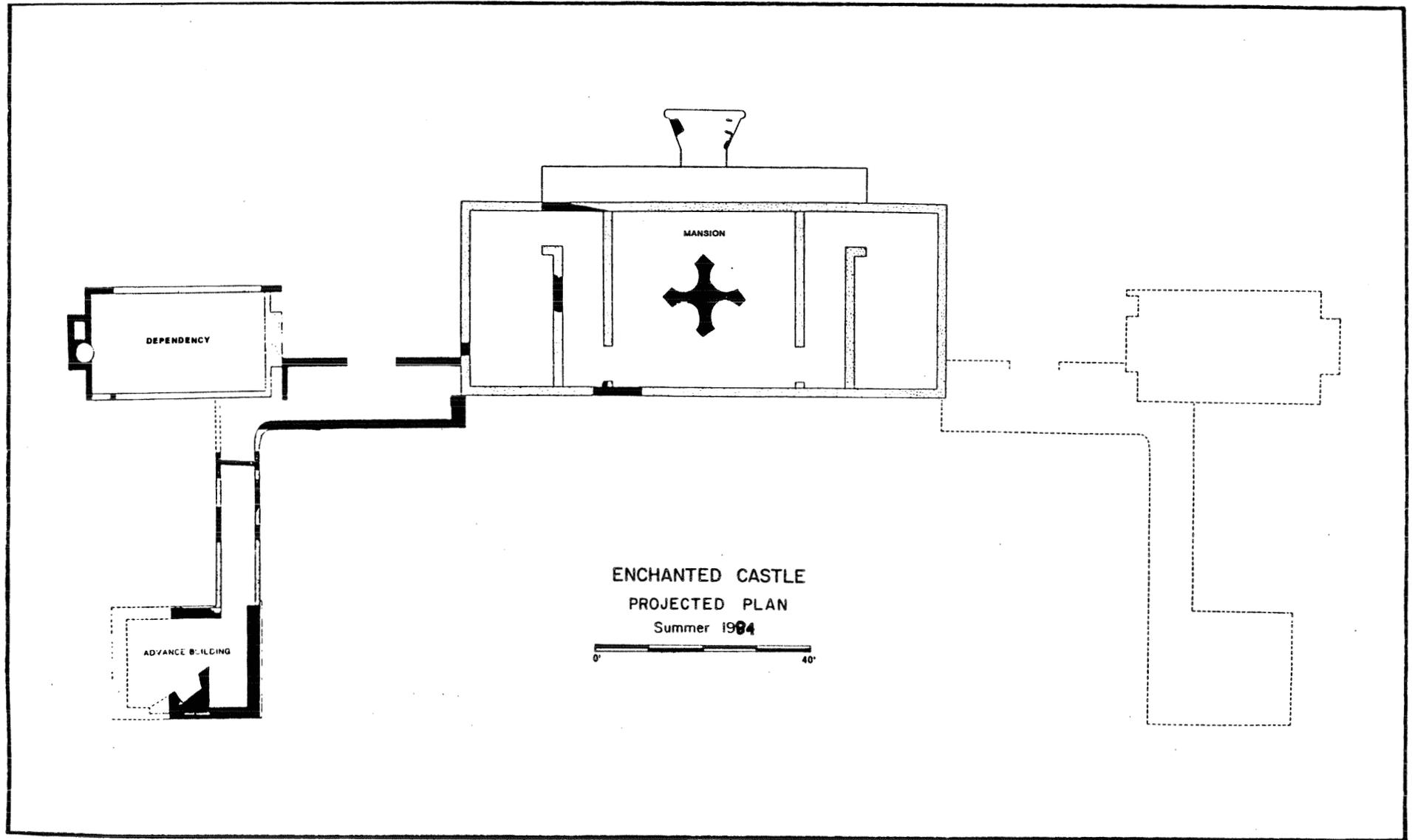


Figure 2. Plan view of Enchanted Castle, 440R3 (darkened areas denote excavated portions).

future expansion of the British colonial system by way of land speculation. The Germans employed by Gov. Spotswood not only settled his own land claims, but later (1718-1721) erected ironworks and maintained an industrial plantation of some 15,000 acres to the east.

Thirdly, the Germanna area's location on the Rapidan River also includes the river ford and the associated Civil War encampments and defensive fortifications that figured into the Chancellorsville and Wilderness campaigns. These events signaled significant turning points in the war and in the local region's social and economic history.

But the survey's goals extended beyond the further delineation of important components associated with these particular sites, communities, and events. In addition, research aims included locating evidence for prehistoric settlements and providing reliable, representative data to fit into broader-scale, temporal and spatial interpretations of the Piedmont region's culture history. The Germanna data embody a sampling of the region's transition from prehistory to colonial frontier, followed by the domination of slave-based tobacco plantations. Later in the eighteenth century and on into the nineteenth, small-scale, rural farm and milling communities proliferated. After the Civil War the Germanna area developed into a "backwater" rural status that now confronts residential and commercial development.

On the ground, the Germanna survey largely relied upon a systematic, subsurface sampling procedure wherein shovel test pits were excavated at 60 foot intervals along aligned transects spaced 60 feet apart (see Figure 3). By imposing this gridwork of transects on the HGI property of 62 acres, the intensive sampling

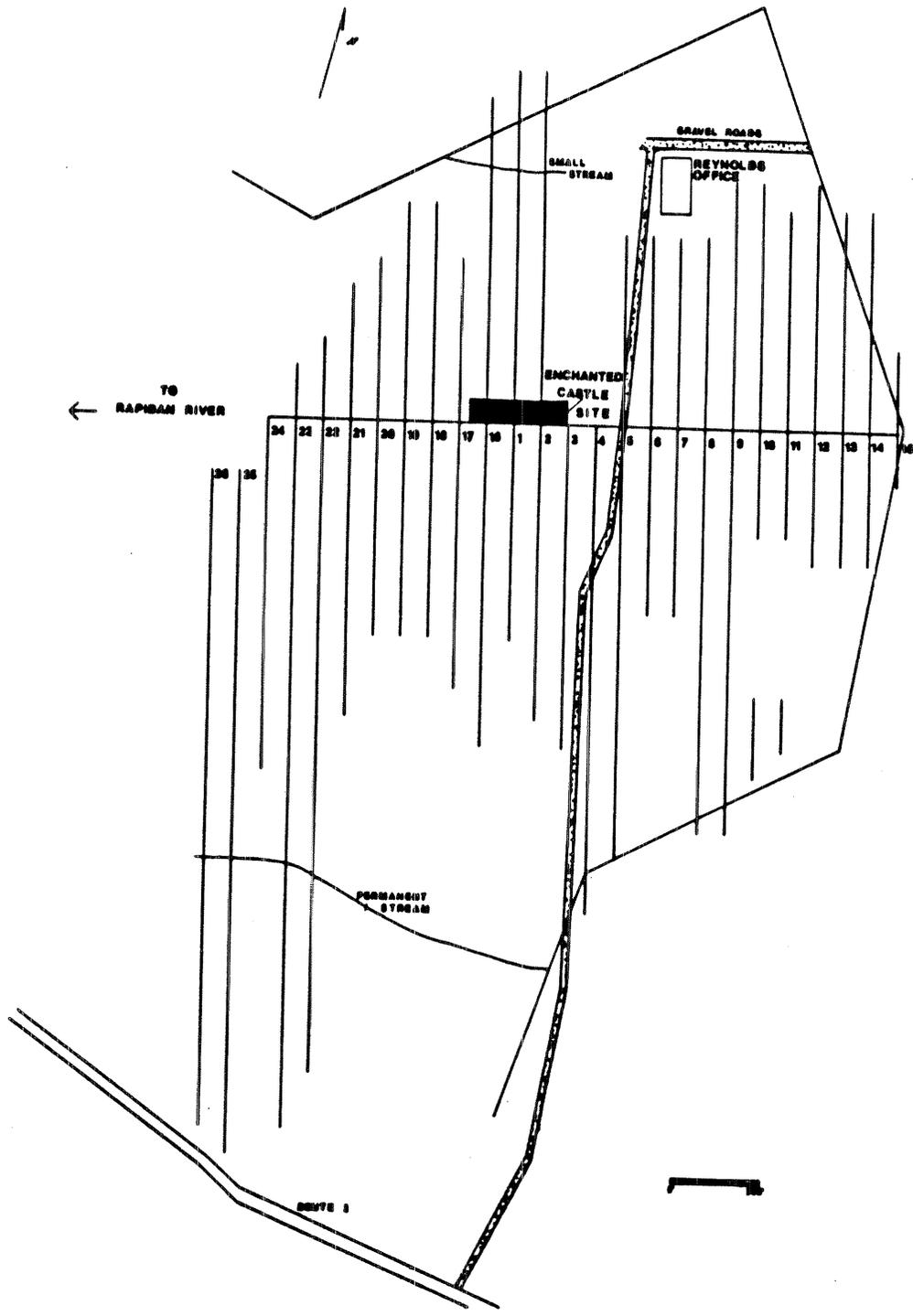


Figure 3. Transect grid for the Germanna survey.

method enabled the efficient recovery of archaeological data. Discovered sites could be (1) located on an easily replicable grid system of compass bearings and measured distances; and (2) be readily assessed as to date, cultural affiliation, approximate size, and if possible, function. Several factors influenced the selection of the survey methodology employed. In summary form, these factors included first, and on the practical level probably foremost, the heavily vegetated condition of the survey area. The survey area's physical appearance is best characterized as a combination of thick grasses, high weeds, brambles, and varying densities of trees. Thus, in compiling the inventory of archaeological resources the survey grid's required qualities focused on ease of implementation and an ability to be returned to in an area of low surface visibility. Second, given the project's allotted time frame (six months for all survey phases), and its relatively low budget, the method effectively accomplished the survey's goals within these limitations while relying almost exclusively on student and volunteer labor available only on a weekend basis.

Subsurface sampling over several acres is both time-consuming and labor-intensive. In light of the above noted physical conditions, and faced with variably skilled laborers, the procedure must remain simple yet efficient. In the case of the Germanna survey, workers operating in pairs used compasses and set paces to determine test pit locations along transects tied into a staked baseline. Survey teams excavated shovel probes at least one foot in diameter and in depth, with the removed soil sifted through 1/4" mesh screen. At each test pit, information recorded included soil profiles; quantity and type of artifacts, lithics, and charcoal; and local topographic conditions and features. Stakes and flagging

marked located sites, and where conditions permitted, surface inspections for artifacts complemented the sampling program. Artifacts or artifact clusters visible on the ground surface received more exact proveniencing by utilizing compass bearings and distances referenced to the survey grid points. Finally, selected sites underwent more intensive sampling by use of smaller interval test pitting in order to more precisely determine their sizes.

The survey program resulted in the recording of 18 sites on the HGI property and 4 sites on two forested properties adjacent to HGI's (see Figure 1). Archaeologists recorded nine additional sites utilizing surface surveys of people walking at regular intervals (approximately 30 feet) over cleared land of an adjoining property undergoing residential development. The total of 31 discovered sites consisted of 21 (67.7%) historic sites, 7 (22.6%) prehistoric sites, and 3 (9.7%) with both prehistoric and historic components and were found over an area of approximately 75 acres.

The shovel test survey method itself discovered 14 of the sites on the HGI property, where a total of 483 shovel test pits were excavated, involving about 400 hours of field labor. Under the field and weather conditions of the Germanna survey project, a crew of two could, on the average, excavate, record, and backfill 20 to 30 shovel test pits per day (4-5 per hour in a six hour field day).

The reliability and validity of the chosen survey strategy deserve some commentary. The method, as a means of controlled and uniform data collection, produced quantifiable and statistically accurate results concerning site size, density, and distribution. The perceived wisdom concerning test pit sampling acknowledges that the precision of subsurface sampling survey methods always involves

an interplay between (1) the known sampling design (namely the factors of the interval, size, number, and pattern of the test pits); and (2) the unknown or partially known nature of the archaeological remains, factors such as site size, shape, and associated artifact densities and distributions. Within this understanding, the use of systematic sampling does permit predictions of the probability of intersecting (or "discovering") sites of certain sizes, and conversely, estimations about sites missed. Still, the reliability of observed quantitative trends has known limits.

For instance, with reference to recent studies of probability formulations related to test pit sampling, the survey interval of 60 feet employed at Germanna indicated that sites with diameters greater than 85 feet would have ideally a 100% probability of being intersected by our gridwork of shovel probes (Krakker et al. 1983; Lightfoot 1986; Nance and Ball 1986). Table 1 shows how the probability of intersection lessens as site diameter decreases, so that, for example, sites 60 feet in diameter would be associated with a probability of intersection of 78.5%. Obviously, the survey method's bias, in terms of site "discovery", is against small sites, and more particularly against those with low densities of artifacts and/or high degrees of spatial clustering of artifacts. Small sites with these characteristics, at least prehistorically, occur frequently in the Piedmont. But as stated, the method does allow a determination of the chances of missing such sites. Also, the small sites encountered, together with those located by other survey methods, provide some estimation of their frequency and areal distribution.

Table 1. Probability of intersecting sites of given diameter, based on sampling interval of 60 feet between shovel test pits (from Krakker et al. 1983:471-472).

<u>SITE DIAMETER</u>	<u>PROBABILITY OF INTERSECTION</u>
60'	78.5%
50'	54.5%
40'	34.9%
30'	19.6%
20'	8.7%
10'	2.2%

Coupled with this realization of the survey method's limitations come the results of controlled studies demonstrating that approximately 20-40% of the test pits placed within known sites retrieved no artifacts (Lightfoot 1986:489). Such studies also indicate that the parallel alignment of shovel test pits from one transect to the next used at Germanna lessened the probability of site discovery in comparison to shovel test pits staggered on alternate transects (Krakker et al. 1983:427-473).

But to return to the Germanna survey, the sampling strategy did "succeed" in systematically identifying and assessing sites. This information will allow HGI to evaluate their archaeological resources and better manage them in the sense of incorporating them into a long term program of research, interpretation, and preservation. For such a local preservation organization, these data also improve land-use decision-making with respect to on-site, that is, property development.

On a broader scale, larger preservation agencies increasingly face similar decisions and thus need systematic, quantifiable information about archaeological resources and their predictability in addition to and in tandem with the data on the many sites already recorded and on file with the VDHL. The development of regional predictive models seems to be the logical response, and the results from the Germanna survey can serve to test the accuracy of these larger scale models and their broader survey techniques. The data from the Germanna project also render a necessary complement to these models by supplying intensive, community-level archaeological survey information.

Comparison of the Germanna survey data with the results from other systematic surveys in the Piedmont can be problematic. The obtained site densities, as well as the predictive models derived from them, vary according to the manner of calculation, their respective field methodologies (including sampling design), and purpose (examples of recent regional surveys include Hantman et al. 1985; Klatka et al. 1986; Lewis and Parker 1987). For instance, regional-scaled models and survey techniques have acknowledged limitations for application to smaller survey areas since they deal with wider confidence intervals for estimations of site discovery and density. With respect to Germanna then, these models would most likely underestimate the number of historic sites. Yet such a result is tempered by the fact that the Germanna area represents a locality of known, high historic activity and thus, a site density higher than normal for other portions of the region.

This type of discrepancy points to two relevant issues of survey methodology. One centers on the role of intensive block surveys, such as that at Germanna. These surveys direct attention

to concerns of settlement composition rather than overall regional distribution patterns. Their results especially provide data on spatial arrangements within and between settlements.

The second issue consists of site definition and by extension, site count. At Germanna, several of the "sites" identified probably represent outbuildings and work areas associated with the two known plantation manor houses of the eighteenth and nineteenth centuries. Should such "expected" resource loci, namely, the integral parts of historic agricultural complexes, receive separate site designations? At the level of the reconnaissance survey logic supports that they should, despite the dangers of inflating site counts. Such data can (1) indicate some portion of what is missing from the larger-scale models and their site inventories; and (2) be modeled into future research and survey designs.

The results of the Germanna survey play a major role in contributing to a number of significant local and regional research goals. Prior to enumerating and briefly describing these, it is worth noting that the archaeological survey at Germanna partially contributed to the establishment of a local preservation consortium. Two adjacent property owners, one public and one private, have agreed to cooperate with HGI in future archaeological and documentary research. Cooperative efforts embrace preserving sites known to exist on the consortium's lands (approximately 270 acres in addition to the 62 acres belonging to HGI), and permitting and assisting future survey work in order to discover and protect those sites presently unknown from future development.

One overriding research goal relevant to the Germanna survey data consists of the study of historical processes in the Piedmont region of Virginia. As noted earlier, this region has yet to

receive intensive and systematic archaeological work and historical research, and can perhaps be correctly characterized as a region whose study is still dominated by Tidewater-derived models of culture, plantation systems, and culture change. While not denying that Tidewater planters effectively controlled the initial historical development of the Piedmont, then the western frontier of colonial Virginia's tobacco and slave-based plantation system, this region did present new environmental and sociocultural obstacles to the expansion of this older, agricultural settlement system. Roads rather than rivers served as the primary means of transportation, and eventual changes in agricultural practices (namely a focus on wheat and mixed farming versus tobacco) together with cycles of soil exhaustion, migration, and settlement resulted in smaller than average land and slave-holdings (Fisher 1983:4). Synchronic and diachronic aspects of this Piedmont settlement system remain to be specified and modeled.

Comparing Alexander Spotswood's eighteenth-century tobacco plantation with the nineteenth-century Gordon family plantation at Germanna that stood amidst a rural community dominated by farming and milling, suggests one method of integrating the local archaeological data with regional models of the Piedmont's social and economic history. The modest-sized Germanna Mills community that developed in the vicinity of Fort Germanna from the late eighteenth century to the time of the Civil War more accurately reflects the region's basic settlement pattern, one based on numerous small towns, farms, and plantations. This same community potentially indexes the regional settlement system's shifting relations of dependence on local, regional, and international markets as well as its response by way of a variable system of local

agricultural diversification and artisan production within an integrated social economy (Schlotterbeck 1980, 1982).

The recognition of Germanna's admittedly limited, but symbolically important role within the periphery of the British colonial world system, as it pertained to Virginia, comprises another perspective on the survey and documentary research data. Within this perspective lies Germanna's significance to the frontier phase of the central Virginia Piedmont.

Hierarchy and rapid change dominated frontier life and cultures in the Germanna area. Gov. Spotswood, not surprisingly, stands as one key figure during this process. He established the 1714 frontier fort at Germanna as part of his plans for effecting the Virginia colony's western defenses and for funneling the Indian fur trade. Fort Germanna, a site not yet found archaeologically, stood as the northern counterpart to Fort Christanna, located to the south on the Meherrin River in Brunswick County. The site of this fort was discovered and partially excavated in 1979 and 1980 by the VRCA and by Mary Beaudry of Boston University (Hazzard 1979; and Beaudry 1979, 1980). Unlike Fort Christanna, Fort Germanna did not successfully sustain an Indian fur trade, nor was it primarily military in nature. The German residents of the fort functioned instead to both settle Spotswood's lands, thus maintaining his legal claim to them, and more importantly, to begin iron mining and the construction of nearby ironworks, known as the Tubal Furnace.

Thus Spotswood's version of speculative capitalism on the frontier held several aspects, namely trade, agriculture, and industry. Spotswood's behavior typified that of other elite Virginians, especially influential Tidewater planter families who patented much of the newly available Piedmont lands. By way of

example, nine out of the eleven gentlemen members of Spotswood's 1716 western expedition obtained large land tracts along the Rappahannock and Rapidan Rivers (Schlotterbeck 1980:13-14).

Elite control of the frontier settlement process went beyond land speculation and tobacco plantations. Returning again to Spotswood, he took advantage of his governmental positions, his wealth, and his prestige in order to perpetuate rights of access to other key resources. Court orders in the 1720s directed roads to be built to his Germanna plantation and that a ferry operate at the road's crossing of the Rapidan River, near where Spotswood would later build a mill complex. The Spotswood family owned the ferry and rented its services to the newly formed county, named Spotsylvania in honor of its leading citizen.

The county's administrators directed that a courthouse, jail, and church complex be constructed at Germanna, thereby allowing Spotswood to oversee the county's seat and the center of its sociopolitical affairs. In line with Kenneth Lewis' modeling of frontier settlement within the agricultural colonization system of complex states, the evidence at Germanna portrays this community as a quickly developed, focal settlement located at a transportation node. This settlement formed the nucleus for the local region's social, religious, economic, and political activities (Lewis 1977:155).

But in keeping with the pattern of rapid change, just as Fort Germanna apparently lasted but a few years, so had Spotswood's local hegemony dissipated by the mid-to-late 1730s. By then, (1) his elite ranking rivals had managed to move the courthouse eastward to Fredericksburg; (2) local residents had burned the Germanna church due to its inconvenient location; and (3) spreading settlement to

the west resulted in the formation of Orange County in 1734, of which Germanna became a lesser part. Thus, within two decades the Germanna area, seen here as exemplary of the Piedmont, quickly changed from a system of diversified frontier agriculture based on indentured labor in an area of low population density. In its place arose a tobacco plantation system, market-oriented agriculture based on black slave labor within a less dispersed settlement pattern. A similar, servant-to-slave labor transformation occurred at Spotswood's ironworks.

Another research theme relevant to the Germanna data concerns ethnicity. Multiple ethnicities effected the frontier process just described and comprised the more settled plantation community phase that followed. Early settlers at Germanna encountered remnants of American Indian populations, then called Saponis, and Spotswood himself kept a female Indian as a servant (Miller 1985:26; Scott 1907:56). Three German colonies of evangelical Protestant and Lutheran faiths settled in or near the Germanna area, serving time as indentured laborers (while disagreeing with Spotswood as to the legality of this status) before migrating, like many others, to more open areas of the Piedmont. Afro-Americans embodied the bulk of the Germanna community's labor force and certainly a major portion of its population. As other researchers have noted, black groups in the Piedmont represented important components of Piedmont settlement processes, particularly during the early to mid-eighteenth-century westward transition of the Tidewater plantation system, and again during the "resettlement" phase by freed blacks after the Civil War (Fisher 1983:2-4). Finally, Anglo-Americans comprised the other major ethnic group at Germanna. In addition to the more well-known

elite families, such as the Spotswoods and the Gordons, Anglo-Americans occupied social positions as indentured servants, artisans, small farmers, and "middlin" planters.

The last major theme for present and future research focuses on landscape, the cultural ordering of space. The Germanna survey data mark the initial assessment of the area's landscape and its changes through time. Both elite and vernacular landscapes are represented, ranging from the elaborate residential complex at Spotswood's "enchanted castle" to the farms, servant and slave quarters, and the milling community of Germanna's long-term and multi-ethnic occupations.

At present, Spotswood's house and grounds occupy the foreground of archaeological research and public interpretation aims. The "enchanted castle" site, from one perspective, signifies the transfer of British Georgian architecture and country estate and garden design from the Tidewater to the Piedmont. The house itself, an early Georgian (ca. 1725) mansion of large size (the main house measuring approximately 40 by 80 feet), represents an unusual incorporation of native stone, both for basic structural and for ornamental elements. Similarly, this mansion and its elaborate landscape initially came about in a frontier location. These latter two qualities, the residential complex's scale (120 by 240 feet when the two L-shaped dependency wings are added to the main house and its juxtaposition with the surrounding wilderness supposedly supplied the basis for the mansion's name. Research to date has also indicated that remains of the house's gardens and grounds do survive. Based on these findings and documentary data, future excavations may well reveal this site as an important transition between the formal, French garden designs of the early to mid-

eighteenth century, and the English, pictorial designs for "naturalized" landscape gardens and grounds that followed (see Figure 4).

But the upcoming excavations of the "enchanted castle's" immediate environs will also necessarily be concerned with defining workyards, fencelines, and domestic contexts that concerned themselves more with the servants, slaves, and other plantation society members that made up the majority of the Germana community. In summary then, this just described movement from a small physical context, the site, to greater social and cultural ramifications mirrors the nature of the Germana survey. It embodies the small, but necessary initial investment that will provide the context for a local preservation organization to realize its resources and to make plans for organizing how the resources' multiple perspectives will be researched and conveyed to interested scholars and the general public.

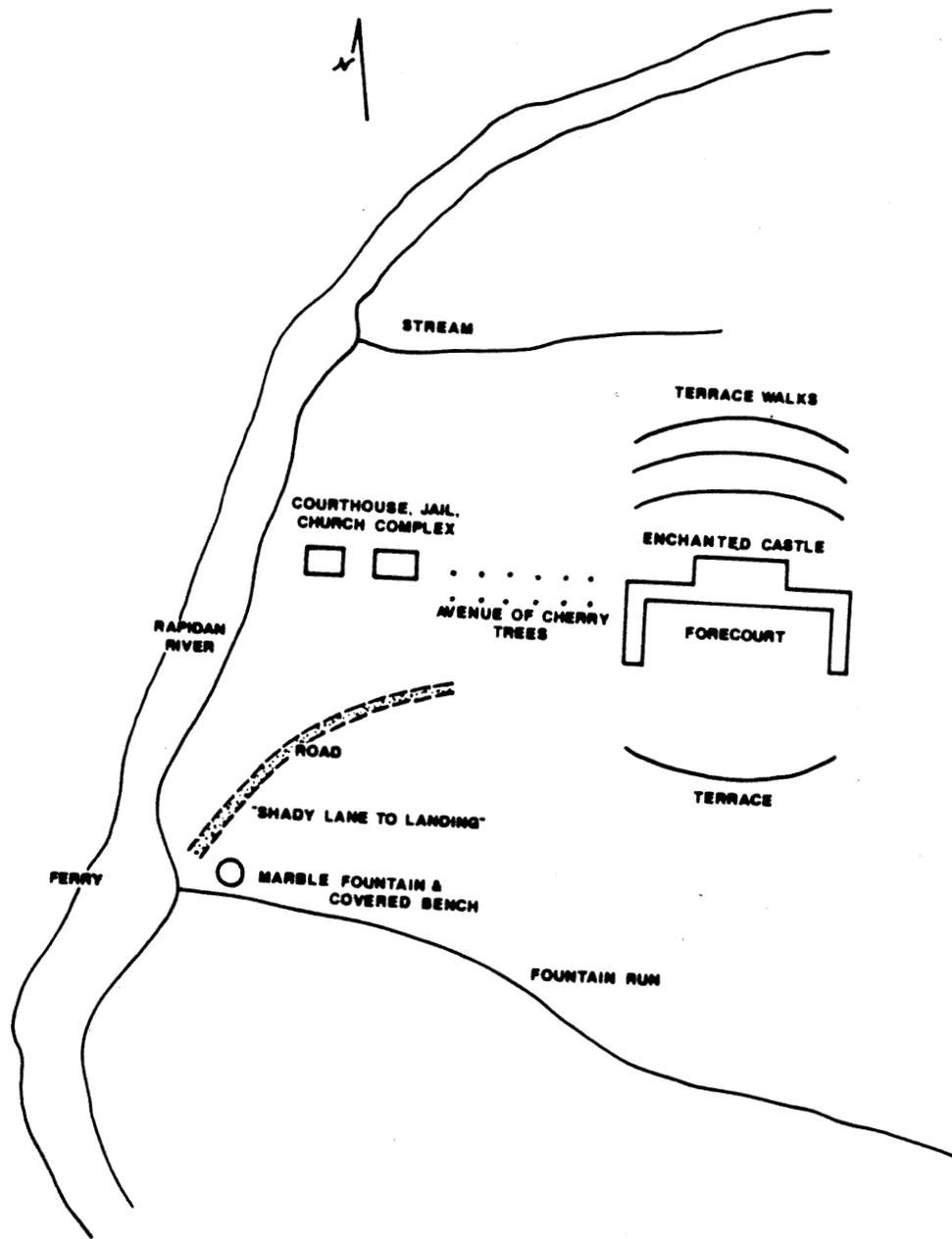


Figure 4. Conjectural sketch of the Spotswood period landscape.

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THE RICHMOND METROPOLITAN AREA ARCHAEOLOGICAL SURVEY:  
PROSPECTS FOR PLANNING IN A SOUTHEASTERN CITY

Frederic W. Gleach

The Richmond Metropolitan Area Archaeological Survey (RMAAS) was undertaken through a grant from the Virginia Division of Historic Landmarks to provide an inventory of known sites in the area, and to develop predictive models to help locate other sites that may be threatened by impending development. The Richmond area has an extensive prehistoric and historic archaeological record, but it is one that is threatened by the explosive rate of growth of the city. As a major city in the Southeast, development is inevitable. As capital of Virginia, a state that thrives on a tourism built around colonial history, archaeological resources are too valuable to be carelessly sacrificed to development.

Prehistory in the Richmond area goes back at least 12,000 years, and a number of important sites are known. The Williamson site (McCary and Bittner 1978), for instance, just outside the RMAAS study area, is a major Paleo-Indian site. Deeply-stratified sites are known along the James River, in the heart of the city as well as in the adjacent counties. These are likely to include important Archaic sites, but this is not certain; none have been sufficiently tested. A major Late Woodland village has been completely destroyed by construction of a sewage treatment plant in Henrico County. A large part of a Late Woodland cemetery was destroyed in Shockoe Slip; the probable location of the site of the village of Powhatan has also been destroyed. Many prehistoric sites still exist in the Richmond area that are critical to an understanding of Virginia prehistory, but many of these are also threatened.

Significant historic sites in the Richmond area are also abundant. Thomas Dale's settlements at Henrico and Bermuda Hundred date to 1613; Henrico has been largely destroyed, and his settlement at Bermuda Hundred has not been located. Parts of the defensive palisades at Bermuda Hundred are still standing. The site of the Falling Creek Ironworks, the first in the New World, has been located (MacCord 1964); it is extensively disturbed, but parts may remain intact. The presence of many other seventeenth-century sites is known from historic documents, but they have not been located by archaeologists. The seventeenth century in central Virginia, particularly the period from 1625 to 1690, is poorly known.

Known eighteenth-century sites in the area are dominated by plantations, but also include port towns at Osbornes and Bermuda Hundred. The rise of industry and coal mining during this period resulted in a great economic expansion, including associated service facilities, but relatively few such sites have been studied or located. The Revolution and the Civil War were both fought through the area, but military sites, particularly those related to the Civil War, have not been a major focus of investigation. Many feel that these sites are so common there is no need to protect them; this feeling is not shared by those in other parts of the country, where such sites are nonexistent.

The developments of the eighteenth century left an extensive archaeological record. Many of these sites are known; many have been destroyed, and many are threatened.

Sites and standing structures of the late nineteenth and early twentieth centuries are perhaps suffering the greatest attrition and receiving the least attention from archaeologists. Richmond was the site of the world's first electric streetcars, including an amuse-

ment park at the end of the line. Prohibition era stills are common in the counties. It may be argued that such sites are not important, because there are already sufficient data concerning this period; it should be borne in mind, however, that our eighteenth-century ancestors could have said the same things about seventeenth-century sites. As increasing numbers of these sites are destroyed, the remaining examples grow in significance. Few in Virginia, where history is dominated by the colonial and Civil War periods, have much interest in such recent events, however.

It is the mandate of cultural resource management to protect all types of sites. In the Richmond area, sites and standing structures are lost to many forces, including gravel quarrying, construction, and "urban renewal". Faced with the daily destruction of site after site, it is necessary to have an inventory of sites in order to predict the presence and significance of a site, and thus to be able to predict the impact of a development project. It is then necessary to get this information to the planners and developers, and to compel them to use it. The alternative is constant salvage archaeology, seldom a successful or productive venture.

The RMAAS project was undertaken to supply these needed tools. As a result of long-term survey projects by VCU and others, a great many sites were already recorded in the Richmond area. Much of this previous research had been performed under the direction of L. Daniel Mouer, who proposed, designed, and directed this project, and it was largely due to his experience in the area that the project was successfully completed.

The study area selected included the City of Richmond, Henrico County, and the northern half of Chesterfield County. It was felt

that this was the maximum area that could be adequately studied in the given amount of time of slightly less than one year. This would also encompass much of the area suffering the greatest destruction by development.

The study was divided into 40 planning units, so that information for a specific area could be supplied to planners and developers working in that area. These planning units were defined using geographical, archaeological, and historical criteria.

Copies were obtained of the site survey registration forms for all sites recorded in the state files, and these forms were used to code data known for each site. As these registration forms are often lacking in detail, and seldom reflect data recovered from subsequent excavation, any other available information, including site reports and study collections, was also consulted. Approximately 1,000 site components were eventually coded as part of this project.

Each major component of each site was then coded separately, using a standard codebook developed specifically for the project. Coded data included location and type of component, its integrity and suitability for study, its research history, and its "study unit" and "priority". These latter two were coded from a "Prioritized study unit list" drawn up for the project, consisting of about 250 study units divided by temporal period, and sub-divided by specific research interests. Each was assigned a priority ranging from 1 to 3, with 1 representing a low priority, 3 a high priority. Any such ranking of priorities is inherently subjective; the research interests of others and possible future research interests were, however, taken into account in the preparation of this ranking.

Each site component, in addition to the study unit priority, had a Site Evaluation Index calculated. The Index took into consideration not only the priority of the study unit represented by a component, but also its integrity, suitability for study and for interpretation, and its National Register status. The Index gave a relatively objective measure of a site's significance.

Since existing survey data were biased toward certain areas, such as floodplains, and particular drainages over others, additional survey was determined necessary to help fill in the gaps in the existing data base. William C. Johnson was brought into the project to direct this survey; he also coded soils and landforms for the project area, as I will describe below. Some areas were selected for additional survey simply because they were under-represented, others because it was felt that they were likely to contain sites of major significance. The mild winter allowed field survey through the fall, winter, and spring of 1984/85. Over 120 new sites were located and added to the state files and the RMAAS data base.

In addition to recorded archaeological sites and those located by RMAAS survey, historic maps and inventories of historic standing structures in the two counties were consulted. Unconfirmed sites which have not been precisely located, including historic Indian villages and Sir Thomas Dale's Henrico and Bermuda Hundred settlements and fortifications, were also taken into consideration in the evaluation and discussions of the various planning units.

In order to provide greater predictive ability to the data base, a sample of the area was made, and the landscape characteristics of that sample coded. A 2,000 foot grid was placed on the USGS 7.5 minute sheets of the project area, so that

characteristics of a given 2,000 foot square could be recorded. The sample taken consisted of two parts: a control sample, made up of those areas that had been adequately surveyed, and a random sample (representing approximately 8% of the area) that provided a means for checking and compensating for any bias in the control sample. The coded landscape characteristics included the presence or absence of a variety of topographic features within a square, proximity to streams of various sizes, and the four most common soil series in the square.

The characteristics of each soil series were then separately coded, so that these data could be merged onto the corresponding grid squares for analysis. Data on site components were also merged with the geographic data. With the use of these three data merged together, correlations of any factors could be determined. This offered the potential to predict the presence or absence of sites in an area, by coding geographic data for the area and comparing it to the various models. This method was applied to prehistoric site prediction, with different models being developed for the different periods (cf. Table 1 for sample listings).

Geographic and environmental factors were not used for the prediction of historic sites in this project. As a result of the extent of historical interest in central Virginia, there exists a great store of documentation on the historic settlement of the area. This is a much more efficient method of site location prediction for historic sites than would be computerized predictive models. The proximity to historic roads and crossroads is a particularly good predictor for historic sites.

An historic settlement pattern model for Henrico County has been prepared as part of another VCU project (Mouer et al. 1980).

TABLE 1

Variable Name	Probability of at least one site		
	Any Prehistoric	Middle Archaic	Middle Woodland
Rank 1 Streams	40%	6%	12%
Rank 2 Streams	39%	4%	15%
Rank 3 Streams	41%	5%	16%
Rank 4 Streams			
James River	39%	6%	16%
Chickahominy River	46%	11%	23%
Appomattox River	*	*	*
Stream headwaters	39%	7%	10%
Falls	36%	0%	7%
Habitat diversity			
Below average	32%	0%	7%
Average	42%	9%	15%
Above average	56%	0%	11%
Extremely diverse	22%	0%	0%
Soil drainage			
Poorly drained	40%	7%	18%
Moderate drainage	34%	6%	9%
Well-drained	43%	5%	8%
Excessively drained	50%	0%	0%
Slope			
Level	40%	6%	12%
Moderate slope	56%	6%	0%
Extreme slope	35%	4%	13%
Soil parent material			
Alluvial sediments	39%	6%	15%
Coastal Plain sediments	41%	3%	6%
Piedmont rocks	35%	6%	6%
Triassic rocks	47%	13%	13%
Topographic situation			
Broad convex ridgetops	43%	6%	6%
Broad convex ridgetops with alluvial sediments	25%	0%	0%
Narrow convex ridgetops	60%	7%	0%
Upland flats	42%	8%	16%
Ridges and concave depressions	33%	0%	0%
Broad alluvial terraces	40%	8%	12%
Low concave terraces and depressions	50%	0%	0%
Narrow floodplains along streams	50%	0%	50%
Floodplains (frequent)	37%	4%	18%
Side slopes	33%	4%	11%
Man-altered land	*	*	*
Agricultural capability class			
Class I	44%	7%	10%
Class II	38%	4%	6%
Class III	40%	6%	14%
Woodland suitability class			
Class I	37%	0%	7%
Class II	38%	6%	14%
Class III+	42%	7%	9%

\* Insufficient information 59

A review of literature and standing site inventories suggests that the general patterns of settlement in Chesterfield County were similar. Historic sites may thus be predicted using this data base of historic documentation.

The preparation of the RMAAS data base and development of the predictive models are the most important contributions of the project. The data base not only allows the prediction of sites of different periods and their significance, but will also support an extensive analysis of settlement patterns and their change over time, and of the correlation of environmental factors with these settlement patterns.

One product of this data base and the predictive models is a set of Sensitivity Maps. These 16 maps consist of the USGS 7.5' topographic sheets for the project area, with a series of "Sensitivity zones" indicated by three levels of shading. These indicate the relative likelihood of encountering sites of given levels of significance within the various zones. They provide a graphic tool that readily locates areas of sensitivity, that could easily alert planners and developers to the need for archaeological survey before construction in any given area. They were produced in such a way that multi-color versions, an even more effective graphic tool, could easily be prepared at any time should there be a demand and funding for them.

A further contribution of the project has been knowledge of two previously unidentified major sites of great significance. One of these is Sir Thomas Dale's Bermuda Hundred palisade of 1613, which was tested by the RMAAS field crew (Gleach 1986). Conclusive evidence is still lacking, but it appears likely that this feature represents the remains of his "Pale cut over, from river to river,

two miles long," (Hamor 1615:31) that served to protect the Bermuda Hundred settlement.

The second site is that of Richard Randolph's Curles Plantation (cf. Mouer 1987). This site was located by the RMAAS crew when it was plowed in the spring of 1985, for the first time in years. The site is incredibly rich, and has been plowed very little, and not deeply. It is being excavated by VCU's field schools, with three seasons already having been spent there. The main house was 95 by 26 feet, with a half basement. Dependencies located include the kitchen, laundry, dairy, and ice house. Not yet definitely identified but near the same site was the house of Nathaniel Bacon in the 1670s.

The identification of these sites was of immediate impact; more long-term effects from the project have been less impressive. A two-volume report was completed (Mouer, Johnson and Gleach 1985 a,b); the first volume intended for planners and developers, and including the sensitivity zone maps, the second volume a technical report describing the methodology and findings of the project. Two hundred copies were printed for distribution to planners, developers, and archaeologists. While comments from those who have read these reports have been favorable, most still await distribution. Until the information is in the hands of developers and planners, it is unreasonable to expect them to be aware of the significance of archaeological resources; without such awareness, it is unreasonable to expect cooperation from developers. Informed cooperation is essential if there is to be responsible management of archaeological resources.

At this time, there is no mechanism for the coordination of efforts by state and local governments. There is no agency, on any

level, to provide an interface between the archaeologists and the local planners and private developers. There is no funding allocated for anyone to provide this service. Without someone to administer a preservation plan, such a plan serves little use. At this time, the RMAAS reports constitute a powerful tool for preservation planning, with no agency to administer such planning.

The first half of 1987 has brought new developments that offer some promise. A proposal has been drafted by the Council of Virginia Archaeologists (COVA) for the re-institution of a system of regional preservation and research offices. Such a system could serve as the needed liaison between archaeologists and developers.

The Richmond metropolitan area, with its combination of important archaeological resources and its explosive rate of growth, is an area ideally suited to preservation planning. The Richmond Metropolitan Area Archaeological Survey has produced a powerful tool for use in the planning process. What is now needed is funding and the organization to perform and/or oversee the planning process. This will not be accomplished by the continued allocation of small amounts of money for further survey or salvage work; an active statewide program of cultural resource management is necessary.

### Acknowledgements

I would like to acknowledge the contributions of William C. Johnson and the field crew in the execution of the fieldwork for this project. L. Daniel Mauer, Director of the VCU Archaeological Research Center, designed, organized, and directed the project, and this paper has been strongly influenced by his work. Any errors in interpretation are, of course, my own. Table 1 is reproduced from Volume II of the report. I would also like to thank Pamela J. Cressey for her comments as discussant of the Society for Historical Archaeology session at which this paper was originally presented, and Elizabeth A. Rega for help in organization.

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BUILDING THE PROCESS INTO RESOURCE PROTECTION PLANNING:  
AN EXAMPLE FROM TIDEWATER VIRGINIA

Gregory J. Brown

For many of us in an institutional or academic setting, historic resource management has become a major concern. Yet there is a temptation to see planning, and the management of historic resources, as a disjointed element of our jobs, important but separate from the "pure" academic research that gives us the most satisfaction. This paper will discuss an attempt to bridge this gap--to create an integrated management and research plan for two counties and two cities in the Lower Tidewater area of Virginia. Although it is only one, admittedly imperfect, solution, we firmly believe that the conscious integration of management programs with academic research can help us do each better and more thoroughly.

In 1984 the Office of Archaeological Excavation of the Colonial Williamsburg Foundation, under the direction of Marley R. Brown III, received a Survey and Planning Subgrant from the Division of Historic Landmarks of the Commonwealth of Virginia, the purpose of which was the production of preservation plans for James City County, York County, the City of Poquoson, and the City of Williamsburg--an area of some 320 square miles in the lower Virginia Tidewater (see Figure 1). Specifically, the region is bounded on the north by the York River, on the west by Charles City and New Kent Counties, on the south by the James River, and on the east by the City of Newport News. As such, it encompasses some of the most significant prehistoric and historic sites in the nation, including the seventeenth-century settlements at Jamestown, the battlefields of Yorktown, and the colonial-period sites of Williamsburg. In the past, the resources in the area have been managed by the National

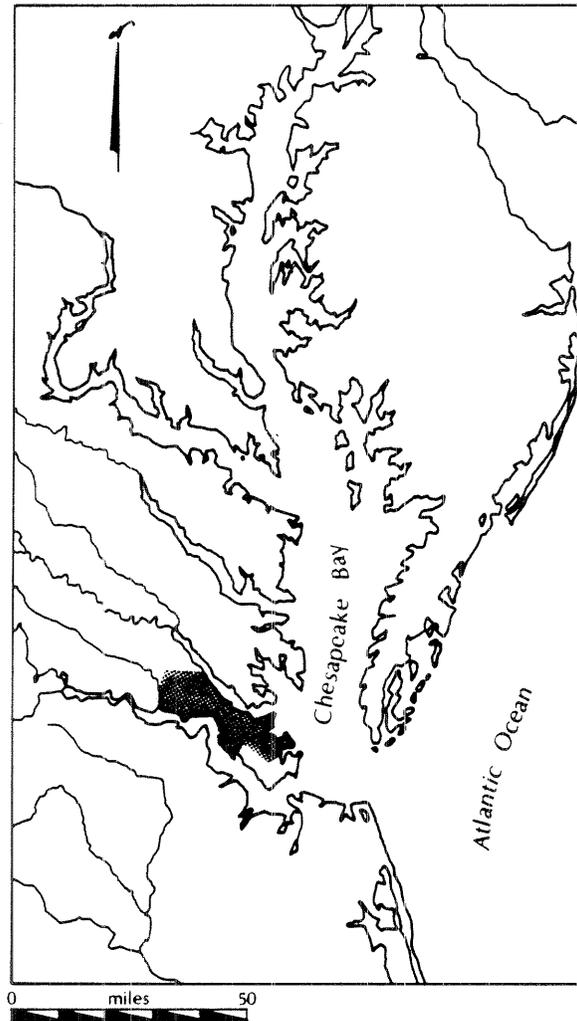


Figure 1. Project area.

Park Service (custodians of Jamestown, parts of Yorktown, and Green Springs Plantation); the Colonial Williamsburg Foundation; the federal government, (owners of the numerous but; mostly-unrecorded sites on the U.S. Naval Weapons Station, Cheatham Annex, and Camp Peary); and the local counties and municipalities, sometimes in concert with professionals from the College of William and Mary. Unfortunately, however, no plan for the systematic management of resources in the entire area had ever been prepared.

The model that we adopted for our plan is one developed by the National Park Service, the Resource Protection Planning Process (often known simply as "RP3"). Described as "a dynamic process that imparts greater consistency and direction to preservation planning," its purpose is:

To develop a comprehensive historic resource management process which identifies and organizes information about a State's historic, archaeological, architectural, and cultural resources into a form and process readily usable for producing high reliability decisions, recommendations, and/or advice about the identification, evaluation, and protection of these resources (Heritage Conservation and Recreation Service 1980:1).

The RP3 project undertaken at Colonial Williamsburg involved three phases: remedial research, organization of the data into study units, and production of the plan. A fourth "phase," in many senses most important, will be discussed later--the on-going use of the plan through the activities of a regional information center.

Remedial research was undertaken in order to estimate the number and condition of archaeological sites and architectural properties in the study area. Archaeological site inventory forms, architectural survey forms, and National Register nomination forms were collected from the files of the Virginia Division of Historic Landmarks, and entered onto microcomputer. Although more than 900 archaeological sites and 100 architectural properties were thus recorded, however, this is unquestionably only a small fraction of the total resources to be managed. Well over 80% of the study area has not yet been archaeologically surveyed, and thus the total site inventory must be many times larger. Our own research has since located over 200 other historic properties that have not yet been registered.

The research made it clear that the archaeological inventory forms were badly in need of updating, as most were incomplete or outdated. An attempt was made, using available U.S.G.S. topographic maps and known documentary sources, to complete at least the major locational and descriptive information on the forms. Through the efforts of an intern specializing in architectural history, photographs were taken of standing buildings in the area, and the architectural forms were similarly updated.

Information regarding historic resources is not limited to the registration forms alone, and an attempt was made to gather and organize some of the subsidiary data scattered in various other sources. Annotated bibliographies of relevant archaeological and architectural reports were prepared by Colonial Williamsburg interns, while analyses of the relevant secondary literature were undertaken by students in the History Department of the College of William and Mary. These bibliographies, with more than 1,000 entries, provide one of the most comprehensive tools yet available for our future research activities.

Once remedial research was completed, study units were organized. Scholars from the College of William and Mary, the Colonial Williamsburg Foundation, the Virginia Division of Historic Landmarks, and several local institutions were consulted before the units were decided upon, and a tentative framework was devised. A total of 23 units were finally established. These include four prehistoric Native American study units, four historic-period Native American study units, six Euro-American study units, and six Afro-American study units (See Figure 2). Finally, three cross-cutting thematic units were established, in order to focus on the develop-

ment of three major historical influences in the region: belief systems, public welfare institutions, and the military.

The development of appropriate study units is essential to the RP3 model, and these units were therefore carefully constructed by a committee of archaeologists, historians, and architectural historians. Designed to reflect the development of major historical themes, they also must permit the integration of documentary history with the physical resources themselves (that is, the archaeological sites and architectural properties). Each unit was thus defined in terms of its major themes and sub-themes, thus providing a research-oriented basis for any determinations of significance. For example, one sub-theme stresses the importance of fledgling manufactures in the early nineteenth-century Tidewater. Because such sites are rare in the study area, this research orientation makes each one that much more significant, and correspondingly increases the sensitivity of any area where such sites are likely to be located. Each study unit was also accompanied by an operating plan, which discussed the identification, evaluation, and treatment options available for each resource or category of resources. Management plans for each jurisdiction were developed as a result of the merging of the operating plans with an evaluation of current development pressures, local political considerations, and the overall planning framework. The operating plans and management plans were worked out in consultation with local planners, as well as with scholars and other professionals. A two-day conference in May 1985, attended by over 45 archaeologists, architectural historians, historians, and planners, was instrumental in establishing a general consensus on the major issues and most significant resources for each study unit.

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**FIGURE 2. STUDY UNITS.**

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- I. Early Hunters, the Area's First Inhabitants, < 6500 B.C.**
  - II. Foragers in a New Environment, 6500-2000 B.C.**
  - III. Permanent Settlement and Population Growth, 2000 B.C.-A.D. 1000**
  - IV. Village Life and Agricultural Development, A.D. 1000-1560**
  - V. The Protohistoric Period, A.D. 1560-1607**
  - VI. Powhatan Struggle to Retain Land, Power, and Cultural Autonomy, A.D. 1607-1644**
  - VII. Powhatan Cultural Change and Adjustment, A.D. 1644-1677**
  - VIII. Reservation Indian and Citizen Indian, A.D. 1677-present**
  - IX. The First Chesapeake Frontier, A.D. 1492-1630**
  - X. Establishment of Colonial Society, A.D. 1630-1689**
  - XI. Expansion and Differentiation of Colonial Society, A.D. 1689-1783**
  - XII. The World the Slaves and Slaveholders Made, A.D. 1783-1865**
  - XIII. Years of Isolation: James City County and York County in the Wake of the Civil War, A.D. 1865-1907**
  - XIV. Revitalization of the Tidewater, A.D. 1907-1945**
  - XV. Early Slavery in the Tidewater, A.D. 1620-1650**
  - XVI. Institutionalization of Slavery, A.D. 1650-1705**
  - XVII. Plantation Slavery and the Development of Slave Communities, A.D. 1705-1820**
  - XVIII. Final Years of Slavery and the Establishment of Free Black Communities, A.D. 1820-1865**
  - XIX. Emancipation and Reconstruction, A.D. 1865-1915**
  - XX. Tidewater in Black and White, A.D. 1915-present**
  - XXI. Belief Systems**
  - XXII. Establishment and Development of Public Welfare Institutions**
  - XXIII. The Rise of Fort Virginia**
- 

Figure 2. Study Units

The final plans for each of the four jurisdictions were prepared in October 1985 and distributed to local planning departments, area libraries, and concerned individuals and groups. It is important, however, to realize that the completed plans are only the first step to effective preservation planning. It is also necessary to create a program for the use, updating, and periodic revision of the plans, as well as for their implementation. It was for that reason, in fact, that the final plans were intentionally entitled "Toward a Resource Protection Process."

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FIGURE 2. STUDY UNITS.

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- I. Early Hunters, the Area's First Inhabitants, < 6500 B.C.
  - II. Foragers in a New Environment, 6500-2000 B.C.
  - III. Permanent Settlement and Population Growth, 2000 B.C.-A.D. 1000
  - IV. Village Life and Agricultural Development, A.D. 1000-1560
  - V. The Protohistoric Period, A.D. 1560-1607
  - VI. Powhatan Struggle to Retain Land, Power, and Cultural Autonomy, A.D. 1607-1644
  - VII. Powhatan Cultural Change and Adjustment, A.D. 1644-1677
  - VIII. Reservation Indian and Citizen Indian, A.D. 1677-present
  - IX. The First Chesapeake Frontier, A.D. 1492-1630
  - X. Establishment of Colonial Society, A.D. 1630-1689
  - XI. Expansion and Differentiation of Colonial Society, A.D. 1689-1783
  - XII. The World the Slaves and Slaveholders Made, A.D. 1783-1865
  - XIII. Years of Isolation: James City County and York County in the Wake of the Civil War, A.D. 1865-1907
  - XIV. Revitalization of the Tidewater, A.D. 1907-1945
  - XV. Early Slavery in the Tidewater, A.D. 1620-1650
  - XVI. Institutionalization of Slavery, A.D. 1650-1705
  - XVII. Plantation Slavery and the Development of Slave Communities, A.D. 1705-1820
  - XVIII. Final Years of Slavery and the Establishment of Free Black Communities, A.D. 1820-1865
  - XIX. Emancipation and Reconstruction, A.D. 1865-1915
  - XX. Tidewater in Black and White, A.D. 1915-present
  - XXI. Belief Systems
  - XXII. Establishment and Development of Public Welfare Institutions
  - XXIII. The Rise of Fort Virginia
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Figure 2. Study Units

The final plans for each of the four jurisdictions were prepared in October 1985 and distributed to local planning departments, area libraries, and concerned individuals and groups. It is important, however, to realize that the completed plans are only the first step to effective preservation planning. It is also necessary to create a program for the use, updating, and periodic revision of the plans, as well as for their implementation. It was for that reason, in fact, that the final plans were intentionally entitled "Toward a Resource Protection Process."

The facility that we envisioned to implement this program is what we have termed the Tidewater Cultural Resource Center (T.C.R.C.). At present the facility is located at the College of William and Mary, and staffed part-time by Colonial Williamsburg archaeologists and interns. Ultimately we intend that there be one or more full-time paid staff members working exclusively for the facility. Funding will be provided under a service contract with the counties and cities. In order to demonstrate the Center's effectiveness, a pilot program was established in conjunction with James City County, under the supervision of its newly-created Historical Commission. The remainder of this paper will be devoted to this program.

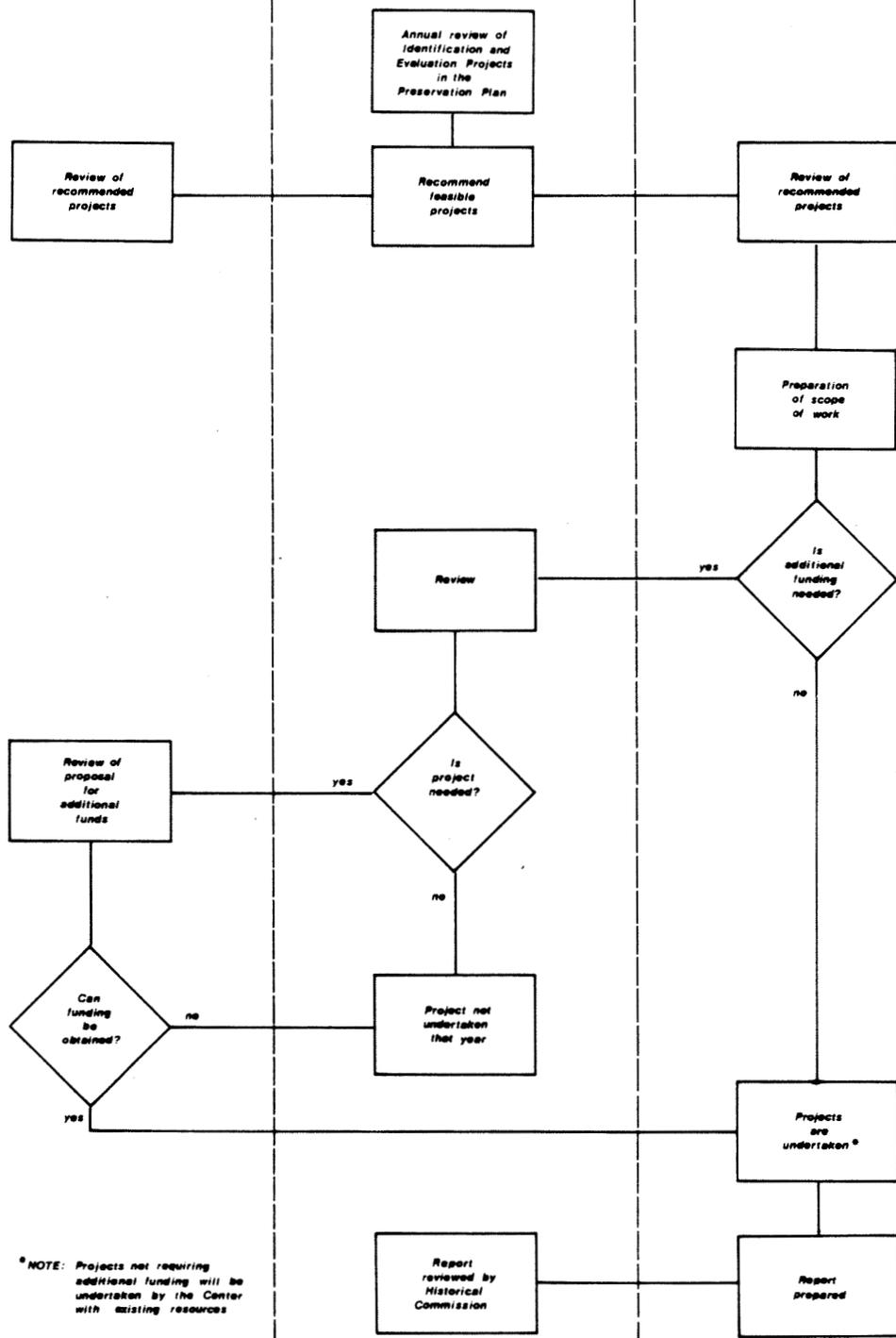
Our pilot program can be divided into two main activity tracks: (1) sensitivity analysis, site survey, and site recording, aimed primarily at the identification of unlocated archaeological sites and architectural properties; and (2) associated research projects, aimed primarily at improving our ability to evaluate the significance of such sites. A flow chart for the first track (Figure 3) shows the close interaction that we envisioned between the T.C.R.C. and the planning department. Because of time limitations on most of these projects, the Historical Commission does not serve as an intermediary in day-to-day operations on this track, instead functioning mostly to identify policy and mitigate problems as they arise.

When a plan is submitted for review, the Center conducts a record search and sensitivity analysis, along with a physical survey if possible, before making a recommendation about the need for an intensive Phase I survey. The planning department then reviews the recommendation, often with the developer, and decides on a possible

PLANNING DEPARTMENT

HISTORICAL COMMISSION

TIDEWATER CULTURAL RESOURCE CENTER



\*NOTE: Projects not requiring additional funding will be undertaken by the Center with existing resources

Figure 3.

course of action. If a survey is completed, the T.C.R.C. professionals, along with the Review and Compliance Officer of the Virginia Division of Historic Landmarks, review the results and recommend a further course of action--Phase II or III investigations, project re-design, or no action. Any recommendation will again be reviewed by the planning department and the developer, and to date, possible conflicts have usually been resolved at this point.

The first task, a record search and sensitivity analysis, involves the use of the data on file with the Center, along with locational models developed as a result of our analyses, to evaluate the archaeological and architectural sensitivity of a particular parcel. James City County planners now regularly send us applications for rezoning, requesting our evaluations. When surveys have been recommended, the County has been quickly responsive and arranged access to the properties involved.

Actual site survey, on smaller parcels, is a second aspect of the Center's responsibility. At present the Center is capable of carrying out small Phase I surveys on some of these parcels, enabling us to test our conclusions in the field. The eventual presence of a full-time staff member will allow the Center to perform even more of these surveys. On larger parcels, a "windshield survey" will enable him or her to evaluate current topography and vegetation, soil condition, and ground visibility before making a recommendation.

The acceptance of a recommendation for more intensive survey on sensitive properties is the obvious goal. In the past, Phase I surveys in the area have been performed by contract archaeologists, the College of William and Mary, and the Colonial Williamsburg

Foundation; thus, the resources for such surveys are readily available in both the professional and academic communities. The management and research value of these surveys can be demonstrated by looking at several projects recently undertaken at Colonial Williamsburg.

One important investigation, while not a direct result of recommendations by the Center, was generated largely as a result of local public concerns raised in part by the RP3 process. The new Port Anne cluster-housing development would impact one of the most important areas on the periphery of Williamsburg: The eighteenth-century port called College Landing. The Williamsburg Board of Supervisors requested the developer to allow Phase I and II investigations on the property prior to construction, and agreed to help fund the cost of the project. The resulting survey, performed by the Office of Archaeological Excavation of the Colonial Williamsburg Foundation, led to the discovery of seven archaeological sites, including three important late eighteenth-century domestic and commercial sites. These sites will now be preserved as a buffer around the development as valuable resources to help us understand the function and character of the community surrounding the port, as well as the economic and social position of the people who inhabited that community.

Even more exciting, and totally unexpected, was the discovery of the earliest site yet found in Williamsburg, a second-quarter seventeenth-century homestead containing a large artifact-filled borrow pit, trash pits, several human burials, landscape features such as fence postholes and ditches, and a possible hearth base that may represent the location of the destroyed structure. Although this latter site was located in the middle of the active phase of

housing development, and thus seriously endangered, an agreement was reached between the developer, the City of Williamsburg, and the Colonial Williamsburg Foundation to jointly fund a salvage excavation of the site. The salvage work produced one of the more important assemblages recently found in the City, one that will tell us a great deal about the origins of the precursor of the colony's capital.

Some of our best, most comprehensive data sources have been a series of even larger surveys for the Virginia Department of Transportation, James City County, and the Colonial Williamsburg Foundation itself. Since 1984, the Office of Archaeological Excavation of the Colonial Williamsburg Foundation has performed two surveys for the Virginia Department of Transportation: the Second Street Extension project, on the northern side of the City of Williamsburg; and the Route 199 Extension project, in James City County northwest of the City. The Route 199 project, in particular, revealed a great deal about a distinctive prehistoric settlement pattern, with most sites located on small stream terraces along interior streams. Almost every stream terrace along Long Hill Swamp contained a prehistoric site, and these data provided a vital locational model for the evaluation of other, unsurveyed parcels in the general area. A survey in 1985 by the College of William and Mary, in the vicinity of the proposed Ware Creek Reservoir in northern James City and southern New Kent Counties, reaffirmed the locational model developed on the 199 survey, and produced a total of 45 more sites, 37 of them prehistoric.

The importance of planning for its own historic resource protection has been realized by the Colonial Williamsburg Foundation, and a comprehensive archaeological survey of 3,600

undeveloped acres owned by the Foundation is currently underway. Clearly important from a management viewpoint, this is also a significant step in our academic program, since until now the great preponderance of study has been within the Historic Area of the City. Yet we know that we cannot fully understand the development of Williamsburg without knowing what took place on the periphery of the town, or in the countryside surrounding the town. That part of the archaeological survey located in York County will also tie in closely with the York County Project, an N.E.H.-sponsored study of documentary history being undertaken by the Colonial Williamsburg Department of Historical Research.

Site recording and monitoring is the third aspect of our first track. With more than 900 registered archaeological sites, the job of closely monitoring their condition through time is obviously a massive one, well beyond the current capability of the Center. Field checking will be necessary in many cases just to update and expand the site records in order to make them useful for management and research. In addition, more than 300 of the 841 registered sites in the area are so-called "map-predicted" sites (shown on historic maps of the area, but not yet physically located). The remains of these sites will eventually have to be physically located on the ground. Our experience in the course of other surveys suggests that most of these map-predicted sites are projected fairly accurately, but the small discrepancies caused by differences in scale or mapping errors makes the pinpointing of these sites to specific lots an extremely dangerous exercise. Can we ask a developer to fund a survey merely on the basis of the proximity of a map-predicted site? In many cases, obviously not--we need something more concrete. Therefore, we envision the institution of a program

of systematic field checks of these sites, perhaps in conjunction with interns from the College or avocationalists from the Archeological Society of Virginia (A.S.V.).

A valuable tool for future management activities will result from the integration of updated site records with the tax assessment maps for the various jurisdictions. These maps, which show the precise placement of individual lots, can be projected onto our site location maps, and vice versa. James City County has asked us, as part of our pilot program, to enter all known site locations onto these maps, thus providing a way to tie directly into the permit application process.

It is the updated and revised site records, however, that form the basis of one of our major research endeavors--the creation of locational models that will help us explain and predict local prehistoric and historic settlement patterns. As a preliminary step, data from James City County sites--including period of use, probable function, nearest landform, distance to nearest road, distance to nearest crossroads, distance to water, and relation to other known sites--has been gathered and entered onto microcomputer. When sufficiently refined, these data can be manipulated to produce models, which we hope to project onto the maps using the Atlas<sup>TM</sup> mapping package, distributed by Strategic Locations Planning, Inc. This project is only now getting underway, but we envision it as an on-going effort.

Locational models, however, will simply provide a tool for site identification. Evaluation and treatment of those identified resources is clearly a responsibility of the Center, and it is in this area that our research orientation takes on added meaning. Our existing inventory of known sites, along with refined locational

models to help us judge the density of as-yet unknown sites, will enable us to assess the numbers of resources in the area. Each site must then be judged, on a case-by-case basis, for significance based on its uniqueness or representativeness. Our present knowledge of certain categories of resources, however, is woefully inadequate. Thus we cannot effectively evaluate these resources without further information.

Our second tract (Figure 4) consists of definition and implementation of a set of research projects that will fill in some of the gaps. The James City County Historical Commission, chaired by historian Kevin Kelly of the Department of Historical Research of the Colonial Williamsburg Foundation, will take the lead in the actual ranking of projects in terms of their importance. The Center will then prepare a scope of work, and suggest appropriate participants and funding sources. The Center will undertake such research projects as time and money allow, but we hope to also encourage local students, interns, A.S.V. members, and volunteers. Among the projects now being contemplated are re-analysis of existing artifact assemblages, re-organization of sets of documentary records to permit their correlation with physical resources, and oral history studies. While the projects are necessarily far-reaching and time-intensive, we believe that the results can be utilized almost immediately to refine and expand our operational definitions of significance.

The choices between actual treatment options for specific sites involve close cooperation with the planning departments and, in the case of James City County, the historical commission. Our recommendations for action are forwarded to them. Working closely with professionals from the Center, and with the advice of the Virginia



Division of Historic Landmarks, a plan is put forward for review. A recommendation for further archaeological investigation will be accompanied by a list of local contract archaeologists and institutions who can do the work. Ideally, however, the choice will be site preservation in situ. So far, local developers have been highly cooperative, provided they are reached early in the planning process.

With a supportive and a highly-concerned local constituency, we are in a good position. Clearly, favorable publicity and commendation by the public will help ease the inevitable problems associated with endangered sites. But it is obvious that the only way a preservation plan will work is by reaching the developer very early in the permit process, before site plans have been finalized, and that the only way that this is possible is through an always-available management facility such as the Center. Our arguments, however, will mean nothing without a well-directed, clearly thought-out reason for the actions that we recommend. We cannot expect to manage our historic resources without the research orientation that tells us why.

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IMPLEMENTING THE FAIRFAX COUNTY HERITAGE RESOURCE MANAGEMENT PLAN:  
ONE APPROACH TO CONFLICTING PRESERVATION GOALS

Michael F. Johnson

Fairfax County, Virginia is one of the most rapidly growing counties in the Nation. A suburb of Washington, D.C. (Figure 1), it has developed from a rural farming area to a bedroom community of Federal civil servants, and finally into a focus for corporate headquarters where business men and women use its location near the Nation's Capital as a base for national and international economic activity. From a population of 25,000 in 1930 it has grown to contain over 680,000 people (Figure 2). The County government's budget for FY 1986 was over \$1.2 billion, and housing starts over the last eight years have ranged from just under 5,000 to over 13,000 per year.

In response to this growth, Fairfax County for the last 20 years has been strongly and consistently committed to preservation. Important preservation efforts, largely private, have occurred in the County as far back as the 1850s. The Mount Vernon Ladies' Association of the Union, was formed in the mid-19th century to save George Washington's home and, as such, represents the Nation's first major preservation effort (David 1977:3). Other Fairfax County landmarks preserved since then include, among others, Woodlawn Plantation and George Mason's Gunston Hall. These were all private efforts. In 1965, the County Board of Supervisors started the present Fairfax County Historic Landmarks Commission to advise it on matters of historic preservation. The History Commission's role has expanded from an initial mission of preserving important standing structures to supporting all areas of heritage resource preservation. Extremely successful in its landmarks preservation efforts,

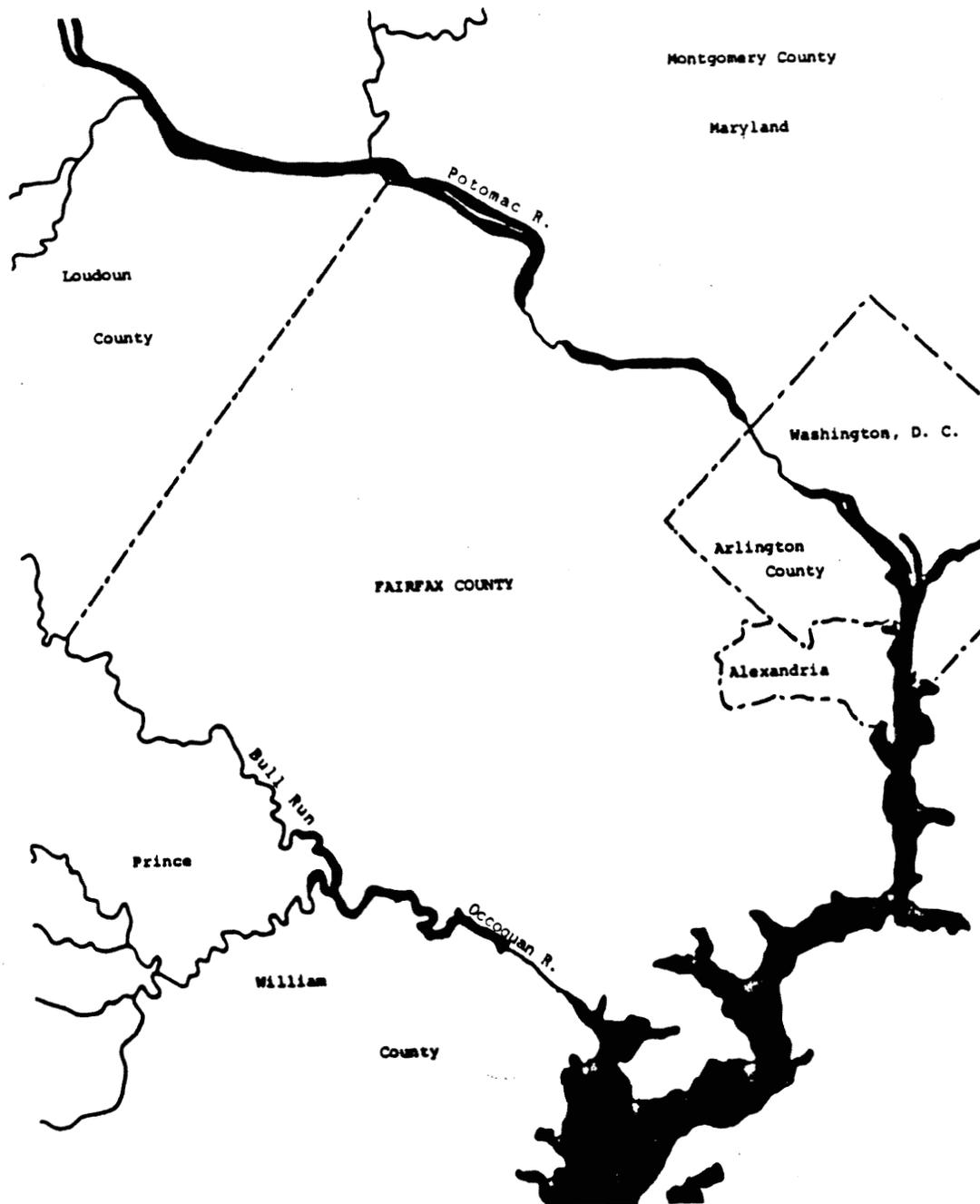


Figure 1. Northern Virginia suburbs of Washington D.C.

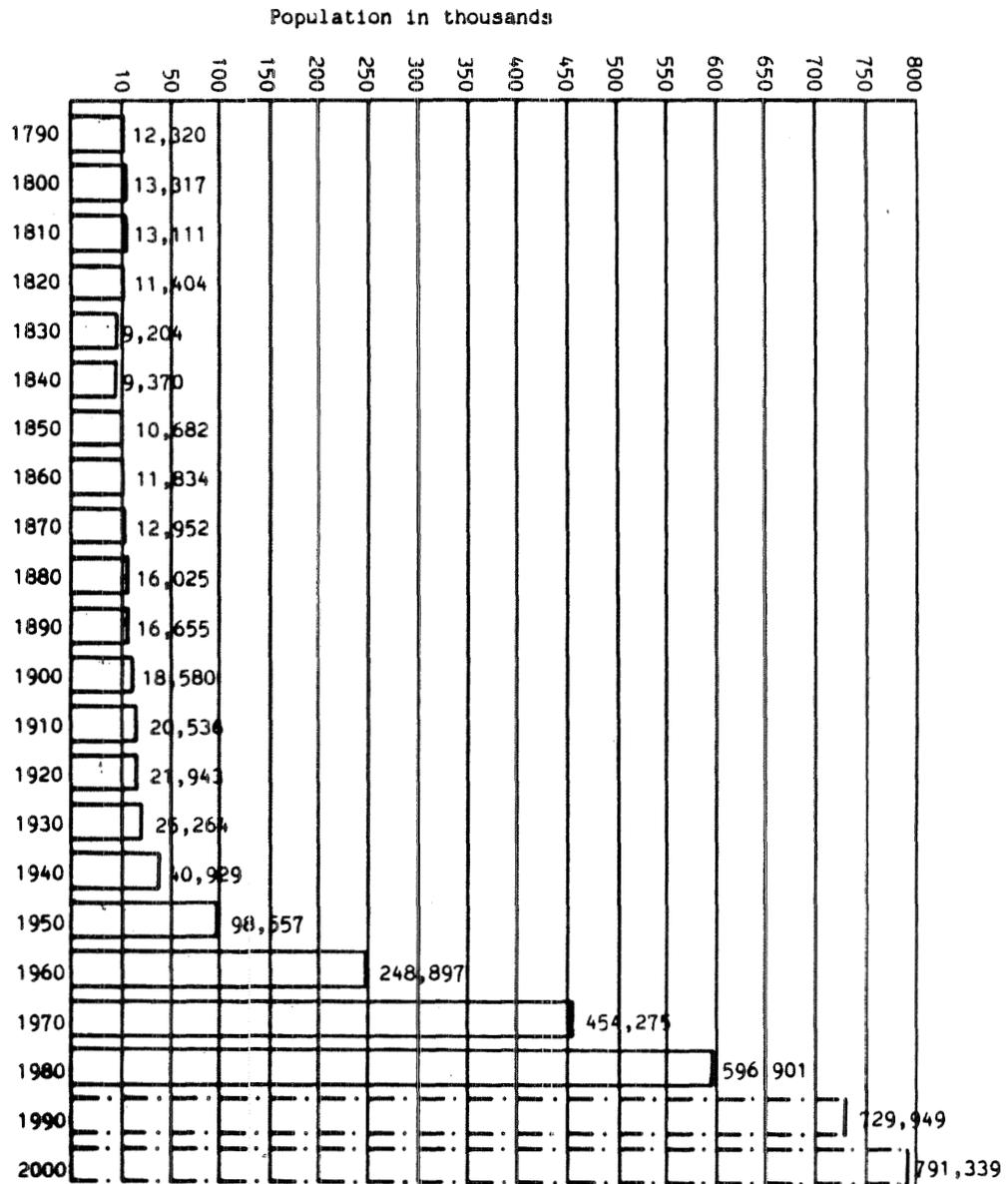


Figure 2. Population growth of Fairfax County, Virginia between 1790 and 2000 (numbers for 1990 and 2000 represent 1986 projections by the Fairfax County Office of Research and Statistics).

the Commission has broadened its scope to include creation of a county historic publications program; the establishment of an archaeology staff and a county archives management program; the development of a photo archives; the creation of an oral history program; and the achievement of many other preservation goals.

Fairfax County's Heritage Resources Branch had its origin in the late 1960s as a staff for the History Commission. Over the years it has expanded and now is located in the Office of Comprehensive Planning (Figure 3), where it has assumed the county-wide management function for landmarks preservation, archaeological resource management, and historic publications. The Historic Preservation Division in the County Park Authority has interpretation and management responsibilities for the county's many historic and archaeological sites located in parks, as well as review of potential additions to the park system and historic preservation easements. Prior to 1984 the relationship between these two functional areas was informal. No management plans existed beyond individual staff member work plans.

This problem was not lost on either the Heritage Resources or Park Authority staffs. As early as 1979 an effort was made by the archaeology staff within the Heritage Resources Branch to develop a heritage resource management plan. This effort met resistance both from within the Heritage Resources staff and from above. Compounding this problem was a lack of sufficient data to develop preservation criteria. The archaeology staff backed off and substituted a long-range strategic plan. The first five years would be spent developing a massive site data base; the second five years would be spent creating and implementing a heritage resource manage-

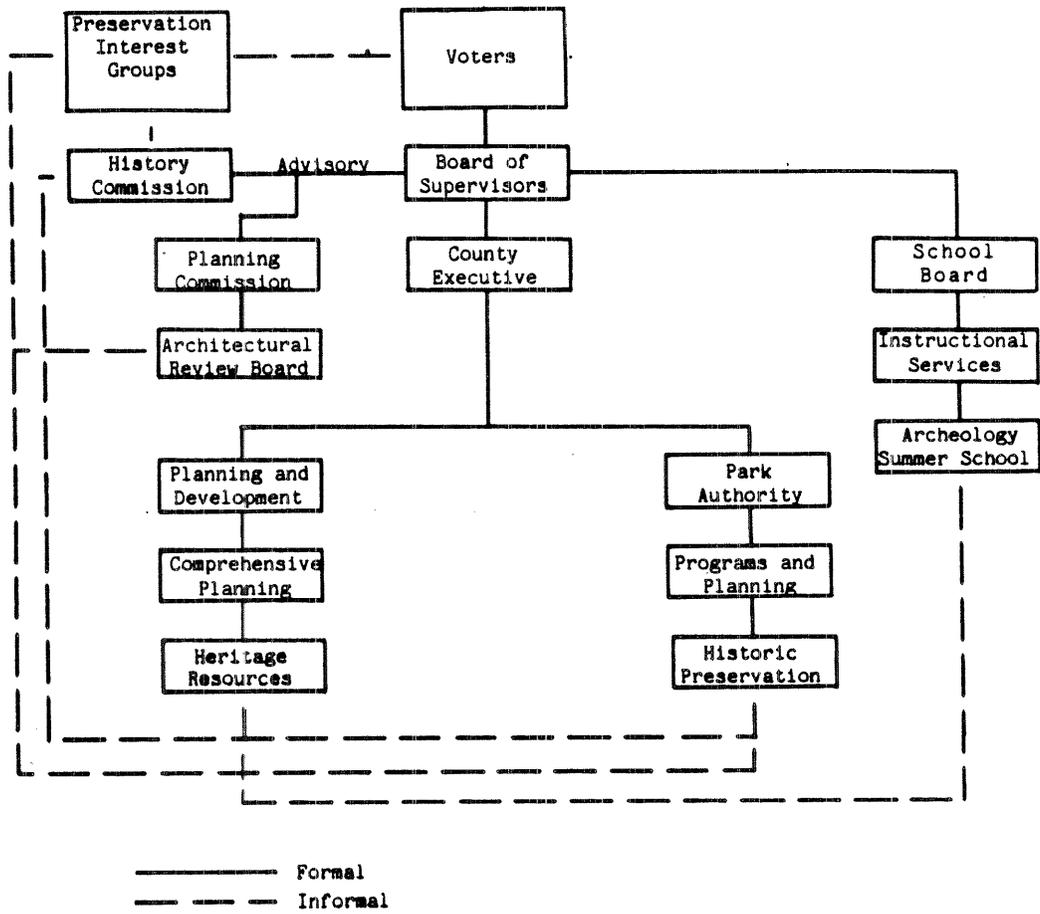


Figure 3. Organization chart (1986) for the preservation of archaeological, architectural, and historic landmark sites in Fairfax County, Virginia.

ment plan; and the third five years would represent a shift toward interpretation and a streamlining of implementation procedures.

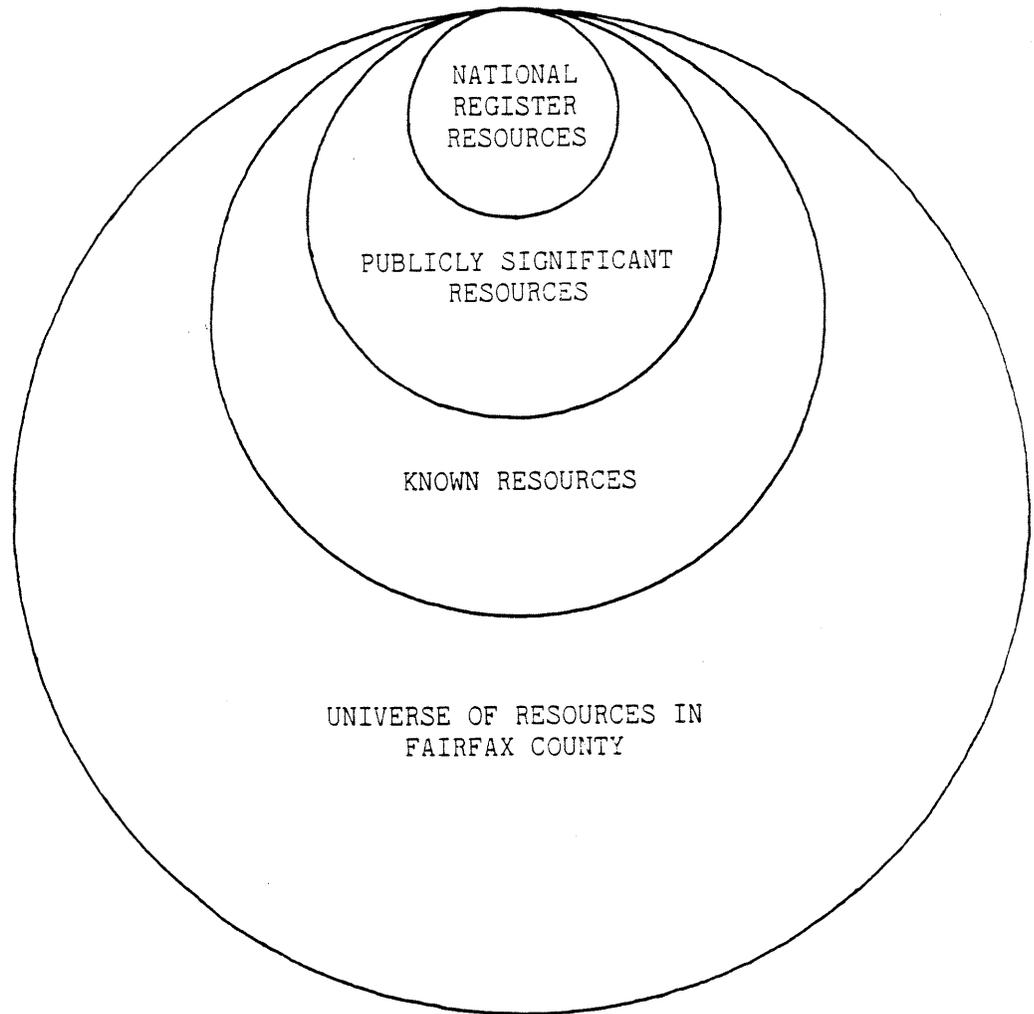
The first five years ended with over 730 inventoried archaeological sites to augment the inventory of 240 standing structures, and 11 approved historic districts. The end of the first phase also coincided with the departure of Ed Chatelain and the hiring of Sue Henry as staff Historical Archaeologist. Consistent with the strategic plan, a strong preservation planning background was made a major qualification for Chatelain's replacement. As soon as Henry came on board she was given the responsibility of project coordinator for the plan (Chittenden et al. 1985a). Henry's efforts began with developing a detailed work plan for producing the preservation plan. During this time the Park Authority's Preservation staff was working on its own plan and a joint decision was made to cooperate on the Heritage Resources Branch effort under Henry's direction. The Heritage Resources Branch then included Henry, Mike Johnson, who was responsible for archaeological surveys and prehistoric resources, and Elizabeth David, who was responsible for historic districts and the historic landmarks inventory. Near the end of plan drafting the Heritage Resources Branch received a \$45,600 implementation grant from the Virginia Division of Historic Landmarks (DHL). Although the grant was approved for a survey to test procedures outlined in the plan, the DHL's interest was clearly directed toward the completed plan.

From the start, project goals included the integration of architectural and archaeological resources into a single broad category of heritage resources. Both types of resources were to be interpreted in terms of historic contexts rather than in terms of functional or stylistic attributes. The relevancy of such

attributes would be important only in relation to the appropriate contexts (Henry 1984:4). Documentary and oral resources were omitted in order to keep the project manageable.

Another goal was to make the plan relevant to Fairfax County rather than merely a tool for the Federal or State registers. From the start the staff realized who was paying the bills and therefore who must be served by the plan. Fortunately the national mood had changed toward decentralization which resulted in support for this approach from both Federal and State agencies. Figure 4 represents the hierarchy of resource significance adopted by staff in formulating the plan. Note the publically significant resources circle which represents those sites or features which may have dubious merit for National Register eligibility but which are extremely important to a local community (i.e. civic association, historical society, town, or any other group of county citizens). For example, a small Civil War earthwork or skirmish area (both common in Fairfax County) may no longer have good integrity due to relic hunting or bulldozing but such sites may evoke emotional attachments in County residents. If such interests are present in a site, and staff has deemed the site significant for record purpose only, staff recommendations may change to preserve intact if at all possible. This approach reflects the realities of local politics and a rejection of elitism in preservation.

Underlying this attitude is a strong desire of staff to maintain its independence and self-sufficiency. In 1982 Fairfax County almost lost its archaeology staff because of a cutoff of Federal survey and planning funds to Virginia. At that time, the archaeology staff was dependent on a 50-50 matching Federal grant managed by the Virginia State Historic Preservation Office. Through the



Circle sizes do not represent actual resource percentages.

Figure 4. Hierarchy of heritage resource significance in Fairfax County, Virginia (Chittenden et al. 1985a:II-11).

efforts of many people, including particularly the County History Commission and the Northern Virginia Chapter of the Archeological Society of Virginia, the County Board of Supervisors picked up the Federal portion of the program. It was at that point that a staff goal was made to, if at all possible, never again become dependent on outside funding. The rationale was that despite the best intentions of State and Federal government preservation staffs, they cannot even guarantee their own funding, much less grants to local governments.

The staff also decided to continue the program's long held focus on survey and in-place preservation, rather than recovery and salvage. Having chosen this course for architectural resources in the late 1960s and for archaeology in 1978 the Heritage Resources Branch now has approximately 1,400 sites in its inventory. These sites serve as a data base for the cultural contexts contained in the plan, thereby giving staff firm rationale for preservation recommendations and the allocation of scarce staff resources.

The County preservation plan itself is a direct result of making such hard choices. The archaeology staff, for example, shifted from an 80% survey effort to a 40% survey effort in 1984 to accomplish a one-year goal to produce the plan. Staff did this, knowing that valuable sites would be lost without even being recorded. The long-range priority of having a good plan were clearly greater than interrupting a very successful survey effort for one year.

The County Heritage Resource Management Plan is a result of all of these efforts and attitudes. It also is a reflection of the well thought out structure contained in the Department of the Interior's "Resource Protection Planning Process" (HCRS 1980) or RP3 guide-

lines. The staff under the firm direction of Sue Henry made a concerted effort to hold to the RP3 format and, as a result, the plan is one of the few comprehensive local RP3 plans in existence. More importantly, though, than having a plan is having a working plan. The plan would have been completed with or without the grant. From a County perspective the grant enabled the staff to have an additional comprehensive set of data to use in testing the plan's management strategies (Chittenden et al. 1985b:I-1). With the assistance of other elements in the County Office of Comprehensive Planning, an area of the County which was projected to have the highest growth rate between 1985 and 1990 was chosen for survey. An architectural historian and archaeologist experienced in both prehistory and history were hired. These two surveyors were augmented by another part-time graduate student intern, funded by the History Commission. The research design, survey, analysis, and report writing were supervised by the County staff.

The Frying Plan/Chantilly/Pleasant Valley area of Western Fairfax County was chosen (Figure 5). The survey involved a systematic and comprehensive architectural survey and a comprehensive archaeological sample. Because of the more time-consuming processes involved in archaeological as compared to architectural survey techniques, the archaeological survey boundaries were more circumscribed (Chittenden et al. 1985b:II-1). The survey located 167 new heritage resources including both standing structures, and historic and prehistoric archaeological sites (Chittenden et al. 1985b:VI). Most sites which were catalogued as historical standing structures also were considered to be archaeological sites, because of associated archaeological features. Photographs, floorplans (Figure 6),

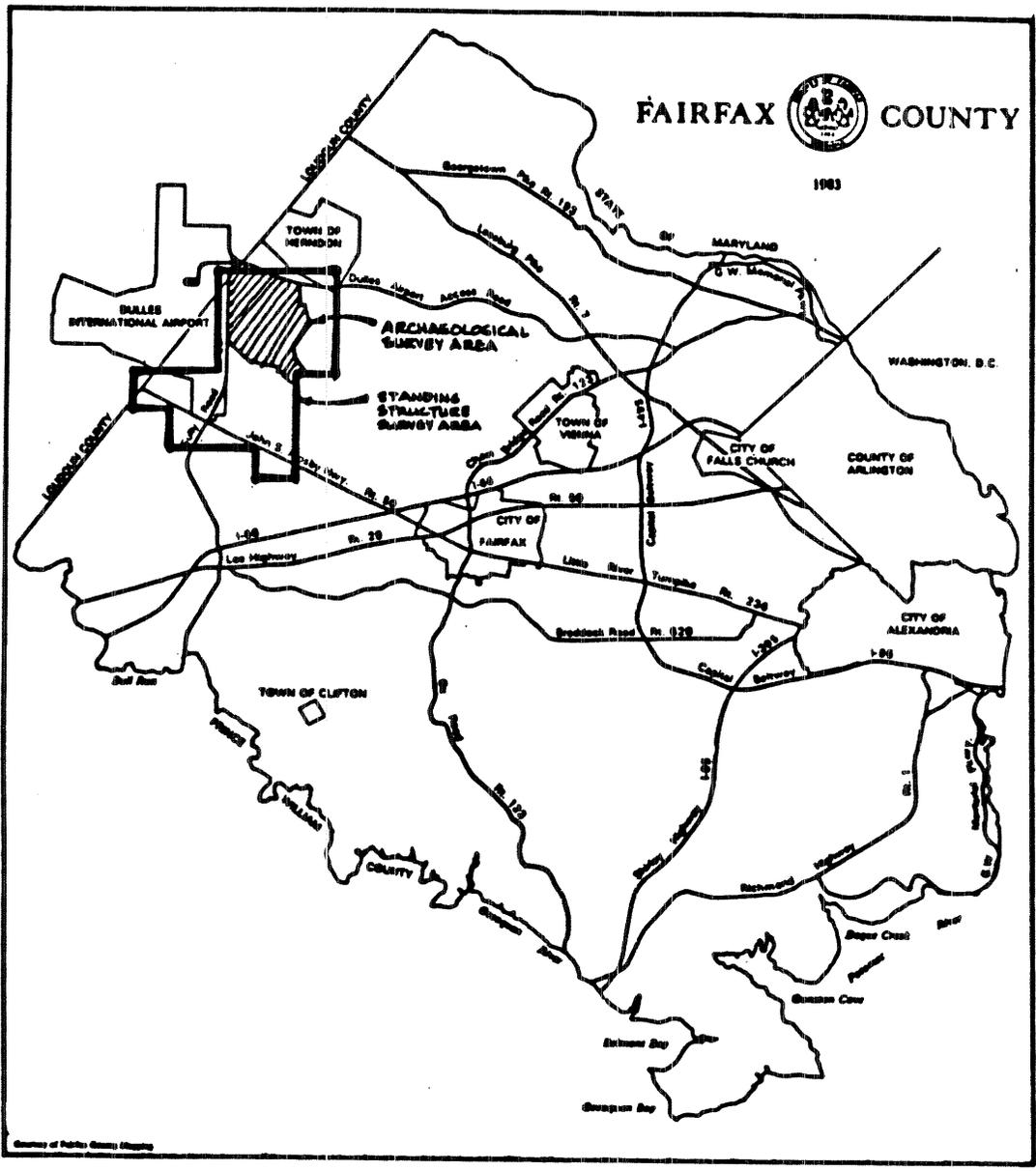


Figure 5. Western Fairfax County survey area selected for Fairfax County's 1985 survey and planning subgrant.



construction sketches (Figure 7), and archaeological field maps (Figure 8) were produced as part of landmark and archaeological registry forms on each site.

The grant survey produced several very important results in terms of short- and long-range preservation planning. Regarding short-term impact, it pointed out that the County's Landmarks Inventory was seriously deficient in terms of vernacular types of structures including barns and other outbuildings. It also demonstrated that the current 250 site Landmarks Inventory and 1,120 archaeological site inventory represent the tip of the iceberg. Throughout the County there still are many early and important historic sites which, together with their archaeological components, could offer significant new information on historic farming, commerce, industry, and residential patterns. A direct result of the survey was a recommendation to the County Architectural Review Board that a Frying Pan Historic District be created (Figure 9). Also, for the first time the boundaries of one of the County's historic district nominations have been drawn purposefully in such a way as to incorporate prehistoric sites.

In terms of long-range impact once the staff began to take steps to preserve the Frying Pan Historic District, County planners were quick to point out that the success of the nomination would be complicated by the fact that it was being offered at the eleventh hour. Most of the land use decisions on that area were made ten years ago and developers and investors already were in position to take advantage of the expected boom. As a result, the Heritage Resources staff learned that to be most effective the plan must be geared to anticipate growth in terms of ten rather than three to five years in advance.

BARN  
 HUTCHISON HOUSE  
 COUNTY of 55-2-AB  
 STATE of 21-201

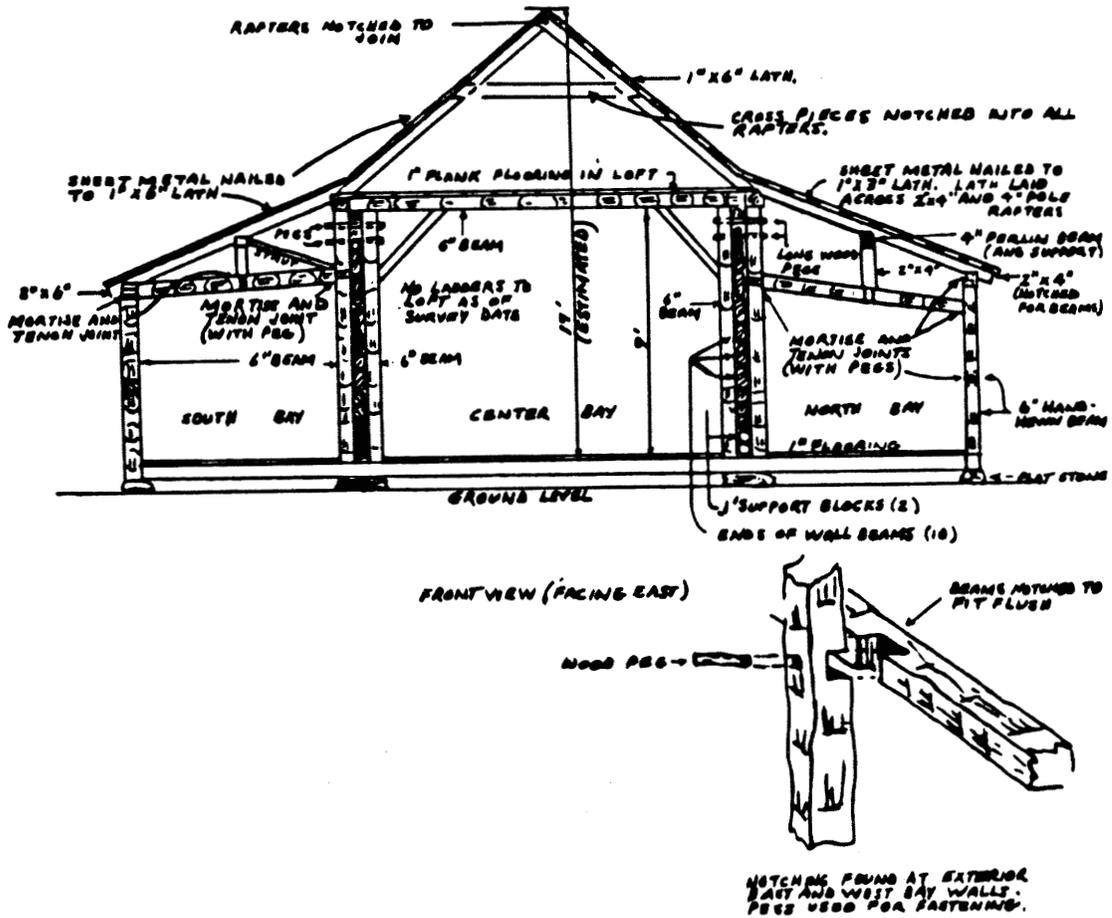


Figure 7. Hutchison House Barn (ca. 1835). Log portion is in the center. Drawing courtesy of Ed Hon (Chittenden et al. 1985b:VIII-A53).

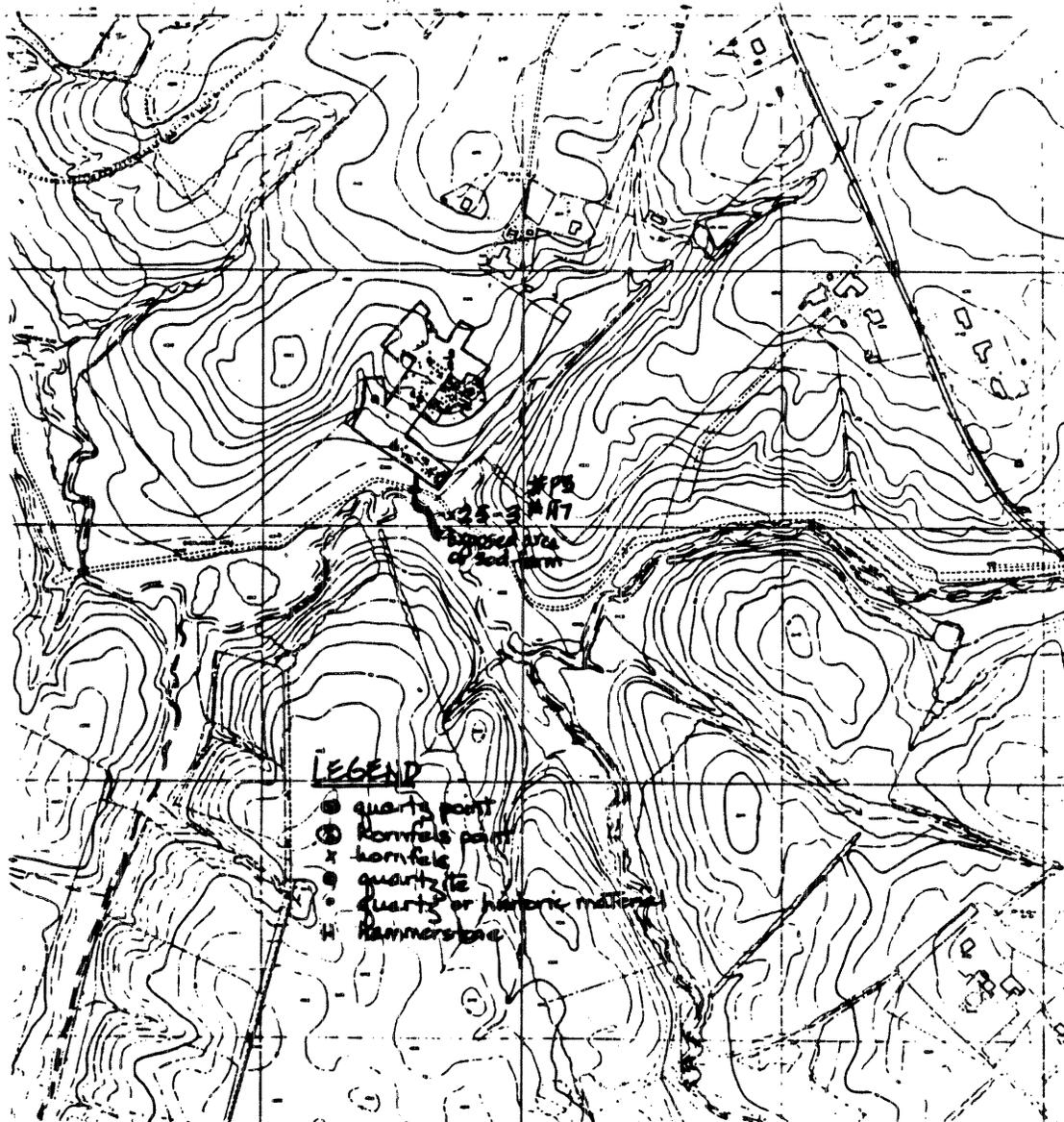


Figure 8. Relative surface collection of prehistoric artifacts from site 25-3 #P3/H7, recovered during the 1985 Western Fairfax County grant survey.

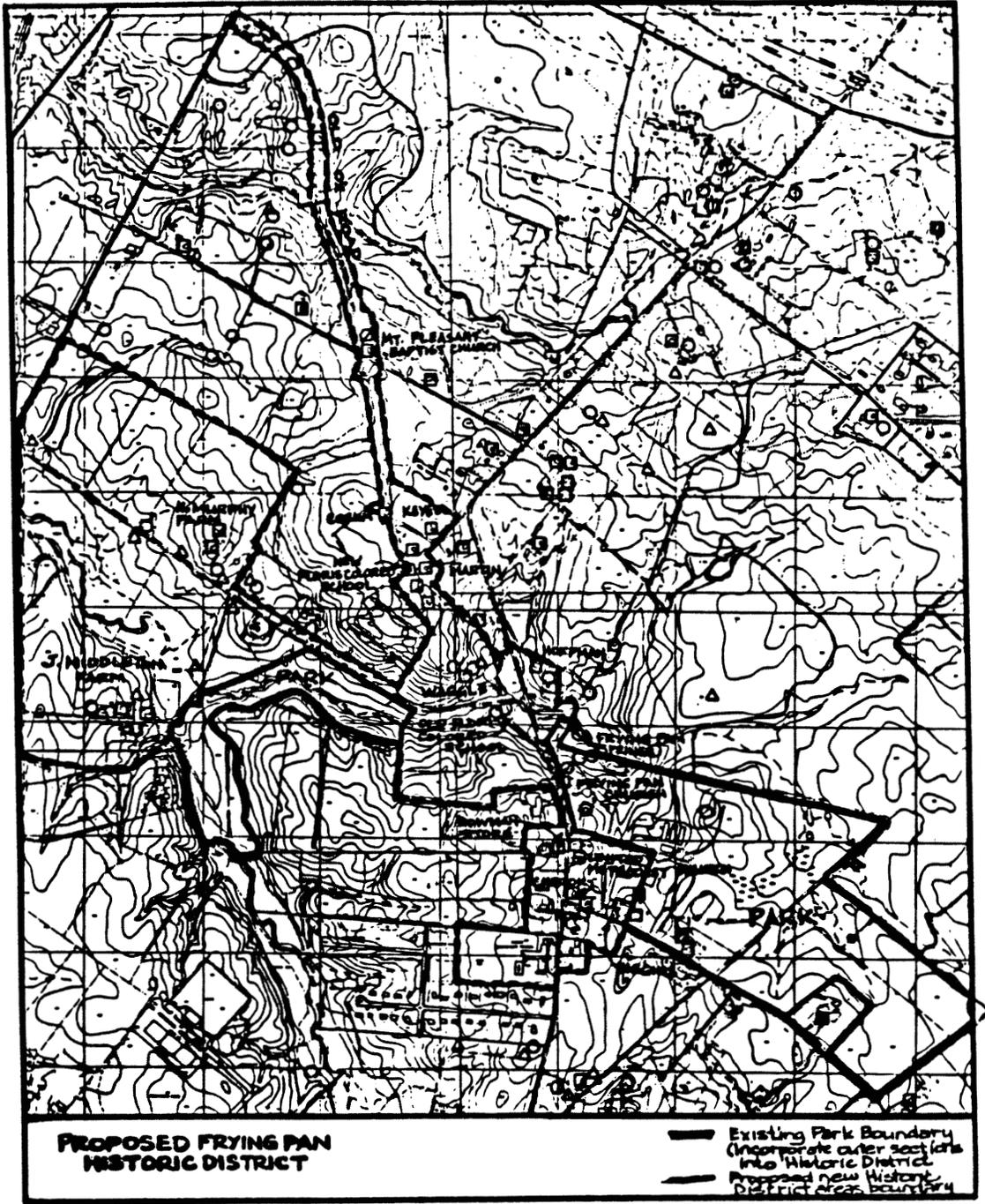


Figure 9. Proposed Fryingpan Historic District (Chittenden et al. 1985b:figure VIII-1).

At this point it is important to note also that almost all of this growth is private with only some roads being covered by State or Federal laws. Although staff has been well aware of this situation for years, the use of the grant survey data in conjunction with the plan has resulted in a fuller understanding of how effective the local developmental permitting structure can be when preservationists have a detailed, explicit, and data-rich preservation plan to use as a guide to making recommendations. As development encroaches on heritage resources in the grant survey area, staff members continue to use the plan as a means to encourage developers to set aside sites, and to adaptively reuse structures and their immediate archaeological contexts. In the case of important sites that cannot be preserved, the Heritage Resources staff now has better procedures and more explicit rationale for using its active volunteer program and providing excavation sites for the County's High School Summer Enrichment Program in Archaeology.

There are no questions in the minds of the Heritage Resources staff that the production of the plan far outweighed the loss of sites caused by a one-year survey hiatus. There also is no question that the \$46,600 allocated by the Virginia Division of Historic Landmarks for this survey was a wise use of Federal dollars.

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DIRECTING VIRGINIA ARCHAEOLOGICAL SURVEYS TOWARD  
THE DEVELOPMENT OF LOCAL PRESERVATION PLANS

E. Randolph Turner, III

As with most, if not all, state offices representing archaeology, the ultimate responsibility of the Virginia Division of Historic Landmarks from an archaeological perspective is the long-term protection of archaeological resources. The preceding papers represent part of our efforts toward this goal in Virginia. In particular, they have focused on two topics - survey and preservation planning, both on the local level.

In order to protect a resource, it obviously helps to know where the resource is and why it is important to protect. This is true for historically significant standing structures as it is for archaeological sites. The problem in archaeology, however, is finding the resource. Unlike architectural surveys, it is the rare exception for archaeological surveys to have a site graphically delineated by substantial standing remains.

In Virginia, we currently have on file descriptive and locational data for over 18,000 prehistoric and historic archaeological sites. Average growth per year is approximately 1,500 new site entries. Current estimates, though admittedly crude, indicate that there are minimally 750,000 to 1,500,000 sites still extant in Virginia. The actual number may well be several million higher. Identifying all sites in the state thus very likely would take well over 500 years at the current rate of archaeological efforts (Mitchell et al. 1986). While it is ludicrous to suggest that all these sites warrant protection, one still is faced with the dilemma of how to protect those sites most in need of such efforts when we, in fact, undoubtedly have not yet discovered the vast

majority of surviving sites still possessing substantial archaeological and/or historical significance.

Another way to look at the magnitude of the problem is by state size. Virginia, not a particularly large state, contains over 25,000,000 acres. Were one person able to survey intensively 10 acres a day, and this is highly questionable given the vast majority of the state covered by dense forest and pasture, it still would take a professional staff of nearly 25 archaeologists working year-round merely to complete necessary fieldwork for covering the state within a limit of 500 years. Artifact analysis and curation needs as well as completion of survey inventory forms and summary reports could easily double staff needs. Not only do we have nowhere near the appropriate funding for such a staff, more importantly we do not have the 500 years to finish such a project. As elsewhere, site losses in Virginia from both human and natural causes continue to increase rapidly far beyond our ability to recover appropriate data before their destruction.

Due to the impossibility, in realistic terms, to survey the state totally, primary emphasis has been placed on the reconnaissance level of survey as defined by the U.S. Department of the Interior (1983). This type of survey does not intensively examine a study area by trying to locate all sites within it. Rather, the study area is examined by selecting a sample and then surveying merely that portion. If the sample is properly chosen, then the data gathered should be sufficiently detailed to make predictive generalizations about the types and distribution of archaeological sites over time within the study area and usually adjacent areas.

This approach, due to the phenomenally large number of extant sites, is viewed as the most feasible means to conduct a state-wide

archaeological survey program, a key mandate of the Division of Historic Landmarks. It still, is a poor substitute for a total inventory. Further, the quality of information, particularly in terms of subsurface deposits, is limited due to the general absence of intensive testing at identified sites.

Virginia encompasses over 43,000 square miles of which approximately 10,000 square miles have been reported to the Department of the Interior as having been completed on the reconnaissance level of archaeological survey. This includes through 1986, one city, 17 counties, and all coastal waters. Typically, two counties per year are reported as completed on this level of survey, resulting in roughly twenty percent of the state being covered each decade. While viewed by some as an unsatisfactory rate since entire coverage of the state will likely take as long as 50 years, it still is far more reasonable than earlier noted estimates for more intensive state-wide surveys. Further, individual county results are readily amenable to developing general predictive statements on the range and density by time period of site types for poorly surveyed counties within the same region.

With the establishment in 1984 of the Division's Survey and Planning Subgrant Program, funded in part through the Department of the Interior's Historic Preservation Fund, an increasing number of archaeological reconnaissance level survey projects have been conducted by outside institutions. While efforts are made to maintain state-wide coverage, particular emphasis is placed on targeting counties for reconnaissance surveys where there are major threats, either currently existing or clearly predictable for the near future, to the archaeological resource base. Staff time

requirements in administering these grants to date have not been substantial, particularly if compared to overall results. The paper on survey results in Buckingham County by the University of Virginia serves as an excellent example of the use of subgrant funding for completion of efforts on the reconnaissance level within counties.

Not all Division survey activities are restricted to reconnaissance level surveys. Other types of surveys, though of lesser priority, conducted by the staff include (1) surveys of state-controlled lands, (2) National Register surveys, and (3) surveys of site classes facing known or predictable threats of destruction yet possessing high research potential.

Similarly, the Division has funded through the subgrant program other forms of surveys, but only when clearly identified with long-term programs for the protection of archaeological sites. The Historic Gordonsville, Inc. project for the intensive survey of the Germanna environs is an excellent example of a local survey closely tied into long-term plans to manage and protect highly significant archaeological resources that recently were severely threatened with destruction. Given limitations in funding, it is precisely this type of intensive survey we encourage to supplement survey efforts on the reconnaissance level. From a slightly different perspective, the Division also has committed limited funding for surveys to expand upon prior reconnaissance level efforts when such data are explicitly used to develop detailed preservation plans for a locale. The papers summarizing recent projects by Virginia Commonwealth University for the greater Richmond metropolitan area and Fairfax Heritage Resources Branch for Fairfax County serve as examples here. This brings us to our next key topic - the utilization of survey results in developing local preservation plans as one means to pro-

vide better protection of archaeological sites on a long-term basis.

Efforts to ensure the long-term protection of archaeological resources in a state can take many forms. As part of a recently completed Division Strategic Plan (1986) to guide agency activities over the next few years, particular emphasis in Virginia will be placed on three specific activities. These include (1) more aggressive pursuit of open-space easements for archaeological sites and districts; (2) increased interaction with state and federal agencies controlling lands of archaeological significance; and (3) expansion of efforts in preservation planning, particularly on the local level.

Ultimately, the single most effective means of protecting archaeological resources over time is through inclusion in an easement drawn in perpetuity. While there are numerous sites in Virginia receiving some form of protection as a result of being under easements covering historically significant standing structures, in the twenty years this program has been in effect in Virginia only one easement has been obtained explicitly for the protection of archaeological resources. Current public interest in archaeological easements thus is virtually nonexistent. If more aggressive pursuit of such easements by the Division proves successful, this activity will become a critical component in Virginia's program for the long-term protection of archaeological resources.

Less than 5% of the acreage in Virginia (including submerged lands) is controlled by state agencies to which may be added roughly another 10% under the control of the federal government. Since the vast majority of these lands remain in an undeveloped state, they represent a major archaeological data base potentially representa-

tive of the phenomenal range of archaeological resources found in Virginia and covering over 10,000 years of human occupation. While outside the scope of this paper, it should be noted that increased interactions in recent years with state and federal land-controlling agencies have been encouraging, to the point that, in some cases, archaeological surveys and accompanying management plans have been considered or actually completed and implemented for individual properties. When such interactions are combined with extant state and federal legislation related to archaeological resources, the potential for long-term protection of sizeable numbers of sites is substantial.

In spite of such potential, it still is apparent that most of the state is privately owned or to a very minor extent under the control of local governments. Further, easements, while highly valuable for individual sites or districts, cannot be expected to be the principal means of protection for archaeological resources over such a large portion of the state. Accordingly, the Division has emphasized the development of local preservation plans as a key means of creating public support for the long-term protection of archaeological resources.

Preservation planning as defined by the Department of the Interior (1983) and as utilized by the Division (1) establishes historical contexts based on the organization of available information around individual cultural themes and their geographical and chronological limits; and (2) uses these historic contexts to develop goals and priorities for the identification, evaluation, registration, and treatment of specific archaeological, historical, and architectural property types. In Virginia, this process has been organized in an hierarchical fashion with, as it expands, a

state-wide plan at the top followed by a limited number of regional plans followed in turn by a larger number of local county and city plans with an even larger number of plans for individual properties at the bottom.

An integral part of developing preservation plans is data obtained through reconnaissance surveys. This includes not merely collecting new survey data during such a project, but also assessing prior surveys and other related data. Both data sets then can be used to define more precisely property types and document their locational patterns by time period and current condition as well as to identify key data gaps that still exist. This information, in turn, can be used to define better the specific goals and priorities that make up a preservation plan.

Since maximum results were viewed as coming from efforts on the local level, through our subgrants program we encouraged proposals for the development of county and city preservation plans. Critical to the evaluation of these proposals (besides ability to complete the proposed work) were three factors: (1) willingness to integrate available data on archaeological resources with that of historical and architectural resources (with such data having reached at least the level of reconnaissance survey efforts); (2) explicit support of the project by the appropriate governmental unit(s); and (3) documentation on the intensity of known or projected threats to existing cultural resources within the area to be studied.

Results to date have been summarized in the papers on plans for Fairfax County by Fairfax Heritage Resources Branch and the greater Williamsburg area (Cities of Poquoson and Williamsburg and Counties of James City and York) by the Colonial Williamsburg Foundation. Both projects focus on areas of rapid growth that have long needed a

detailed plan on how best to preserve those cultural resources still surviving. In both cases, the difficult task of integrating data on archaeological resources with that of historical and architectural resources was successful. Initial results indicate that this multidisciplinary approach has proven to be especially valuable due to the increased likelihood of archaeological resources being considered by local communities when making decisions affecting their integrity and long-term protection. When combined with historical and architectural resources, the "visibility" of archaeological resources (both prehistoric and historic) within local communities tends to increase. While not downplaying the importance of the greater Williamsburg area plan, the most explicit governmental support was for the Fairfax County plan, and as expected this is precisely where the completed plan has been adopted most readily.

As a further point of comparison, results of the greater Richmond Metropolitan Area Archaeological Survey by Virginia Commonwealth University were used to develop a general archaeological preservation plan for this area. In this case, however, there was minimal governmental support, and historical and architectural resources were not fully evaluated. While the resulting report has proven extremely valuable for archaeologists working in the area, it, nevertheless, has not had the impact on local governments that was the case in the other two studies.

Survey and planning subgrants, as manifested through the papers presented here, have become an integral part of the Division of Historic Landmark's ultimate archaeological goal - the long-term protection of archaeological resources. Surveys and preservation plans are viewed as closely related with particular attention to their integration on the local level. Reconnaissance level surveys

especially are emphasized since through them one can readily define site types and their distribution over time, critical data for preservation plans. Critical to the successful implementation of planning goals and priorities is the obtaining of local governmental support. Explicitly including historical and architectural resources with archaeological resources in local plans also has proven advantageous through heightening the public awareness of all these resources in their many diverse forms.

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THE VIRGINIA ARCHAEOLOGICAL SURVEY AND PLANNING PROGRAM:  
A COMMUNITY ARCHAEOLOGIST'S PERSPECTIVE

Pamela J. Cressey

I have been asked to discuss the papers that were presented at the 1987 Society for Historical Archaeology symposium organized by the Virginia Division of Historic Landmarks as a review of its survey and planning efforts. While much can be said about each paper, I would prefer to address my comments at another end--the evaluation of the goals and results of archaeological survey and planning in Virginia. Each paper was written by well qualified individuals who had used contemporary methods of collecting, analyzing, and interpreting data for their projects. The results of each survey and planning project have been large reports which discuss both very detailed information and broad themes. The level of research is admirable, and is the persistence and patience necessary to produce reports of this type.

Let us turn our attention from the methods and results of each survey or preservation plan to questions dealing with the statewide product of these endeavors.

What is the purpose of survey and planning?

What is the result of the current S&P approach?

Is this the best way to approach S&P given the  
current resources and threats?

In basic terms, the survey and planning approach uses a management framework for preserving historic resources. Rather than wait until an unexpected crisis hits, the management strategy is to identify your needs (resources), assess your strengths (personnel, knowledge, administration, etc.), and weaknesses (development

pressure, funds, people), and devise a plan for accomplishing preservation goals. The activities which have been eligible for state funding have been resource inventories, preservation planning efforts, National Register nomination reports, and educational curriculum for elementary and secondary school. Between 1984 and 1987, slightly under \$275,000 have been awarded to local governments, universities, and private organizations for archaeologically related survey and planning projects.

How are we doing in managing Virginia's heritage resources? A paper which assesses the DHL archaeological program provides one perspective. Going along at the current rate, the DHL archaeologists predict that it would take minimally 500 years to identify all sites in Virginia and 50 years to complete a statewide reconnaissance level survey (Mitchell et al. 1986:3). These statistics dramatically portray the magnitude of the issue--there may be more than 1,000,000 archaeological sites to preserve in the Commonwealth! They also tell me that such an approach does not work. I have difficulty in identifying with a 500, or even 50, year project. It is great to have long-range plans, but this is a bit ridiculous. Clearly, we need to address the preservation of sites in another manner.

While the decisions must be made at the state level of preservation (VDHL), I want to express my ideal of including local governments and other institutions with archaeological expertise in the decision-making process. As the City Archaeologist of Alexandria, I am often struck by the differing goals that the state and localities have toward preservation. I see the development of Alexandria daily and must deal with the constant demand to preserve sites NOW. The opportunities for preserving sites, and certainly

our knowledge that sites are about to be destroyed, are at the nitty gritty level in local government decisions and community participation.

My remarks are intended to provide a local perspective to the survey and planning issue in preservation. They are not a criticism of VDHL survey and planning efforts. However, I must ask: Did we get our money's worth? What effect did we have on the preservation of sites by allocating \$275,000 for these projects? Can we say to any citizen of Virginia how the money contributed to the preservation of our "historical and cultural foundations. . .as a living part of our community life and development. . .?" (National Historic Preservation Act of 1966, as amended, Section 1[a](2)).

I do not think that it is sufficient in developing survey and planning goals to know how many sites are registered nor the number of counties surveyed at the reconnaissance level. These represent what may be there, but not what is threatened or gone. Ironically, 18,000 sites could be registered and also be lost. There is no statement of significance or priority in this approach. It is important to determine what areas have the highest probability of site loss and what types of sites are threatened given the environment and general history. It is also important to know what human and organizational resources are in Virginia that are currently, or could in the future, address the threatened areas and site types. We have a tremendous body of dedicated professional, student, and volunteer archaeologists, historians, preservationists, and planners. They can be organized toward specific goals.

The State Historic Preservation Officer has the responsibility to "cooperate with local governments in the development of local historic preservation programs. . ." (National Historic Preservation

Act of 1966, as amended, Section 101 [b][3][H]). I believe that an active local initiative would result in a greater knowledge and preservation of archaeological resources as well as enhanced public appreciation. The Survey and Planning Subgrants and the Certified Local Government programs are already aimed at the local level. I am suggesting that a more aggressive and organized campaign be developed to bring local governments (and all the resources in a community that this term implies) into the state historic preservation process as partners.

This perspective dramatically alters the assessment of the financial, human, and organizational resources which can be directed toward the task of preserving the Commonwealth's heritage. I would venture a guess that a calculation of all of the funds and volunteer hours contributed to preserving historic sites, properties, and objects in Virginia would produce an amazing statement about the value citizens place on our past. Surely these individuals and groups can be included in the task at hand. In turn, they will generate even more energy to preserve and appreciate our heritage.

A major concern out here in the localities is the inclusion of archaeological review in the planning and development processes. To my knowledge, there are few if any localities in Virginia that assess the archaeological resource base as a normal part of planning or review. Yet, the loss to our archaeological past occurs through daily, and often routine, decisions made in planning, transportation, and environmental departments as well as public review boards. This is an important organizational component to preservation, and it must be addressed in several ways. The state enabling legislation must be changed to provide more direct authority for local governments to include archaeology in the review process. Also

related to this legal authority, is the need for local charters to be changed to allow for archaeological review. Staff and review boards currently dealing with architectural sites can be given training and guidance in archaeological assessment. The VDHL can prepare model comprehensive preservation ordinances which will assist localities in developing their own. State awards can be made to businesses, local governments, private groups, volunteers, students, etc. that have outstanding results. Exhibitions and lecture series can be organized with local and university groups with themes related to archaeological preservation.

An additional manner in which the local initiative can be implemented is by the requirement that Survey and Planning subgrant projects have goals, data collection, analyses, and results which are useful at the local level. Excellent examples of projects that have been successful at changing local decision-making to favor archaeological preservation are the Fairfax County comprehensive heritage resource management plan and the Colonial Williamsburg Foundation protection plan for, in particular, James City County.

An archaeologist conducting this type of project must learn how the jurisdiction works (both staff and public decision-making), use scales and organizational devices which are congruent with local planning tools, and locate people who will create a focus for archaeology after the project is finished. It is essential to identify major areas of development pressure, and particularly those projects which could include archaeology (such as planning studies for road widenings, zonings, etc.). Results should be distributed in public formats (brochures, lectures, maps). Resources to identify, preserve, and interpret sites need to be assessed, so that the community and state are not left with just nice ideas. An

implementation strategy should be outlined with a timetable and responsible persons, so that the DHL can encourage these efforts.

I also encourage the DHL to serve the role as facilitator for professional training and interpretation. It is possible to offer workshops in public administration and the development process, so that archaeologists know what this culture is like. Symposia can be offered that analyze and interpret the data which are being collected from such local endeavors. In this manner, broad historic themes and site types will become apparent and result in regional preservation plans linked to the state plan.

It is true that the task is large and complex. Yet, when I look at the professional and volunteer archaeologists in Virginia, I am moved by the passion and commitment that motivates us. We may disagree among ourselves on how to proceed in our preservation efforts, but the concern for our past is universal. Rather than looking so closely at difficulties and lack of funding, I suggest that we dream a bit. I have learned this attitude from the Alexandria Archaeological Commission that has a way of carving out a huge, almost outrageously impossible goal, and being successful. As the Commission Chairman, Ben Brenman, has written:

We have a history of accomplishment. We have a great record of putting into practice that which we plan; we have a proven capability to dream and to achieve. . .

While we may not achieve all our goals at once, we will strive to do so. We will continue to serve our City, our Populace, and our Dreams (1984:23).

This grass roots approach is infectious and produces results. It is not a substitute for the Division of Historic Landmarks, but it offers some exciting possibilities for partnership.

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Brenman, Ben

1984 Alexandria's Vision of Community Archaeology. In Alexandria Antiquity 1984, edited by Steven J. Shephard and Pamela J. Cressey, pp. 21-23, Alexandria, Virginia.

Mitchell, H. Bryan, Keith T. Egloff, Herbert G. Fisher, Mary Ellen N. Hodges, E. Randolph Turner, J. Mark Wittkofski, Bruce J. Larson, and David K. Hazzard

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APPENDIX: ARCHAEOLOGICAL SURVEY AND PLANNING SUBGRANTS, 1984-1987

1984

Applicant: Colonial Williamsburg Foundation Award: \$47,300\*  
Project Title: Cultural Resource Protection Plan: Williamsburg and Surrounding Areas.

Final Report: Toward a Resource Protection Process: Management Plans for James City County, York County, City of Poquoson, and City of Williamsburg. By Marley R. Brown, III and Kathleen J. Bragdon (editors), Office of Archaeological Excavation, Colonial Williamsburg Foundation. Three Volumes, 1985.

Applicant: Fairfax County Award: \$45,600\*  
Project Title: Implementation of Fairfax County Comprehensive Heritage Resource Management Plan.

Final Report: Fairfax County Heritage Resource Management Plan. By Betsy Chittenden, Elizabeth S. David, Susan L. Henry, Michael F. Johnson, and Martha R. Williams, Heritage Resources Branch, Fairfax County. 1985.  
Report of Findings: Survey Portion of the Fairfax County Subgrant Heritage Resources Management Plan. By Betsy Chittenden, Andrea Heintzelman, Adena Landry, and Susan L. Henry, Heritage Resources Branch, Fairfax County. 1985.

Applicant: Prince William County Historical Commission Award: \$23,800

Project Title: Prince William County Comprehensive Archaeological Preservation Survey - Bull Run, Broad Run, and Quantico Creek.

Final Report: A Phase I Evaluation of Three Streams in Prince William County, Virginia: Broad Run, Bull Run, and Quantico Creek. By James R. Cromwell, Jr., Robert McIver, and Clarence R. Geier. Archaeological Research Center, James Madison University. 1985.

Applicant: Town of Saltville Award: \$10,300\*  
Project Title: A Survey of Archaeological and Historical Places in Saltville.

Final Report: A Survey and Inventory of Archaeological Resources in the Town of Saltville, Virginia: Report of Activities and Results. By Jerry N. McDonald, Department of Geography, Radford University. 1985.

Applicant: University of Virginia Award: \$17,700  
Project Title: Archaeological Survey of Projected Development Areas in Albemarle County.

Final Report: The Archaeology of Albemarle County: Results of a Systematic Survey of Proposed Development Areas in Albemarle County, Virginia. By Jeffrey Hantman, Department of Anthropology, University of Virginia, 1985.

Applicant: Virginia Commonwealth University Award: \$49,600  
Project Title: Richmond Metro Area Archaeological Survey.  
Final Report: Richmond Metropolitan Area Archaeological Survey:  
Volume One - Archaeological Sites of the Richmond  
Metropolitan Area, A Guide to Planning and  
Management; Volume Two - Technical Report. By L.  
Daniel Mouer, William C. Johnson, and Frederic W.  
Gleach, Office of Cultural and Environmental Studies,  
Virginia Commonwealth University. 1985.

1985

Applicant: Historic Gordonsville, Inc. Award: \$2,500\*\*  
Project Title: Archaeological Survey of Germanna, Orange County.  
Final Report: From Frontier to Plantation: The Archaeological  
Reconnaissance of the Germanna Area, Orange County,  
Virginia. By Douglas W. Sanford and Scott K. Parker,  
Historic Gordonsville, Inc. 1986.

1985

Applicant: University of Virginia Award: \$18,500  
Project Title: Archaeological Reconnaissance of Buckingham County:  
Results of a Systematic Survey of Selected Areas of  
Buckingham County, Virginia. By Thomas Klatka,  
Michael Klein Gary Durham, and Jeffrey Hantman,  
Department of Anthropology, University of Virginia.  
1986.

Applicant:  
1986

Applicant: National Trust for Historic Preservation Award: \$19,700  
Project Title: Archaeological Reconnaissance Survey, Orange County.  
Final Report: From Aborigines to Aristocrats: Archaeological Survey  
in Orange County, Virginia. By Lynne G. Lewis and  
Scott K. Parker, National Trust for Historic Preser-  
vation. 1987.

Applicant: University of Tennessee Award: \$1,500\*\*  
Project Title: Archaeological Survey of 44TZ92.  
Final Report: Archaeological and Osteological Survey of Bull  
Thistle Cave (44TZ92), Virginia. By P. Willey and  
George Crowthers, University of Tennessee. 1986.

1987

Applicant: Montgomery County Award: \$11,500\*  
Project Title: Montgomery County Multiple Resource Area Register  
Nomination Report and Education Grant.  
Final Report: Project in Progress.

Applicant: Prince William County Award: \$10,000\*  
Project Title: Thematic National Register Nomination for Civil War  
Sites in Prince William County.  
Final Report: Project in Progress.

Applicant: University of Virginia Award: \$13,200  
Project Title: Archaeological Survey of Fluvanna County.  
Final Report: Project in Progress.

\*Includes projects covering not merely archaeological resources but  
also architectural/historical properties.

\*\*Denotes survey projects for which state, not federal, funding was  
used.